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## Self-Selection as a Tool <br> \title{ \section*{Self-Selection as a Tool for Managing the Demands on for Managing the Demands on Department of Defense (DOD) Personnel} 

 Department of Defense (DOD) Personnel}}

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# INSTITUTE FOR DEFENSE ANALYSES 

IDA Paper P-4606

# Self-Selection as a Tool for Managing the Demands on Department of Defense (DOD) Personnel 

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## Executive Summary

Secretary of Defense Robert M. Gates underscored his commitment to the long-term health of the military personnel system in the 2010 Quadrennial Defense Review. His "preserve and enhance" initiatives emphasize the need to transition to "sustainable rotation rates that protect the force's long-term health." As early as January 2007, he addressed the need to manage force utilization by setting targets for combat zone duty of no more than one year in three for Active Duty personnel and involuntary mobilizations of at most one year in six for National Guard and Reserve personnel.

The Secretary's commitment to limiting the demands placed on individual service members creates a host of challenges for the Department of Defense's (DOD's) management of personnel. Even as the United States draws down deployments in Iraq, demands will remain high in some occupations. Under current policies, the Secretary's targets will not be achievable for many high-use military occupations with today's force structure and end strength requirements. To accomplish the Secretary's objectives, new data and analytical tools will be needed to monitor and assess service member utilization, and to identify occupations where there are shortfalls in the number of individuals able to comply with the Secretary's utilization targets. New management mechanisms will be needed to discipline the demand for individuals in high-use occupations, to improve the utilization of available individuals, and to adjust available supplies.

The Office of the Under Secretary of Defense for Personnel and Readiness commissioned this study to focus on the supply-side, specifically, to "...examine the costs and benefits of deployment incentives and [identify initiatives to] increase self-selection"-that is, to allow individuals to opt for combat zone duty. After reviewing the available data and practices, this paper recommends steps to reduce existing barriers to the use of self-selection, and to target its use within a structure designed to manage both the demand for and available supply of individuals in high-use occupations. Within this framework, self-selection will contribute to minimizing deployments in excess of the Secretary's guidelines.

In addition, the paper outlines an approach for coupling self-selection with training, which could substantially expand the scope for self-selection. Finally, the paper outlines steps to incorporate self-selection as an element of long-term, institutional reform to create personnel management systems that are more responsive to operational needs.

## A. Findings

In the nine years since the beginning of Operation Enduring Freedom, the Congress has revised legislative authorities to provide DOD with the flexibility required to sustain the force in the face of heavy deployment duties. The Services are, in the main, succeeding in recruiting and retaining service members both in terms of the quality and numbers needed. Military compensation has increased substantially and it is highly competitive. For example, when total cash, noncash, and deferred compensation is considered, an enlisted service member's compensation is ranked in the top 15 percent for comparable age and education groups in the U.S. labor market. Moreover, when deployed in a combat zone, a service member's effective compensation increases by 1215 percent above non-deployed levels. In addition, individuals in high-use occupations may receive targeted assignment incentive or re-enlistment bonuses that can amount to tens-of-thousands of dollars.

Although detailed market research is needed to assess individuals’ motivations for self-selecting, the comparison data show that available compensation gives service members considerable incentives to self-select for deployment. Therefore, the main body of this paper focuses on administrative and policy factors-which proved to be the most relevant and constraining near-term barriers to expanding self-selection. Among the important findings to emerge from this study are the following:

- Given all the steps taken to ensure military pay is competitive, there is no evidence that additional compensation is a prerequisite for sustaining or expanding self-selection. In particular, the compensation associated with deployment is highly competitive relative to the civilian alternatives available to Reserve Component members and retirees.
- Self-selection is already common, but not systematically reported.
- At least 50,000 of the 135,000 Reserve Component service members mobilized as of September 2009 self-selected for this duty.
- Self-selection within the Active Duty force occurs through informal negotiations between service members and their personnel managers; this practice is said to be common, but no data are available.
- Accumulated deployments over the last eight years have depleted the inventory of individuals who could be ordered to deploy again and still comply with the Secretary's targets in many occupations.
- This paper provides a prototype of a Self-Selection Targeting Indicator (SSTI) that identifies occupations where self-selection could help to fill compliance shortfalls.
- The SSTI found that self-selection could be needed in 272 of the 1,153 occupations examined. Across these occupations, the size of the shortfall to be filled by self-selection totaled 37,000 individuals. The needs are concentrated heavily in the Army National Guard and Army Reserve.
- Using self-selection to identify and employ service members willing to deploy in occupations with identified shortfalls could minimize the number of service members who are ordered to deploy in violation of the Secretary's targets.
- Better data on self-selection are needed to determine the extent to which self-selectees are already filling these needs, as well as to target the use of self-selectees to meet identified future shortfalls.
- DOD's ability to target self-selection and manage individual service member's deployment duties is hindered by the lack of consistent definitions and metrics for individual utilization and self-selection.
- To meet the Secretary's utilization targets, the need for self-selection will persist and may continue to grow in some occupations.
- A snapshot of Defense Manpower Data Center contingency deployment data for September 2009 identified 240 occupations where heavy deployments continued to deplete the pool of service members who can be ordered to deploy in compliance with the Secretary's targets.
- Coupling self-selection Reserve Component members with opportunities for cross-training, retraining, or refresher training could expedite the adjustment of inventories to bring them into balance with demands.
- Data and an analytical framework are needed to provide increased awareness of occupations where such adjustments may be desired.
- The potential to maintain or expand self-selection by Reserve Component members and retirees appears to be substantial relative to the projected need:
- Self-selection could be expanded by more systematically identifying opportunities, and more proactively soliciting, screening, training, and assigning self-selectees.
- In addition to the more than 50,000 reservists who are already self-selecting, the potential targets for expanding self-selection include over one-half million Reserve Component members and retirees who have never mobilized; of these some 325,000 are in the Ready Reserve.
- Market research is needed to assess the potential for expanding selfselection relative to projected needs.
- After observing the effects of initiatives to reduce barriers and expand opportunities, DOD will have a better basis for assessing whether it is appropriate to add compensation incentives to encourage self-selection.
- Finally, while this study focuses on self-selection, it is equally important to manage the demand for high-use occupations.
- A reported 24,000 individual military personnel are assigned to Central Command (CENTCOM) in ad hoc and individual billets (versus in doctrinally-defined units) to fill headquarters, training teams, and other tasks not served by standard units.
- The demands on individuals filling these billets lack the management structure, including planning and demand forecasting, and discipline, that is available to billets filled through normal force management processes.
- Such billets often cannot be filled with self-selectees because the personnel managers lack the program authority or response time needed to identify and screen self-selectees to meet the need.


## B. Recommendations

This paper recommends and describes three sets of initiatives to expand and target the contribution of self-selection. They are as follows:

## 1. Remove the barriers to self-selection, and target its use within a demandsupply management structure for addressing the Secretary's deployment targets

Recommendations 1 through 7 in Table ES-1 would create a systematic and proactive structure to manage the demands for and the available supply of individuals in high-use occupations. Critical to these recommendations is the need to strengthen metrics and available data. These recommendations touch on each of the four management domains listed below:

- Combatant Commands. Improved theater planning, forecasting, and communications are needed to enable supplying institutions to fill needs with self-selectees. In particular, CENTCOM is filling 24,000 billets through requests for individuals who are neither in doctrinal units, nor planned or programmed for by the Services. The individual requests are often for less than 179 days and do not currently count against the Afghanistan troop ceilings.
- DOD-wide Force Managers. An Office of the Secretary of Defense-led coordination mechanism is needed to provide management metrics, visibility,
and guidance; to assess and discipline theater requests; and to target collaborative efforts to remedy shortfalls.
- Service Force Managers. Force managers need the ability to plan for and manage the thousands of jobs that are currently being staffed individually in the theater; this would bring the normal force management processes to bear. In addition, force managers can make the best use of talent in high-use occupations by modifying force management practices, such as establishing standing theater commands with units that are sustained by individual personnel rotations.
- Personnel Managers. The available supply of self-selectees can be expanded by adopting more proactive approaches for soliciting, selecting, and assigning selfselectees. In addition, the coordination of demands and the targeting of selfselection for high-use occupations across all DOD components are needed to make the best use of available talent.


## 2. Create a "Self-Select and Train" program (SSaT) to solicit Reserve Component members for duty in high-use occupations

DOD could substantially expand the role of self-selection by coupling it with training to expedite inventory rebalancing and the growth of high-use skill communities. Recommendations 8 and 9 in Table ES-1 describe the elements of a "Self-Select and Train" program (SSaT) that would permit individuals from across DOD Reserve Components to compete as candidates to fill needs in targeted occupations.

The SSaT program incorporates three major features that contribute to needed flexibility. First, it expands the reach of self-selection to include individuals who are willing to serve but do not possess all the requisite training. Second, it incorporates a flexible timeline that allows sufficiently long commitments for needed training coupled with effective deployment duty time. Third, it provides for DOD-level oversight of funding for any additional personnel and training costs, which supplements normal planning and budgeting cycles and permits the program to be immediately responsive to identified needs.

In addition to accommodating needed individual training, the SSaT model could also be applied to fulfill requirements for unit training prior to deployments. Thus an individual from the Reserve Component could, for example, self-select for eighteen months of duty, allowing him or her to join an Active Army unit in time for its predeployment training, and still serve for a year in theater with the unit.

## 3. Employ self-selection as an element of institutional reform

The initiatives outlined above are designed to remove barriers, not to build new institutions. Recommendations 10 through 13 in Table ES-1 identify some fundamental
institutional reforms that would emphasize self-selection in creating a personnel system responsive to operational needs-analogous to the rapid equipping initiatives that have been devised to respond quickly to pressing theater hardware needs. The major thrusts of these recommendations are as follows:

- Combatant Commands. Personnel planning that is forward-looking, resource constrained, disciplined, and comprehensive will enable personnel managers to better respond to operational needs.
- DOD Headquarters. Staff responsibility should be assigned to advise and support the Secretary of Defense on emerging, enduring skill requirements, and on actions needed to address personnel capability needs to support operations.
- Service Force and Personnel Managers. The Secretary should assign Service proponents, when needed, to ensure enduring new personnel capability needs will be provided within the Service's training and education systems.
- DOD Component Leadership. The leaderships of the active and Reserve Components should be tasked to design Total Force solutions to address emerging personnel capability needs. Certain capabilities, such as specialized support for civil authorities, cyber capabilities, or capabilities for civil-military operations might be most cost-effectively assigned to Reserve Components.


## C. Next Steps

Because self-selection is currently limited primarily by institutional barriers, DOD's priority should be to address the initiatives summarized in recommendations 1 through 9. These actions would create a more systematic and proactive structure for managing demands and identifying and filling operational needs, while simultaneously supporting the Secretary's commitment to preserving and enhancing the health of the military personnel system. DOD should hold off on any additional financial incentives until the results of these initiatives can be assessed.

Table ES-1. Recommendations
Remove the Barriers to Self-Selection, and Target its Use within a Demand-Supply Management Structure for Addressing the Secretary's Deployment Targets

1. Create Theater Functional Commands to assess and discipline theater demands for individuals, and to plan for and manage their employment.
2. Institute personnel planning conferences - that look twelve to twenty-four months into the future -to improve two-way communication, provide discipline, and thereby enhance the ability of personnel suppliers to respond to theater needs.
3. Assign responsibility to the Office of the Secretary of Defense (OSD) to coordinate the creation of common metrics and a reporting system for personnel utilization and self-selection.
o Critical to this is the development of consistent definitions and measures for individual utilization and self-selection.
o Use this system to forecast self-selection needs in high-use occupations.
4. Assign responsibility to the Senior Readiness Oversight Council (SROC) to coordinate the management of individual utilization.
o Commission an SROC-led collaborative initiative to create a strategy, policy, definitions, plans, and processes for a Department of Defense (DOD)-wide approach to individual utilization and self-selection.
o Give the SROC authority and resources to form DOD-wide working groups to coordinate demands and supplies for high-use occupations.
5. Direct Service force managers to create needed planning and management structures for the 24,000 billets currently being filled by individual requests.
6. Direct Service force managers to adopt force management policies that help achieve utilization targets for high-use occupations.
o Adopt individual rotation policies for selected high-utilization communities.
o Adopt flexible self-selection timelines for high-utilization communities; allow tailoring of commitments.
7. At the level of personnel managers, improve the processes for self-selection, including more systematically identifying opportunities, and more proactively soliciting, screening, and assigning self-selectees from across all DOD components.

## Create A Self-Select and Train (SSaT) Program

8. Assign Responsibility to the Senior Readiness Oversight Council for Establishing a Self-Select and Train Program.
o Coordinate creation of an implementation strategy and plan.
o Identify target high-use occupations for applying the SSaT.
o Provide resourcing recommendations to the Deputy Secretary.
o Convey the Secretary's priorities and guidance to Services.
9. Assign responsibility to Service force managers and personnel managers to execute the SSaT program.
o Create inventory adjustment plans and programs in response to guidance.
o Establish templates and timelines that couple self-selection with cross-training and refresher training opportunities for selected high-use skill communities.
o Coordinate implementation across DOD through working groups.
o Expand training capacity as needed to accommodate SSaT.
o Actively solicit self-selectees for training from among Reserve Component (RC) members who have not yet been mobilized; Direct RC leadership to encourage self-selection for training through favorable career paths.

## Employ Self-Selection as an Element of Long-Term Reform to Create Responsive Personnel Supply Institutions

10. Task Combatant Commanders to include personnel planning in their deliberate plans and their 1224 month future operational planning.
11. Charter a DOD leadership forum for responding to emerging operational needs.
12. Assign Service proponents for creating new or altered skill communities when needed to adapt to emerging personnel capability needs.
13. Design total force solutions for meeting emerging personnel capability needs.

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## Contents

1. Introduction ..... 1
A. Definition of Self-Selection ..... 1
B. Scope and Background Fact Finding ..... 2
C. Substantive Assessments Provided in the Paper's Appendices ..... 2
D. Paper Structure ..... 4
2. Observations on Self-Selection ..... 7
A. The Compensation System Provides Considerable Incentives for Service Members to Self-Select for Deployment Duty ..... 7
B. Self-Selection is Common, But It is Neither Officially Defined Nor Reported .....  9
3. Active Components ..... 9
4. The Ready Reserve ..... 11
5. An Estimate of Reserve Component Self-Selection ..... 17
C. Self-Selection Could be More Proactive and Better Targeted ..... 18
6. Mechanisms for Soliciting and Screening Self-selectees in Response to Demands ..... 19
7. Assignments ..... 20
8. Training ..... 20
9. Summary ..... 21
D. Targeted Recruitment Could Expand Self-Selection ..... 21
10. Selected Reserves ..... 21
11. Retired Military Personnel ..... 22
12. Targeting Requires Market Research ..... 23
E. Summary of the Fact Finding ..... 23
13. Near-Term Actions to Address the Secretary’s Deployment Targets ..... 25
A. An Indicator for Targeting Self-Selection ..... 25
B. The Needed Actions Address Four Management Domains ..... 28
14. Combatant Commander Planning, Management, and Requests for Personnel ..... 28
15. DOD-wide Leadership for Allocating Force Units and Individuals to Support Operations ..... 31
16. Service Force Managers ..... 34
17. Personnel Managers ..... 40
18. Summary ..... 40
19. Self-Selection Coupled with Training ..... 43
A. A Prototype Analytical Framework for Targeting Inventory Adjustments ..... 43
B. A Self-Select and Train (SSaT) Program ..... 45
20. Self-Selection and Responsive Institutions ..... 51
A. Institute Theater Personnel Planning. ..... 52
B. Designate a Secretarial Staff Assistant Responsible for Responsive Personnel Support ..... 53
C. Create Institutional Proponents ..... 54
D. Design Reserve Components for Flexibility and Adaptability ..... 55
E. Next Steps ..... 57

## Appendices

A. Metrics for Quantifying and Managing Service Member Utilization ..... A-1
B. Civilian Self-Selection for Work in Combat Zones ..... B-1
C. Adequacy of Compensation ..... C-1
D. Statutory Authorities ..... D-1
E. Illustrations ..... E-1
F. References ..... F-1
G. Abbreviations ..... G-1

## 1. Introduction

The 2010 Quadrennial Defense Review (QDR) underscores Secretary of Defense Robert M. Gates’ commitment to preserving the health of the military personnel system. After eight years of war in Iraq and Afghanistan, requiring substantial commitments of individual service members' time and immeasurable personal sacrifice, the Secretary is determined to set limits on the deployment demands placed on individuals. His "preserve and enhance" initiatives outlined in the QDR emphasize the need to transition to "sustainable rotation rates that protect the force's long-term health." ${ }^{1}$

In January 2007, the Secretary established utilization targets of one-year deployed in every three years of Service for Active Duty service members, and one-year mobilized for every six years in Service for Reserve Component (RC) members. These actions serve to reduce frequent exposure to a hostile environment as a source of stress for service members and uncertainty as a source of personal stress for both service members and their families. In addition, the ability to tell individuals what to expect is believed to be an important selling point for recruiting and retaining needed service members. Beginning early in 2010, the department began to enforce the utilization guidelines by requiring formal, individual waivers for exceptions to these targets for the Reserve Components. ${ }^{2}$

## A. Definition of Self-Selection

This study was commissioned to examine the potential contributions of selfselection in managing the demands on individuals, while meeting the operational needs of the Combatant Commands (COCOMs). After reviewing current practices, the study considers additional actions to increase the opportunities and incentives for self-selection. The study team defines self-selection and distinguishes it from volunteering as follows:

Volunteering is a civilian's willing commitment to enlist in military Service and (for officers) to accept a commission, or a service member's commitment to remain beyond one's minimum Service obligation. The definition is consistent with the meaning of the "All-Volunteer Force."

[^0]Self-selection is a service member's willing commitment to deploy to combat zone duty over and above the minimum expectation.

One issue complicating this study is that self-selection has not been formally defined or measured within the Department of Defense (DOD). Current statistical data on service members' deployment experience do not account for self-selection and all the available data only incompletely capture the current extent of self-selection. We provide the data that are available and suggest mechanisms for improving data collection going forward.

## B. Scope and Background Fact Finding

Working with support from representatives of each of the Services, along with the Office of the Secretary of Defense (OSD), the Joint Staff, U.S. Joint Forces Command, and U.S. Special Operations Command (USSOCOM), the study team examined the possible contributions of self-selection, current practices across the Services, and the potential for expanding self-selection. The DOD representatives met with the study team several times, providing essential insights, data, and critiques.

The study addresses each of the three major categories of government personnel: Active Component (AC) military, Reserve Component military and civilian DOD employees. The main body of this paper focuses primarily on self-selection among military service members; our work on the civilian workforce is documented in the Appendices.

## C. Substantive Assessments Provided in the Paper's Appendices

The findings and recommendations presented in the body of this paper rely on four areas of supporting research; the details of which are reported in the appendices:

- Metrics and Statistics. The DOD lacks the data needed to manage personnel utilization to meet the Secretary's utilization targets, and the data needed to assess self-selection is incomplete. To address these needs, data from the Defense Manpower Data Center are used in Appendix A to illustrate a possible framework for monitoring and assessing service member utilization. We develop a "Self-Selection Targeting Indicator" to apply to 1,153 occupations. It measures the number of self-selectees needed to meet deployment needs, given the number of service members who can be ordered to deploy and still be in compliance with the Secretary's targets for utilization. We also present an "inventory gap" measure for each of these occupations, which captures the current utilization of an occupation relative to the long-term sustainable rate of utilization.

This prototype framework makes use of available data, and while the results are useful, they can be significantly improved upon. A fully operational framework would require the development of consistent definitions and metrics for individual utilization and self-selection.

With improved data, the metrics illustrated here could provide the needed indicators for managing individual utilization and self-selection.

- Compensation and Incentives. The Services have been given tremendous flexibility to offer incentives, both financial and non-financial. When the total of cash, noncash, and deferred compensation is considered, military compensation is highly competitive (military pay ranks in the top 15 percent of pay for comparable age and education groups in the U.S. labor market). Moreover, compensation in combat zones is substantially higher than for non-deployed Service people with the same rank and years of Service.

Given the length of the operations, service members should not be surprised by the deployment demands associated with decisions to enlist or re-enlist. We, therefore, judge that the Services’ compensation packages are sufficient for recruiting and retaining needed personnel. This package of compensation is also available to self-selectees from the Reserve Components and retired ranks who self-select for Active Duty, and we believe that available compensation is proving equally competitive for these individuals.

Military compensation is competitive with civilian alternatives; it provides service members considerable incentives to self-select for deployment.

- Authorities and Sources of Self-selectees. The Services have been thorough and diligent in using all available sources of trained military personnel to sustain Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF), including active, reserve, and retired. It also appears that there is a significant amount of self-selection for deployment and for repeated deployments that exceed the targets established by DOD. Despite the preference for volunteerism stated in DOD policy documents, there are barriers to self-selection that stem from cultural factors and legacy processes. At the same time, however, there are also more paths to self-selection than were expected at the outset of the study.

Authorities are adequate for sustaining or expanding self-selection.

- Management of Civilian Deployments. Civilian employees are playing a greater role in the combat zones than in previous conflicts, but the number serving in the Iraq, Afghanistan, and Middle East Combat Zones is still a very small fraction of the total U.S. Government presence there. All of the approximately 6,500 DOD employees serving in the combat zones are self-selectees. The Army

Corps of Engineers provides an excellent example of an effective approach for managing the employment of civilians in the Central Command (CENTCOM) Theater. The Civilian Expeditionary Workforce is a nascent program designed to provide civilian employees ready and willing to deploy as Individual Augmentees (IAs) from their regular work locations to support "combat operations by the military; contingencies; emergency operations, humanitarian missions; disaster relief; restoration of order; drug interdiction; and stability operations."

DOD monetary benefits and incentives for working in the combat zones are adequate to attract large numbers of volunteers, but the qualifications are so stringent that only 5 to 10 percent of volunteers are selected to serve.

DOD is not wanting for willing civilian self-selectees, but the process of hiring civilians for jobs in the combat zones is long and painstaking, and should be improved.

## D. Paper Structure

This paper documents current policies and practices that promote or inhibit selfselection among service members and identifies and assesses actions that would help make the personnel system more responsive.

We identify three broad classes of actions that would expand the contribution of self-selection. The first focuses on near-term actions to meet the Secretary's deployment targets. After reviewing available data and existing practices, we describe an approach for monitoring and assessing service member utilization, and show how self-selection initiatives coupled with demand-side management actions could target and help to mitigate (perhaps even resolve) identified shortfalls in the numbers of individuals available to deploy in compliance with the Secretary's targets. Self-selection serves within this framework to ensure that any individuals whose deployment history violates the Secretary's guidelines are those who have opted for the duty (self-selected).

The second set of actions couples self-selection with training opportunities to broaden the scope for self-selection to adjust inventories with emerging needs. This mechanism would allow pre-trained individuals in the Reserve Components to choose to commit for a period of time sufficient to allow them to be trained and deployed in a needed skill community. Finally, the third set of actions would incorporate self-selection as one element of fundamental institutional reform to provide responsive personnel support to operations.

The remainder of the paper is structured as follows:

- Chapter 2: Observations on Self-Selection
- Chapter 3: Reducing Barriers to Self-Selection
- Chapter 4: Coupling Self-Selection with Opportunities for Training
- Chapter 5: Self-Selection and Responsive Institutions
- Appendix A: Metrics for Quantifying and Managing Service Member Utilization
- Appendix B: Civilian Self-Selection for Work in Combat Zones
- Appendix C: Adequacy of Compensation
- Appendix D: Statutory Authorities
- Appendix E: Illustrations
- Appendix F: References
- Appendix G: Abbreviations

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## 2. Observations on Self-Selection

Each of the Services has a distinct approach for identifying and using self-selectees. Although the extent of self-selection is not systematically measured today, Service personnel managers report there is a great deal of informal self-selection that occurs between Active Duty service members and community personnel managers. The available data examined here suggests that self-selection is extensive in the Reserve Components, with over 50,000 of the 137,000 deployed service members in February 2010 having self-selected for their assignment.

The Service personnel managers report that they have been satisfied with the extent of self-selection that is occurring. Circumstances have not pushed them to the threshold where they have been compelled to take a more proactive approach. The Secretary's commitment to limit individual utilization will likely change this. Self-selection targeted on specific occupations will become an essential tool for managing individual utilization. As background for our assessments and proposed initiatives, this chapter reviews the current data on self-selection, examines the potential for expanding self-selection, and describes the policies and processes in place.

## A. The Compensation System Provides Considerable Incentives for Service Members to Self-Select for Deployment Duty

The initial objective of this study was to assess whether additional incentives would be required to sustain or increase the extent of self-selection. Given the steps that have been taken to ensure military compensation is competitive, the study found no evidence that additional compensation is a prerequisite for sustaining or expanding self-selection.

Congress has revised legislative authorities to provide DOD with the flexibility required to sustain the military personnel force in the face of heavy, sustained deployment demands. The Services have used this flexibility aggressively, but there is significant scope for more aggressive steps if they deem it necessary. Military compensation has increased substantially over the last decade, and it is highly competitive. The Services are, in the main, succeeding in recruiting and retaining service members both in terms of the quality and numbers needed.

Appendix C reviews the military compensation system as background for this assessment. The points below briefly summarize the main findings:

- Military compensation is very competitive with comparable civilian alternatives today. For example, when the total amount of cash, noncash, and deferred compensation is compared, military enlisted compensation ranks at the 85th percentile of all U.S. compensation. (This means a service member makes more than 85 percent of Americans with comparable education and experience.)
- Within the overall structure of compensation, service members deployed in a combat zone receive substantial additional benefits, including family separation pay, hardship duty pay, imminent danger pay, and a combat zone tax exclusion. These additions increase a service member's effective pay by roughly 12-15 percent above non-deployed pay, depending on an individual's dependents and household tax circumstances. This additional compensation gives service members considerable incentives to self-select for deployment.
- The law provides the Services with significant flexibility to target compensation toward high-use communities though such flexible compensation mechanisms as Assignment Incentives Pay or Selected Reenlistment Bonuses. Such pays provide incentives to self-select for deployment duties in two ways. First, they provide a direct retention incentive for members in these communities, an act that commits the individual to future deployment duty. Second, these pays offer members in other communities an incentive to self-select for retraining into high-use skills where they expect to be required to deploy extensively.
- A related point is that self-selection into high-use communities affects not only current compensation, but also a service member's career expectations about longevity and promotion. The additional career compensation associated with self-selection is an additional incentive for continuation or retraining into these communities.
- In addition to the financial recognition provided to service members, the Services recognize personnel for their contributions by providing uniform badges, Service stripes, and medals, which distinguish those individuals who have participated in combat operations from those who have not. In some cases, personnel are offered their choice of assignment or training opportunities following combat duty. These non-monetary incentives have always been a valuable tool that the Services effectively use to inspire their personnel and their value cannot be underestimated.

In combination, these factors provide considerable incentives for individuals to self-select for combat zone duty. Within the Active Components, these incentives work in combination with the assignment systems to manage assignment duties within occupations.

For individuals in the Reserve Components and the retired military community, the compensation for self-selecting to mobilize and deploy must be weighed against the individual's civilian alternatives. Although detailed market research is needed to assess individuals’ motivations for self-selecting, it is clear from the factors outlined above that the total package of military compensation is highly completive with civilian alternatives. Thus the existing compensation package provides considerable incentives for a Reserve Component member or retiree to self-select for deployment duty.

## B. Self-Selection is Common, But It is Neither Officially Defined Nor Reported

The use of self-selectees in the active and Reserve Components is managed largely independently, and there are no consistent definitions or measures of the extent of selfselection. The subjective assessments, anecdotal reports, and limited available data all indicate that self-selection is very common. This section briefly reviews what is known about the extent of self-selection, and identifies needed improvements in the data.

## 1. Active Components

Virtually no data are kept on the extent of self-selection within the Active Components. In the main, self-selection in the Active Components is a subtle process that is difficult to quantify.

Active Duty military personnel volunteer for service, but while on Active Duty they are subject to involuntary assignments and deployments. Most assignments are based on formal procedures through centralized processes for reassignment and career development. The ethos of duty and discipline, coupled with the practice of centralized institutional workforce management, creates limits on the opportunities for self-selection within the Active Components. Still, within this system, there are opportunities for selfselection.

Self-selection in the Active Components most often takes the form of an individual service member seeking an assignment in a unit known for certain types of duty through informal contact with personnel managers. For example, in the Navy there is an expectation of sea duty obligations when a seaman is assigned to the surface fleet, just as there is an expectation in the Army of extensive deployment duty associated with assignment to a Special Forces group. Such assignments would customarily be expected to entail more frequent overseas deployment and duty within combat zones compared to
assignments with other types of units or organizations. Similarly, with the ongoing operations under OEF and OIF, certain high-utilization communities, such as Civil Affairs, Military Police, or Explosive Ordinance Disposal, carry with them the expectation of regular deployments.

Self-selection within or among operational units (e.g., ship, squadron, regiment, brigade combat team (BCT)) may be limited because of the desire to manage personnel consistent with the cyclic rotation of units and individuals to the combat zones. Each Service has a different approach to the management of unit rotations; they have different tour lengths in the combat zones; and they differ according to whether they favor involuntary reassignment or tolerate a degree of self-selection.

Self-selection by individuals who wish to transfer from non-deploying jobs to operational units is possible, but even here opportunities are limited by workload demands. The Service responsibilities for raising, training, sustaining, and providing trained units and personnel for the COCOMs entail important work. Billets in those functional areas are continually screened and reduced to shift personnel to operational assignments. This reduces slack in the system. So, even when an individual is willing to self-select, the institution may be unwilling to forego that person's contribution in his or her current job. Personnel performing essential functions, such as recruiting, basic training, and teaching are often "stabilized" in these jobs for multi-year tours, and required to complete a full tour of duty before they can be reassigned.

It is noteworthy that the Navy has instituted an innovative program for managing the use of Active Duty personnel for non-traditional combat zone duties. It has programmed a block of 2,700 billets in the active end strength to form a Global War on Terrorism Support Assignment (GSA). Through this system, the Navy attempts to fill many of its contributions to combat zone individual billets using Active Component selfselectees. The goal is to have a self-selectee rate of approximately 75-80 percent, although numbers have been holding at around 50 percent. ${ }^{3}$

While not directly linked to self-selection for combat zone duty, the Services are using self-selection in combination with other actions to realign their occupational inventories to address limited supply/high demand (LS/HD) occupations. The Services have expanded the size of forces (with Congressional and Secretary of Defense approval), applied selected reenlistment bonuses, and provided incentives for switching to high-use occupations. An example of the latter is the Navy Perform to Serve (PTS) program, where enlisted personnel are encouraged to change from low to high demand skills. This is the Navy program that shapes the current and future force, ensuring that

[^1]high demand skill communities are sufficiently manned. The PTS process is now mandatory for sailors up to the grade of E6 with less than fourteen years of service. ${ }^{4}$

The ongoing Army transformation requires 150,000 soldiers to change skills, and the Service is roughly two-thirds through that process, according to the Army Chief of Staff Gen. George W. Casey Jr.: "Since this began, the Army has taken down about 200 tank, field artillery and air defense companies and built an equivalent number of military police, engineers, Special Forces and civil affairs units." ${ }^{5}$ As recently as April 22, 2010, the Army offered Military Occupational Specialty (MOS) conversion bonuses with the intent of "attracting highly qualified soldiers in the rank of E6 and below to self-select from over-strength specialties" into a shortage MOS. ${ }^{6}$ Monetary incentives range from $\$ 2,000$ to $\$ 4,000$. Similarly, the U.S. Army Reserve (USAR) officer branch informs officers of the opportunity to convert from over-strength branches to those critical branches with shorter wait times for basic officer leader course start dates such as Transportation, Quartermaster, and Ordinance.

## 2. The Ready Reserve

Within the Reserve Components, the overwhelmingly dominant source of available and capable personnel for combat duty resides in the Ready Reserve. The Ready Reserve consists of the Selected Reserve, the Individual Ready Reserve (IRR), and the Inactive National Guard (ING). The Ready Reserve includes over one million members:

- The Selected Reserve contains 379,000 Federal Reserve members and 459,000 National Guardsmen. Within the Ready Reserve, the selected reserve provides the primary source of service-aged, trained individuals. The Selected Reserve is the element of the Ready Reserve that includes all units, individual mobilization augmentees (IMAs), full-time Active Guard Reserve (AGR) personnel, and full time dual-status technicians that are military members as well as civilian technicians.
- The Individual Ready Reserve comprises another 213,000 members. Many members of the IRR serve because they are fulfilling their Military Service obligation after leaving Active Duty.
- The Inactive National Guard is a holding detachment of some 5,200 individuals who are assigned to a unit but for various reasons no longer drill with that unit. ${ }^{7}$

[^2]Volunteerism is a way of life for Ready Reservists. All of them volunteered to join the Military Services, and most of them volunteer a second time to train in units or as individual mobilization augmentees.

## a. Mobilization Authorities

Thanks to the records kept on individuals mobilized for Active Duty, much more information is available on self-selection within the Reserve Components than were found for the Active Components. But, despite this, the measures of self-selection are incomplete and limited. We shall review here the data that are available to assess the current situation, and point out the areas where the data need to be improved.

Table 1 shows the legal authorities for mobilizing the Ready Reserve. In this context, "mobilization" is the term used to describe calling up the units and individual to Federal Active Duty-both voluntary and involuntary.

Table 1. Ready Reserve Mobilization Authorities

| Title | 10USC12301a | 10USC12301d | 10USC12301h | 10USC12302 | 10USC12304 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Name | Full <br> Mobilization | Active Duty Operational Support ADOS | Medical Examination or Treatment | Partial Mobilization | Presidential Selected Reserve Callup (PSRC) |
| Method | Involuntary | Voluntary | Involuntary | Involuntary | Involuntary |
| Authority | President | Service Secretaries | Service Secretaries | President | Secretary of Defense |
| Condition | War or National Emergency |  |  | National Emergency | Augment AC for operations or WMD attack |
| Number | Entire Ready Reserve | No limit in the law | No limit in the law | 1 million Ready Reservists | $\begin{gathered} 200,000 \\ \text { Ready } \\ \text { Reservists } \end{gathered}$ |
| Duration | $\begin{gathered} \text { Duration }+6 \\ \text { months } \end{gathered}$ | As determined by a Service Secretary | Unspecified | 24 months | 365 days |

Two of these mobilization authorities have been used predominately during the current campaigns:

- 10 U.S. Code, Section 12302 (Partial Mobilization) allows the President to call up to Federal Active Duty up to one million Ready Reservists without their consent (involuntarily) for a period of twenty-four months. This authority was
invoked on 14 September 2001 by President George W. Bush when he issued Proclamation 7463 declaring a National Emergency ${ }^{8}$ and Executive Order 13223 authorizing the Secretary of Defense "to order any unit, and any member of the Ready Reserve not assigned to a unit organized to serve as a unit, in the Ready Reserve to Active Duty for not more than twenty-four months." ${ }^{9}$
- 10 U.S. Code, Section 12301d (Active Duty Operational Support ADOS) allows the Secretaries of the Military Departments at any time to order a member of a Reserve Component under his jurisdiction to Active Duty or retain him on Active Duty, with the consent of the member. This is the voluntary option, and the Secretaries of the Military Departments may set the conditions and durations of Active Duty for the volunteers.


## b. Data from Mobilization Orders

Mobilization orders provide a key source of data on self-selection. Statistics are collected for RC service members who are mobilized under Involuntary Mobilization Orders (Section 12302) as well as under Voluntary Mobilization Orders (Section 12301(d)). Table 2 shows that in February, 2010 there were a combined total of 136,662 National Guard and Reserve personnel mobilized in both units and in individual billets. ${ }^{10}$ Approximately 30,000 ( 28 percent) of these 137,000 individuals were on voluntary mobilization orders, which we deem to constitute self-selection. ${ }^{11}$

[^3]Table 2. Mobilization Orders

| Reserve Component | Voluntary Orders 12301(d) | Involuntary Orders 12302 |
| :---: | :---: | :---: |
| Army National Guard | 6,506 | 69,197 |
| Army Reserve | 9,964 | 21,756 |
| Navy Reserve | 91 | 6,159 |
| Marine Corps Reserve | 1989 | 4,355 |
| Air National Guard | 7,273 | 2,735 |
| Air Force Reserve | 3937 | 1,537 |
| DOD Total | 29,760 | 105,739 |

It is noteworthy that the majority of RC members who are mobilized by the Air Force are under voluntary orders. The Air Force routinely seeks volunteers from across the RC to meet deployment needs and seamlessly inter-mixes active and Reserve individuals to build deploying units. This approach is facilitated by the Air Force's strategic decisions to manage talent individually or in small units, to train to the same standards within the active and Reserve Components, and to set flexible timelines for mobilizing individuals. These combine to provide tremendous flexibility in mixing and matching individuals across the components to create effective combat organizations. While this degree of flexibility may not be appropriate for certain large ground combat formations, there are many combat zone duty assignments that could benefit from adopting such a flexible approach.

The reported percentage of voluntary mobilization orders represents a lower bound estimate of the number of Reserve Component self-selectees currently on Active Duty, because some of the remaining 107,000 service members who have been mobilized under involuntary orders might in fact have self-selected for duty. There are two main reasons why this happens. First, RC service members often find it is easier to justify their deployment duty to families and employers if the duty is classified as involuntary. So, even when a service member seeks the opportunity to serve, he or she does so with the condition that this service be conducted under involuntary orders.

Second, individuals may self-select to join a unit mobilized under involuntary orders. For example, the Army National Guard reports that, on average, they are crossleveling 37 percent or 1,215 service members to fill out each mobilizing brigade. ${ }^{12}$ These additional personnel are likely a mixture of individuals who self-select and individuals

[^4]who are involuntarily mobilized. All are counted as involuntary, however, because the unit is being involuntarily mobilized under Involuntary Mobilization Orders (Section 12302) orders. Hence, some fraction of these National Guard individuals who fill out units should also be considered to be self-selectees, but the Guard has no direct measures to indicate how many.

## c. Data from Waivers

One indicator of the degree of self-selection is available through the newly required data on the individual 'waivers' to the Secretary's deployment-dwell targets. (The time at home station between deployments is defined "dwell time.") By mid 2009, all of the Services were tracking Reserve service members' dwell waivers. While this information is not yet recorded in a common database, statistics are being collected and maintained by the Office of the Assistant Secretary of Defense for Reserve Affairs. Figure 1 depicts the aggregated monthly data for all of the Services.


Figure 1. Aggregated Monthly Data for All of the Services

The most recent snapshot indicates that a total of 3,690 Reserve Component service members were involuntarily mobilized during the month of February, 2010. Any of these individuals who did not comply with the Secretary's deployment targets required a waiver declaring that he or she had self-selected for this duty. Of the 3,690 mobilized, there were 783 ( 28 percent) who were granted self-selection waivers. The self-selection data series extends back to July 2009. The data suggest that self-selection consistently trends at about 20-25 percent of the total mobilized each month under involuntary orders.

These data are only rough indicators, because each Service is still defining (and hence reporting) self-selection and waivers differently. As an example of how a Service
tracks waivers, the Air Force uses a Mobilization Worksheet to annotate if an individual is amenable to being recalled to Active Duty (self-selectee) or whether the member must be involuntarily activated with less than the requisite dwell time. If individual consent for self-selection is not given, the first general officer in the chain of command must submit a letter stating why any individual is needed before completing the required dwell time. ${ }^{13}$ Conversely, the Marine Corps maintains no such policy requiring AC or RC members to sign waivers to break dwell time, since ratios have generally been met and dwell time is perceived as a 'goal.' An internal Marine Corps policy does require commanders to justify when they intend to redeploy Marines before they have achieved a minimum dwell goal of $1: 1$. The Army maintains a similar policy for its AC regarding a minimum of twelve months dwell, and uses a system similar to the Air Force regarding RC waivers. Army National Guard members also have the requirement of gaining approval of unit commanders and State Adjutants General (TAGs)/governors in order to self-select for mobilization.

Navy data provide additional indicators of the extent of self-selection. With regard to RC personnel, a running total as of May 21, 2010 depicts 2,703 personnel mobilized on the "exception" report, of which 57 percent were self-selectees. ${ }^{14}$ Packages submitted for future mobilization dates show an 89 percent self-select level.

## 3. An Estimate of Reserve Component Self-Selection

Taken as a whole, the available data suggest that a significant fraction of those RC members mobilized under involuntary orders have in fact self-selected for the duty. Conservatively, we would place this fraction at roughly 20 percent. Using this percentage as a guide suggests that roughly 22,000 of the 106,000 individuals currently mobilized under involuntary orders can be considered self-selectees. When added to the 29,000 mobilized under voluntary mobilization authority, this suggests that at least 50,000 RC service members are currently self-selected for combat zone duty.

Looking to the future, the waiver system could provide an improved basis for measuring and reporting self-selection. Each waiver would certify either that an individual has self-selected to deploy, or that command leadership determines that the deployment is sufficiently important that it merits violating the Secretary of Defense's (SecDef's) utilization targets. In either case, there is a paper trail, which if reported systematically, would provide measures of self-selection and the utilization of other individuals in excess of the SecDef targets.

[^5]
## C. Self-Selection Could be More Proactive and Better Targeted

The IDA study team met with Service representatives to learn about their current approaches for soliciting, selecting, training, and employing self-selectees. We also sought to identify best practices that might be shared across components. The findings are summarized in this and the following sections. Table 3 provides an overview.

Table 3. Observations on Service Self-Selection Processes

| Assessment Element | Army | Navy | Air Force | Marine Corps |
| :---: | :---: | :---: | :---: | :---: |
| Solicitation and Selection | - Postings on Army Knowledge On Line <br> - Components manage needs individually | - Individual Augmentee (IA) website <br> - Active Component: detailers <br> - Reserve Component (RC): mobilization opportunities advertised | - Air Expeditionary Force (AEF) online and Volunteer Reserve System posts opportunities | - Ops Forces manage requirements; seeks selfselectees when needed to fill billets <br> - RC uses the Billet Advertising Module |
| Assignments | - Fill deploying units; limited within components for combat formations <br> - Fill individual billets | - Fill deploying units <br> - Fill individual billets | - Flexible mix of active and Reserve | - Marine reports to new unit or IA billet; participates in needed predeployment training |
| Cross-training opportunities | - Train at home station before deploying using on-line courses <br> - Train at CONUS Replacement Center and upon arrival in theater | - Cross training provided for non-doctrinal roles: detainee ops; customs; personnel security details; improvised explosive device | - Limited opportunities based on persistent unit needs | - Some lateral moves involving training <br> - Lateral moves are not used for temporary needs; Marines may be crosstrained for additional Military Operational Specialty (MOS) to fill a temporary billet |

[^6]
## 1. Mechanisms for Soliciting and Screening Self-selectees in Response to Demands

The Services solicit self-selectees by communicating specific job requirements and identify self-selectee candidates through various systems employing chains of command, human resource managers, and internet portals. For example, the Air Force uses the Air Expeditionary Force (AEF) Tempo Band construct to synchronize Service sourcing with the Global Force Management Process and the Volunteer Reserve System (VRS). Candidate names and personnel data are entered into the AEF Online system.

The Marine Corps sends out requests across commands when a deploying unit cannot be internally sourced. AC Marines submit request orders to deploy or join a deploying unit. Marine Reserve Components use the Billet Advertising Module and Reserve Duty Online (RDOL) to request duty, in addition to contacting Reserve Operational Sponsors. The U.S Marine Corps (USMC) Department of Manpower and Reserve Affairs attempts to match self-selected personnel to the right billet. ${ }^{15}$

The Navy employs commands and community detailers to advertise self-selection opportunities, and uses the GSA process for personnel to identify themselves as selfselectees for augmentee assignments into combat theaters. ${ }^{16}$ For Naval RC members, numerous processes for self-selection exist. Selected Reserve personnel can change their mobilization status code to 'VOL' in the Reserve Headquarters Systems Database and then contact Naval Reserve Force Command with preferences. Personnel can utilize the 'Volunteer to Mobilize’ website to request duty locations and deployments. Enlisted members can also use Career Management System Interactive Detailing (CMS/ID) where mobilization opportunities are advertised, and sailors can submit applications for selfselection.

The Army posts many personnel requirements on websites accessed by Army Knowledge Online (AKO) and its Worldwide Individual Augmentee System. Opportunities for AC, National Guard, Reserves, and separated personnel (IRR and retirees) are listed throughout the various human resource online domains. In many cases, detailed information regarding the skill set required, grade, and duty location exists for each advertised billet. Officers also have an interactive assignment module that permits them to self-select for consideration for duty positions within windows of selection periods. Those interested in self-selecting for combat duty must have access to AKO and, even when access is gained they are not provided a system-wide view of all opportunities and requirements.

[^7]One major demand-side barrier to the effective use of self-selectees was cited across all the Services: the personnel managers in the Services find that too often theater requirements for individual billets are presented with too little advance notice. The lack of sufficient lead time for filling theater requests for forces constrains the Service's ability to seek and use self-selectees for many operational needs. To meet eleventh hour requests, the Services are forced to "rip to fill" from Active Duty ranks. They argue that the management of individual utilization could be made much more effective if theater demands were more predictable, providing additional time to respond.

## 2. Assignments

While all of the Services employ self-selectees to deploy to combat zones, there are differences in where, organizationally, self-selectees are assigned. Employment, once in theater. varies since war fighting leaders adjust organizations and personnel based on the actual requirements encountered.

The Navy uses self-selection as a vehicle primarily to fill combat theater requirements for individual augmentee positions and non-doctrinal requirements, such as Provisional Reconstruction Teams. Navy RC personnel generally serve on Navy staffs, Joint staffs, in ad hoc units, or with Army units.

The Air Force mixes and matches weapons systems and organizations throughout the active and Reserve Components to meet most of its demands. Unique, non-doctrinal requirements are met with self-selected individuals to the degree possible. As noted earlier, the Air Force is unique in its emphasis on the voluntary employment of its Reserve Component members.

The Marine Corps uses both AC and RC self-select personnel to fill up the ranks of its deploying formations, active and Reserve.

Self-selection within the Army RC is component-centric since each component looks inward to manage the self-selection process, cross level, and subsequently mobilize its units. In fact, according to Army regulations, cross leveling between components is not authorized. ${ }^{17}$ Army Reserve self-selectees tend to be used the most flexibly, as they may fill Headquarters positions above brigade level in active combat formations, or deploy as a part of Active units.

## 3. Training

Training opportunities for self-selectees are limited to situations where the Service uses self-selectees to fill non-doctrinal billets. Examples might include training to serve

[^8]on a Provincial Reconstruction Team or to serve as a military trainer. For other possible uses of self-selectees, the Services seek, and screen for, individuals who already possess the requisite training and experience. Because standards are high, and there is limited time for cross-training, or refresher training, only a fraction of individuals who might be willing to serve are able to meet requirements. As will be discussed in Chapter 4, an initiative that couples self-selection and training might significantly expand the scope for self-selection.

## 4. Summary

The management of combat duties varies widely across the components, and consequently so does the treatment of self-selection. Although the Air Force has tailored its operational strategy to maximize the use of self-selectees from its Reserve Components and meet its core operational missions, self-selection mechanisms are more typically used to fill gaps or serve non-core functions. The Services solicitations for selfselectees are narrowly targeted in reaction to specific theater requirements, and in all cases, solicitations are focused inwardly within an individual component and are not coordinated across DOD.

## D. Targeted Recruitment Could Expand Self-Selection

Although there has been a great deal of self-selection in the last few years, there is substantial potential for even more. None of the Services conducts market research to identify pools of willing self-selectees among those serving in the AC or RC, or those who have recently separated from Service. Perhaps this is not being done because the Services' personnel managers already understand these communities, and, as mentioned earlier, they are satisfied with the current levels of self-selection. Nevertheless, some understanding of the potential scope for additional self-selection is needed. This brief review provides some perspective on the size of the pools of reservists and retired military that could be tapped to meet operational needs.

## 1. Selected Reserves

A logical target population for recruiting additional self-selectees is individuals who are in the Selected Reserves but who have not yet been mobilized. Table 4 summarizes the current utilization status of each of the 1.4 million service members in the active and Selected Reserves across the Services. The table identifies the total number of enlisted personnel, limited to grades E4 and above in order to eliminate the more junior grades that may lack the requisite training and experience for their occupation. The table also identifies those individuals whose combat zone duty time exceeds the SecDef rotational targets discussed above. The table then identifies those individuals who have no combat zone duty time, or in the case of the Reserves, have not yet been mobilized.

Table 4. Active Duty and Selected Reserves (2009 Data for Enlisted Rank E4 and Above, in thousands)

|  | Army |  |  | Marine |  | Air Force |  |  | Navy |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AC | NG | R | AC | R | AC | NG | R | AC | R |
| Total Inventory $(1,385)$ | 341 | 236 | 125 | 97 | 15 | 196 | 82 | 48 | 201 | 44 |
| Above Utilization Target (332) | $\begin{gathered} 97 \\ (28 \%) \end{gathered}$ | $\begin{gathered} 121 \\ (51 \%) \end{gathered}$ | $\begin{gathered} 53 \\ (42 \%) \end{gathered}$ | $\begin{gathered} 8 \\ (8 \%) \end{gathered}$ | $\begin{gathered} 6 \\ (40 \%) \end{gathered}$ | $\begin{gathered} 5 \\ (3 \%) \end{gathered}$ | $\begin{gathered} 16 \\ (20 \%) \end{gathered}$ | $\begin{gathered} 12 \\ (25 \%) \end{gathered}$ | $\begin{gathered} 6 \\ (3 \%) \end{gathered}$ | $\begin{gathered} 8 \\ (18 \%) \end{gathered}$ |
| Sel Res Never Mobilized (225) |  | $\begin{gathered} 77 \\ (33 \%) \end{gathered}$ | $\begin{gathered} 55 \\ (44 \%) \end{gathered}$ |  | $\begin{gathered} 4 \\ (27 \%) \end{gathered}$ |  | $\begin{gathered} 39 \\ (48 \%) \end{gathered}$ | $\begin{gathered} 23 \\ (49 \%) \end{gathered}$ |  | $\begin{gathered} 27 \\ (61 \%) \end{gathered}$ |

In addition to the Active Components and selected Reserve Components shown in Table 4, there are several hundred thousand individuals in the Individual Ready Reserve, Inactive National Guard, and retired populations. Individuals from these groups have deployed in substantial numbers, and they can be considered a viable source for additional self-selectees.

## 2. Retired Military Personnel

Retired Military personnel are another potential source of self-selectees for duty in combat zones, or to backfill other members deployed to the combat zones. ${ }^{18}$ There are two kinds of retired military personnel. Regular retirees are active status officers and enlisted personnel who have retired for length of service and receive military retired pay. The retired Reserve consists of reserve officers and enlisted personnel who are eligible to retire on the basis of their combined active and inactive duty service.

Retired military members constitute a sizeable pool of trained and experienced military personnel. They tend to be senior officers and non-commissioned officers. Many retired enlisted personnel are in their forties and early fifties and have the vigor and physical ability to perform many duties. The retired Reserve includes 217,000 service members. Of these, 42,000 (19 percent) have deployed.

For mobilization purposes, both regular and retired reservists are assigned to three categories. The most relevant category as a potential source of self-selectees are the

[^9]Category I retirees. They are within their first five years of retirement, under age 62, and are not disabled. In the Army, for example, there are 110,000 Category I retirees. The data show that the Military Services have called to Active Duty and deployed a significant percentage of the retired military population. Yet the Army's process for selecting retirees to come onto Active Duty requires a 'by name request' for the individual for a specific billet to be filled. Accordingly, there are currently 1,600 retirees who have applied to come back into the active Army, but are waiting to be 'by name' selected.

## 3. Targeting Requires Market Research

Market research is needed to determine the propensity of individuals to self-select. There are good reasons to believe that, if given a good opportunity, some fraction of the more than half a million individuals in these pools would be willing to self-select for combat zone deployments. First, as already noted, self-selection already is common. Second, as outlined in Appendix C, the military's compensation packages are quite favorable relative to civilian industry norms-especially when one considers all of the monetary and non-monetary compensation associated with combat deployments. Third, the weak state of the U.S. job market limits the competitive opportunities in the private sector. A Bureau of Labor Statistics report from March 2010 indicates that the unemployment rate for veterans who served in the military since September 2001 averaged 10.2 percent in 2009, and the rate peaks at 21.6 percent for young male veterans between the ages of 18 to $24 .{ }^{19}$ While veterans may do better than average in the job market, these labor-market statistics, coupled with the comparative compensation data noted earlier, indicate that substantial numbers may be willing to self-select if given a suitable opportunity.

## E. Summary of the Fact Finding

In the Active Components, multiple, informal self-selection mechanisms are used to negotiate assignments, particularly for senior officers and enlisted personnel. This informal self-selection is administered by community managers within individual components. Self-selection statistics are not reported. Within the Reserve Components, self-selection is also very common, but the available data are incomplete. About 29,000 RC members are currently serving under voluntary mobilization orders, and perhaps 20 percent of those mobilized under involuntary orders have self-selected for their duty. Hence, the total extent of self-selection today is about 50,000 service members.

[^10]While self-selection is common, its use remains limited by several factors. After reviewing compensation practices, we concluded that compensation is not the major factor constraining the extent of self-selection. We determined that the limitations result primarily from the procedures used to administer self-selection. Some of the major barriers include:

- A lack of metrics and visibility of individual utilization and self-selection.
- Limited forward planning for personnel in theater and weak communications between theater planners and the provider communities.
- Reactive use of self-selection to meet specific, detailed personnel requests.
- Insular approaches for soliciting and identifying self-selectees that have not always sought the best talent from across DOD.

The initiatives outlined in the next three chapters address these barriers and outline a systematic, proactive framework for self-selection that will help to meet the Secretary's utilization targets.

## 3. Near-Term Actions to Address the Secretary's Deployment Targets

A more deliberate and purposeful approach to managing the deployment duties of individuals is possible and self-selection provides an important tool for creating the needed management framework. This chapter describes the actions needed to expand the opportunities for self-selection and more systematically target the use of self-selection toward the communities with identified needs. The proposed actions involve four DOD domains involved in the management of personnel in support of operations:

- Combatant Commands could improve their planning for and communication of theater needs.
- DOD-wide leadership for force and personnel allocation could define the policy, and provide the analytical framework and leadership forum for assessing and managing individual utilization.
- Service force managers could strengthen the mechanisms for managing individual billets required in the theater and for making the most effective use of high-use occupations.
- Service personnel managers could more proactively use self-selectees.

These actions will serve to minimize deviations from the Secretary's targets in the near-term, and provide a path for moving toward full compliance over time. The next section begins with definitions and prototype analytical results that suggest the steps necessary to monitor individual utilization.

## A. An Indicator for Targeting Self-Selection

DOD is striving to minimize cases where individual service members must be compelled to serve in excess of the Secretary's utilization goals. This study has developed and demonstrated an analytical framework to target self-selection in meeting this objective. The prototype metrics are defined and illustrated in Appendix A.

- Self-Selection Targeting Indicator (SSTI). For each of 1,153 occupations, the Self-Selection Targeting Indicator provides a measure of how many service members would violate the Secretary's utilization targets if they were ordered to combat zone duty.
- Example. A hypothetical numerical example illustrates how the SSTI is calculated:

300 individuals in an occupation

- 180 individuals who have cumulative deployment time since 2004 that exceeds the Secretary's guidance (i.e., one year in six for RC) ${ }^{20}$
- 50 individuals who are currently deployed, and not eligible to redeploy immediately
- 30 individuals who have never deployed, and assumed unavailable ${ }^{21}$
$=40$ individuals who can be involuntarily deployed in compliance with the Secretary's targets

The Self-Selection Targeting Indicator then is the difference between the number of individuals who can be ordered to deploy in compliance with the guidance versus the number of individuals required for deployment. Hence:

SSTI = 10 (= 50 to be deployed -40 who can be ordered to deploy in compliance with guidance)

We have applied this methodology to 1,153 occupational groups using personnel utilization histories reported by the Defense Manpower Data Center. We found shortfalls to be filled by self-selection in 272 of the 1,153 occupations, under a baseline assumption of steady rates of deployment across occupations (See Appendix A). The total need for self-selectees summed across these occupations amounts to 37,122 service members. It is noteworthy that 235 (86 percent) of the occupations with self-selection needs are in the Army National Guard (ARNG) and Army Selected Reserve (USAR SELRES). Moreover, when measured in terms of absolute numbers of individuals, the Army Guard and Reserve account for 97 percent of the need. ${ }^{22}$ (The statistics for each occupation with a self-selection need are presented in the tables at the end of Appendix A.)

[^11]The purpose of the Self-Selection Targeting Indicator is to provide a leading indicator that can help direct more in-depth study of an occupation to confirm or rule out the possibility of a persistent shortfall, and if necessary, the targeting of appropriate remedial actions. What are the supply-side options? In the short run, with total inventories fixed, personnel managers in communities with identified needs have three options:

1. Solicit self-selectees to fill the predicted shortfall

- Self-selection helps to close the gap by allowing service members to choose to serve at rates above their target utilization ratio.
- Self-selection also allows individuals to select mobilization periods longer than 1 year.
- Note that the Army National Guard and the Army Reserve are no doubt already getting large numbers of self-selectees. However, as we have noted, the current data do not provide a measure of the degree of self-selection that is occurring.

2. Increase the availability of individuals in the inventory by ensuring that those who have never deployed are available to do so

- Data in Appendix A show that both the Army National Guard and Army Reserve have sizeable pools of individuals who have never deployed. We have not counted them as available because significant numbers of them are not eligible to deploy.
- Increasing availability may entail accelerating the entry pipeline, perhaps through accelerated training.
- It may also entail investment to obtain medical readiness.
- Self-selection could serve as the basis for identifying candidates.

3. Cross-level across Services and components

- A DOD-wide approach would make the most effective use of available talent. Should there be skills available in other Services or components they should be considered as part of the solutions.
- Self-selection across all components would provide a basis for crossleveling available talent.

Whether these near-term measures could fill the indicated shortfalls will require some additional experience to answer. It is encouraging, however, that our estimate of an aggregate self-selection need of 37,000 is roughly of the same magnitude as the 50,000 Reserve Component of self-selectees today. Of course, self-selectees are not being
targeted to exactly match the needs, so it is not likely that current self-selectees are filling all the shortfalls identified by the SSTI. Yet, some additional self-selection combined with effective targeting may be sufficient to mitigate or remove the indicated shortfalls in some occupations.

## B. The Needed Actions Address Four Management Domains

The interactions with DOD representatives indicated the need to take a DOD-wide perspective in assessing self-selection opportunities. As a result, the study has examined practices in four major DOD domains involved in managing personnel support for operations: (1) The Combatant Commanders’ personnel planning and requests; (2) The DOD-wide processes for allocating forces and personnel; (3) The component force provider and management institutions; and (4) Personnel supplying institutions. (See Figure 2.) For each domain, this section reports observations and recommended actions to remove the barriers to self-selection.


Figure 2. Four Management Domains Shape Demand and Supply

## 1. Combatant Commander Planning, Management, and Requests for Personnel

Table 5 summarizes observations on current practices within the Combatant Commander's management domain. We find there are major differences between the management of force units, which are handled through DOD's mainstream force management processes and the management of unprogrammed billets, which are filled by
individual replacements. The management of force units is handled through wellestablished mechanisms and procedures, including the Guidance for the Employment of the Force and the Global Force Management (GFM) process. Communication between the theater and force providers routinely occurs through the Service component commands of the COCOM. Unit providers have a basis for planning, and unit training and logistics movements may be scheduled many months in advance. (Of course this may not always be possible when the situation changes rapidly.)

Table 5. Observations on Combatant Command Management Processes

| Evaluation Element | Units and Organizations | Unprogrammed billets Filled by Individuals |
| :---: | :---: | :---: |
| Well structured processes | - Global Force Management (GFM) processes manage and forecast demand and supply for major units <br> - Force managers are able to plan for future unit deployments | - Rely on Request for Forces (RFF) for Individuals; Emergent requirements rapidly evolve <br> - RFF Process has structure, but requests come in many packages throughout the year (150 RFFs in 2009) |
| Effective communication with providers | - Utilize Service component Headquarters as provider liaisons <br> - Demands not always welldefined, resulting in overuse of Low Supply skills, underuse of skills in less demand, and pre-deployment training that doesn't match billet requirements | - Providers challenged <br> - Demands not always well defined, resulting in overuse of Low Supply skills, underuse of skills in less demand, and predeployment training that doesn't match billet requirements |
| Forward looking and adaptive to need; Predictable when feasible | - Utilize GFM and RFF processes to project needs | - Emergent requirements work against predictability <br> - Recurring demands are predictable |
| Disciplined | - Limited by Secretary priority, Svc Inventory, GFM process, Guidance for the Employment of the Force (GEF) priority <br> - Encouraged to submit unconstrained 'demand' <br> - Opportunity cost (cap) in Afghanistan | - Growth in unprogrammed requirements (temporary, unprogrammed) <br> - Constrained by manpower cap in Afghanistan <br> - Manpower cap avoided by using individuals for fewer days than an established limit (<179 days) |

In contrast, the challenge of managing the individual, unprogrammed billets in the theater has grown tremendously over the years while the institutional framework has not developed commensurately. Currently, Central Command (CENTCOM) operations are
using somewhat over 24,000 individual billets in the theater. ${ }^{23}$ These unprogrammed billets exist outside of doctrinally defined Service units; they serve to round out Joint headquarters staffs or to perform non-doctrinal tasks, such as serving on training teams, security detachments, Provincial Reconstruction Teams or providing "in-lieu-of" manpower. Because these billets are unprogrammed, they do not fit within the Services normal force management practices.

An underlying cause of these procedural shortfalls in managing unprogrammed billets is that they are managed as though the "war will end next year." Hence, a systematic management process has not emerged. Although most of these billets, once established, can be expected to generate a demand to be filled on an ongoing basis, they are not formally requested beyond a year at a time and the requirement typically is not programmed into the structure of the provider organizations. ${ }^{24}$ Each new request requires Service force and personnel providers to identify and task individuals with the requisite skills and experience.

## Recommendations:

1. Create Theater Functional Commands to assess and discipline theater demands for individuals, and to plan for, and manage their employment.

## 2. Institute personnel planning conferences-that look twelve to twenty-four months into the future-to improve two-way communication, provide discipline, and thereby enhance the ability of personnel suppliers to respond to theater needs.

The proposed initiatives would strengthen the management of unprogrammed billets. On the demand side, improvements are needed in planning for, disciplining, and managing the use of individuals in the theater. On the supply side, improved management would improve the ability of the Services to identify self-selectees to fill unprogrammed billets. An important step is to create units, or other mechanisms, that would take responsibility to plan for and manage the 24,000 unprogrammed billets in CENTCOM. In parallel, responsibilities should be assigned within the theater for managing the employment of these newly created units and the individuals within them. This could be accomplished by creating theater functional commands responsible to plan for and manage the employment of these units and individuals. These steps would bring the responsibility for planning, programming and managing the individuals currently filling

[^12]unprogrammed billets under customary force provider and personnel management mechanisms.

The channels of communication could be strengthened by convening regular planning conferences for the purpose of reviewing expected theater demands, assessing the available supplies to meet the demands, and evaluating alternatives for bringing supply and demand into balance. The conferences would involve the theater functional command planners, DOD force allocation officials, and the responsible force provider organizations. By improving the two-way flow of information, and looking twelve to twenty-four months into the future, this forum would help to improve the alignment over time of demand with supply.

The overall effect of these initiatives would be to reverse the trend of growth in unprogrammed billets. By creating a more systematic and forward-looking approach to managing the currently unprogrammed billets in the theater, these actions would improve the ability of the Services to plan for and support theater needs. In particular, these actions should help to minimize the occurrence of short-notice, quick fuse requests for individuals, which has required "rip-to-fill" staffing and has been a significant barrier to the use of self-selectees.

## 2. DOD-wide Leadership for Allocating Force Units and Individuals to Support Operations

The DOD-level processes for allocating resources to support operations provide the institutional bridge between the COCOM's requests and the DOD component organizations responsible for providing forces. Several processes are in place to engage the major institutions, which include the Office of the Secretary of Defense, the Military Departments, the supported Combatant Commanders, Joint Forces Command, and the Joint Staff:

- Global Force Management Process
- Request for Forces Process
- Force Sufficiency Assessments
- Operational Availability Assessments

Table 6 summarizes our assessment of the status of these processes.

Table 6. Observations on OSD, Joint Staff, Joint Forces Command (JFCOM) Processes for Allocating Force Units and Individuals

| Evaluation Element | Observation |
| :---: | :---: |
| Maintains situational awareness | - Utilization of individuals is not transparent or comprehensive (all Services, all components, military and civilian, unit and individual) |
| Conveys the Secretary's guidance; Sets clear goals and metrics for individual utilization | - 1:2, 1:5 policies have been clearly articulated <br> - The system of waivers for enforcing the Secretary's utilization guidance is beginning to emerge for the Reserve Components, but its application remains uneven |
| Provides a leadership forum and an adjudication framework for managing individual utilization | - Global Force Management and Guidance for the Employment of Forces processes focused on global unit requirements (assignment, allocation, apportionment), but do not capture all individual (military and civilian) requirements <br> - Processes do not capture opportunity costs due to supply, demand mismatches (e.g., when a brigade is sent, when company-sized units were requested) <br> - Process tends to uncritically validate Combatant Command (COCOM) requests for unprogrammed billets filled by individuals <br> - No systematic demand management mechanism in place to evaluate opportunities to employ support from outside the theater, validate requirements, or pose alternative solutions |
| Takes a DOD-wide perspective | - A DOD-wide perspective on individual utilization is needed to balance supply and demand for critical skills across all components <br> - Failure to clearly define required capabilities results in misuse of personnel with high demand capabilities and underutilization of people who could fill generalist requirements |
| Resolves problems e.g., targets needed actions to manage high-use communities, including selfselection | - No DOD-wide mechanism for targeting solutions for persistent mismatches <br> - Force sufficiency analyses and reliance on large numbers of unprogrammed billets filled by individuals suggest that inventory adjustments have not been sufficient to meet COCOM needs <br> - Persistence of high-utilization occupations implies very little slack in the system for these skill sets and communities |

A great deal of work is required by DOD leadership to institute an efficient management system. This work includes establishing a management information system,
developing and conveying DOD implementation guidance, creating a leadership forum, and establishing mechanisms for resolving problems.

Addressing all these management functions will require the creation of significant new processes. Because this chapter is focused on removing barriers (not building new institutions), the proposed initiatives are designed to perform the needed functions to the fullest extent possible within existing organizations. When taken together, the actions outlined here would create an effective framework, albeit one that in practice would depend largely on the willing collaboration of the participants. (In the final chapter, we discuss the possibility of more thorough institutional reform.).

## Recommendations:

## 3. Assign responsibility to OSD to coordinate the creation of common metrics and a reporting system for personnel utilization and self-selection.

- Critical to the creation of common metrics and a reporting system is the development of consistent definitions and metrics for individual utilization and self-selection
- Use this system to forecast the need for self-selectees in high-use occupations.


## 4. Assign responsibility to the Senior Readiness Oversight Council to coordinate the management of individual utilization.

- Commission an SROC-led collaborative initiative to create a strategy, policy, definitions, plans, and processes for a DOD-wide approach to individual utilization and self-selection.
- Give the SROC authority and resources to form DOD-wide working groups to coordinate demands and supplies for high-use occupations.

Recommendation 3 focuses on the creation of data and metrics for monitoring and assessing the utilization of individuals. An effective system requires: a) consistent measurement based on uniform definitions and metrics; b) an analytical system for tracking individual utilization in all Services; and c) consistent definition and metrics for self-selection. The data presented in Appendix A and summarized in Chapter 1 provide prototype metrics for monitoring and assessing the status of individual utilization. These prototypes provide insights into the current situation and they indicate shortcomings in the currently available data that will need to be addressed.

The assessment framework would serve to provide the data needed to identify the communities that are unable to comply with the Secretary's utilization targets and provide a collaborative framework for resolving identified problems. They provide the
necessary framework for harnessing self-selection to meet the most pressing operational needs.

Recommendation 4 would assign responsibility to oversee the employment of personnel in a manner consistent with the mechanisms in place for overseeing the employment of force units. The Senior Readiness Oversight Council is the logical home for this function. The utilization of individuals is a readiness issue, inasmuch as the management of individual utilization determines the future availability of individuals within skill communities.

The SROC should be chartered to assess demands against available supplies, to discipline demands in view of individual utilization, to define "enduring needs," and to propose needed structure and inventory adjustments. It would assess individual billet requests and evaluate alternatives. This should help reduce debates over the legitimacy of specific needs or requests. The forum would also be responsible for providing a systematic framework for evaluating alternatives such as reducing the need for deployments by increasing the support provided from outside the theater.

Recommendation 4 also proposes to create DOD-wide working groups for high-use communities. Cross-component collaboration will be needed to ensure high-use skills are used effectively and efficiently. Collaborative working groups that report to the Senior Readiness Oversight Council would have the responsibility of creating and instituting collaborative remedies for communities with utilizations that exceed the Secretary's guidance.

The working groups would be assigned responsibility for developing and implementing remedial strategies for the communities that are not in compliance with the Secretary's utilization targets. They would be given the responsibility, authority, and staff resources to work with the Combatant Commands and the Services to plan for meeting combat needs eighteen to twenty-four months in advance, to assess requests for forces, to evaluate the potential for increasing support from U.S.-based capabilities to meet mission needs, to post and fill self-selection opportunities across all the components, and to coordinate the use of self-selectees with the Services’ force managers and personnel managers.

The task also remains to flesh out the strategies and policies for managing individual utilization and to convey these to the implementing activities.

## 3. Service Force Managers

The policies for forming and managing force units within the component force providers have a profound influence on the opportunities for self-selection. Experience shows that a service member's willingness to self-select for an assignment can be
maximized by designing job opportunities that are predictable, well defined, meaningful, and flexible in the required time commitment.

The observations on current practices are summarized in Table 7. Practices differ widely across the Service components. There are also significant differences between the management of force units versus unprogrammed billets.

The Services mainstream force management processes are designed to provide predictability and structure for planning and managing the demands on individuals. Common across the Services is the expeditionary model of rotating units into operations. To the extent operational demands permit, these rotations are scheduled and predictable. The Service personnel communities use this schedule to fill the units on the timelines established by the force managers. These rotational processes facilitate self-selection by making it possible for individuals to predict when units are scheduled to deploy.

Table 7. Observations on Force Provider and Management Institutions

| Evaluation Element | Army | Navy | AF | USMC |
| :---: | :---: | :---: | :---: | :---: |
| Demands on individuals are well structured: <br> - predictable <br> - well defined <br> - meaningful <br> - tailored | - Army Force Generation (ARFORGEN) intent -to provide unit focused stability; predictability is the goal <br> - "Rip to fill" sourcing reduces predictability, increases risk, and creates gaps in programming <br> - Continued, significant cross leveling in RC | - Reserve Component (RC)Ready Mobilization Pool -Maintaining 1:5 Mobilization: <br> - Dwell goal. Provides predictability <br> - Active Component -Global War on Terrorism (ACGWOT) Support Assignments (GSA) incorporate theater assignments within processes for normal career rotations <br> - Short notice requirements (<120 days) lead to rip-to-fill IA assignments rather than predictable GSAs <br> - Ratio of Individual Augmentee (IA):GSA going up as result of shift from Iraq to Afghanistan | - Army Expeditionary Force (AEF) provides predictable planning baseline for Active Component (AC) and RC <br> - "Rip to fill" sourcing for unprogrammed billets reduces predictability | - Uses the Force Sourcing "Playbook" to guide requirements planning and staffing |
| Replacement Policies make efficient use of available personnel <br> - allow tailored commitments | - 12 month involuntary deployments constrain use of RC individuals in Active Component (AC) <br> - Unit rotation limits flexibility of individual self-selectees <br> - ARFORGEN is brigade combat team (BCT)-centric (12 month AC rotations) | - One year or less GSA/IA tours <br> - Reserve Units deployed more frequently than $1: 5$, but individuals in units maintain 1:5 | - AEF - Total Force generation construct , manages battle rhythm of all capabilities <br> - AEF very flexible in tailoring RC commitments <br> - One-Year deployment limits use of RC or NG individuals in AC | - 7-month deployments for Battalions and below. <br> - 12-month deployments for Regiments and higher |
| Meshes employment of AC and RC effectively <br> - meaningful <br> - respected | - Constrained manpower flows suggest that total force is not being optimally utilized | - Both RC and AC force managers appear committed to this | - AEF process attempts to share burden across total force | - Reserve forces are used to achieve requirements via unit augmentation and/or IAs |

Every Service component uses self-selection from the Reserve Components to some degree to fill out units that are preparing to deploy.

- Air Force. The Air Force has been particularly adept at defining opportunities that induce large numbers of Reserve Component members to self-select to mobilize. More than 70 percent of the mobilized RC members serve on voluntary mobilization orders. The Air Force provides a high degree of predictability and flexibility by permitting RC units the flexibility to "plant the flag" for the duration of a mission, while employing a flexible personnel strategy to staff the unit over the operational period. Some individuals may stay for the duration; others may come and go; others may serve for a designated period. The Air Force policies of a) allowing reserve units the first choice in selecting missions, and $b$ ) intermixing active and Reserve Component members in operational units, contribute to the conviction that self-selectee's work is meaningful and his or her contribution is respected.
- Navy. The Navy manages the mobilization of Naval Reservists as individuals regardless of whether they join the crews of deploying ships or serve in unprogrammed billets in the theater. The Navy has also been very successful in attracting self-selectees, with recent survey results indicating that 50 percent of recently mobilized individuals were self-selectees.
- Army National Guard. The Army National Guard has to cross-level more than one-third of its deployable individuals across many units every time it prepares a brigade combat team to deploy, because the normal complement of individuals is insufficient to fill out the unit. In this circumstance, the unit rotation pattern may appear to be quite routine and predictable, but underlying that is a great deal of individual shuffling and turmoil. Active Army personnel are not assigned to fill out Army National Guard units.
- Army Reserve. The Army Reserve activates both large and small units providing specialized support capabilities in order to field Reserve Support Brigades as well as to fill out Active Duty Support Brigades. Support Brigades in the Army are flexible in employing Reserve Component members, and intermix active and Reserve Component elements.
- Active Army Combat Brigades. The Active Army does not use RC members to flesh out its deploying combat brigades.
- Marine Corps. The Marines use reservists largely as individual augmentees to their deploying active units. The Marines are quite flexible in integrating reservists into active forces.

With the exception of the barriers between the active Army and National Guard combat formations, there are no absolute barriers prohibiting the use of Reserve Component self-selectees to join deploying units. The barriers that do exist are a matter of degree, involving the practicalities of duration and timing of commitments. The Air

Force is the most flexible in accommodating the use of self-selectees. The active Army combat brigades are the least flexible, requiring pre-deployment training and deployments of at least one-year. An individual would need to self-select for a period of eighteen months or more to be able to match the active Army's deployment rhythm. (The Marines have a similar challenge, but their challenge is eased by the fact that their deployments typically are for seven months.). The Army needs to find better ways to fully integrate the contributions of the active, Guard, and Reserve Components.

A related concern is whether the unit replacement policies are being applied appropriately for many of the high-use skills needed for stability operations. Where the nature of the work permits, more flexibility would increase the likelihood that individuals will self-select to take on these assignments. Adopting a management strategy akin to that employed by the Air Force could make better use of available talent for selected high-use skill communities.

## Recommendations:

5. Direct Service force managers to create planning and management structures for the $\mathbf{2 4 , 0 0 0}$ billets currently being filled by individual requests.

## 6. Direct Service force managers to adopt force management policies that help achieve utilization targets for high-use occupations.

- Adopt individual rotation policies for selected high-utilization communities.
- Adopt flexible self-selection timelines for high-utilization communities; allow tailoring of commitments.

The recommendations for force management have two distinct objectives. The first is to create force management structures for the thousands of billets being staffed individually in the theater. Forming force units with designated providers will bring the normal force management processes to bear. This will increase predictability and definition, both of which increase the potential for using self-selectees. The second major thrust is to eliminate force management practices, such as unit rotation policies and deployment timelines, that unduly limit the use of self-selectees in high-utilization communities. Each recommendation is discussed in turn.

Improving Management for Unprogrammed Billets. Filling the 24,000 unprogrammed billets in the theater has proven to be a challenging task that creates unnecessary uncertainty and stress. By definition, the unprogrammed billets lack a unit management structure, and the resulting lack of planning and predictability is the key barrier to the use of self-selectees to fill these roles. Creating mechanisms to provide structure for these billets will help to improve Service force management, and should, in turn, increase predictability and strengthen communication between theater planners and the personnel managers responsible for filling the positions.

The Navy has created a model for addressing this situation that deserves consideration. First, the Navy has set aside about 2,700 billets within its overall force structure to support theater demands. In effect, this represents a reallocation of end strength. The billets are labeled to match "adaptive core" missions that draw on personnel from communities such as medical, public affairs, intelligence, and construction. This assignment of end strength indirectly helps to relieve stress on other operational units that no longer risk losing individuals to meet ad hoc demands in these mission areas. Second, the Navy has defined these billets to be a normal duty assignment. Hence, these assignments can be worked into the normal Navy detailing process. This removes the stress of a mid-assignment transfer and relocation. Very significantly, the Navy is giving command credit to individuals who take some of the more challenging individual billet assignments in theater. This provides a strong signal that the Navy values these assignments and is willing to recognize the individuals’ contributions.

Adopt Flexible Replacement Policies. Instituting individual rotation policies for selected skill communities could yield significant advantages in both efficiency and effectiveness. For example, in the medical community doctors can already use their skills in theater for relatively short assignments. The shorter period of Service also allows doctors to serve without having to abandon their practices.

Other candidate skills for individual rotation include those where service members work as individuals or in small units. Examples include high-use communities such as Civil Affairs and Intelligence. For such communities, the use of individual replacements for staffing units provides greater flexibility for the timing of an individual's deployment, and it provides some additional flexibility in setting the duration of an individual's deployment. Individual replacement also makes sense from an operational standpoint for skill communities where continuity is critically important, such as in maintaining situational awareness in a region or in dealing with local populations.

The theater management of these communities could be assigned to a theater command. A theater command would improve planning, resourcing, coordination of support capabilities provided from outside the theater, and provide the consolidated management capabilities necessary to effectively employ high-use communities of service members. From an operational standpoint, a theater command offers the ability to allocate theater resources effectively and to sustain focus on areas and populations across the entire area of operation.

Flexibility in the timelines for self-selection allows the commitment to be tailored to the needs of an assignment and the expectations of the individual agreeing to take on the job. As noted earlier, the Air Force regularly uses self-selecting individuals for short duration assignments. The flexibility afforded by this approach allows the Air Force to rely heavily on self-selection to meet requirements. Flexibility could also include extending commitments beyond the one-year involuntary mobilization limit. An
agreement to be mobilized for over a year could, for example, allow an individual to be mobilized to join an active Army unit in time for pre deployment training, and still serve for a year in theater with the unit. (As discussed in the next chapter, flexible timelines would also permit an individual to commit to a period of training coupled with the commitment to deploy.).

## 4. Personnel Managers

The personnel supply institutions have the day-do-day responsibilities of employing self-selection to meet operational needs. In the review of current practices for selfselection in Chapter I, we noted that every Service has self-selection mechanisms in place, and described some of the strengths and weaknesses.

## Recommendation:

7. At the level of personnel managers, improve the processes for self-selection, including more systematically identifying opportunities, and more proactively soliciting, screening, and assigning self-selectees from across all DOD components.

At the level of the Service personnel managers, self selection could be expanded if they were to adopt a more proactive approach for soliciting and employing self-selection. We have already noted that, with the exception of the Air Force, self-selection primarily serves to fill gaps. Solicitations are made in response to needs and typically are narrowly targeted at specific skills and experience.

A more proactive approach would begin with market research to assess the available pools of additional self-selectees. Careful research could assess the fraction of these individuals who would self-select under a more proactive approach. Targeting these pools, the personnel communities then would solicit participants and establish a standby registry of prospective self-selectees who could be pre-qualified and called upon to meet emerging needs.

A related objective is to share best practices for managing self-selection across the Services.

## 5. Summary

A more deliberate and purposeful approach for managing the deployment duties of individuals is possible. Self-selection provides an important tool. The needed actions, involve each of the four principal domains involved in the management of personnel in support of operations.

- Combatant Commands. Improve the planning for and communication of needs for unprogrammed billets.
- DOD-wide Force and Personnel Allocation Processes. Create the policy, forum, and supporting tools for assessing and managing individual utilization.
- Establish situational awareness on high-use communities.
- Create DOD-wide working groups for managing high-use communities.
- Force Managers. Design policies to encourage self-selection and to employ high-use communities most effectively.
- Assign responsibility for units to manage unprogrammed billets.
- Create more attractive job opportunities for self-selection (flexible timelines, individual rotation).
- Personnel Managers. Use all available talents.
- Establish proactive DOD-wide solicitation of self-selectees for high-use communities.
- Share best practices among the Services.

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## 4. Self-Selection Coupled with Training

In the introduction we defined the second potential role of self-selection as aiding in expediting inventory adjustments to meet emerging operational needs. DOD could substantially expand the role of self-selection by coupling it with training to expedite inventory rebalancing and the growth of high-use skill communities. This chapter describes the elements of a "Self-Select and Train" program (SSaT) that would permit individuals from across all the DOD components to compete to fill needs in targeted areas.

## A. A Prototype Analytical Framework for Targeting Inventory Adjustments

To gauge the need for adjustments to bring the inventories in line with the Secretary's utilization targets, we developed the inventory utilization metric, U/S, or the ratio of the number of service members used (deployed or mobilized) to the sustainable inventory for a given occupation as of September 30, 2009. Sustainable inventory is the number that could be deployed or mobilized in compliance with the Secretary's utilization target $-1 / 3$ of the total inventory for the Active Component occupations and $1 / 6$ for the Reserve Component. If the ratio is less than one, then the sustainable inventory is sufficient to fill deployment or mobilization needs while meeting the Secretary's utilization target. Conversely, if the ratio is greater than one, then more individuals are being deployed or mobilized than the inventory can sustain within the Secretary's deployment targets. Appendix A gives examples of the calculation of this metric for selected occupations.

The data from the Defense Manpower Data Center showed that of the 1,153 skill communities across all Service components, there are 240 where current deployment rates exceed the sustainable inventory. Bringing the inventories into alignment with current deployment levels would require a massive realignment of inventories, adding roughly 131,000 individuals to the occupations with inventory gaps. As was the case for the availability metrics, there are essentially no inventory gaps in any of the Active Components, and the challenges are concentrated heavily in the Army National Guard and the Army Reserve: 182 (76 percent) of the occupations with gaps are in these two components, which accounts for 93 percent of the inventory shortfalls in absolute terms. The inventory utilization statistics for each component are shown in Table A-1 in Appendix A and the occupations with utilization ratio above one are identified in Tables A-6 and A-7 in the same appendix.

The message conveyed by these data on inventory gaps is consistent with that from the self-selection targeting indicators. Not surprisingly, many communities with immediate needs for self-selectees also pose future challenges for adjusting inventories. The main point raised in this section is that the ability to solicit and use self-selectees provides a potentially valuable tool for expediting needed inventory adjustments, just as it serves to allocate available inventories.

Whether it is possible for the Reserve Components to rebalance their inventories sufficiently to remove these inventory gaps is an open question that will require analysis beyond the scope of this study. The high concentration of gaps across such a broad range of skill communities in the Army National Guard and Army Reserve suggest that it will be difficult to fill those gaps, requiring substantial rethinking of structure, training, and individual availability for mobilization. Should these measures prove to be unsuccessful, the remaining alternatives would be to loosen the Secretary's utilization targets, or to scale back the community's support for current operations. ${ }^{25}$

Service personnel managers say they are unwilling to optimize their forces for the current operation because they fear this will unduly weaken their ability to perform possible future missions. Hence they take near-term expedient actions to meet current needs, such as using individuals in high-demand communities well above the average. The Services’ concerns no doubt have merit, but their approach entails risks to the longterm health of the communities where heavy demands are being levied, and the resulting limits on available talent create risks for completing current operations. There is a concern, also, that the individual component perspectives may be somewhat skewed by Service cultures and the institutional pressures to preserve the health of historically important warfare communities.

As discussed in the preceding chapter, DOD leadership is needed to counter-balance these tendencies. The Senior Readiness Oversight Council could be assigned the responsibility of defining enduring needs for skills that do not fit within the Service's mainstream war-fighting communities (e.g., language, culture, Civil Affairs), and for ensuring that the personnel supplying institutions adequately adjust inventories of skills in response to the need. In this sense, the system for managing personnel inventories in response to emerging operational needs should parallel the responsiveness of the equipping processes that DOD has created to meet emerging operational needs. (We will return to this topic in Chapter 5.)

[^13]
## B. A Self-Select and Train (SSaT) Program

The SSaT program incorporates three major features that contributed to needed flexibility: First, it expands the reach of self-selection to include individuals who are willing to serve but do not possess all the requisite training. Second, it incorporates a flexible timeline that allows sufficiently long commitments for needed training coupled with effective deployment duty time. Third, it provides for DOD-level oversight of funding for any additional personnel and training costs, which supplements normal planning and budgeting cycles and permits the program to be immediately responsive to identified needs.

Self-selection already plays a role in ongoing Service initiatives to rebalance their inventories of skills (Army and Navy programs are described later in this chapter). For example, the Services provide opportunities and incentives for individuals to retrain and shift career field. In the longer-term, the principles of self-selection could be applied to improve the responsiveness of the DOD personnel system to meet evolving operational needs.

## Recommendations:

8. Assign Responsibility to the Senior Readiness Oversight Council for establishing a Self-Select and Train Program.

- Coordinate creation of an implementation strategy and plan
- Target high-use occupations for applying the SSaT
- Provide resourcing recommendations to the Deputy Secretary
- Convey the Secretary's priorities and guidance to the Services

9. Assign responsibility to Service force managers and personnel managers to execute the SSaT program.

- Create top-level inventory adjustment plans and programs in response to guidance
- Establish templates and timelines that couple self-selection with crosstraining and refresher training opportunities for selected high-use skill communities
- Coordinate implementation across DOD through working groups
- Expand training capacity as needed to accommodate SSaT
- Actively solicit self-selectees for training from among RC members who have not yet been mobilized; Direct RC leadership to encourage selfselection for training through favorable career paths

In broad terms, self-selection with training opportunities would work as follows:

- AC and RC members could be solicited to self-select to join some high-use occupations.
- The duration of the commitment would be tailored to the circumstance in order to allow sufficient time for training and deployment.
- Such self-selection with training could be focused on any community with shortfalls; it could be particularly helpful to fill theater "unprogrammed billets" in the components' non-core occupational areas.

Self-selection has an important role to play in facilitating inventory adjustments. For example, should the DOD decide to expand the ranks of Civil Affairs Specialists, service members from across the DOD components could be solicited to self-select as candidates to be trained for these positions. As noted, the Army and Navy are already retraining individuals within their Active Duty ranks. Beyond this, one should expect that within the pool of over 300,000 individuals in the Ready Reserve Components who have not yet deployed, DOD should be able to find many willing candidates who could be screened for these positions. Since these candidates would already have at least basic skills and experience, they would need only a tailored package of refresher training and the incremental training necessary to prepare them in the new skill community. With this approach, inventories could be adjusted on a fairly rapidly, often within a matter of months, depending on the training requirements.

One major feature of the SSaT, compared to the role of self-selection outlined in the preceding chapter, is that self-selection is not confined to assigning duties within existing inventories of individuals in a skill community. Instead, the solicitation for self-selectees would be broader, encompassing individuals with basic military skills and experience across DOD who are willing and available to-serve but who are not fully trained in a needed skill.

Another important feature of the SSaT program is the flexibility to define timelines to encompass both the necessary training and the subsequent deployment. A precondition for self-selection is the individual's willingness to commit to this timeline. An illustration of the generic template and timeline for a Reserve Component self-selectee is provided in Figure 3.


Figure 3. Tailored Timeline for Reserve Component Self-Selection

Figure 3 shows three process steps-solicitation; identification; and screen, select and process-that occur before an individual is mobilized. The necessary skill training ideally could occur before mobilization, but the process should be flexible enough to permit training after mobilization should circumstances dictate. Finally, post-mobilization steps include unit training for the occupation, followed by deployment.

In addition to accommodating individual training, the SSaT model could also be applied to fulfill requirements for unit training prior to deployments. Therefore an individual from the Reserve Component could self-select for eighteen months of duty, allowing him or her to join an active Army unit in time for its pre-deployment training, and still serve for a year in theater with the unit.

A mismatch between needs and available skills is one reason why we find 330,000 individuals in the Ready Reserve who have not yet deployed. Offering training would greatly expand the opportunities for these individuals to serve. Table 8 provides several templates to show how the self-selection commitment might be tailored for different skill communities. A commitment could be only twelve months if an individual receives three months of skill training, has no unit training requirement, and deploys for nine months. The longest commitment involves an individual who requires twelve months of individual training, three months of unit training, followed by a deployment of twelve months.

Table 8. Representative Templates for an SSaT Program

| Occupation | Military Occupational Specialty Training | Unit Pre-Deploy Training \& Prep | Deployment | Total |
| :---: | :---: | :---: | :---: | :---: |
| Civil Affairs | 10-week AC; 9 Week RC <br> 20-week NCO <br> Reclassification | 12 | 52 | 74-84 |
| Military Police | 10-week basic 7-week internment/ resettlement specialist | 12 | 52 | 74-81 |
| EOD | 10-week AIT Phase 1 28-week AIT Phase 2 | 12 | 52 | 102 |
| Human Intel | 19-week AIT | 12 | 52 | 83 |
| Interpreter | 16-week Dari, Pashto language training Defense Language Institute (DLI) 7-week Interpreter/ Translator 09L course 48-week emerging language course DLI | 12 | 52 | 71-112 |
| Aviation Mech. | 13-28 week based on type of aircraft/mechanic | 12 | 52 | 77-92 |

*The length of MOS training would be tailored to the need. Under current rules, individual skill training may not count against mobilization time. DODI 1235.12, para 4.b.(1).
*The length of pre-deployment training would depend on the individual's experience, and the predeployment training policies for the unit to be joined.

The design and execution of SSaT will require a structure that provides resources for personnel and training, along with modifications in force management and personnel supply institutions. The needed actions are briefly outlined below.

Responsive resourcing mechanisms, parallel to those needed for responsive hardware support, are needed to provide the flexibility needed for the SSaT program. The logical home for centering the resource allocation decision making is with the Deputy Secretary of Defense, who can be supported by assessments and recommendations developed by the Senior Readiness Oversight Council.

Chapter 4 proposed that the SROC serve as the forum for addressing personnel utilization matters, and the responsibility for resourcing the SSaT is a natural adjunct to that role. The SROC would be responsible for creating a resource plan that a) sets overall resource limits for the SSaT , and b ) proposes resourcing responsibilities.

The two major categories of resources are personnel and training. Personnel costs would be driven primarily by decisions on the mobilization of Reserve Component members. It would be reasonable for beginning this program with the assumption that the total number of mobilized RC members would not be increased. Rather, the effect of the program would be to alter the composition of those mobilized to include a higher proportion of members in high-use skill communities.

Training expenses would include any necessary expansion in training capacity needed to accommodate the SSaT program.

Linking training with self-selection requires force managers to adjust their plans and programs to accommodate the agreed upon changes in inventories. In the preceding chapter, we described a process by which the Senior Readiness Oversight Council and the Services would identify the objectives for inventory adjustments.

Another key force management action is needed within the Reserve Components to expand the opportunities for self-selection by service members in selected Reserve units. The management challenge is to expand the flexibility for self-selection, while ensuring the integrity of the home unit, including maintaining sufficient readiness levels to perform home State missions. This can be accomplished if Reserve Component force managers adopt policies that encourage individuals to self-select for training and deployment at an appropriate phase of the Reserve unit's readiness cycle. For example, managers could limit the total number of self-selectees taking leave from a unit, concentrate the self-selection opportunities during the first two or three years of a unit's readiness cycle, and prohibit self-selection during the months the unit is training for full availability. (For example, a unit might permit up to 20 percent of its members to selfselect during the first two reset years of the six year Army Force Generation (ARFORGEN) unit readiness cycle, but allow no one to self-select during the final training year and the availability year.)

If managed carefully, the ability of Reserve Component units to send individuals for training and operational experience will contribute substantially to the capabilities of the home unit upon that individual's return. A Reserve Component unit with a number of partially trained, inexperienced service members could benefit substantially by allowing some of these individuals to opt for training and deployment. This would reduce the training burden, and the unit would benefit from the skills and experience the individual acquired.

The personnel supplying institutions would shoulder the main burden in designing, establishing, and executing a SSaT program. They would be responsible for defining the templates for the program, as well as for providing the needed training capacity. It is expected that the components would work in collaboration on these matters through the working groups established under the Senior Readiness Oversight Council.

The personnel supply institutions would also take the lead in executing the SSaT. This includes soliciting candidates as well as administering the processes for screening and admitting candidates into the training programs. The parent organizations that contribute self-selectees should be encouraged to reward and acknowledge the contributions of the participants.

The flexibility designed into the SSaT program should substantially expand the opportunities for self-selection relative to existing practices, even after removing the barriers identified in the preceding chapter. Such an approach, strategically targeted from a DOD-wide perspective, would substantially increase the ability of U.S. forces to adapt to uncertain and changing operational needs. Through the SSaT framework, the adjustment of inventories to adapt to emerging operational needs would become a natural, routine, occurrence.

## 5. Self-Selection and Responsive Institutions

The preceding chapters describe the value of a proactive approach for self-selection. They outline initiatives that would reduce the barriers to self-selection and expand the scope for self-selection by coupling self-selection with training opportunities. These initiatives build on progress already made: Over the last decade, the DOD and Congress have acted to provide the flexibility and authority needed to adapt compensation policies to economic and military conditions, and legislation has evolved to provide the necessary tools for managing the force.

The Services have been given tremendous flexibility to offer incentives, both financial and non-financial, and they have used them extensively to shape inventories. Even so, they have not as yet reached the limits of the allowed flexibility, suggesting that current authorities are sufficient to meet current needs. When all dimensions of compensation are considered, military compensation is quite competitive in comparison with the general U.S. labor market (particularly when the effects of current high unemployment rates are factored in). Moreover, compensation in combat zones is substantially higher than for non-deployed Service people in the same rank and years of Service. For these reasons, we believe the pool of those who would be willing to selfselect for deployment duty may be substantial, even without any targeted incentives for self-selection.

The initiatives presented in the earlier chapters are designed to work within the existing organizations and authorities. They are intended primarily to remove barriers, not to build new institutions. Although those initiatives address specific shortcomings identified in each of the four management domains shaping individual utilization, they largely retain the separation of the domains, and in particular they retain the Services as solely responsible for defining, funding, and executing self-selection initiatives. To the extent these initiatives address the roles of the Combatant Commanders, OSD, and the Joint Staff, and the interactions across domains, they are limited to improving planning and the flow of information, and creating collaborative working groups.

Taken together, these initiatives will substantially increase the opportunities for selfselection over and above what is already a significant, if diffused, activity. Equally importantly, the initiatives will help to proactively target the use of self-selection on the skill communities that most need it.

This closing section briefly considers how self-selection might be incorporated as one element in a redesigned set of DOD-wide institutions. This approach parallels DOD's
institutional initiatives taken over the past several years to build responsive mechanisms for equipping the force to meet the emerging needs in Iraq and Afghanistan. The overall objective is to create a similarly "responsive" framework to ensure the inventories of skilled individuals meet operational needs.

The unifying objective of the proposed institutional initiatives is to more tightly integrate activities across the four management domains described in the previous chapters:

- The theater requests for forces (units, individuals service members, or civilians);
- The DOD-wide framework managing theater requests for forces, for reconciling these requests with available supplies, and for directing the adaptation of future supply to meet expected demands;
- Service institutions for force management and employment (units, individuals) and;
- The Service supplying institutions for developing and managing service members.

The management system would convey information from ongoing operations regarding the kinds and mix of skilled personnel needed for institutions to respond to these demands in a timely fashion. This requires the creation of a mechanism that can provide effective interactions across the management domains, which entails synchronizing actions across many organizational boundaries.

## A. Institute Theater Personnel Planning

## Recommendation:

## 10. Task Combatant Commanders to include personnel planning in their deliberate plans and their twelve to twenty-four month future operational planning.

- Personnel planning that is forward-looking, resource constrained, disciplined, and comprehensive will enable personnel managers to better meet operational needs.
- Planning conferences can provide the basis for improving communication between the theater operational leadership and personnel providers.

Responsiveness begins with the work done by theater commanders to plan ahead and to communicate needs in a way that increases the ability of supply institutions to adjust their activities. This requires theater force planning that is forward-looking, disciplined, and provides predictability. Theater engagement, campaign, and operational
planning should address the skills and inventory mix of personnel supporting the plan. The study identified several characteristics required in this planning:

- Theater personnel planning and operations need to be resource constrained. The planned-for demands need to be managed in consideration of supply capabilities. To do this, theater operational plans should have personnel resources linked to them. This requires the Commander to carefully prioritize requirements. A parallel assessment for civilians and contractors needs to be performed in parallel.
- Predictability (when feasible). The lack of predictability has been a particular problem for managing individual augmentees and personnel to meet unprogrammed theater requirements. This makes it hard for supplier institutions to respond effectively and efficiently to operational demands.
- Constraints of demand for units and individuals; In the future, DOD should be required to manage to the SecDef's Constraints on Theater Requirements. This is essential because a realistic supply of troops can never meet unconstrained requirements. As an element of this, support provided from outside the theater should be used whenever feasible to reduce theater deployment demands.


## B. Designate a Secretarial Staff Assistant Responsible for Responsive Personnel Support

## Recommendation:

## 11. Charter a DOD leadership forum for responding to emerging operational needs.

- A leadership forum provides the venue to assess, discipline and support COCOM operational needs.
- It could synchronize efforts across all DOD personnel supply sources, including targeted recruiting for self-selection.
- Leadership for responsive personnel support would be analogous to the responsive hardware acquisition mechanisms established for current operations.

One way to accomplish all this is to assign responsibility for responsive personnel support to the Under Secretary of Defense for Personnel and Readiness, and designate this person to lead a forum assigned to support COCOM operational needs for personnelcall it the SROC+. The SROC+ would be chaired by the Under Secretary of Defense for Personnel and Readiness, with the Director for Operations (J-3) of the Joint Staff as the Vice Chair. Members would include the Force Managers and Personnel Suppliers from each of the Services, including the active and Reserve Components. COCOM planners
would participate to address ongoing operations. A cell within the Under Secretary's staff would provide an executive secretary and necessary analytical and administrative support.

This body would be responsible for personnel deployability planning, operational responsiveness, and personnel utilization. Other major responsibilites of this leadership body would include:

- Maintaining situational awareness on personnel utilization across DOD.
- Assessing theater force plans to discipline requests and ensure common understanding of needs and priorities.
- Assessing the appropriate balance of operational duties between military, government civilians, and contractors.
- Communicating needs systematically (consolidated treatment of RFFs).
- Defining enduring needs based on assessments of plans and readiness to meet needs.
- Assessing the consistency of theater operational concepts and plans with available inventories of personnel and the Secretary's targets for service member utilization; consolidated reporting on compliance of personnel utilization with the Secretary's targets.
- Improving predictability to better facilitate supply responses-through a personnel planning process and planning conferences looking eighteen to twenty-four months into the future.
- Overseeing any supplemental funding for personnel support for operations.

The authorities and responsibilities of this body would either include or be coordinated with existing force-management processes. For example, the planning and assessments performed by this body could be used to inform and support the processes for Global Force Management and Requests for Forces. Similarly, the analytical work of this body could complement the near-term Force Sufficiency Analyses and the longrange Operational Availability Analyses.

## C. Create Institutional Proponents

## Recommendation:

## 12. Assign Service proponents for new or altered skill communities when needed to adapt to emerging personnel capability needs.

- An adaptive personnel system requires that emerging operational skills, such as those needed for Civil-Military Operations (CMO), Counter-improvised
explosive device operations, or cyber operations, become incorporated in Service training and education systems.
- Service personnel systems will respond if tasked to provide needed new skills; this tasking should come from the Secretary, informed by the DOD leadership forum.
- Self-selection can assist in expediting the growth of needed new occupational skills.

A second long-run institutional initiative entails the adaptation of DOD institutions to address emerging operational needs. Historically, the DOD has created new institutions, or realigned existing institutions when necessary to assign responsibility for recruiting, developing, and retaining emerging communities of skilled service members. One rationale for creating a new organization is that once it takes root, it will provide a central focus and proponency for the community. For example, DOD currently is developing a "Cyber Command," and building a skilled community is one of its major responsibilities.

In cases where emerging missions do not fit well with existing missions and community cultures, there may be a need to build a community to establish its own identity and culture. One pending example that is frequently discussed is the creation of a stronger Civil-Military Operations community. Alternative approaches would include establishing a Service or Joint "branch" for CMO. This branch would provide an institutional home for CMO, would be responsible for proponency on behalf of the community in DOD decision processes, and establish a branch school. Units with like or complementary missions could be assigned to the new branch.

The data gathered for this study on personnel utilization demonstrate that the inventories in many high-use communities have not adjusted sufficiently to cover the demand. One explanation is that these communities lack institutional clout within their parent Service to garner the resources through internal processes commensurate with the demands on them. Hence, the consolidation of several high demand communities involved in Civil Military Operations may have the beneficial affect of increasing their combined voice in resource allocation processes.

## D. Design Reserve Components for Flexibility and Adaptability

## Recommendation:

## 13. Design total force solutions to meet emerging personnel capability needs.

- Certain capabilities, such as specialized support for civil authorities, cyber capabilities, or capabilities for Civil-Military Operations might be most cost-effectively assigned to Reserve Components.
- Flexibility in Service commitments and opportunities to self-select for deployment duties will enable the Reserve Components to recruit, train, and use individuals with the widest range of skills.
- A total force approach is consistent with the goal of establishing a "continuum of Service," which tailors an individual's service commitments to match the needs of each occupation Increased reliance on the Army National Guard and the Army Reserve to serve specialized functions will require increased investments in individual availability for duties.

Finally, the fourth institutional reform possibility derives from the need to update the design of the Reserve Components from a Cold War model to a model that is more consistent with how the Reserves are expected to be used in the future. The key element of this is to move toward a model that adapts Reserve Component operating concepts to operational needs, tailors the contractural arrangements between the government and the individual to the operational concepts, allows an individual some freedom to tailor his or her commitment based on the choice of contract, and communicates the expectation that all Reservists must be prepared to be deployed if needed (except under special circumstances, such as special skills needed in the continental United States).

Future operating concepts could span a number of different models, and a key feature of future force management may be that different missions will entail very different profiles of utilization. As the examples below illustrate, there are a range of alternative concepts of operations, and each provides a distinctive set of commitments. DOD may, for example, establish tiered utilization categories for RC units. Examples include:

- Air Force Selected Reserve-the Air Force Selected Reserve is used regularly, but primarily on a self-selected basis; hence individuals expect to be mobilized involuntarily only if a major national emergency requires it.
- Operational Reserves-these units would be ready to deploy on the current timeline stipulated in the Army Force Generation Model.
- Strategic Reserve-these units may be devoted primarily to training and readiness exercises; they may be left out of the normal ARFORGEN deployment cycle with operational deployments restricted to mobilization in a time of declared national emergency.
- Reserve for Domestic Civil Support-these units may be devoted to training for the specialized skills needed to address catastrophic emergences, in support of civil authorities.

A future Reserve Component management system could establish a range of contracts that set utilization expectations for each tier and create a commensurate
compensation system. Individuals could self-select from the range of expected utilization and compensation opportunities to establish contractual arrangementsthat best suits his or her preferences and situation.

This tiered system of contracts and compensation provides the flexibility needed to instituted a "continuum of Service" approach for personnel management. "Continuum of Service" requires DOD to set expectations and to allow service members to choose from among alternatives.

In designing future Reserve Component structures, it will be necessary to address the question raised earlier of why it is that more than 40 percent of service members in the Army National Guard and Army Reserve are not available for deployment. A flexible and adaptable Reserve Component requires that individuals be ready to serve when the circumstances dictate.

## E. Next Steps

This study represents an initial review of the use of self-selection, and its potential contributions for managing the utilization of individuals. In it we have identified and examined the sources of data on the utilization of individuals, the extent of self-selection, and compensation, and documented the current practices across the Services. The study offers a number of concrete ideas worth pursuing, but at the same time, it raises a large number of questions that remain to be answered. Many of these questions will be answered once efforts are undertaken to execute the initiatives outlined here.

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# Appendix A Metrics for Quantifying and Managing Service Member Utilization 

Colin Doyle, David Graham, Yev Kirpechevsky, and Steve Mortimer

The Secretary's focus on improving the management of individual utilization described in the Introduction requires a method for defining and measuring utilization. The utilization of individual service members needs to be understood and assessed in the context of each Service's force management model. At the same time, consistency requires the development of uniform definitions, data, and displays. To provide a first step toward the creation of the needed framework, we, the IDA study team, employed Defense Management Data Center (DMDC) data on individuals to develop prototype definitions, calculations, and displays. Since 2001, DMDC has tracked individual data on "contingency deployments," providing a consistent approach for defining duty time in support of Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF). This chapter describes the prototype framework employing this data, the patterns of utilization it reveals, and the path forward for creating the needed information system.

## A. Service Definitions of Intensively Managed Communities

As background for this study, the Services provided their lists of "intensively managed" communities. A comparison of these lists shows that the Services’ personnel utilization challenges differ markedly, and so do their approaches for identifying managed communities. For convenient reference, we have included these lists at the conclusion of the appendix. Some of the key differences include:

- The vast majority of deployed Army service members are supporting OEF and OIF, and so their deployment duties are captured in the DMDC database. (The U.S. Marine Corps (USMC) is operating today in a model that is similar to the Army's).
- The Navy is designed to support regular fleet deployments, and these activities are being sustained in parallel with OEF and OIF deployments. There is no direct entry into the DMDC data system. The Navy enters data which shows that individuals are deployed. It doesn't tell where they are deployed. This data is then compared with pay data. If a deployed person is credited with a tax
exclusion or imminent danger pay, he is assumed to be in OEF or OIF and he becomes an entry in the Contingency Tracking System.
- Navy service members who have been assigned to perform ground combat roles in support of OEF and OIF are often being "borrowed" from other Navy duties. This borrowing of individuals can stress the donor organization and stretch thin the available pool of talent in a community, even when a relatively modest fraction of the community is reported as being deployed in the combat zone.
- Similarly for the Air Force (AF), the individuals performing combat zone duty are often being borrowed from other assigned duties. In addition to deployments overseas, the Air Force has many operational duties performed at U.S. bases, including space operations and inter-continental ballistic missile (ICBM) deterrence operations. For example, a fraction of the security force at Minot Air Force Base (AFB) has been assigned to perform duties in Iraq. This move is burdensome on both the individuals deploying and those staying at Minot, the latter having to perform their duties without 20 percent of their colleagues.

These examples suggest the need to clarify the definition of utilization and derive an approach for measuring and assessing utilization that is consistent and meaningful across the Services.

## B. Note on DMDC Deployment Data

This initial application of the DMDC Contingency Tracking System data yields some useful findings regarding the utilization of individuals, particularly for the ground combat forces. It also yields some valuable insights regarding the limitations of the DMDC data and the kinds of reporting systems that will be needed to gain useful insights regarding how individuals are being used. It is important to understand the limitations of these data.

The Contingency Tracking System measures the utilization of people in support of the OEF and OIF operations. For Active Duty members, it uses pay records to identify when an individual is deployed. The key indicators are when an individual begins receiving hazardous duty pay and the combat zone tax exclusion. For Reserve Component members, it records when an individual is mobilized.

Unfortunately, the Contingency Tracking System does not report deployment activity that does not involve OEF or OIF. For example it would not report a service member's deployment to South Korea for an exercise or to South America for a training mission. The exclusive focus on OEF and OIF operations skews the measurement of individual utilization, particularly, for the Air Force and Navy, because a large share of their operational and training deployments does not fall within the combat zone.

There are two other notable limitations of the DMDC data. First, the number of individuals who have self-selected for duty versus those who have been involuntarily called up is not being recorded in the common database. Thus, we do not know to what extent high-utilization is due to self-selection. Second, there are large numbers of service members who have never been deployed or mobilized, and the reasons for this are not recorded. These individuals may be in the training pipeline, or they may be declared "unavailable" for deployment for medical or other reasons-the latter constituting a large fraction of the Army National Guard. Overcoming these limitations in the utilization data may require creating consistent definitions of deployment and utilization across all the Services as well as recording data on self-selection and deployment unavailability. We shall return to this topic in the conclusion of this Appendix.

## C. A Prototype Framework for Measuring Service Member Utilization

The prototype framework devised for assessing utilization employs two sets of metrics: inventory utilization and individual utilization. The first, inventory utilization, examines the overall utilization of a community, as reported in the DMDC data. To serve as the benchmark, we use the fraction of the community that could be deployed on a sustained basis that is consistent with the Secretary's utilization guidance. Our assessment framework tracks the relationship between actual deployments and this benchmark every year since 2001. The second set of metrics assesses the utilization of individuals within the skill community. In particular, we report the fraction of individuals in the community who are utilized at rates above the Secretary of Defense's (SecDef's) targets, as well as the estimated number of service members available for the next deployment relative to current deployment needs.

Both sets of metrics are illustrated and discussed in Figure A-1. This example uses data for the Active Army enlisted infantryman community ("infantry" henceforth). It includes only infantrymen with a rank of E4 and above to remove from the analysis the individuals most likely to be in the entry pipeline.

Inventory utilization. The chart in the top half of Figure A-1 displays the metrics for assessing the occupation inventory balance. Several points explain the information in the chart:

1. The "sustainable inventory" (dashed red line) represents the fraction of the total occupation that can be fielded under the SecDef's utilization guidance at each annual snapshot date since 2001 (this fraction is $1 / 3$ for Active Component (AC) and $1 / 6$ for the Reserve Component (RC)).
2. The number deployed (blue line that peaks with the Surge in 2007), or the number mobilized in the case of the RC charts, permits a comparison of the use of the individuals against the sustainable inventory. In this case, the enlisted
infantry deployments exceeded the sustainable inventory in the year of the Surge.
3. The ratio U/S (Used(U)/Sustainable(S) inventory) provides a snapshot statistic of the relationship between the number deployed and the sustainable inventory as of September 30, 2009. If $\mathrm{U} / \mathrm{S}<1$, then the sustainable inventory is sufficient to fill deployment or mobilization needs while meeting the Secretary's utilization target. (Conversely, if $\mathrm{U} / \mathrm{S}>1$, then more individuals are being deployed or mobilized than the inventory can sustain within the Secretary's targets). For Active Army infantry in 2009, U/S equals 0.85 , indicating no inventory gap. For those communities where $U / S>1$, the inventory gap is the increase in total inventory necessary to equalize sustainable inventory with the number deployed.
4. Trends over time in the sustainable inventory line show how the Army has adjusted the inventory in response to demands. The upward slope of the line shows that the Army has expanded the inventory of infantry ranks of E4s and above by more than 100 percent over the last decade.

## Guide to the Charts

Occupation Inventory Balance

1. The sustainable inventory number (dashed Red) represents the fraction of the total occupation that can be fielded under SecDef's utilization guidance ( $1 / 3$ for active, $1 / 6$ for the reserve component charts) at each snapshot since 2001
2. The blue line charts the total number deployed (for the active component charts) or mobilized (for the reserve component) in support of contingency operations
3. The ratio U/S refers to Used/Sustainable inventory ("Used" refers to deployed for active and mobilized for the reserve component). If $\mathrm{U} / \mathrm{S}<1$ then the inventory of the occupation can meet targets and fill needs
4. Trends show how inventory has been adjusted in response to demands


Cumulative Utilization for Individual Service Members

1. Utilization $=$ BOG:Dwell ratio (Mobilization:Dwell for the reserve component charts)
2. Chart shows the number in the occupation across the Chart shows the number in the occupation
3. Columns to the right of the red line represent "high-use"

Columns to the right of the red ine represent high-use
service members (HU) who have accumulated a fraction of service members (HU) who have accumulated a fraction of
deployment time that exceeds SecDef's guidance over a deployment time that exceeds SecDef's guidance over a period going back up to 2001
Notes:

- Because of variance in deployment experience, there are many HU service members, even though the inventory (INV) is sufficient
- We do not know the extent to which high utilization is due to self-selection
- SecDef's deployment policy memo (1:2, 1:5) was published in January 2007


Figure A-1. Prototype of Utilization Metrics for a Skill Community

Individual utilization. The bottom chart in Figure A-1 provides the metrics for assessing the utilization of individuals within the skill community.

1. Individual utilization is defined as a ratio of the cumulative months used to the cumulative months non-deployed, i.e., in "dwell." (In other words, it is the Deployed to Dwell ratio for the AC or Mobilization to Dwell ratio for the RC.) The data is for the individuals serving as of September 30, 2009 (utilization data available from the year 2001 forward).
2. The chart presents the distribution of individuals in the occupation across utilization categories. For example, there were approximately 5,500 Active Army infantrymen whose Deployed to Dwell ratio was 1:3 as of September 30, 2009.
3. The red line represents the Secretary's target utilization rate: 1:2 for Active Duty individuals (corresponding to one year of deployment in every three years) and 1:5 for the reservists (one year mobilized in every six years). The columns to the
right of the red line represent "high-use" service members (HU) whose utilization exceeds the Secretary's target rate. ${ }^{1}$ Conversely, all individuals to the left of the line are in compliance with the Secretary's guidance and are termed "complying inventory."
4. The ratio high-use over inventory (HU/INV) provides the fraction of the total inventory that is high-use. In this example HU/INV = . 38 .
5. "Available inventory" are those service members who we estimate to be available for deployment in the next cycle. It is calculated by subtracting from complying inventory the number of service members currently deployed and those who never deployed. The latter group (just above 2,000 infantrymen on the chart) is subtracted on the conservative assumption that they had not deployed because of a lack of training or because they were medically unready, and so they would be unlikely to be available for the next deployment.
6. "Availability margin" is the ratio of the available inventory to the number currently deployed. The greater this margin, the greater the flexibility of personnel managers to choose whom to deploy from among the available pool. A margin of less than one indicates that there are insufficient numbers of available individuals to meet the deployment demands. The availability margin for Active infantry is 1.57 , suggesting there is sufficient flexibility and an "availability gap" of 0 . For those occupations with an availability margin below one, the availability gap is the difference between deployed personnel and available inventory. This is the shortfall that must be filled without mandatory deployments or involuntary mobilization in order for the upcoming deployment cycle to be in compliance with the Secretary's utilization target, assuming a steady-state level of deployment.
7. The number of individuals who have self-selected for duty versus the number who have been involuntarily called up is not being recorded. Thus, we do not know to what extent high-utilization is due to self-selection.

It is noteworthy that while the inventory utilization for Active infantry does not exceed the sustainable inventory in 2009, 38 percent of the members in the community are still utilized above the SecDef's target rate. This illustrates the high degree of variability in the experience of individuals within a community.

[^14]Such variation in individual experiences may result from a number of causes. For example, selectivity in duty assignments may lead some to spend more time in operational units. Self-selection that is currently occurring may also play a role. Clearly, one implication of self-selection is that it may permit a community to segregate into those who chose to deploy and those who chose to remain at home. It should also be noted that the Secretary's utilization targets have only existed since January 2007, and the Services have only been required to issue formal waivers (and only for the Reserve Components) since February 2010 (DODI 1235.12 of 4 Feb 2010). Hence, those high-use individuals who accumulated substantial deployment times in the early years of this decade were not in violation of any policy or prescription.

## D. Service Component Overview Charts

Figure A-2 extends the analysis to encapsulate the experience across Army AC communities. The chart includes all Army occupations with a total inventory of more than fifty service members. This chart is designed to provide a quick overview of the status of communities in order to provide a basis for sorting communities into those that are in compliance with the Secretary's utilization guidance and those that are not.

## Key

- Each dot represents an occupation
- Vertical line represents target utilization (1:2 for the active; 1:5 for the reserve component charts)
- Horizontal axis shows total occupation utilization
number deployed : number nondeployed (number mobilized : number demobilized) in September 2009
- Vertical axis shows the percentage of "highuse" service members in occupation

High-use $=$ Service members with
utilization > target

- Includes all occupations with total inventory > 50 service members


Figure A-2. Service Component Occupational Utilization Summary Chart

The chart presents the two utilization metrics for each community:

- Inventory utilization. The horizontal axis displays a variant of the snapshot of inventory utilization in September 2009. Here, we have translated the U/S statistic into the equivalent Deployed to Dwell or Mobilization to Dwell ratios (e.g., a U/S =1 corresponds to a 1:2 Deployed to Dwell ratio for the AC or 1:5 Mobilization to Dwell ratio for the RC).
- Individual Utilization. The vertical axis displays the percentage of high-use individuals in the community (HU/INV).

To provide a point of reference, the chart highlights the data point for infantry, with coordinates corresponding to the statistics presented in Figure A-1 (HU/INV = 38 percent and $\mathrm{U} / \mathrm{S}=.85$, which translates to the Deployed to Dwell ratio below the $1: 2$ target).

First, points to the right of the red line represent communities where the September 2009 deployments exceeded sustainable inventory-hence the community is (at least temporarily) not in compliance. Points to the left are within the sustainable inventory. Second, the higher the data point, the larger the fraction of individuals in the community whose cumulative deployment time exceeds the Secretary's targets.

The chart illustrates two major points about the Army Active Component: First, only three of the Active enlisted communities fall to the right of the red line (these communities are human intelligence, aviation maintenance, and asphalt paving and repair). Hence for the active Army overall, community inventories are typically sufficient to sustain the current levels of deployment. Second, most communities have significant fractions of individuals who have accumulated deployment times in excess of the Secretary's targets. Generally speaking, when this fraction grows, the fraction of the community available for deployments shrinks.

## E. Patterns of Utilization across Service Components

A comparison of the scatter charts across the Service components provides useful insights into the patterns of individual and inventory utilization. Ten thumbnail examples are presented in Figure A-3 to illustrate the range of experiences across the enlisted communities for each Service, as well as the lessons that can be drawn from examining the scatter charts. Only the communities with total inventories greater than fifty individuals were assessed, and only the ranks of E4 and above were included in the analysis. The charts on the left are for the enlisted communities in the Active Component of each of the Services. The charts on the right are for the enlisted communities in the Reserve Component(s) (Selected Reserve) of each of the Services. Table A-1, which accompanies Figure A-3, lists the number of occupations assessed on each of the charts and provides data on inventory utilization (the x-axis on the charts) and inventory gaps for each of the components. In addition, Table A-2 presents data on the availability gap-
the alternative measure of individual utilization from the one charted on the $y$-axis-for each of the components. Tables A-6 and A-7 at the end of this Appendix list all the AC and RC occupations with either inventory or availability gaps.

A brief summary of the data in Figure A-3 and Tables A-1 and A-2 captures the relationship between the current rates of utilization and the Secretary's utilization targets:

- Active Duty:
- Only four occupations exceed the Secretary's inventory utilization target across all Services.
- Nearly every occupation has some individuals who exceed the individual utilization target; but in nearly every occupation, the fraction of individuals above target is a small minority.
o AF and Navy: Only six communities have over 10 percent of individuals above target.
o USMC: Only five communities have over 20 percent above target.
o Army: Most communities have over 20 percent above target, but nearly all are under 40 percent.
- Virtually no availability gap exists in the Active Components.
- Reserve Component (Selected Reserve):
- Most of the Reserve component occupations exceed the inventory utilization target of $1: 5$. And more remarkably, thirty RC occupations exceed the $1: 2$ Active Component utilization target-an order of magnitude greater than the number of Active Component occupations exceeding this same target. For the assessed occupations, the aggregate inventory gap in the Army National Guard (ARNG) constitutes 45 percent of the current total ARNG inventory.
- Large numbers of Army and Marine communities have substantial fractions of their individuals with utilization above the target.
o AF and Navy: Fifteen communities have 40 percent or more of individuals above target.
o Army and USMC: The majority of communities have 40 percent or more of individuals above target. Fifteen communities have 70 percent of individuals above target.

Large numbers of Army and Marine communities might have little flexibility in meeting the SecDef utilization target in the next deployment cycle. For example, 147 of the 164 ARNG communities assessed have availability gaps.

Figure A-3. Utilization Summary Charts, All Service Components


Army National Guard (E4+, Inventory>50, 09/2009)




Air Force National Guard (E4+, Inventory>50, 09/2009)


Air Force Reserve
(E4+, Inventory>50, 09/2009)



Table A-1. Inventory Gaps Across the Service Components

| Component | Total Number of Occupations Assessed | Number of Occupations with an Inventory Gap | Aggregate Inventory Gap Across All Occupations | Gap as Pct of Inventories in the Occupations Assessed |
| :---: | :---: | :---: | :---: | :---: |
| Army Active | 181 | 3 | 197 | 0.0\% |
| Army Guard | 164 | 136 | 105,882 | 45.0\% |
| Army Reserve | 134 | 46 | 16,105 | 13.0\% |
| Navy Active | 73 | 0 | 0 | 0.0\% |
| Navy Reserve | 62 | 5 | 1,160 | 2.7\% |
| Air Force Active | 110 | 0 | 0 | 0.0\% |
| Air Force Guard | 81 | 5 | 1,202 | 1.5\% |
| Air Force Reserve | 77 | 5 | 560 | 1.2\% |
| Marine Active | 211 | 1 | 4 | 0.0\% |
| Marine Reserve | 60 | 39 | 5,655 | 45.7\% |
| Totals | 1,153 | 240 | 130,765 |  |

Table A-2. Availability Gaps across the Service Components

| Component | Total Number of Occupations Assessed | Number of Occupations with an Availability Gap | Sum of Availability Gap Across All Occupations in the Component | Gap as Pct of Inventories in the Component's Occupations |
| :---: | :---: | :---: | :---: | :---: |
| Army Active | 181 | 1 | 4 | 0.0\% |
| Army Guard | 164 | 147 | 28,738 | 12.2\% |
| Army Reserve | 134 | 88 | 7,294 | 5.9\% |
| Navy Active | 73 | 0 | 0 | 0.0\% |
| Navy Reserve | 62 | 8 | 383 | 0.9\% |
| Air Force Active | 110 | 0 | 0 | 0.0\% |
| Air Force Guard | 81 | 3 | 127 | 0.2\% |
| Air Force Reserve | 77 | 4 | 77 | 0.2\% |
| Marine Active | 211 | 0 | 0 | 0.0\% |
| Marine Reserve | 60 | 21 | 499 | 4.0\% |
| Totals | 1,153 | 272 | 37,122 |  |

We draw several additional conclusions from these data:

- Selected Reserve versus Active Component Utilization. Comparisons between the active and the Reserve Components demonstrate the major contributions that the Reserve Components have made to these operations.
- Meeting the Secretary's Utilization Targets. Because of the Reserve Components' heavy commitments to date, the greatest challenge in meeting the Secretary's utilization goals will lie in managing the RC deployments. Although this will be particularly true for the Army Reserve Components, each of the Services has selected communities that have been heavily used.
- Measuring Utilization Across Services. Clearly among the Active

Components, the contingency operations demands are predominately born by
the Army and the Marine Corps. Neither the Navy nor the Air Force Active Components have deployed at levels approaching the Secretary's utilization targets.

- As a corollary to this, it is understood that the Contingency Tracking System does not provide a complete view of the operational duties of any of the Services, but the omissions are probably larger for the Navy and Air Force.
- Improved measures of utilization will be needed to provide a consistent basis for assessing utilization across the Services. For example, the Navy has used "ITEMPO" to measure an individual's time away from home station. This measurement captures all deployed duty and training assignments and may provide a more complete view of utilization than is provided by the data from the Contingency Tracking System.


## F. Strategies for Complying with Utilization Targets

This section considers the question of how the Services might transition to compliance with the Secretary's individual utilization targets. As we shall see, selfselection has a key role to play. We examine four main actions available for bringing utilization into compliance:

1. Community personnel managers assign for deployment only individuals who currently are in compliance with the Secretary's utilization targets.

- The Services can increase the pool of individuals by ensuring those who have never deployed become available to deploy.

2. Augment assignments of compliant service members by soliciting self-selectees to meet the near-term deployment needs.

- Self-selectees would waive utilization targets.
- A DOD-wide approach would make the most effective use of available talent.

3. Expand the inventory to balance the sustainable inventory with deployment needs.

- Self-selection coupled with training can be helpful for expediting inventory adjustments.

4. Adjust the Utilization Targets.

- Blanket waivers could be issued (temporarily) for high-use communities.
- Higher utilization targets could be adopted selectively for individuals who self-select for them at the point of re-enlistment; might be coupled with reenlistment bonuses.

The following section illustrates the logic of these possible actions using data for three communities of enlisted personnel (ranks of E4 and above): Army Active Infantryman, Army National Guard Infantryman (Selected Reserve), and Army Reserve Civil Affairs Specialist (Selected Reserve).

## G. Using Utilization Metrics

The examples below illustrate the logic of the four alternative actions. They provide insights regarding the range of circumstances across communities and the extent of the actions needed to bring communities into compliance with the Secretary's utilization targets.

The utilization metrics for the Army infantry as of September 30, 2009 are summarized by the charts presented in Figure A-4. These are useful cases because the infantry is representative of the situation for most of the large, mainline warfare communities. The ARNG infantry has been used more extensively than the Active infantry relative to the Secretary's targets.

## Army Infantryman (E4+)





Figure A-4. Utilization Metrics for Active Army and National Guard Infantry
Tables A-3 and A-4 use these data to quantify the current gap between the Secretary's utilization targets and the actual experience of these communities. The righthand panel in each table provides a "what if" analysis, examining the effects of altering the utilization targets, with all of the calculations described above repeated for an alternative rate of utilization.

Part A: Inventory Balance. The top half of each table examines inventory utilization and the balance between inventories and deployments. It calculates the gap that would need to be filled to bring the overall rate of utilization of the community into compliance with the Secretary's utilization targets. In the case of the Active infantry, the sustainable inventory is in balance with current deployments ( $\mathrm{U} / \mathrm{S}=.85$ ), and there is no gap in 2009. In the case of the ARNG infantry, as of September 2009, mobilizations substantially exceeded sustainable inventory ( $\mathrm{U} / \mathrm{S}=1.64$ ), and the gap of 18,562 infantrymen needed to bring sustainable inventory in line with mobilizations was over half the total inventory.

Part B: Individuals Available for the Next Deployment Cycle. The bottom half of each table focuses on whether there will be enough individuals in compliance with the Secretary's utilization targets to meet deployment needs. We start by obtaining the
A-17
number of individuals in the inventory who are in compliance with the Secretary's utilization targets (those to the left of the red vertical line in the bottom charts of the Figure A-4). We assume that none of the currently high-use individuals will self-select in the next cycle. Limiting deployments to individuals who are in compliance with the target utilization rates and to self-selectees is a key element of the strategy for bringing the community as a whole into compliance. To estimate the available inventory, we adjust the number of complying individuals by subtracting out those who have never deployed and those currently deployed.

The availability margin, the ratio of the available inventory to the number currently deployed, was 1.57 for Active infantry. Hence, by focusing future assignments on the available pool of service members, it should be feasible to manage deployments to eventually bring nearly all individuals into compliance with the Secretary's utilization targets. The availability margin for National Guard infantry is .42 indicating that the available inventory is 4,588 service members short of the number needed for the next mobilization. Increasing the mobilization tempo by changing the utilization target from 1:5 to $1: 4$ reduces the shortfall for the next deployment, but does not eliminate it. Finally, it is noteworthy that, despite the history of heavy utilization of the ARNG infantry, 6,680 individuals, or almost 15 percent of the total inventory, have never been mobilized.

Table A-3. Utilization of Army Active Infantry

Army Active Infantry (E4+; Total Inventory = 39,897)

| Balancing the Inventory (Utilization Target =1:2) |  |  | A1. Balancing the Inventory (Utilization Target $=1: 1$ ) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Currently Deployed | 11,249 |  | Currently Deployed | 11,249 |  |
| Sustainable Inventory | 13,229 |  | Sustainable Inventory | 19,949 |  |
| U/S |  | . 85 | U/S |  | . 56 |
| Needed Inventory Adjustment to achieve U/S = 1 |  | 0 | Needed Inventory Adjustment to achieve U/S = 1 |  | 0 |
| Managing Service Member Deployments (Utilization Target = 1:2) |  |  | B1. Managing Service Member Deployments (Utilization Target = 1:1) |  |  |
| Total Inventory | 39,897 |  | Total Inventory | 39,897 |  |
| HU/INV |  | . 38 | HU/INV |  | . 06 |
| Complying Inventory | 24,924 |  | Complying Inventory | 38,589 |  |
| Available Inventory | 17,655 |  | Available Inventory | 25,818 |  |
| Availability Margin |  | 1.57 | Availability Margin |  | 2.30 |
| Shortfall for Next Deployment |  | 0 | Shortfall for Next Deployment |  | 0 |

Table A-4. Utilization of Army National Guard Infantry (Selected Reserve)

| Army National Guard Infantry (E4+; Total Inventory $=\mathbf{2 8 , 9 4 6}$ ) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Balancing the Inventory (Utilization Target = 1:5) |  |  | A1. Balancing the Inventory (Utilization Target = 1:4) |  |  |
| Currently Mobilized | 7,918 |  | Currently Mobilized | 7,918 |  |
| Sustainable Inventory | 4,824 |  | Sustainable Inventory | 5,789 |  |
| U/S |  | 1.64 | U/S |  | 1.37 |
| Needed Inventory Adjustment to achieve U/S = 1 |  | 18,562 | Needed Inventory Adjustment to achieve U/S = 1 |  | 10,644 |
| Managing Servic (Utilizat | Member Target $=$ | oyments | B1. Managing (Utili | ice Mem on Targ | ployments |
| Total Inventory | 28,946 |  | Total Inventory | 28,946 |  |
| HU/INV |  | . 61 | HU/INV |  | . 48 |
| Complying Inventory | 11,398 |  | Complying Inventory | 15,173 |  |
| Available Inventory | 3,330 |  | Available Inventory | 6,413 |  |
| Availability Margin |  | . 42 | Availability Margin |  | . 81 |
| Shortfall for Next Mobilization |  | 4,588 | Shortfall for Next Mobilization |  | 1,505 |

Figure A-5 and Table A-5 show the utilization picture for the Army Reserve Civil Affairs community. This community has been heavily used and, in response, its inventory has almost doubled over the last decade. Nevertheless, in September 2009, mobilizations exceeded the sustainable inventory $(\mathrm{U} / \mathrm{S}=1.39)$, and the proportion of high-use individuals was quite high (HU/INV = .61). The following points are worth noting:

- An additional 975 Civil Affairs service members would be needed to bring the inventory into balance with mobilizations-this is a 40 percent increase.
- The community is almost 200 service members short of the number needed for the next mobilization (the availability margin is .66).
- The Civil Affairs community has 500 individuals, or almost 20 percent of the total inventory, who have never been mobilized.
- Increasing the mobilization tempo by adopting a 1:4 utilization target would alleviate the shortfall for the next mobilization.


## Army Reserve: Civil Affairs (E4+)



Figure A-5. Army Reserve Civil Affairs Specialist

Table A-5. Army Reserve Civil Affairs Specialist (Selected Reserve)
Army Reserve Civil Affairs (E4+; Total Inventory = 2,499)

| Balancing the Inventory (Utilization Target = 1:5) |  |  | A1. Balancing the Inventory (Utilization Target =1:4) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Currently Activated | 579 |  | Currently Activated | 579 |  |
| Sustainable Inventory | 417 |  | Sustainable Inventory | 500 |  |
| U/S |  | 1.39 | U/S |  | 1.16 |
| Needed Inventory Adjustment to achieve U/S = 1 |  | 975 | Needed Inventory Adjustment to achieve U/S = 1 |  | 396 |
| Managing Servic (Utilizati | member Target | ments | B1. Managing | vice Me tion Tar | ployments |
| Total Inventory | 2,499 |  | Total Inventory | 2,499 |  |
| HU/INV |  | . 61 | HU/INV |  | . 50 |
| Complying Inventory | 967 |  | Complying Inventory | 1,261 |  |
| Available Inventory | 382 |  | Available Inventory | 623 |  |
| Availability Margin |  | . 66 | Availability Margin |  | 1.08 |
| Shortfall for Next Activation |  | 197 | Shortfall for Next Activation |  | 0 |

When there is a shortfall of available inventory, as in the cases of the ARNG infantry or Army Reserve Civil Affairs, the near term options to address the situation include:

- Acting to increase the availability of those who have never deployed.
- Recruiting self-selectees from among those who are not in compliance with the Secretary's utilization targets.
- Relaxing the utilization targets.


## H. Concluding Remarks

There are many operational specialties where the current fraction of the inventory deployed exceeds the fraction that can be sustained under the Secretary's utilization targets. And nearly every community includes individuals who have accumulated deployment time that is in excess of the Secretary's deployment targets. We outlined an approach to bring highly utilized communities into compliance with the Secretary's targets and illustrated a number of alternative actions, including initiatives for targeted recruitment of self-selectees.

The examples also highlight two variables that require additional understanding. The first is the population of service members who have never been deployed or mobilized. These individuals represent a sizeable fraction of the Reserve Component inventories. As the examples show, excluding them from the available inventory decreases the ability to manage the community. Therefore, it will be important to know more about a) how many of these individuals are qualified and eligible to deploy, as they could then be counted on to fill any gaps in the available inventory, and b) what actions are needed to increase the fraction eligible to deploy.

Parallel questions exist for self-selection. It would be beneficial to know the fraction of individuals in each community who have self-selected for duty. Similarly, it would be important to have some basis for estimating the fraction of high-use individuals who are likely to self-select for future duty. Such individuals could then be counted on to fill any gaps in the available inventory. Finally, attention also should be given to obtaining an understanding of the actions needed to increase the fraction willing to self-select.

Table A-6. AC Enlisted Occupations with U/S > 1 or Availability Margin < 1
(Total Strength > 50, Ranks E4 and Above)

| Svc Comp | Code | Occupation | Active | Total | U/S | HU/Inv | Avail. Margin | Inv. <br> Gap <br> (Y/N) | Avail. Gap (Y/N) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 15S | OH-58D/Armed Reconnaissance Helicopter (ARH) Helicopter | 257 | 747 | 1.03 | 32\% | 1.26 | Y | N |
| A | 21V | Concrete and Asphalt Equipment Operator | 32 | 85 | 1.13 | 36\% | . 88 | Y | Y |
| A | 35M | Human Intelligence (HUMINT) Collector | 1032 | 2934 | 1.06 | 16\% | 1.28 | Y | N |
| M | 6213 | Fixed-Wing Aircraft Mechanic, EA-6 | 20 | 56 | 1.07 | 13\% | 1.45 | Y | N |

Table A-7. RC (Selected Reserve) Enlisted Occupations with U/S > 1 or Availability Margin <1
(Total Strength > 50, Ranks E4 and Above)

| Svc <br> Comp | Code | Occupation | Active | Total | U/S | HU/Inv | Avail. Margin | Inv. Gap (Y/N) | Avail. Gap (Y/N) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ARNG | 00Z | Command Sergeant Major | 204 | 883 | 1.39 | 63\% | 0.62 | Y | Y |
| ARNG | 09G | National Guard (NG) on Active Duty Medical Hold | 39 | 61 | 3.84 | 87\% | 0.13 | Y | Y |
| ARNG | 09L | Interpreter/Translator | 48 | 78 | 3.69 | 83\% | 0.04 | Y | Y |
| ARNG | 11B | Infantryman | 7918 | 28946 | 1.64 | 61\% | 0.42 | Y | Y |
| ARNG | 11C | Indirect Fire Infantryman | 731 | 2546 | 1.72 | 62\% | 0.40 | Y | Y |
| ARNG | 112 | Infantry Senior Sergeant | 334 | 1076 | 1.86 | 74\% | 0.40 | Y | Y |
| ARNG | 13B | Cannon Crewmember | 1693 | 7191 | 1.41 | 64\% | 0.53 | Y | Y |
| ARNG | 13D | Field Artillery Automated Tactical Data System Specialist | 315 | 1244 | 1.52 | 60\% | 0.44 | Y | Y |
| ARNG | 13E | Cannon Fire Direction Specialist | 19 | 95 | 1.20 | 69\% | 0.63 | Y | Y |
| ARNG | 13F | Fire Support Specialist | 609 | 2162 | 1.69 | 62\% | 0.34 | Y | Y |
| ARNG | 13M | MLRS/HIMARS Crewmember | 515 | 1449 | 2.13 | 72\% | 0.21 | Y | Y |
| ARNG | 13P | MLRS Operations/Fire Direction Specialist | 239 | 660 | 2.17 | 72\% | 0.23 | Y | Y |


| Svc Comp | Code | Occupation | Active | Total | U/S | HU/Inv | Avail. Margin | Inv. <br> Gap <br> (Y/N) | Avail. <br> Gap <br> (Y/N) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ARNG | 13R | Field Artillery Firefinder Radar Operator | 91 | 289 | 1.89 | 63\% | 0.32 | Y | Y |
| ARNG | 13S | Field Artillery Surveyor | 70 | 295 | 1.42 | 60\% | 0.63 | Y | Y |
| ARNG | 13W | Field Artillery Meteorological Crewmember | 39 | 126 | 1.86 | 57\% | 0.23 | Y | Y |
| ARNG | $13 Z$ | Field Artillery Senior Sergeant | 174 | 563 | 1.85 | 71\% | 0.47 | Y | Y |
| ARNG | 14 J | AD C4I Tactical Ops Center Enhanced | 92 | 434 | 1.27 | 55\% | 0.45 | Y | Y |
| ARNG | 14M | Man Portable Air Defense System Crewmember | 15 | 63 | 1.43 | 71\% | 0.53 | Y | Y |
| ARNG | 14S | Air and Missile Defense (AMD) Crewmember | 187 | 807 | 1.39 | 61\% | 0.45 | Y | Y |
| ARNG | $14 Z$ | Air Defense Artillery Senior Sergeant | 28 | 84 | 2.00 | 57\% | 0.29 | Y | Y |
| ARNG | 15B | Aircraft Powerplant Repairer | 74 | 394 | 1.13 | 44\% | 0.78 | Y | Y |
| ARNG | 15D | Aircraft Powertrain Repairer | 59 | 254 | 1.39 | 47\% | 0.51 | Y | Y |
| ARNG | 15F | Aircraft Electrician | 69 | 307 | 1.35 | 44\% | 0.61 | Y | Y |
| ARNG | 15G | Aircraft Structural Repairer | 85 | 392 | 1.30 | 45\% | 0.61 | Y | Y |
| ARNG | 15H | Aircraft Pneudraulics Repairer | 42 | 189 | 1.33 | 46\% | 0.50 | Y | Y |
| ARNG | 15J | OH-58D/ARH Systems Repairer | 31 | 61 | 3.05 | 46\% | 0.03 | Y | Y |
| ARNG | 15K | Aircraft Components Repair Supervisor | 47 | 220 | 1.28 | 60\% | 0.91 | Y | Y |
| ARNG | 15N | Avionic Mechanic | 89 | 430 | 1.24 | 51\% | 0.67 | Y | Y |
| ARNG | 15P | Aviation Operations Specialist | 334 | 1502 | 1.33 | 45\% | 0.44 | Y | Y |
| ARNG | 15Q | Air Traffic Control (ATC) Operator | 82 | 323 | 1.52 | 42\% | 0.38 | Y | Y |
| ARNG | 15R | AH-64 Attack Helicopter Repairer | 158 | 758 | 1.25 | 57\% | 0.22 | Y | Y |
| ARNG | 15S | OH-58D/ARH Helicopter Repairer | 58 | 104 | 3.35 | 41\% | 0.16 | Y | Y |
| ARNG | 15T | UH-60 Helicopter Repairer | 696 | 2911 | 1.43 | 57\% | 0.60 | Y | Y |
| ARNG | 15 U | CH-47 Helicopter Repairer | 270 | 994 | 1.63 | 59\% | 0.31 | Y | Y |
| ARNG | 15W | Unmanned Aerial Vehicle (UAV) Operator | 32 | 173 | 1.11 | 51\% | 0.28 | Y | Y |
| ARNG | 15X | AH-64A Armament/Electrical/Avionics Systems Repairer | 34 | 282 | 0.72 | 47\% | 0.44 | N | Y |
| ARNG | 15Y | AH-64D Systems Repairer | 55 | 123 | 2.68 | 57\% | 0.07 | Y | Y |


| Svc Comp | Code | Occupation | Active | Total | U/S | HU/Inv | Avail. Margin | Inv. <br> Gap <br> (Y/N) | Avail. Gap $\qquad$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ARNG | $15 z$ | Aircraft Maintenance Senior Sergeant | 78 | 383 | 1.22 | 61\% | 0.73 | Y | Y |
| ARNG | 18B | Special Forces Weapons Sergeant | 62 | 210 | 1.77 | 55\% | 0.73 | Y | Y |
| ARNG | 18C | Special Forces Engineer Sergeant | 79 | 215 | 2.20 | 57\% | 0.37 | Y | Y |
| ARNG | 18D | Special Forces Medical Sergeant | 58 | 199 | 1.75 | 52\% | 0.72 | Y | Y |
| ARNG | 18E | Special Forces Communications Sergeant | 75 | 227 | 1.98 | 58\% | 0.43 | Y | Y |
| ARNG | 18F | SF Assistant Operations and Intelligence Sgt | 23 | 70 | 1.97 | 70\% | 0.52 | Y | Y |
| ARNG | 182 | Special Forces Senior Sergeant | 83 | 241 | 2.07 | 73\% | 0.54 | Y | Y |
| ARNG | 19D | Cavalry Scout | 1836 | 5567 | 1.98 | 63\% | 0.32 | Y | Y |
| ARNG | 19K | M1 Armor Crewman | 803 | 2418 | 1.99 | 63\% | 0.29 | Y | Y |
| ARNG | $19 Z$ | Armor Senior Sergeant | 115 | 318 | 2.17 | 77\% | 0.27 | Y | Y |
| ARNG | 21B | Combat Engineer | 1980 | 7304 | 1.63 | 62\% | 0.40 | Y | Y |
| ARNG | 21E | Construction Equipment Operator | 759 | 3878 | 1.17 | 47\% | 0.48 | Y | Y |
| ARNG | 21H | Construction Engineering Supervisor | 178 | 893 | 1.20 | 66\% | 0.83 | Y | Y |
| ARNG | 21K | Plumber | 116 | 465 | 1.50 | 46\% | 0.49 | Y | Y |
| ARNG | 21M | Firefighter | 44 | 327 | 0.81 | 32\% | 0.61 | N | Y |
| ARNG | 21N | Construction Equipment Supervisor | 238 | 1191 | 1.20 | 73\% | 0.63 | Y | Y |
| ARNG | 21R | Interior Electrician | 132 | 603 | 1.31 | 36\% | 0.45 | Y | Y |
| ARNG | 21T | Technical Engineer | 100 | 291 | 2.06 | 53\% | 0.28 | Y | Y |
| ARNG | 21W | Carpentry and Masonry Specialist | 312 | 1503 | 1.25 | 41\% | 0.56 | Y | Y |
| ARNG | 21X | General Engineering Supervisor | 56 | 278 | 1.21 | 64\% | 0.63 | Y | Y |
| ARNG | 21Y | Geospatial Engineer | 43 | 109 | 2.37 | 44\% | 0.30 | Y | Y |
| ARNG | $21 Z$ | Combat Engineering Senior Sergeant | 84 | 317 | 1.59 | 77\% | 0.54 | Y | Y |
| ARNG | 25B | Information Technology Specialist | 487 | 2288 | 1.28 | 38\% | 0.57 | Y | Y |
| ARNG | 25C | Radio Operator-Maintainer | 146 | 608 | 1.44 | 54\% | 0.53 | Y | Y |
| ARNG | 25 F | Network Switching Systems Operator-Maintainer | 103 | 630 | 0.98 | 49\% | 0.48 | N | Y |


| Svc Comp | Code | Occupation | Active | Total | U/S | HU/Inv | Avail. Margin | Inv. <br> Gap <br> (Y/N) | Avail. <br> Gap <br> (Y/N) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ARNG | 25L | Cable Systems Installer-Maintainer | 106 | 540 | 1.18 | 40\% | 0.45 | Y | Y |
| ARNG | 25N | Nodal Network Systems | 28 | 96 | 1.75 | 40\% | 0.14 | Y | Y |
| ARNG | 25P | Microwave Systems Operator-Maintainer | 11 | 56 | 1.18 | 41\% | 0.27 | Y | Y |
| ARNG | 25Q | Multichannel Transmission Systems | 255 | 1187 | 1.29 | 52\% | 0.37 | Y | Y |
| ARNG | 25S | Satellite Communications Systems | 100 | 375 | 1.60 | 45\% | 0.43 | Y | Y |
| ARNG | 25 U | Signal Support Systems Specialist | 1074 | 3986 | 1.62 | 54\% | 0.44 | Y | Y |
| ARNG | 25W | Telecommunications Operations Chief | 102 | 502 | 1.22 | 64\% | 0.51 | Y | Y |
| ARNG | 27D | Paralegal Specialist | 170 | 663 | 1.54 | 46\% | 0.50 | Y | Y |
| ARNG | 31B | Military Police | 3944 | 12686 | 1.87 | 60\% | 0.32 | Y | Y |
| ARNG | 31E | Internment/Resettlement Specialist | 68 | 227 | 1.80 | 63\% | 0.31 | Y | Y |
| ARNG | 35F | Intelligence Analyst | 506 | 1786 | 1.70 | 50\% | 0.41 | Y | Y |
| ARNG | 35G | Imagery Analyst | 27 | 77 | 2.10 | 47\% | 0.33 | Y | Y |
| ARNG | 35 H | Common Ground Station (CGS) Analyst | 26 | 91 | 1.71 | 43\% | 0.15 | Y | Y |
| ARNG | 35L | Counter Intelligence Agent | 60 | 311 | 1.16 | 64\% | 0.73 | Y | Y |
| ARNG | 35M | Human Intelligence Collector | 242 | 826 | 1.76 | 48\% | 0.43 | Y | Y |
| ARNG | 35 N | Signals Intelligence Analyst | 56 | 196 | 1.71 | 35\% | 0.36 | Y | Y |
| ARNG | 35P | Cryptologic Linguist | 70 | 278 | 1.51 | 44\% | 0.44 | Y | Y |
| ARNG | 35T | MI Systems Maintainer/Integrator | 19 | 83 | 1.37 | 30\% | 0.42 | Y | Y |
| ARNG | 35 X | Intel Senior Sergeant/Chief Intel Sergeant | 17 | 58 | 1.76 | 66\% | 0.53 | Y | Y |
| ARNG | 36B | Financial Management Technician | 52 | 229 | 1.36 | 39\% | 0.54 | Y | Y |
| ARNG | 42A | Human Resources Specialist | 1962 | 11114 | 1.06 | 38\% | 0.71 | Y | Y |
| ARNG | 42F | Human Resources Information Systems Management Specialist | 43 | 187 | 1.38 | 45\% | 0.40 | Y | Y |
| ARNG | 42 R | Army Bandperson | 69 | 2073 | 0.20 | 5\% | 0.45 | N | Y |
| ARNG | 44B | Metal Worker | 137 | 548 | 1.50 | 49\% | 0.40 | Y | Y |
| ARNG | 44 C | Financial Management Technician | 227 | 1076 | 1.27 | 46\% | 0.62 | Y | Y |


| Svc Comp | Code | Occupation | Active | Total | U/S | HU/Inv | Avail. Margin | Inv. <br> Gap <br> (Y/N) | Avail. Gap <br> (Y/N) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ARNG | 44E | Machinist | 50 | 205 | 1.46 | 46\% | 0.64 | Y | Y |
| ARNG | 45B | Small Arms/Artillery Repairer | 92 | 410 | 1.35 | 41\% | 0.62 | Y | Y |
| ARNG | 45G | Fire Control Repairer | 17 | 78 | 1.31 | 45\% | 0.35 | Y | Y |
| ARNG | 45 K | Armament Repairer | 78 | 362 | 1.29 | 49\% | 0.64 | Y | Y |
| ARNG | 46Q | Public Affairs Specialist | 92 | 293 | 1.88 | 47\% | 0.35 | Y | Y |
| ARNG | 46R | Public Affairs Broadcast Specialist | 21 | 109 | 1.16 | 51\% | 0.57 | Y | Y |
| ARNG | $46 Z$ | Chief Public Affairs Non Commissioned Officer | 23 | 118 | 1.17 | 53\% | 0.91 | Y | Y |
| ARNG | 52C | Utilities Equipment Repairer | 138 | 595 | 1.39 | 46\% | 0.56 | Y | Y |
| ARNG | 52D | Power-Generation Equipment Repairer | 383 | 1511 | 1.52 | 48\% | 0.48 | Y | Y |
| ARNG | 56M | Chaplain Assistant | 160 | 606 | 1.58 | 47\% | 0.46 | Y | Y |
| ARNG | 62B | Construction Equipment Repairer | 222 | 1056 | 1.26 | 51\% | 0.57 | Y | Y |
| ARNG | 63A | M1 ABRAMS Tank System Maintainer | 106 | 409 | 1.56 | 63\% | 0.41 | Y | Y |
| ARNG | 63B | Wheeled Vehicle Mechanic | 2949 | 11621 | 1.52 | 54\% | 0.46 | Y | Y |
| ARNG | 63D | Artillery Mechanic | 65 | 241 | 1.62 | 63\% | 0.48 | Y | Y |
| ARNG | 63H | Track Vehicle Repairer | 292 | 1124 | 1.56 | 51\% | 0.46 | Y | Y |
| ARNG | 63J | Quartermaster and Chemical Equipment Repairer | 143 | 534 | 1.61 | 47\% | 0.50 | Y | Y |
| ARNG | 63M | BRADLEY System Maintainer | 185 | 601 | 1.85 | 61\% | 0.31 | Y | Y |
| ARNG | 63X | Maintenance Supervisor | 471 | 1856 | 1.52 | 63\% | 0.57 | Y | Y |
| ARNG | $63 Z$ | Mechanical Maintenance Supervisor | 173 | 782 | 1.33 | 58\% | 0.66 | Y | Y |
| ARNG | 68A | Biomedical Equipment Specialist | 18 | 77 | 1.40 | 35\% | 0.39 | Y | Y |
| ARNG | 68E | Dental Specialist | 39 | 435 | 0.54 | 18\% | 0.82 | N | Y |
| ARNG | 68G | Patient Administration Specialist | 63 | 380 | 0.99 | 27\% | 0.71 | N | Y |
| ARNG | 68 J | Medical Logistics Specialist | 59 | 306 | 1.16 | 38\% | 0.63 | Y | Y |
| ARNG | 68 K | Medical Laboratory Specialist | 18 | 101 | 1.07 | 33\% | 0.78 | Y | Y |
| ARNG | 68P | Radiology Specialist | 35 | 208 | 1.01 | 28\% | 0.63 | Y | Y |


| Svc Comp | Code | Occupation | Active | Total | U/S | HU/Inv | Avail. Margin | Inv. <br> Gap <br> (Y/N) | $\begin{aligned} & \text { Avail. } \\ & \text { Gap } \\ & (\mathrm{Y} / \mathrm{N}) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ARNG | 685 | Preventive Medicine Specialist | 16 | 90 | 1.07 | 40\% | 0.81 | Y | Y |
| ARNG | 68W | Health Care Specialist | 2238 | 9301 | 1.44 | 49\% | 0.48 | Y | Y |
| ARNG | 68X | Behavioral Health Specialist | 17 | 109 | 0.94 | 43\% | 0.65 | N | Y |
| ARNG | 74D | Chemical, Biological, Radiological, Nuclear (CBRN) Specialist | 902 | 4188 | 1.29 | 46\% | 0.55 | Y | Y |
| ARNG | 88 H | Cargo Specialist | 8 | 66 | 0.73 | 33\% | 0.88 | N | Y |
| ARNG | 88M | Motor Transport Operator | 3692 | 15335 | 1.44 | 59\% | 0.41 | Y | Y |
| ARNG | 88 N | Transportation Management Coordinator | 109 | 501 | 1.31 | 53\% | 0.63 | Y | Y |
| ARNG | 882 | Transportation Senior Sergeant | 58 | 291 | 1.20 | 66\% | 0.74 | Y | Y |
| ARNG | 89B | Ammunition Specialist | 187 | 712 | 1.58 | 49\% | 0.49 | Y | Y |
| ARNG | 89D | Explosive Ordnance Disposal Specialist | 36 | 189 | 1.14 | 47\% | 0.97 | Y | Y |
| ARNG | 91B | Wheeled Vehicle Repairer | 423 | 2457 | 1.03 | 52\% | 0.77 | Y | Y |
| ARNG | 91C | Utilities Equipment Repairer | 33 | 165 | 1.20 | 50\% | 0.67 | Y | Y |
| ARNG | 91D | Power Generation Equipment Repairer | 52 | 343 | 0.91 | 46\% | 0.88 | N | Y |
| ARNG | 91E | Allied Trades Specialist | 13 | 61 | 1.28 | 51\% | 0.46 | Y | Y |
| ARNG | 91H | Tracked Vehicle Repairer | 34 | 209 | 0.98 | 54\% | 0.76 | N | Y |
| ARNG | 91J | Quartermaster and Chemical Equipment Repairer | 27 | 129 | 1.26 | 36\% | 0.78 | Y | Y |
| ARNG | 91K | Armament Repairer | 20 | 95 | 1.26 | 56\% | 0.55 | Y | Y |
| ARNG | 91L | Construction Equipment Repairer | 52 | 274 | 1.14 | 54\% | 0.71 | Y | Y |
| ARNG | 91W | Metal Worker | 23 | 120 | 1.15 | 46\% | 0.65 | Y | Y |
| ARNG | 92A | Automated Logistical Specialist | 1775 | 8596 | 1.24 | 47\% | 0.60 | Y | Y |
| ARNG | 92F | Petroleum Supply Specialist | 1028 | 3934 | 1.57 | 53\% | 0.44 | Y | Y |
| ARNG | 92G | Food Service Specialist | 1346 | 6306 | 1.28 | 44\% | 0.58 | Y | Y |
| ARNG | 92M | Mortuary Affairs Specialist | 32 | 111 | 1.73 | 44\% | 0.50 | Y | Y |
| ARNG | 92S | Shower/Laundry and Clothing Repair Specialist | 107 | 290 | 2.21 | 44\% | 0.30 | Y | Y |
| ARNG | 92W | Water Treatment Specialist | 215 | 1381 | 0.93 | 46\% | 0.86 | N | Y |


| Svc Comp | Code | Occupation | Active | Total | U/S | HU/Inv | Avail. Margin | Inv. <br> Gap <br> (Y/N) | Avail. <br> Gap <br> (Y/N) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ARNG | 92Y | Unit Supply Specialist | 2143 | 9811 | 1.31 | 47\% | 0.57 | Y | Y |
| ARNG | $92 Z$ | Senior Noncommissioned Logistician | 36 | 150 | 1.44 | 45\% | 0.69 | Y | Y |
| ARNG | 94A | Land Combat Electronic Missile System Repairer | 30 | 129 | 1.40 | 45\% | 0.70 | Y | Y |
| ARNG | 94E | Radio and COMSEC Repairer | 81 | 354 | 1.37 | 45\% | 0.44 | Y | Y |
| ARNG | 94F | Computer/Detection Systems Repairer | 82 | 382 | 1.29 | 43\% | 0.62 | Y | Y |
| ARNG | 94M | Radar Repairer | 23 | 81 | 1.70 | 52\% | 0.30 | Y | Y |
| ARNG | 94P | MLRS Repairer | 32 | 100 | 1.92 | 48\% | 0.50 | Y | Y |
| ARNG | 94R | Avionic and Survivability Equipment Repairer | 32 | 169 | 1.14 | 44\% | 0.75 | Y | Y |
| ARNG | 94T | AVENGER System Repairer | 11 | 53 | 1.25 | 57\% | 0.55 | Y | Y |
| ARNG | 94W | Electronic Maintenance Chief | 23 | 116 | 1.19 | 55\% | 0.65 | Y | Y |
| ARR | OOD | Special Duty Assignment | 10 | 85 | 0.71 | 19\% | 0.40 | N | Y |
| ARR | 09L | Interpreter/Translator | 74 | 169 | 2.63 | 62\% | 0.08 | Y | Y |
| ARR | 11B | Infantryman | 723 | 4659 | 0.93 | 33\% | 0.52 | N | Y |
| ARR | 11C | Indirect Fire Infantryman | 27 | 335 | 0.48 | 22\% | 0.93 | N | Y |
| ARR | 112 | Infantry Senior Sergeant | 160 | 541 | 1.77 | 70\% | 0.33 | Y | Y |
| ARR | 13B | Cannon Crewmember | 89 | 704 | 0.76 | 25\% | 0.64 | N | Y |
| ARR | 13D | Field Artillery Automated Tactical Data System Specialist | 7 | 121 | 0.35 | 11\% | 0.57 | N | Y |
| ARR | 13P | MLRS Operations/Fire Direction Specialist | 7 | 73 | 0.58 | 11\% | 0.00 | N | Y |
| ARR | $13 Z$ | Field Artillery Senior Sergeant | 27 | 73 | 2.22 | 68\% | 0.33 | Y | Y |
| ARR | 14 J | Air Defense Command, Control, Communications, Computers | 5 | 73 | 0.41 | 7\% | 0.80 | N | Y |
| ARR | 14 S | AMD Crewmember | 4 | 77 | 0.31 | 19\% | 0.75 | N | Y |
| ARR | 14 T | PATRIOT Launching Station Enhanced Operator/Maintainer | 2 | 80 | 0.15 | 4\% | 0.50 | N | Y |
| ARR | 15P | Aviation Operations Specialist | 33 | 265 | 0.75 | 24\% | 0.85 | N | Y |
| ARR | 15T | UH-60 Helicopter Repairer | 45 | 141 | 1.91 | 33\% | 0.16 | Y | Y |
| ARR | 15 U | CH-47 Helicopter Repairer | 85 | 242 | 2.11 | 52\% | 0.20 | Y | Y |


| Svc Comp | Code | Occupation | Active | Total | U/S | HU/Inv | Avail. Margin | Inv. <br> Gap <br> (Y/N) | Avail. <br> Gap <br> (Y/N) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ARR | 15Y | AH-64D Armament/Electrical/Avionics Systems Repairer | 1 | 67 | 0.09 | 31\% | 0.00 | N | Y |
| ARR | 19D | Cavalry Scout | 86 | 744 | 0.69 | 27\% | 0.49 | N | Y |
| ARR | 19K | M1 Armor Crewman | 57 | 591 | 0.58 | 19\% | 0.68 | N | Y |
| ARR | $19 Z$ | Armor Senior Sergeant | 22 | 98 | 1.35 | 63\% | 0.55 | Y | Y |
| ARR | 21C | Bridge Crewmember | 96 | 505 | 1.14 | 45\% | 1.32 | Y | N |
| ARR | 21E | Construction Equipment Operator | 239 | 1870 | 0.77 | 42\% | 0.74 | N | Y |
| ARR | 21H | Construction Engineering Supervisor | 144 | 869 | 0.99 | 73\% | 0.61 | N | Y |
| ARR | 21K | Plumber | 35 | 232 | 0.91 | 44\% | 0.40 | N | Y |
| ARR | 21R | Interior Electrician | 38 | 385 | 0.59 | 33\% | 0.53 | N | Y |
| ARR | 21T | Technical Engineer | 40 | 212 | 1.13 | 57\% | 0.40 | Y | Y |
| ARR | 21V | Concrete and Asphalt Equipment Operator | 23 | 95 | 1.45 | 48\% | 0.52 | Y | Y |
| ARR | 21W | Carpentry and Masonry Specialist | 92 | 1083 | 0.51 | 43\% | 0.68 | N | Y |
| ARR | 21X | General Engineering Supervisor | 65 | 314 | 1.24 | 64\% | 0.83 | Y | Y |
| ARR | 25B | Information Technology Specialist | 307 | 1703 | 1.08 | 37\% | 0.69 | Y | Y |
| ARR | 25C | Radio Operator-Maintainer | 22 | 129 | 1.02 | 30\% | 0.95 | Y | Y |
| ARR | 25F | Network Switching Systems Operator-Maintainer | 43 | 367 | 0.70 | 26\% | 0.58 | N | Y |
| ARR | 25L | Cable Systems Installer-Maintainer | 75 | 508 | 0.89 | 55\% | 0.27 | N | Y |
| ARR | 25M | Multimedia lllustrator | 29 | 110 | 1.58 | 49\% | 0.45 | Y | Y |
| ARR | 25Q | Multichannel Transmission Systems | 96 | 452 | 1.27 | 30\% | 0.14 | Y | Y |
| ARR | 25S | Satellite Communications Systems | 39 | 127 | 1.84 | 44\% | 0.31 | Y | Y |
| ARR | 25 U | Signal Support Systems Specialist | 340 | 1847 | 1.10 | 40\% | 0.51 | Y | Y |
| ARR | 25 V | Combat Documentation/Production Specialist | 29 | 80 | 2.18 | 55\% | 0.24 | Y | Y |
| ARR | 25W | Telecommunications Operations Chief | 100 | 380 | 1.58 | 67\% | 0.44 | Y | Y |
| ARR | 27D | Paralegal Specialist | 171 | 934 | 1.10 | 41\% | 0.75 | Y | Y |
| ARR | 31B | Military Police | 1481 | 6912 | 1.29 | 55\% | 0.54 | Y | Y |


| Svc Comp | Code | Occupation | Active | Total | U/S | HU/Inv | Avail. Margin | Inv. <br> Gap <br> (Y/N) | Avail. Gap <br> (Y/N) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ARR | 31D | Criminal Investigations (CID) Special Agent | 80 | 228 | 2.11 | 60\% | 0.42 | Y | Y |
| ARR | 31E | Internment/Resettlement Specialist | 61 | 419 | 0.87 | 50\% | 0.92 | N | Y |
| ARR | 35F | Intelligence Analyst | 254 | 1516 | 1.01 | 35\% | 0.68 | Y | Y |
| ARR | 35L | Counter Intelligence (CI) Agent | 56 | 347 | 0.97 | 57\% | 0.61 | N | Y |
| ARR | 35M | Human Intelligence (HumInt) Collector | 197 | 683 | 1.73 | 38\% | 0.26 | Y | Y |
| ARR | 35 N | Signals Intelligence Analyst | 44 | 237 | 1.11 | 21\% | 0.57 | Y | Y |
| ARR | 35P | Cryptologic Linguist | 17 | 169 | 0.60 | 18\% | 0.65 | N | Y |
| ARR | 35X | Intelligence Senior Sgt/Chief Intelligence Sgt | 29 | 150 | 1.16 | 63\% | 0.90 | Y | Y |
| ARR | 35Y | Chief Counterintel/HumInt Sergeant | 13 | 66 | 1.18 | 67\% | 0.77 | Y | Y |
| ARR | 37F | Psychological Operations Specialist | 562 | 1588 | 2.12 | 64\% | 0.22 | Y | Y |
| ARR | 38B | Civil Affairs Specialist | 579 | 2499 | 1.39 | 61\% | 0.66 | Y | Y |
| ARR | 42A | Human Resources Specialist | 1993 | 12586 | 0.95 | 40\% | 0.67 | N | Y |
| ARR | 42F | Human Resources Information Systems Management Specialist | 19 | 197 | 0.58 | 39\% | 0.37 | N | Y |
| ARR | 44B | Metal Worker | 14 | 219 | 0.38 | 30\% | 0.86 | N | Y |
| ARR | 44 C | Financial Management Technician | 217 | 1286 | 1.01 | 48\% | 0.63 | Y | Y |
| ARR | 44E | Machinist | 9 | 111 | 0.49 | 47\% | 0.67 | N | Y |
| ARR | 45K | Armament Repairer | 14 | 115 | 0.73 | 34\% | 0.93 | N | Y |
| ARR | 46Q | Public Affairs Specialist | 64 | 213 | 1.80 | 51\% | 0.48 | Y | Y |
| ARR | 46R | Public Affairs Broadcast Specialist | 36 | 94 | 2.30 | 68\% | 0.17 | Y | Y |
| ARR | 462 | Chief Public Affairs NCO | 30 | 110 | 1.64 | 65\% | 0.33 | Y | Y |
| ARR | 52D | Power-Generation Equipment Repairer | 87 | 1000 | 0.52 | 35\% | 0.83 | N | Y |
| ARR | 56M | Chaplain Assistant | 133 | 665 | 1.20 | 39\% | 0.57 | Y | Y |
| ARR | 63A | M1 ABRAMS Tank System Maintainer | 11 | 91 | 0.73 | 20\% | 0.27 | N | Y |
| ARR | 63B | Wheeled Vehicle Mechanic | 748 | 5998 | 0.75 | 41\% | 0.79 | N | Y |
| ARR | 63M | BRADLEY Fighting Vehicle System Maintainer | 7 | 118 | 0.36 | 16\% | 0.57 | N | Y |


| Svc Comp | Code | Occupation | Active | Total | U/S | HU/Inv | Avail. Margin | Inv. <br> Gap <br> (Y/N) | Avail. <br> Gap <br> (Y/N) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ARR | 63X | Maintenance Supervisor | 173 | 608 | 1.71 | 65\% | 0.48 | Y | Y |
| ARR | $63 Z$ | Mechanical Maintenance Supervisor | 110 | 399 | 1.65 | 68\% | 0.37 | Y | Y |
| ARR | 68A | Biomedical Equipment Specialist | 46 | 263 | 1.05 | 40\% | 1.22 | Y | N |
| ARR | 68E | Dental Specialist | 128 | 984 | 0.78 | 28\% | 0.65 | N | Y |
| ARR | 68G | Patient Administration Specialist | 109 | 695 | 0.94 | 32\% | 0.69 | N | Y |
| ARR | 68K | Medical Laboratory Specialist | 115 | 525 | 1.31 | 50\% | 0.79 | Y | Y |
| ARR | 68Q | Pharmacy Specialist | 37 | 263 | 0.84 | 34\% | 0.86 | N | Y |
| ARR | 68R | Veterinary Food Inspection Specialist | 48 | 228 | 1.26 | 46\% | 0.73 | Y | Y |
| ARR | 68 S | Preventive Medicine Specialist | 33 | 198 | 1.00 | 56\% | 0.76 | N | Y |
| ARR | 68 T | Animal Care Specialist | 13 | 85 | 0.92 | 32\% | 0.54 | N | Y |
| ARR | 68W | Health Care Specialist | 1081 | 7081 | 0.92 | 37\% | 0.68 | N | Y |
| ARR | 68X | Behavioral Health Specialist | 49 | 353 | 0.83 | 52\% | 0.90 | N | Y |
| ARR | 74D | CBRN Specialist | 394 | 3373 | 0.70 | 33\% | 0.99 | N | Y |
| ARR | 88H | Cargo Specialist | 185 | 955 | 1.16 | 45\% | 0.75 | Y | Y |
| ARR | 88M | Motor Transport Operator | 1771 | 7166 | 1.48 | 64\% | 0.36 | Y | Y |
| ARR | 88 N | Transportation Management Coordinator | 601 | 2320 | 1.55 | 57\% | 0.47 | Y | Y |
| ARR | 882 | Transportation Senior Sergeant | 182 | 699 | 1.56 | 71\% | 0.39 | Y | Y |
| ARR | 89B | Ammunition Specialist | 351 | 1290 | 1.63 | 66\% | 0.34 | Y | Y |
| ARR | 92A | Automated Logistical Specialist | 670 | 5197 | 0.77 | 42\% | 0.84 | N | Y |
| ARR | 92G | Food Service Specialist | 286 | 2485 | 0.69 | 41\% | 0.91 | N | Y |
| ARR | 92M | Mortuary Affairs Specialist | 55 | 210 | 1.57 | 61\% | 0.36 | Y | Y |
| ARR | 92 S | Shower/Laundry and Clothing Repair Specialist | 237 | 1105 | 1.29 | 66\% | 0.34 | Y | Y |
| ARR | 92W | Water Treatment Specialist | 82 | 739 | 0.67 | 47\% | 0.65 | N | Y |
| ARR | 92Y | Unit Supply Specialist | 807 | 6259 | 0.77 | 35\% | 0.83 | N | Y |
| ARR | 922 | Senior Noncommissioned Logistician | 21 | 122 | 1.03 | 59\% | 1.05 | Y | N |


| Svc Comp | Code | Occupation | Active | Total | U/S | HU/Inv | Avail. Margin | Inv. <br> Gap <br> (Y/N) | Avail <br> Gap <br> (Y/N) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ARR | 94E | Radio and Communications Security (COMSEC) Repairer | 14 | 144 | 0.58 | 34\% | 0.86 | N | Y |
| AFNG | 1 A 0 | In-flight Refueling | 102 | 450 | 1.36 | 39\% | 1.54 | Y | N |
| AFNG | 1A1 | Flight Engineer | 99 | 507 | 1.17 | 57\% | 1.05 | Y | N |
| AFNG | 1A2 | Aircraft Loadmaster | 208 | 957 | 1.30 | 56\% | 1.00 | Y | N |
| AFNG | 1N1 | Imagery Intelligence | 173 | 399 | 2.60 | 54\% | 0.34 | Y | Y |
| AFNG | 1N4 | Network Intelligence Analyst | 18 | 85 | 1.27 | 28\% | 0.72 | Y | Y |
| AFNG | 3N1 | Regional Band Member | 18 | 305 | 0.35 | 5\% | 0.56 | N | Y |
| AFR | 3E8 | Explosive Ordnance Disposal (EOD) | 44 | 160 | 1.65 | 41\% | 0.68 | Y | Y |
| AFR | 1A0 | In-flight Refueling | 54 | 308 | 1.05 | 36\% | 2.37 | Y | N |
| AFR | 1A1 | Flight Engineer | 110 | 564 | 1.17 | 68\% | 0.85 | Y | Y |
| AFR | 1 A 2 | Aircraft Loadmaster | 242 | 1142 | 1.27 | 66\% | 0.81 | Y | Y |
| AFR | 1A4 | Air Crew Member | 3 | 51 | 0.35 | 39\% | 0.67 | N | Y |
| AFR | 3P0 | Security Forces | 656 | 3902 | 1.01 | 49\% | 1.18 | Y | N |
| MR | 0151 | Administrative Clerk | 56 | 300 | 1.12 | 34\% | 0.88 | Y | Y |
| MR | 0211 | CI/HUMINT Specialist | 22 | 89 | 1.48 | 55\% | 0.86 | Y | Y |
| MR | 0231 | Intelligence Specialist | 53 | 252 | 1.26 | 50\% | 1.02 | Y | N |
| MR | 0311 | Rifleman | 433 | 1418 | 1.83 | 51\% | 0.77 | Y | Y |
| MR | 0313 | LAV Crewman | 106 | 165 | 3.85 | 66\% | 0.20 | Y | Y |
| MR | 0331 | Machine Gunner | 62 | 307 | 1.21 | 46\% | 1.26 | Y | N |
| MR | 0341 | Mortarman | 80 | 254 | 1.89 | 44\% | 0.94 | Y | Y |
| MR | 0351 | Infantry Assaultman | 50 | 159 | 1.89 | 52\% | 0.60 | Y | Y |
| MR | 0352 | Anti-tank Missileman | 33 | 146 | 1.36 | 43\% | 1.48 | Y | N |
| MR | 0369 | Infantry Unit Leader | 145 | 477 | 1.82 | 64\% | 0.77 | Y | Y |
| MR | 0411 | Maintenance Management Specialist | 24 | 143 | 1.01 | 30\% | 1.67 | Y | N |
| MR | 0471 | Personnel Retrieval and Processing Specialist | 21 | 56 | 2.25 | 80\% | 0.29 | Y | Y |


| Svc Comp | Code | Occupation | Active | Total | U/S | HU/Inv | Avail. Margin | Inv. <br> Gap <br> (Y/N) | Avail. Gap <br> (Y/N) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MR | 0481 | Landing Support Specialist | 58 | 170 | 2.05 | 61\% | 0.64 | Y | Y |
| MR | 0612 | Tactical Switching Operator | 22 | 129 | 1.02 | 38\% | 1.64 | Y | N |
| MR | 0621 | Field Radio Operator | 123 | 582 | 1.27 | 46\% | 1.33 | Y | N |
| MR | 0622 | Digital Wideband Transmission Equipment Operator | 15 | 58 | 1.55 | 36\% | 0.60 | Y | Y |
| MR | 0629 | Radio Chief | 39 | 132 | 1.77 | 64\% | 0.64 | Y | Y |
| MR | 0651 | Data Systems Technician | 16 | 95 | 1.01 | 33\% | 1.38 | Y | N |
| MR | 0811 | Field Artillery Cannoneer | 52 | 230 | 1.36 | 51\% | 1.48 | Y | N |
| MR | 0844 | Field Artillery Fire Control Man | 14 | 78 | 1.08 | 40\% | 2.07 | Y | N |
| MR | 1141 | Electrician | 26 | 76 | 2.05 | 41\% | 0.81 | Y | Y |
| MR | 1142 | Engineer Equipment Electrical Systems Technician | 21 | 95 | 1.33 | 42\% | 1.38 | Y | N |
| MR | 1171 | Water Support Technician | 21 | 58 | 2.17 | 41\% | 0.52 | Y | Y |
| MR | 1341 | Engineer Equipment Mechanic | 35 | 148 | 1.42 | 37\% | 1.03 | Y | N |
| MR | 1345 | Engineer Equipment Operator | 41 | 209 | 1.18 | 50\% | 1.20 | Y | N |
| MR | 1371 | Combat Engineer | 121 | 400 | 1.82 | 63\% | 0.63 | Y | Y |
| MR | 1812 | M1A1 Tank Crewman | 34 | 143 | 1.43 | 43\% | 1.12 | Y | N |
| MR | 1833 | Assault Amphibious Vehicle (AAV) Crewman | 62 | 138 | 2.70 | 71\% | 0.23 | Y | Y |
| MR | 2311 | Ammunition Technician | 52 | 189 | 1.65 | 38\% | 0.83 | Y | Y |
| MR | 2844 | Ground Communications Organizational Repairer | 21 | 104 | 1.21 | 50\% | 1.71 | Y | N |
| MR | 3381 | Food Service Specialist | 57 | 228 | 1.50 | 46\% | 1.07 | Y | N |
| MR | 3521 | Automotive Maintenance Technician | 97 | 433 | 1.34 | 44\% | 1.23 | Y | N |
| MR | 3531 | Motor Vehicle Operator | 139 | 531 | 1.57 | 43\% | 0.98 | Y | Y |
| MR | 3533 | Logistics Vehicle System Operator | 91 | 260 | 2.10 | 65\% | 0.68 | Y | Y |
| MR | 3537 | Motor Transport Operations Chief | 56 | 161 | 2.09 | 64\% | 0.59 | Y | Y |
| MR | 5811 | Military Police | 80 | 315 | 1.52 | 58\% | 0.81 | Y | Y |
| MR | 6531 | Aircraft Ordnance Technician | 13 | 52 | 1.50 | 23\% | 1.15 | Y | N |


| Svc Comp | Code | Occupation | Active | Total | U/S | HU/Inv | Avail. Margin | Inv. <br> Gap <br> (Y/N) | Avail. <br> Gap <br> (Y/N) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MR | 7051 | Aircraft Rescue and Firefighting Specialist | 24 | 91 | 1.58 | 45\% | 0.92 | Y | Y |
| MR | 8999 | Sergeant Major-First Sergeant | 40 | 204 | 1.18 | 69\% | 1.33 | Y | N |
| NR | AZ | Aviation Maintenance Administrationman | 11 | 315 | 0.21 | 3\% | 0.82 | N | Y |
| NR | BU | Builder | 301 | 1789 | 1.01 | 26\% | 1.76 | Y | N |
| NR | CTI | Cryptologic Technician Interpretative | 16 | 167 | 0.57 | 6\% | 0.88 | N | Y |
| NR | LS | Logistics Specialist | 371 | 1174 | 1.90 | 22\% | 0.05 | Y | Y |
| NR | MN | Mineman | 24 | 165 | 0.87 | 16\% | 0.96 | N | Y |
| NR | PR | Aircrew Survival Equipmentman | 12 | 213 | 0.34 | 6\% | 0.92 | N | Y |
| NR | PS | Personnel Specialist | 115 | 1362 | 0.51 | 12\% | 0.85 | N | Y |
| NR | RP | Religious Program Specialist | 30 | 165 | 1.09 | 25\% | 1.33 | Y | N |
| NR | SB | Special Warfare Boat Operator | 13 | 56 | 1.39 | 29\% | 0.85 | Y | Y |
| NR | SO | Special Warfare Operator | 30 | 126 | 1.43 | 28\% | 0.77 | Y | Y |

# Appendix B Civilian Self-Selection for Work in Combat Zones 

John Brinkerhoff

Although civilian employees are playing a greater role in the combat zones than in previous conflicts, the number serving in the Iraq, Afghanistan, and Middle East Combat Zones is still a very small fraction of the total U.S. Government presence there. Most of the approximately 6,500 Department of Defense (DOD) employees serving in the combat zones are involved in managing the large number of contractors that provide goods and services to support the military forces and reconstruction. A relatively few but highly skilled civilians serve on high level staffs or as members of provincial reconstruction teams or other elements involved directly in the on-going counterinsurgency campaigns and nation building programs. DOD is apparently not lacking civilian volunteers, but the process of hiring civilians for jobs in the combat zones is long and painstaking. Monetary benefits and incentives for working in the combat zones are adequate to attract volunteers, but some of the qualifications are difficult to meet, particularly for people not employed by the Federal Government.

## A. DOD and U.S. Government Policy

There is a concerted effort by the U.S. Government to increase the numbers of civilian employees that serve in the forward areas. ${ }^{1}$ The DOD policy was set forth in 2008 by the Deputy Under Secretary of Defense for Personnel and Readiness, as follows:

I need your support and immediate action to increase the deployment of DOD civilians. The Department relies on these volunteers to meet many contingency operations mission requirements. Consequently, all efforts must be made to assist those who volunteer to support the mission, particularly in Iraq and Afghanistan where the need is most acute. ${ }^{2}$

[^15]This is a new phenomenon. During the Cold War, the role of DOD civilian employees (except those working in Western Europe and other overseas facilities) was to staff the headquarters and operate the bases, arsenals, and depots in the United States. In Operation Desert Storm, some wholesale support functions, such as depot level maintenance, were for the first time carried out in an active theater of war by civilian employees. One reason for increased reliance on civilian employees may be that the number of them is not subject to a theater ceiling. Another reason may be that DOD believes that having more civilians in the combat zones will help relieve the stress on military personnel due to frequent tours. Finally, there has been an effort by the Administration to reduce the burden on DOD by persuading other Federal Departments and Agencies to participate in these overseas contingency operations and bring their expertise to bear on achieving satisfactory outcomes.

## 1. Number of Deployed Civilians

Table B-1 shows the number of DOD civilian employees by DOD component that were serving in Iraq, Afghanistan, or the Middle East as of 31 March 2010. ${ }^{3}$ Table B-1 also shows the cumulative numbers of employees that have served in these combat zones since 2003.

Table B-1. DOD Civilian Employees Serving in Central Command (CENTCOM) Combat Zones (As of 31 March 2010)

|  | OSDIDAs | USA ${ }^{4}$ | USN | USAF | USMC | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Iraq |  | 1,943 | 70 | 150 |  |  |
| Afghanistan |  | 1,368 | 48 |  |  |  |
| Middle East |  | 725 | 900 |  |  |  |
| TOTAL | 1,250 | 4,036 | 1018 | 150 | 50 | 6,504 |
| Cumulative <br> Since 2003 |  | 30,000 |  |  |  |  |

There is some variation among the DOD components as to the extent to which their civilian employees are deployed. Table B-2 shows for each DOD component the total military strength deployed in Iraq and Afghanistan, the total civilian strength, and the total civilian workforce. ${ }^{5}$ These data permit the calculation of the percentage of combat

[^16]zone (CZ) strength filled by civilian employees, and also the percentage of civilian workforce deployed.

Table B-2. Data on Number of Civilian Employees Serving Voluntarily in CENTCOM Combat Zones (CZs)

|  | OSDIDA | USA | USN | USAF | USMC | TOTALS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Military Personnel | n/a | 153,000 | 23,300 | 27,000 | 25,114 | 228,414 |
| Civilian Employees | 1,250 | 4,036 | 1,018 | 150 | 50 | 6,504 |
| Total CZ Strength | n/a | 157,036 | 24,318 | 27,150 | 25,164 | 239,928 |
| \% Civilians | n/a | 2.6\% | 4.9\% | 0.6\% | 0.2\% | 2.7\% |
| Civilian Workforce | 135,700 | 303,000 | 174,000 | 171,300 | 35,123 | 819,123 |
| \% Deployed | 0.9\% | 1.3\% | 0.6\% | 0.09\% | 0.14\% | 0.8\% |

Every one of these civilian employees has been a volunteer. Unlike military personnel who may be compelled to deploy to a combat zone, civilian employees must agree of their own volition to do so. Even those who agree to accept a position that requires deployment as a "condition of employment" may avoid deployment by resigning. ${ }^{6}$ One question is why these employees have been so willing to volunteer. Another question is whether civilians are cost-effective compared to military personnel. And yet another is whether these civilian employees replace military personnel or augment them.

The Services take somewhat different approaches to the use of civilian employees in these combat zones. The Army has the largest number of deployed civilians due to its responsibilities for construction management by the U.S. Army Corps of Engineers, provision of depot level maintenance and supply support from Kuwait, responsibility for the theater sustainment system, and de facto responsibility for staffing provisional units that provide irregular warfare capabilities. The Navy operates major bases in Bahrain and Egypt and uses civilians to supervise local employees and contractors. The Air Force sends few civilians to the combat zones, presumably to manage the local nationals used to operate the air bases in the region. The Marine Corps deploys very few civilians. The Office of the Secretary of Defense (OSD) and the Defense Agencies also have a civilian presence in the Central Command (CENTCOM) Combat Zones, primarily to manage the large numbers of local and U.S. contractors operating there.

[^17]
## 2. DOD Management of Civilian Employees

The Deputy Under Secretary of Defense for Civilian Personnel Policy (DUSD (CPP)) is responsible for oversight and policy formulation for all of DOD's approximately 800,000 civilian employees. A subordinate activity of that office, the Defense Civilian Personnel Management Service (DCPMS), is responsible for providing policy guidance, training, and support for civilian personnel officers throughout DOD for both appropriated and non-appropriated fund employees. DCPMS also maintains data on civilian employment.

One of the major goals of DCPMS is to foster an expeditionary mindset and establish an expeditionary capability in the DOD civilian workforce. DCPMS makes all arrangements to place civilian employees from DOD and other Federal Agencies and hire new employees from the private sector to work in the combat zones. The DCPMS accepts applications from people who want to deploy into the combat zones in response to position vacancy announcements. One of the major initiatives of DCPMS is the establishment of a Civilian Expeditionary Workforce (CEW) that consists of current and former employees who are ready upon short notice to report for emergency duty in response to domestic emergencies and foreign military operations. There are several programs in place to accomplish this goal and the CEW is one of the most innovative.

The general policy of DOD with respect to civilian deployments is "to promote opportunities for DOD civilians to contribute their talent to DOD's mission." ${ }^{7}$ Specific policies that govern this effort include the following:

- DOD civilian employees who answer the call voluntarily to serve in Iraq and Afghanistan by applying and being selected for a valid requirement for deployment...will be released for deployment unless there is significant negative impact on the losing organization.
- Organizations that deny a DOD civilian employee the opportunity to deploy must submit their reasons for denial to the Deputy Under Secretary of Defense (Civilian Personnel Policy) (DUSD (CPP)) for review within thirty days of said denial.
- DOD civilian employees who deploy to Iraq or Afghanistan will not be denied consideration for promotion or other career enhancing opportunities while deployed.

[^18]- Components will make available through policy and practice, and in accordance with governing law and regulations, maximum use of incentives to encourage DOD civilians to accept opportunities in Iraq and Afghanistan.
- The DOD 5-year limitation on employment in foreign areas does not apply to deployments to Iraq or Afghanistan.
- DOD civilian employees who deploy or who are currently deployed in support of operations in Iraq or Afghanistan will be granted the right to return to the positions they held prior to their deployment, or to a position of similar grade, level, and responsibility within the same local organization.
- Components shall ensure that deploying DOD civilian employees are provided comprehensive support prior to, during and following deployment to Iraq and Afghanistan.


## 3. The Civilian Expeditionary Workforce

The Civilian Expeditionary Workforce is a "subset of the DOD civilian workforce [that] is pre-identified to be organized, trained, and equipped in a manner that facilitates the use of their capabilities for operational requirements." ${ }^{8}$ The CEW is to have a set of civilian employees ready and willing to deploy as Individual Augmentees (IAs) from their regular work locations to support "combat operations by the military; contingencies; emergency operations, humanitarian missions; disaster relief; restoration of order; drug interdiction; and stability operations..." ${ }^{9}$ The CEW applies to all appropriated and nonappropriated fund civilian employees for all DOD components. It does not apply to dual status National Guard and Reserve Technicians and contract employees.

In the context of on-going contingency operations in the CENTCOM area of operations, the purpose of the CEW is to contribute to Total Force Staffing in order to relieve stress on Active Duty military personnel, reduce dependency on contractor support, and provide opportunities for DOD civilians to contribute their talents. ${ }^{10}$ The Secretary of Defense has the authority to use CEW positions to meet "validated DOD mission requirements," and Combatant Commanders (COCOMs) are encouraged to integrate civilian capabilities in their planning and resourcing processes. CEW positions are filled using the Secretary of Defense Operations Book, which is the same process by

[^19]which military requirements are sourced. ${ }^{11}$ The CEW is organized into four subcategories:

- Emergency Essential (E-E) Employees fill positions that require the employee "to provide immediate and continuing support for combat operations or to support maintenance and repair of combat essential systems" and/or "perform that duty in a combat zone in connection with a war or national emergency or to "remain behind after the evacuation of nonessential personnel." A civilian may be required when "it is impracticable" to fill a position with a military member because it is necessary that the work be "performed without interruption." ${ }^{12}$ E-E Employees are key employees who cannot be members of the Ready Reserve. They must accept deployment as a condition of employment.
- Non-Combat Essential (NCE) Employees fill positions that require the employee "to support the expeditionary requirements in other than combat or combat support situations." ${ }^{13}$ NCE employees are key employees who cannot be members of the Ready Reserve. They must accept deployment as a condition of employment.
- Capability-Based Volunteers (CBV) are employees who may be asked to volunteer for deployment, to remain behind after other civilians have evacuated (e.g., in a Non-Combatant Evacuation Operation (NEO), or backfill other employees who have deployed. ${ }^{14}$ This designation provides for identification of capabilities outside the scope of an employee's current position to meet E-E and NCE requirements. ${ }^{15}$
- Capability-Based Former Employee Volunteer Corps is a group of former or retired employees who have agreed to be listed in a database as being interested in returning to Federal service temporarily to fill expeditionary requirements or backfill for other employees who have deployed. ${ }^{16}$

The DOD goal is to have approximately 27,000 positions in the Emergency Essential and Non-Combat Essential categories of the CEW. This overall figure was established by the Office of the Deputy Under Secretary of Defense for Civilian Personnel Policy ODUSD (CPP), referred to hereafter as CPP, based on historical data

[^20]from 1986 to the present that provide a basis for estimating that current and future Overseas Contingency Operations (OCO) require about 9,000 civilian employees in addition to military personnel, local national employees, and contractors. ${ }^{17}$ The CPP planners determined that the rotation of civilian employees would be governed by the 1:2 ratio, so that they would deploy for one year and then have two years at home station before the next deployment. Adherence to this rotational cycle requires having two CEW employees in the United States for every one deployed in a combat zone-or three times 9,000 = 27,000.

CPP has established a baseline number of E-E and NCE civilians of 26,304 employees. ${ }^{18}$ About 1,000 of these would be E-E employees, and 26,000 would be NCE employees. The CPP planners have tasked the Services and Defense Agencies to designate specific positions to be filled by CEW workforce. Current incumbents of these CEW positions will have the option of joining the CEW or not, and those that decline to join the CEW will be reassigned to lateral positions without losing promotion or developmental potential. CPP estimates it will take several years to fill all of the 26,000 CEW positions with volunteers. Table B-3 shows roughly how the proposed NCE CEW positions are allocated by CPP.

Table B-3. Allocation of Proposed Non-Combat Essential (NCE) Civilian Expeditionary Workforce (CEW) Positions

| Army | Navy/Marine Corps | Air Force | OSD \& Agencies | Total DOD |
| :---: | :---: | :---: | :---: | :---: |
| 16,000 | 3,500 | 4,500 | 2,000 | 26,000 |

The DOD has established a Civilian Expeditionary Unit (CEU) in the DCPMS to serve as the central management office and authority for all civilians deploying to support current campaigns in the CENTCOM area of operations. The CEU clarifies and validates COCOM IA and Request for Forces (RFF) requirements, designates sources among DOD components to fill validated positions, recruits volunteers to fill positions, and arranges for deployment processing including funding, qualifying, training, and equipping of volunteers. ${ }^{19}$ In this respect, the CEU does for civilian employees what the Joint Staff and Joint Forces Command (JFCOM) do for military personnel. The effect of this approach is that there are two separate but similar systems for placing civilian employees and military personnel in combat zones.

[^21]CEW employees will be ready and available to deploy upon short notice when requested by a COCOM. Most of the pre-deployment vetting, such as security clearances, passports, immunizations, physical examinations, and paper-work will be done and kept current. When a COCOM establishes a requirement for civilian employees to support a contingency operation, the CEU will task the appropriate Services and Defense Agencies to provide CEW employees to meet the demand, subject to approval by the Secretary of Defense. It might be necessary, for example, to call on the Army to provide 200 civil engineers for a contingency operation. To facilitate this rapid response, CPP has detailed human resources planners to the staffs of all of the COCOMs to advise the combatant commanders on how to access the CEW. ${ }^{20}$

## 4. Filling Civilian Positions

The current data about filling civilian positions imply that the process is not very effective, with a success rate of 6 percent for DOD applicants and a lesser rate for the other sources. The process is slow and has several points at which an applicant can be turned down. Current average processing times are fifteen days for obtaining approval from the supervisor who is losing the employees, then fifteen days for theater approval (shown as pending) and seventy-two days for pre-deployment processing, for a total average of 102 days after the application has been accepted at OSD. The goal for the CEW managers is to reduce that time to forty-five days.

The civilian system works in the same way that non-deployable positions are filled. The CEU receives a requirement that consists of a position description and specifies a grade and qualifications. The next step is to search a database of individuals who have volunteered for deployment and seek a match between the position description and the volunteers' applications. If there is a match, the volunteer is contacted to find out if he or she is interested. The process is repeated until there is a positive response. When that occurs, the CEU contacts the current supervisor of the volunteer to see if he or she will agree to allow the employee to deploy. If the supervisor agrees, the volunteer's application is forwarded to the theater for approval. If the supervisor disagrees, the CEU reviews the case and takes it to the Deputy Under Secretary of Defense for Civilian Personnel Policy for adjudication and decision. In some cases, the final decision might have to be made by the Secretary of Defense.

Table B-4 shows the source of those who have volunteered and those who have been accepted in the CEW as of 2 March 2010. ${ }^{21}$ The data in this table suggest that there is no shortage of volunteers for these combat zone positions, particularly from the private

[^22]sector where many of the volunteers may be unemployed. It also shows convincingly that the selection rates are very low. ${ }^{22}$ This may be because a large number of volunteers are unqualified or because the process is arduous and overly concerned with exact matches for positions. One problem certainly is that most, if not all, of the positions require that the incumbent be cleared for access to SECRET information or a higher security clearance. This requirement may account for the low selection rate among private sector volunteers.

Table B-4. Civilian Deployment Results as of 2 March 2010

| Sources | Volunteered | Selected | Selection Rate |
| :---: | :---: | :---: | :---: |
| Army | 1384 | 61 | 4.4\% |
| Navy | 655 | 42 | 6.5\% |
| Air Force | 332 | 14 | 4.2\% |
| Marine Corps | 101 | 6 | 5.9\% |
| COCOMs | 33 | 4 | 12.1\% |
| OSD \& Defense Agencies | 523 | 44 | 8.4\% |
| TOTAL DOD | 3028 | 171 | 5.6\% |
| Non-DOD Federal | 739 | 10 | 1.4\% |
| Private Sector | $8297$ | $23$ | $0.2 \%$ |
| GRAND TOTAL | 12064 | 204 | 1.7\% |

Although it is difficult to obtain an overall perspective on how civilian employees are utilized in the combat zones, there are some fragmentary reports that provide a partial view. Some of the current programs for deploying civilian employees are shown in Table B-5. ${ }^{23}$

[^23]Table B-5. Examples of Current Programs for Deploying Civilian Employees

| Name of Program | Demand | Filled | $\begin{gathered} \text { In- } \\ \text { Process } \end{gathered}$ | Comments |
| :---: | :---: | :---: | :---: | :---: |
| DOD Global Task Force | 640 | 135 | 226 | Iraq and Afghanistan |
| Afghanistan Civilian Surge | 421 |  |  | 264 resumes sent to the Department of State to fill U.S. Embassy \& PRT positions |
| Intermediate Joint NATO Command Headquarters | 50 |  |  |  |
| Afghanistan International Security Headquarters | 168 |  |  |  |
| Joint Improvised Explosive Device (IED) Defeat Organization | 54 | 18 |  |  |
| CENTCOM Commander's Emergency Response Program | 98 |  |  | New provisional unit |
| Afghan Ministry of Defense Pilot Program | 32 |  | 32 |  |
| Afghanistan Pakistan (AFPAK) Hands Program | 21 | 20 |  |  |
| Defense Logistics Agency ${ }^{24}$ |  | 73 |  | Manage local national employees and contractors |

Defense Contract Management Agency (DCMA) is a good example of a DOD agency using civilian employees in a traditional role. DCMA manages billions of dollars in contract support for operations in Iraq, Afghanistan, and the Middle East. ${ }^{25}$ DCMA handles the Logistics Civil Augmentation Program (LOGCAP) contracts that provide support services to U.S. military and civilian personnel serving in the combat zones. It oversees acquisition of equipment and supplies and equipment, and provides contingency contracting services. To do this work, DCMA has 328 civilian employees working in the combat zones. Most of these employees are contract administrators, property management specialists, or quality assurance specialists. They are all volunteers who have contracted with DCMA to be part of an emergency-essential program in which they agree to be deployed two times in a three year period. The initial E-E contract is for three years, after which it can be renewed by the employee for another three years. These employees serve for 179 days in the theater on a temporary duty (TDY) basis. The

[^24]forward deployed civilians comprise 3.3 percent of the approximately 10,000 civilian employees in the DCMA workforce.

## 5. United States Army Corps of Engineers (USACE) Volunteer Program

The United States Army Corps of Engineers (USACE) provides another good example of how a DOD organization operates with a mix of military personnel and civilian employees in overseas areas, including combat zones. USACE employs approximately 650 military personnel and 36,000 civilian employees to carry out its responsibilities as a Federal engineering, design, and construction management agency. The Corps is a major direct reporting unit of the Army and has five major missions: civil works projects, including dams, inland navigable waterways, and flood control; emergency response and recovery; enforcement of environmental laws; military construction projects for the Army and other DOD and federal clients; and contract construction support for Overseas Contingency Operations (OCO) in Iraq and Afghanistan. USACE is organized geographically into nine divisions (commanded by general officers), each of which has several subordinate districts (commanded by colonels). There are forty-four districts in all. Several other smaller organizations report directly to headquarters, including a research and development command and a prime power battalion. ${ }^{26}$

The focus of this case study is the Transatlantic Division (TAD) located in Winchester, Virginia. TAD is responsible for construction and support contracting in Iraq, Afghanistan, Kuwait, and elsewhere in the Middle East and South Asia. TAD has four districts and a Deployment Center. The Gulf Region District, located in Baghdad, supports Iraq. The Afghanistan District North (Kabul) and the Afghanistan District South (Kandahar) cover that area of operations. The Middle East District covers Kuwait and other locations in its area from a centralized location in Winchester, Virginia. The Deployment Center is also located in Winchester, Virginia. The districts operate in a dispersed manner with numerous project offices located where needed throughout Iraq and Afghanistan. The personnel in these offices serve in hardship and in danger.

USACE has about ninety military personnel and 700 civilian employees working in Iraq and Afghanistan. All of the civilian employees are volunteers. Since 2003, about 9,000 civilian employees have volunteered to serve in these dangerous areas. After experimenting initially with employees on 120-day temporary duty tours, USACE established a permanent replacement system that would attract new qualified personnel to

[^25]keep these districts fully staffed as employees finished their tours. How they have done this is a good example of how to operate a volunteer program. ${ }^{27}$

The deployment application, referral, and selection process is managed centrally by the Humphreys Engineer Center Support Activity (HECSA) Civilian Personnel Advisory Center (CPAC) which is based in Washington, DC, but also has offices in Winchester, VA and Rock Island, IL. The deployment process is managed centrally from Winchester, VA and works as follows:

- In anticipation of vacancies as tours of duty expire, open continuous announcements are published in several sources soliciting volunteers for specific positions from current USACE employees, employees of other Federal agencies, and the general public. Advertisements are placed in the websites of USACE, Transatlantic Division, other elements of USACE, the Department of the Army's Civilian Personnel Online, the Office of Personnel Management's (OPM's) usajobs.gov website, Monster.com, and various professional magazines.
- Volunteers may sign up for a six-month tour or a twelve-month tour, with an option for extension for another twelve months. Tours in excess of twenty-four months are considered individually but are not encouraged.

The HECSA CPAC makes the job offers, explains the benefits, and works with the home stations, if necessary, to obtain release dates; provides information for the Engineers Link Interactive (ENGLINK) tasker; initiates the personnel actions; obtains or completes the necessary personnel forms and documents; briefs the volunteers on various Human Resource (HR) issues, such as pay, health and life insurance, foreign entitlements, and Workers' Compensation Program information; and assists the volunteers with any personnel questions or issues. Volunteers for positions are provided a website that contains the pre-deployment requirements by the Administrative Personnel Processing Office (APPO) which is co-located with the USACE Deployment Center (UDC) in Winchester, VA. Detailed instructions are provided on the UDC web site, and the APPO technicians provide assistance and support to the volunteers. All details are managed from one location. A volunteer must have or must be able to obtain a SECRET

[^26]or Interim SECRET Clearance (this is done through security channels), successfully pass a medical examination, and have or be able to obtain a passport. Volunteers are issued a Common Access Card and a U.S. Government Credit Card prior to deployment.

- Volunteers accepted for deployment are processed by the UDC in Winchester. The APPO makes all arrangements for the travel, travel orders, training, and outfitting of all civilians (and some military personnel) who deploy to TAD positions. The UDC also processes civilian employees of the Army Materiel Command for deployment to Iraq and Afghanistan.
- All civilian volunteers are provided training at the UDC, receive their equipment (e.g., boots, uniforms, and helmets), and receive a Common Access Card. Training includes Personnel Recovery Training, Hostage Training, Capacity Development Training, Accident Avoidance Training, and for some jobs, Construction Deployment Safety Training. ${ }^{28}$
- When the volunteer is on duty in the theaters, the APPO is a single point of contact for all travel and travel orders. Timekeeping questions are directed to the In-Theater Customer Service Representative. The HECSA CPAC provides information on pay, benefits, and other issues of concern to the employees. The TAD Regional Community Support Coordinator (RCSC) provides Family Readiness support for deployees in conjunction with the RCSC's at the other divisions. The RCSC is located in close proximity to the APPO and the UDC and provides predeployment briefings to all deployees. The TAD RCSC works closely with the other Division RCSCs to ensure all deployees are aware of the USACE Family Readiness Program and the benefits of the employee's and their family's participation in the program.
- When a Federal employee volunteer returns from a tour of duty, the HECSA CPAC representative confirms that all the necessary paperwork has been completed and that the volunteer knows who to contact if post-deployment issues arise. The CPAC representative notifies and works with the home duty CPAC to successfully return the employee to his/her permanent position.

USACE reports that this approach has been successful in maintaining the strength of its elements deployed in Iraq and Afghanistan. They attribute this success to several factors:

- Command Support. The most important factor in the success of the USACE voluntary deployment is the extraordinary level of interest and support shown by the current Chief of Engineers and his immediate predecessors. The Chief

[^27]decided that all of USACE workers deployed to Iraq or Afghanistan would be volunteers. The Chief established the centralized management system that simplified the path for volunteers. The level of enthusiasm is reflected in the following statement by Lieutenant General Robert L. Van Antwerp, the Chief of Engineers: ${ }^{29}$
I expect leaders at all levels to...fully support the GWOT [Global War on Terrorism] effort, and encourage all members of our workforce to consider accepting a GWOT assignment. Further, I urge you to coach and mentor leaders throughout your MSCs [Major Subordinate Commands] to encourage volunteerism, and consider strong action if my intent is undermined.

- Expeditionary Mindset. The Corps of Engineers is a global operation that for several decades has managed projects outside the United States. Wherever the Armed Forces go, the Corps goes along. Establishing engineering operations in Saudi Arabia, Kuwait, Bosnia, and other theaters of operations is something the military personnel and civilian employees accept as part of their mission. For the sustained operations in Iraq and Afghanistan, the Corps developed an expeditionary workforce whose members understand that need.
- Making it easy to Volunteer. Each individual that applies for a USACE position overseas is guided through the application process and, if hired, through a centralized employment and deployment process. Open positions are advertised widely, and the information provided to a potential volunteer is clear and adequate, albeit voluminous. The hiring process is still complicated and has many tasks to be performed, but the UDC takes pride in providing personal help and not hindering the process. Volunteers are considered from within the Corps workforce, other Army and Federal civilian organizations, and by lateral entry from civilian life. The rule is "Never say No" to a volunteer who can qualify to fill a vacancy or possibly meet another need.
- Obtaining Support from Supervisors of Volunteers. One of the major barriers deployment volunteers face is the reluctance of their current employers to let them go. Rather than face their supervisor's displeasure, some employees who want to go might not volunteer. USACE reduces the discontent of the volunteers' organizations by using re-employed annuitants to fill in temporarily for the deployed volunteers. These retired former Corps employees (who are also volunteers) bring to the deployed volunteer's organization an experienced hand that can carry on the work until the deployed volunteer returns. In effect,

29 LTG R. L. Van Antwerp, "Building Civilian Deployment Capacity," Memorandum for All Commanders, Directors, and Chiefs of Separate Offices, 12 May 2008.

USACE has created a cadre of former employees who can fill in where and when needed. Again, the Chief of Engineers has notified supervisors that "USACE civilians who voluntarily answer the call to serve in OCO missions by applying and being selected for deployment to Iraq, Afghanistan, or another overseas contingency assignment, will be released for deployment unless there is a significant negative impact on the losing organization." ${ }^{30}$

USACE also uses "reimbursable details" to employ volunteers from other Federal agencies on a temporary basis. Under this process, the volunteer remains on the rolls of their "home" agency, but is temporarily assigned to USACE. USACE reimburses the "home" agency for all of the costs associated with the detail of the individual. The HECSA CPAC negotiates a written agreement with the employee's agency that describes the roles and responsibilities of both agencies, as well as the monetary amount to be reimbursed by USACE.

Other features of the USACE program include:

- Reviewing Denials of Volunteers. In the event that the losing organization does not approve the application of an employee who volunteers for duty in Iraq or Afghanistan, command influence is invoked to examine the denial.
Commanders denying a volunteer application must submit within seven days the justification for this action to USACE Headquarters for review by the Chief of Engineers. ${ }^{31}$
- Minimizing the in-country footprint. USACE reduces the number of civilians who must be persuaded to volunteer to work in the theaters of operation by providing support from the Division Headquarters and other USACE elements outside of the theater. The office in Winchester, VA completes a lot of design, contracting, and administrative work.
- Funding. USACE operates on a cost-reimbursable basis and receives a fee for contract management and supervision. These fees tie the cost of the USACE workforce to the mission.
- Making it Easy to Extend in Theater. Civilian employees in Iraq and Afghanistan may volunteer to extend their tours of duty for another year, subject to approval by the Transatlantic Division and the divisions and districts from which they came. The original district commanders are cautioned that they must "carefully consider factors such as organization and mission requirements,

[^28]ability to backfill the continental United States position, length of time the employee has served, and health implications" when considering whether to deny or approve an extension. ${ }^{32}$ The implication of this guidance is that there had better be a very good reason to deny an extension of tour of duty.

- Rewarding Volunteers with Extra Pay. USACE volunteers receive a Relocation Incentive for these deployments. The increment is 12.5 percent of annual salary for a six-month tour and 25 percent for a twelve-month tour. ${ }^{33}$ Payments are made in biweekly increments commencing at the beginning of the deployment. Other incentives include a 35 percent post-differential and 35 percent danger pay under Department of State (DOS) regulations; and rest and recuperation (R\&R) travel while deployed and forty hours of excused absence for reintegration purposes upon successful completion of an OCO deployment.
- Promotion Preference. It is known within the workforce that service in Iraq, Afghanistan, and other hardship locations is "a plus for promotion." The Chief of Engineers has made service in a combat zone a prerequisite for promotion to the Senior Executive Service.
- Family Support._USACE has an effective family support program for the deployed volunteers and for other employees who often serve away from their homes in response to domestic emergencies. A survey conducted in 2007 indicated that family care and support is a major concern. ${ }^{34}$ As a result, the Corps has established a Family Readiness Office at USACE Headquarters and drawn up a comprehensive program to assure that family members of military personnel and civilian employees are provided useful assistance when an individual is deploying or participating in an emergency response operation. ${ }^{35}$ This program provides families with information and access to various resources, including counseling. In addition, regular contact is made with the families during the deployment and for a period of time afterwards to determine if the families need any additional assistance.
- Guaranteed jobs upon return. In the survey noted above, some respondents indicated a degree of dissatisfaction with their post-deployment experiences. The USACE and DOD policy is that all of the USACE volunteers will be

[^29]33 Ibid.
34 Ronald Hess, Jim Paige, Juanita S. Farrow, and Mulenga Tembo, "Civilian Deployment Survey for the U.S. Army Corps of Engineers," Farrow and Associates, Williamsburg, Virginia.
U.S. Army Corps of Engineers, (DRAFT) Regulation 600-1-54, "Deployment Cycle for Families: Requirements to Assist Family Members during the Deployment of U.S. Army Corps of Engineers Soldiers or Civilian Employees," 3 February 2010.
guaranteed jobs upon their return. In most cases, this will be the same job as before the deployment.

Overall, the USACE program described above has been adequate to meet the need. Since it was put into effect in 2003, the Corps has been able to staff $75-80$ percent of the required civilian positions in Iraq and Afghanistan. In Iraq, with the drawdown of military troops continuing, there has been a decline in USACE civilian employees. However, in Afghanistan, there has been a significant increase in construction projects to accommodate additional U.S. forces and support the Afghan National Army and Police Forces. Several years ago USACE developed an approach to assist in providing volunteers for both Iraq and Afghanistan. Since the workload in Afghanistan is increasing, more Divisions are aligned to obtaining volunteers for Afghanistan. This process is currently being reviewed, revised, and updated to accommodate this reality and a new operation order (OPORD) is being written to spell out processes, roles, and responsibilities.

The USACE Civilian Volunteer Program serves as a good model for other DOD and non-DOD agencies to emulate as they staff overseas positions. It follows the guidance set forth for DOD by the Under Secretary of Defense for Personnel and Readiness. ${ }^{36}$ It provides a single point of contact that makes it easy for civilians to volunteer and makes them feel good about the experience. The mechanism set up by USACE to attract and accept volunteers and treat them well is sound. Above all, the Chief of Engineers has expressed, in no uncertain terms, his complete support for this program.

## 6. Conditions in a Combat Zone

DOD civilian employees in the combat zones are either on TDY orders or Temporary Change of Station (TCS) orders. When working in a combat zone, they are expected to share the hardships of field operations and have living conditions appropriate for their equivalent ranks with military personnel. ${ }^{37}$ They serve under the jurisdiction of the Uniform Code of Military Justice while in the combat zone. Except for Iraq, which requires civilian attire, they may wear a military combat uniform with a black baseball cap. They may carry a weapon for personal protection if they are so authorized. There is a general lack of privacy. Housing may consist of tents or other communal buildings. Food will be prepackaged or served in a military dining facility. Showers will be communal, and "bathing may be from a bucket or helmet." Military chaplains will provide religious services.

[^30]While serving in a combat zone under these conditions, civilian employees receive several monetary and non-monetary incentives. ${ }^{38}$ Major benefits are summarized in the following three tables. Table B-6 summarizes pay. Except for per diem, these benefits are all taxable. Some of them are not available for senior executives. There is a ceiling of $\$ 145,700$ per annum on premium pay, which is equal to the basic pay for a GS-15 Step 10 or Executive Level V. This ceiling can be waived so that some employees can receive premium pay up to $\$ 230,700$ per annum, equal to pay for Executive Level $1 .{ }^{39}$

Table B-6. Major Pays for Deployed Civilian Employees

|  | Amount | Service in CENTCOM CZs | Comments |
| :---: | :---: | :---: | :---: |
| Locality Pay/Danger Pay | $35 \%$ of base pay | Temporary Duty (TDY) or Temporary Change of Station (TCS) |  |
| Hardship Duty Pay | $20 \%$ to $35 \%$ of base pay | TCS upon arrival and TDY after 42 days |  |
| Separate Maintenance Allowance | Varies | TCS with family at overseas post |  |
| Per Diem | \$105 per month | TDY | Not Taxable |
| Hazardous Duty Pay | Up to 25\% | TDY or TCS | Wage Grade |
| Premium (Overtime) Pay | $50 \%$ of base pay for higher of GS10 step 1 or actual pay | TDY or TCS | Excess of 8 hours per day or 40 hours per week, or working on a Sunday, and Holiday |
| Night Differential | 10\% of base pay | TDY or TCS | Between 1800 and 0600 hours |

Table B-7 shows some of the non-monetary incentives for civilian employees, and Table B-8 shows the in-kind benefits provided by the Military Services.

[^31]Table B-7. Key Non-Monetary Incentives ${ }^{40}$

|  | TDY | Six Month TCS | One Year TCS |
| :---: | :---: | :---: | :---: |
| Rest and Recuperation (R\&R) Trips | One trip of 10 days | One trip of 10 days | 3 trips of 10 days each |
| Admin Leave | 10 days and free travel | 10 days and free travel | 10 days and free travel |
| Home Leave | 15 days and free travel | 15 days and free travel | 15 days and free travel |
| Federal <br> Employee Group Life Insurance (FEGLI) | Up to 5 x salary | Up to $5 \times$ salary | Up to $5 \times$ salary |
| Global War on Terrorism (GWOT) Medal | Yes | Yes | Yes |
| Storage of Goods | No | Yes at Govt expense | Yes at Govt Expense |

Table B-8. In-Kind Goods and Services from Military Sources

| Housing and Meals | Same as for military personnel |
| :---: | :---: |
| Post Exchange (PX), commissary, and postal | Full access |
| Morale, Welfare, \& Recreation | Full access |
| Medical Care | Full support to include evacuation from theater |
| Personal weapons | If issued by regional commanders, voluntary |
| Combat Uniforms | Cannot be worn in Iraq; may be worn elsewhere, <br> Civilians wear black baseball cap |
| Personal Protective Equipment | Issued to all |
| Pre-Deployment Training | All will receive this training |

## 7. Deploying More Civilians to Combat Zones

There is a distinct effort on the part of DOD, DOS, and other Departments and Agencies of the Federal Executive Branch to employ civilian employees in the combat

[^32]zones in and around Iraq and Afghanistan. This effort may be based on the following reasons:

Limiting Reliance on Contractors. There appears to be an emphasis on increasing the role of civilian employees and limiting the role of contractors both in the United States and in the overseas posts, including the combat zones. New rules proposed by the Office of Federal Procurement Policy in April 2010 would have the effect of strengthening the definition of "inherently governmental functions" and providing a list of twenty examples of jobs that are to be performed by government employees. ${ }^{41}$ The effect of the new policy will be to replace contractors with government employees in many DOD organizations, including those in combat zones. This could lead to an increasing demand for civilians to volunteer for these assignments.

Easing the Stress on the Military Force. One reason given for having more civilians is to reduce the number of military personnel in the combat zones. That is, having civilians fill positions instead of military personnel reduces the demand for military personnel. Civilians are volunteers and thus presumably not overly stressed by the location or the work. Having fewer military personnel in the combat zones means fewer will be deployed involuntarily, easing deployment stress on the force. At this time, however, the number of civilian employees in the combat zones is too few to have much influence on deployment stress in the Military Services. And if there is a substantial increase in civilian employees in the combat zones, they are likely to replace contractors rather military personnel.

The Eight Hour Day and Overtime Pay. A major problem with having civilians and military personnel work together in headquarters and provisional units is that the civilians are limited to working a 40-hour week and drawing extra pay for any hours over that. Laws and policies regulating overtime and holiday pay for civilian employees are established for a normal stateside workplace environment that consists of a 40-hour workweek and requires employees to be paid extra for working overtime, on Sundays, and on holidays. This becomes a problem when military personnel, who are expected to work long hours without additional compensation, and civilians, who work "from eight to five," are assigned to the same work centers. The differences between the two groups are exacerbated in combat zones where the Operating Tempo demands that work proceed around-the-clock. Civilian employees often opt to work extra hours, particularly those on field assignments such a provincial reconstruction teams. However, some do not, and this causes tension between the two groups. There is substantial anecdotal evidence of this tension. Given the stance of the Congress and of labor unions on this issue, it is not likely

[^33]to be resolved. A satisfactory resolution at the working level can be achieved by good leadership and by assuring that civilian employees understand their position vis-a-vis the military troops.

The Civilian Personnel Policy Office in OSD has taken note of this issue and is working with OPM and the Department of State to draw up a legislative proposal that will change the compensation for deployed civilians to have them agree to work longer hours for a one-time lump sum payment. ${ }^{42}$ The legislative proposal would also simplify pay and benefits for civilian employees working in combat zones. These were not designed for the current situation and are a patchwork of pays and benefits, some of which were imposed on DOD by a generous Congress and others of which were sought by DOD to recruit more civilians for duty in the combat zones. As the GAO has noted, merely administering them is a challenge to the system. ${ }^{43}$ As discussed above, they do not necessarily incentivize the employee to work longer hours after arriving in a theater.

Filling Vacant Positions. There are still numerous vacant positions open in the combat zones. This is due to the nature of the hiring process for civilian employees. There is no shortage of volunteers to fill positions in the combat zones or the CEW. The customary marketing methods attract an abundance of applicants for the announced positions. This enthusiastic response is most likely caused by the poor state of the economy and the attractive pay and benefits for these combat zone jobs. Despite this favorable condition, DOD has not been able to fill these civilian positions either sufficiently or rapidly. The current system for processing applications for jobs in the combat zones is the traditional Civil Service approach. It is position-based and starts with a description of the work to be done and the kind of employee wanted to do that work. It is by nature a slow process because the purpose is to place exactly the right kind of employee in each position. It is a serial process in which each step is performed one after another and prior approval is needed to advance along the path to assignment. While this approach is onerous, but bearable for routine civilian personnel management purposes, it is unsatisfactory for filling positions in combat zones during overseas contingency operations.

A good business model for the kind of system that is needed is to use a parallel path approach so that the several reviews and approvals are done at the same time so that decisions may be made much faster than is possible using the current approach. Another improvement would be to allow more flexibility in filling positions by granting waivers and making some exceptions. This could be done by emphasizing what an applicant can bring to the effort and not how he and she matches the qualifications prepared by a

[^34]Human Relations Specialist in a higher headquarters. In combat zones, the work to be done may not match exactly what was written in the position description. Also, the process should be reversed and focused on finding right jobs for volunteers. DCPMS should, in these instances, behave as a placement agency so that when an applicant with good qualifications volunteers, the system tries to place that person where he or she can do the most good. Rigid adherence to the contents of a position description should be replaced with a flexible search for how this volunteer can help the mission. The suggested approach may increase the possibility of minor mismatches in placement, but it will overall improve the fill rate greatly. An empty position does no work.

One particularly important barrier to filling civilian positions is the CENTCOM policy that all civilian employees be cleared for SECRET or able to obtain a clearance before deployment. This has an adverse effect on hiring qualified civilians from the private sector. For other jobs, such as contract management, it is not apparent why a security clearance is necessary for lower grade workers. This policy should be reviewed.

## 8. Observations

Cost Effectiveness. This study has not performed a cost-effectiveness analysis among military personnel, civilian employees, and contractors. ${ }^{44}$ The prevailing paradigm is that military personnel are most expensive, civilian employees somewhat less expensive, and contractors significantly less expensive for value received. Because of the incentives and benefits provided in recent years to attract civilian employees to volunteer for work in the combat zones, this paradigm may no longer be valid. It is possible that civilian employees are more expensive than military personnel in the combat zones, particularly if the limitations on the work week and generous vacations for civilian employees are taken into account. In a combat zone, military members are about 50 percent more available to perform their duties than civilian employees, on a daily basis. Military personnel are essentially available to work every one of the 365 days in a yearlong tour, except for one ten-day R\&R trip per a one-year tour, while civilian employees who take full advantage of their leave time are available for only about 210 eight-hour work days. When the comparison is made on an hourly basis, the availability gap between military personnel and civilian employees widens even more. The results of this comparison could have an impact on present trends in the mix of the DOD deployed workforce.

Make it Possible for the Losing Organizations to fill the Vacancies. The current policy is that when a Federal employee is deployed, the losing organization remains responsible for the employee's basic pay and the additional costs of premium pays,

[^35]transportation, and training are paid out of Overseas Contingency Operations funds. This financial burden is increased because the employee's agency ordinarily cannot fill the volunteer's position while the employee is away. This practice makes it hard for losing managers to agree to release an employee for deployment to a combat zone. There are some ways to get around this problem, as illustrated by the Corps of Engineers, an agency with funding that allows it the flexibility that other agencies do not have. The pain can be eased by hiring a temporary employee to backfill for the volunteer and, perhaps, using OCO funds for that expense. In those cases, the CEU could place one of the capability volunteers in the CEW to backfill the vacant position.

The Role of Civilian Employees in the Combat Zones. There is some concern among military commanders about expanding the role of civilian employees in the combat zones. Most of the civilian employees presently working there are involved in contract management or performing depot level maintenance. In these roles, the civilians are part of a Service Command or Defense Agency and are commanded by military officers. Some civilian employees are involved in providing direct services to military units, such as base level maintenance and operations, and technical support for equipment, and these civilians also serve under military command. A few civilian employees are assigned to high level headquarters as civilian advisors (for senior civilians) or administrative support (for lower grade civilians). In the current campaigns, civilians also serve as members of provisional units that provide irregular warfare capabilities. These civilians are middle- to high- grades and have professional qualifications that are needed for this kind of work. Some military leaders are concerned that an effort by DOD to deploy civilians without a request from field commanders will be counterproductive for the civilian employees who will have to obtain jobs from combat commanders who did not ask for them.

The Status of Civilian Employees in a Combat Zone. Many civilian employees in the combat zones are becoming more like military personnel. There is now a fuzzy boundary between what military personnel do in the combat zones and what civilian employees do. Except for Iraq, civilians wear uniforms and protective gear like military personnel. Some civilians bear arms. They are under the Uniform Code of Military Justice for some aspects of their behavior. These practices make it difficult to distinguish between lawful combatants under the Geneva Conventions and illegal combatants. Efforts by DOD and OPM to deploy civilians to trouble spots that may involve armed conflict should be tempered with this concern.

Establish a Manpower Program for Civilians in Combat Zones. The way that civilians employees are deployed needs to be changed so that their numbers and roles in the combat zones is regulated by the regional combatant commanders and field commanders in the combat zones. Any flow of civilians for whom resources have not been programmed needs to be stopped. Field commanders need to appreciate the value
and understand the proper role of civilians in their areas, and they should request them in the same way they request military personnel. When civilians are pushed forward without meeting a stated need, they are likely to be unappreciated and poorly utilized. A civilian personnel program for CENTCOM that is prepared in consultation with the field commanders, the Services, and Defense Agencies is needed. DCPMS has placed a human resources staff officer in the CENTCOM staff to assist in making this happen. OSD should place a ceiling on civilian employee strength and authorize those positions requested by the field commanders and coordinated with the Services and Defense Agencies. This step will eliminate having positions encumbered by deployed employees remain vacant for the duration of their tours. That is, DOD should plan, program, and budget for civilian positions in the combat zones. OSD should not deploy a civilian employee to a combat zone unless that person is filling a COCOM validated position.

Outlook. Despite the current trend to deploy more civilian employees to combat zones, they remain a very small proportion of the DOD workforce in those zones. Even taking into account the policy shift on inherently government functions, it is unlikely that this situation will change in the new future. The campaign in Iraq is winding down, and the campaign in Afghanistan has stabilized at a strength that is unlikely to be increased. U.S.- and NATO-backed reconstruction and development work may continue in these countries for some time longer, but the enthusiasm of civilian employees to work there without the military forces to provide security is likely to diminish, except for a hard core group that will be much smaller in size. Given the timelines for leaving, it is unlikely even a very successful program for placing large numbers of civilians in these combat zones, will have a substantial impact on the military personnel systems. And it will not reduce the stress on the military force by any measurable amount. However, it is also apparent that civilians with high demand skills not found in sufficient numbers in the DOD workforce can be very useful in filling irregular warfare related positions in provisional units and joint headquarters. Finally, it would be useful to consider the longrange implications of current programs that tend to blur the traditional distinctions between civilian employees and military personnel working in a combat zone.

# Appendix C Adequacy of Compensation 

Saul Pleeter and Susan Rose

In 1973, with the elimination of the draft, the military became an All-Volunteer Force. With an All-Volunteer Force individual decisions to join the military are based upon many factors: intangibles such as patriotism, quality of life, the rigors of military life, aspirations for college; and, the value of the military compensation package in comparison to civilian alternatives. In order to secure high-quality personnel in sufficient numbers, the military must offer pays and benefits that are competitive with private sector wages and benefits as well as recognizing the responsibilities and hardships of military life. If compensation falls short of private sector opportunities, recruiting and retention suffer. Military Compensation is the vehicle by which personnel are secured in sufficient numbers and quality to execute national defense strategy.

## A. The Military Compensation System

The Active Component of the Military Personnel (MILPERS) budget totaled $\$ 106.1$ billion for FY 2009. As shown in Figure C-1, the major components of the MILPERS budget were basic pay, retired pay and health care accrual, Basic Allowance for Housing (BAH), Basic Allowance for Subsistence (BAS), Special and Incentive pays (S\&I), other allowances and miscellaneous budget items.


Figure C-1. FY09 Military Personnel (MILPERS) Budget for Active

Military compensation can be disaggregated into three broad categories: cash, noncash benefits, and deferred compensation. Figure C-2 shows the relative size of the three components. Cash compensation is approximately 48 percent of total compensation, followed by deferred compensation at 31 percent and noncash benefits of 21 percent. Table C-1 contains the major elements of military compensation in each of these categories. According to the U.S. General Accountability Office, cash compensation comprises a much larger share of total civilian compensation amounting to 67 percent versus 48 percent for the military.


Figure C-2. Components of Military Compensation FY2006 (in billions)

Table C-1. Major Elements of Military Compensation in Each of These Categories

| Cash | Noncash Benefits | Deferred Compensation |
| :---: | :---: | :---: |
| Basic Pay | Health Care | Retired Pay Accrual |
| Housing Allowance | Education | Health Care Accrual |
| Subsistence Allowance | Housing | Veteran's Affairs |
| S\&l Pays | Other | Other |

Tax Advantage
Other

Every military member receives basic pay, a housing allowance (or government housing), a subsistence allowance and a tax advantage based upon the fact that the housing and subsistence allowance are not subject to federal income tax. These four elements of cash compensation are called Regular Military Compensation (RMC).

Congress has stated that RMC is equivalent to gross wages and salaries in the private sector. Figure C-3 presents the components of cash compensation. Basic pay accounts for 58 percent of the total, followed by the housing allowance (18 percent), tax advantage (10 percent), S\&I pays ( 6 percent), subsistence allowance ( 4 percent) and other cash elements (4 percent).


Figure C-3. Components of Cash Compensation FY 2006 (in billions)

The military compensation system has approximately sixty-five S\&I pays (37 U.S.C. Chapter 5) which serve one of five functions:

- To provide additional compensation for duty in hazardous, or less desirable duty or location.
- To provide an incentive for the attainment or retention of skills, such as foreign languages or in the health professions.
- To provide for pay comparability in certain occupational specialties such as technical and professional areas.
- To provide effective tools for managing the force with incentives to join and stay in the military.
- To provide incentives to encourage self-selection and staff shortfalls.

Special and Incentive pays play an important role in military compensation-they keep military compensation flexible, competitive and efficient. With S\&I pays, the Services can selectively manage the force within limits prescribed by Congress. S\&I pays amount to less than 5 percent of the military personnel budget. Not all military members receive S\&I pays. In 2006, the average enlisted member received $\$ 3,000$ or 6.6 percent of
her cash compensation in the form of S\&I pays. The average officer received $\$ 7,000$ or 7.3 percent of his cash compensation in the form of S\&I pays, but the Services have some latitude in the amount that they can pay in S\&I pays.

Included in these S\&I pays are authorization to provide twenty-eight bonuses for such purposes as enlistment, accession, continuation, and skill conversion. Bonuses are market driven and respond to changing conditions of demand and supply.

Addressing the issue of the adequacy of military compensation, the Ninth Quadrennial Review of Military Compensation (9 ${ }^{\text {th }}$ QRMC) compared RMC with wages and salaries for comparable civilians and determined that RMC should be at the $70^{\text {th }}$ percentile of the distribution of civilian earnings. On the basis of the $9^{\text {th }}$ QRMC determination, the Department recommended, and Congress approved, a series of targeted pay raises that raised all officers and enlisted RMC to at least the $70^{\text {th }}$ percentile. This means that the RMC of a military member is greater than the earnings of 70 percent of civilians. Figure C-4 shows the comparison for officers and enlisted by years of service.


Figure C-4. Comparison for Officers and Enlisted by Years of Service

The Tenth Quadrennial Review of Military Compensation (2008) was asked by President Bush to review the adequacy of military compensation. Since civilian compensation has a smaller proportion of deferred and noncash benefits than military compensation-33 percent vs. 52 percent, comparing cash compensation only, understates the value of the military compensation package. Even in terms of the tax advantage resulting from the housing and subsistence allowances, the $10^{\text {th }}$ QRMC argued, RMC is

## C-4

understated since Federal Insurance Contributions Act (FICA) taxes and state income taxes are not included in the calculation of tax advantage. What should be compared, the $10^{\text {th }}$ QRMC argued, is an expanded RMC with the tax advantage increased by the amount of FICA and state income taxes avoided, and the health care and retirement benefits.

The largest noncash benefit is health care, which amounted to 8 percent of a military member's total compensation. The value of the health care benefit was determined by looking at the difference in out-of-pocket costs between a typical civilian health care plan and TRICARE, the military health care system. Not all civilian employers offer health care and, consequently, the civilian health care plan comparison was weighted by the probability that an individual of a specific age and education would be offered health care in the private sector.

Retired pay was the other significant benefit included in the QRMC comparison. Although contributions by the Department of Defense for retirement are significant, as a result of the 20 -year vesting requirement only 15 percent of enlisted members and 47 percent of officers ultimately receive an annuity. In contrast, civilian employees are required to vest to 80 percent within five years of employment and to 100 percent after seven years. While military retired pay is far more generous than civilian retirement plans, a larger percentage of civilians actually receive an annuity from their employer. In calculating the value of this benefit, the probability of receiving an annuity is multiplied by its actuarial value.

Incorporating these changes in both the military and civilian compensation plans, the $10^{\text {th }}$ QRMC found that military compensation is at or exceeds the $85^{\text {th }}$ percentile of comparable civilians. In 2006, the average enlisted member's compensation exceeded his comparable civilian's by $\$ 5,400$. The corresponding figure for an officer was $\$ 6,000$. There are few jobs in the private sector that offer compensation packages that are better than the ones offered by the military.

On the basis of their evaluation of the adequacy of pay, the $10^{\text {th }}$ QRMC concluded, "compensation for members of the uniformed Services compares favorably to compensation in the civilian sector, and the differential is substantial when the comparison includes not only cash compensation but also elements of a generous benefits package." ${ }^{1}$

Another aspect of an assessment of the adequacy of the military compensation system is the military's ability to guide members to assignments and locations where they are needed in a manner that minimizes the cost of their duty to members and their families. To the extent that the military compensation system supports and encourages

[^36]
## C-5

self-selection that is consistent with mission outcomes, job satisfaction, retention, and productivity should increase.

The Department of Defense was given additional flexibility to expand specific S\&I pays within budgeted limits or to create new pays. The 2008 National Defense Authorization Act, acting upon a recommendation of the $10^{\text {th }}$ QRMC, provided the Department of Defense with this authority. The sixty-five S\&I pays were consolidated to a smaller number of categories. Within each category, the Department has the authority to raise or lower existing S\&I pays or to expand the number of pays.

The Assignment Incentive Pay (AIP) programs demonstrate this increased flexibility. AIP is meant to encourage and reward volunteers for extended or specific assignments. Each Service has designed its own programs and uses the AIP in different ways.

The Navy Assignment Incentive Pay program, which began in June of 2003, is designed to encourage volunteers for selected, hard-to-fill billets and to reduce costs. Prior to AIP, the hard-to-fill assignments were eligible for Sea Pay, which drove up the end strength requirements in order to fill all sea duty posts. The Navy AIP program changed these sea duty posts to shore duty posts and made these hard-to-fill billets open to bid, which incorporates sailor preferences into the assignment process.

For example, suppose Sailor 1 would like to be assigned to Naples; Sailor 2 would prefer not to be assigned to Naples; and Sailor 3 is indifferent between Naples and other available assignments. Before the implementation of the AIP program, sailors could indicate assignments they were willing to accept, but could not indicate the strength of their preference. Sailor 1 and Sailor 3 would look identical to the assignment system that focused just on willingness to accept. In the AIP system, a sailor indicates his or her interest in a particular assignment by submitting a bid for an open assignment. The bid is the additional monthly pay that the sailor requires in order to prefer that assignment to other available assignments. In the Naples example, Sailor 1 (who wants to go to Naples) will bid lower than Sailors 2 and 3. The assignment is awarded to the qualified sailor with the lowest bid.

Sailors assigned to an AIP posting receive the monthly pay they bid for the duration of the assignment. An AIP cap set by the Navy limits the maximum amount a sailor may bid for a particular assignment. The cap varies by location and rating. Sailors may submit bids from $\$ 0$ to the maximum bid rate in $\$ 50$ increments. As of April 2010, the AIP Max Rate Chart lists maximum bids that range from $\$ 50$ to $\$ 1600$ depending on location,

## C-6

rating and pay grade. ${ }^{2}$ A review by the Center for Naval Analysis in 2006 reported that the application rate per AIP assignment had increased approximately 50 percent in the three years covered by the review. ${ }^{3}$ While not proof, these results suggest that the program is increasing volunteerism and that service members find the program attractive. In addition, the Navy has steadily expanded the use of the AIP program to new locations.

The Army also uses AIP to encourage volunteers. In 2004, the Army established an AIP program in Korea to help stabilize deployment. Soldiers with at least 120 days remaining on their current Korean tour of duty may volunteer to extend it. If the soldier extends for twenty-four (unaccompanied) or thirty-six (accompanied) months, the soldier receives a monthly bonus of $\$ 300$. A soldier extending to thirty-six (unaccompanied) or 48 (accompanied) months receives a bonus of $\$ 400$ per month.

The Army also uses AIP to encourage soldiers in Iraq or Afghanistan to extend their tours. Soldiers extending for at least three months receive $\$ 300$ per month in AIP while those extending for more than three months receive $\$ 500$ per month. ${ }^{4}$

The Marine Corps uses AIP to encourage Marines to extend their enlistment or reenlistment to complete an involuntary extension of a unit deployment. Marines who agree to extend their Expiration of Active Service receive \$500 AIP per month during the extension. ${ }^{5}$

## B. Deployment and Compensation

In order to attract a sufficient number of high-quality personnel, the military must offer compensation that is not only competitive with the private sector but also compensates for the responsibilities and hardships of military life. The Department of Defense's philosophy concerning the compensation of military members is that the greater the risk associated with hostile fire or imminent danger, the greater should be the compensation. As military members face increasing risk, their compensation increases due to the initiation of a number of pays and benefits. The following are a list of pays and benefits that military members receive when facing combat, hostile action or the threat of hostile action.

[^37]Hostile Fire/Imminent Danger Pay (IDP) provides compensation for exposure to hostile fire, or imminent danger, or the threat of hostile fire or imminent danger because of civil insurrection, civil war, terrorism, or wartime conditions is a carryover from World War II. The same amount of IDP is paid to all members, both enlisted and officers, at $\$ 225$ per month.

Hardship Duty Pay (HDP) is an additional pay that military personnel, in or outside the United States, receive for performing a duty designated by the Secretary of Defense, under conditions recognized as being of "greater-than-normal rigor." There are three potential justifications for receiving HDP-location, mission, and tempo. Most military members that receive HDP, receive it because of their location. There are only a few instances where members receive HDP for mission, and no examples of HDP-Tempo. The various locations that are designated as HDP sites are paid at a rate of $\$ 50, \$ 100$, or $\$ 150$ per month. ${ }^{6}$ Locations that are also eligible for Imminent Danger Pay, by regulation, are limited to $\$ 100$ of HDP per month. All military members regardless of grade receive the same HDP.

The National Defense Authorization Act for Fiscal Year 2006, Public Law 109-163, authorized an increase in the maximum monthly rate of hardship duty pay from $\$ 300$ to $\$ 750$. The National Defense Authorization Act for Fiscal Year 2008, Public Law 110181, increased the maximum monthly rate to $\$ 1,500$. $^{7}$

[^38]Family Separation Allowance (FSA). A service member with dependents who serves an unaccompanied tour of duty may be entitled to a family separation allowance (FSA) of $\$ 250$ per month. All members with dependents serving in Iraq or Afghanistan receive the FSA.

Combat Zone Tax Exclusion. Section 112 of the Internal Revenue Code, 26 U.S.C. provides for the exclusion of some income for members serving in a designated combat zone or qualified hazardous duty area. Enlisted members and warrant officers can exclude all of their Active Duty pay and Imminent Danger Pay (IDP) from their income when calculating their income tax liability. Most states allow this same exclusion from state income tax liability. Officers can exclude the highest rate of enlisted pay (plus IDP) from the calculation of gross income for income tax purposes. This exclusion applies for any month that they served in a combat zone or qualified hazardous duty area for one day or more. Also excluded are reenlistment bonuses, if reenlistment occurs in a month that the member served in a combat zone, and the pay for accrued leave earned in any month served in a combat zone.

A synthesis of these special pays and tax treatment are illustrated in the following table:

Table C-2. Synthesis of Special Pays and Tax Treatment

|  | E-6, 10 YoS, married, 2 children |  | O-3, 8 YoS, married, 1 child |  |
| :---: | :---: | :---: | :---: | :---: |
|  | CONUS | Iraq (1 yr TDY) | CONUS | Iraq (1 yr TDY) |
| Basic Pay | \$3,148 | \$3,148 | \$5,374 | \$5,374 |
| Basic Allowance for Housing (BAH) (*) | \$2,265 | \$2,265 | \$2,433 | \$2,433 |
| Basic Allowance for Subsistence (BAS) | \$324 | \$324 | \$223 | \$223 |
| Temporary Duty Per Diem (Incidental Expense) | \$0 | \$105 | \$0 | \$105 |
| Family Separation Allowance (FSA) (**) | \$0 | \$250 | \$0 | \$250 |
| Hardship Duty PayLocation (HDP-L) | \$0 | \$100 | \$0 | \$100 |
| Hostile Fire/Imminent Danger Pay (IDP) | \$0 | \$225 | \$0 | \$225 |
| Combat Zone Tax Exclusion (***) | \$0 | \$113 | \$0 | \$475 |
| Total | \$5,737 | \$6,530 | \$8,030 | \$9,185 |
| Difference (from CONUS Station) |  | \$793 |  | \$1,155 |

## Notes:

*BAH is for Washington, DC.
**For married personnel.
${ }^{* * *}$ Varies with number of dependents, deductions, other income.

The table provides data for an enlisted E-6, with ten years of service, married with two children and an officer O-3, with eight years of service, married with one child. Compared to the same E-6 serving in the continental United States (CONUS), the E-6 in Iraq or Afghanistan makes $\$ 793$ per month in additional compensation. The officer in a combat zone earns $\$ 1,155$ more per month. In addition, any bonuses received by an enlisted member while in the combat zone are not taxable.

Reserve Income Replacement Program (RIRP) is a program to provide specific payments to members of the National Guard and Reserve who are involuntary serving on

Active Duty and have experienced an income loss of more than $\$ 50$ per month. Income loss is the difference between the average monthly civilian earnings before mobilization and the member's total monthly military compensation while involuntarily mobilized.

Eligibility is based upon serving on Active Duty in an involuntary status and having:

- Completed eighteen consecutive months of Active Duty, or
- Completed twenty-four months of Active Duty during the previous sixty months, or
- Been involuntarily mobilized for 180 days or more within six months of the previous involuntary period of Active Duty of more than 180 days.

Post Deployment/Mobilization Respite Absence (PDMRA) is a new category of leave "intended to compensate Soldiers with days of non-chargeable leave when required to mobilize or deploy with a frequency beyond established rotation policy goals."

After twelve months of deployment, eligible Soldiers earn one day of administrative absence. Soldiers with eighteen months of deployed time earn two days and those with twenty-four months of deployment within a thirty-six month period earn four days of leave.

In addition to the pays described above, service members on Active Duty receive additional non-monetary benefits. The service member’s Civil Relief Act (SCRA) replaced the Soldiers' and Sailors’ Civil Relief Act (SSCRA). The SCRA provides a wide range of protections from certain civil obligations such as lease terminations, interest payments on credit card debt, and eviction or mortgage default. The new law updates life insurance protections provided to activated Guard and reserve members by increasing from $\$ 10,000$ to $\$ 250,000$ the maximum policy coverage that the federal government will protect from default for nonpayment while on Active Duty.

Guard and reserve members with twenty years of service are typically eligible for retirement pay at age 60. The National Defense Authorization Act of 2008 allows these Guard and reserve members to begin drawing their retired pay three months earlier for every ninety days they spend deployed. The law applies to deployment time served after January 28, $2008{ }^{8}$

[^39]
## C. Deployment Incentives and Retention

Deployment not only increases a military member's work and personal stress, exposure to the risk of harm or injury, and separates the member from her family and community; it also involves long, arduous work days-frequently sixteen hours a day seven days a week. From 2002-2007, 1.5 million members have been deployed. Since 2004, the average number of months of hostile deployment has doubled, 80 percent of soldiers have been deployed at least once at reenlistment, and the deployment rate has increased significantly (Figure C-5 below). Given the increase in tempo, perhaps it would be expected that reenlistment rates would suffer. However, the relationship between deployment and retention is not simple. Studies have shown that some deployments are morale boosters and have in the past increased retention. Members have reported feeling a sense of purpose and accomplishment especially with humanitarian or peacekeeping efforts. But 'extra long' deployments, repeated deployments without sufficient home station time, and deployment frequency that is 'over and above' normal, serve to reduce retention. Because expectations and utilization vary by Service, it would be expected that retention behavior would be Service and occupation specific.

Responses to increased frequency and length of deployments did indeed vary by Service ${ }^{9}$. Between 2002 and 2007, the change in personnel tempo had little or no effect on first-term reenlistment in the Air Force, Navy and Marine Corps while first-term reenlistment in the Army suffered. Between 1996 and 2001, deployment had a positive impact on reenlistment for the Army. But after 2002, reenlistment rates declined with first-term reenlistment becoming negative in 2006. The Army has the longest deployment length and had unexpectedly increased tour length from twelve to fifteen months in 2007.

The Army exhibited a similar pattern in its second-term reenlistment rate. Secondterm reenlistment in both the Navy and Marine Corps was about zero in 2003 and increased slightly afterward. The Air Force had positive second-term reenlistment rates throughout this period. James Hosek and Martorell conclude, "This and previous studies have found that, in most instances, deployment increased reenlistment. More precisely, having some deployment increased reenlistment, but extensive deployment can decrease reenlistment." ${ }^{10}$

Retention might have suffered more were it not for the expanded use of Selective Reenlistment Bonuses. Between 2003 and 2004, only 15 percent of soldiers received bonuses at reenlistment. Between 2006 and 2007, 80 percent received bonuses. Furthermore, the value of the bonus increased by 50 percent during this period.

[^40]
## D. Continuation Rates and Deployment in the Reserves

Studies of Reserve behavior resulted in similar findings. Continuation rates among reservists depend upon expectations about future deployments as well as the frequency and duration of past deployments. Colin Doyle examined accession and continuation rates for the Army Reserve and reports, "Plausible increases in expected Active Duty will result in relatively small reductions in continuation rates." ${ }^{11}$ And as is the case for Active Duty retention, pay and bonuses can counter the tendency for retention to suffer when deployment increases.

## Percent of Total DoD Deployed* vs. End Strength



* End of quarter rates displayed (Data as of DEC 08)

Figure C-5. Percent of Total DOD Deployed vs. End Strength

[^41]
## E. Summary

The military compensation system is very flexible and can currently provide increased incentives for self-selection for successive deployments. For example, the authorized limit for hardship duty pay is $\$ 1,500$ per month, but members in the combat zone receive an extra $\$ 100$ per month. The Department currently has the authority to implement a hardship duty pay for tempo as a way of compensating the member for frequent deployments as well as the broad authority to create a combat pay if needed. Numerous studies of the effects of deployment on reenlistment indicate that additional pay can offset the negative aspects of increased stress, hardship and intense work. While budget constraints may appear to be an obstacle to a more extensive use of special pays and bonuses, greater efficiency in the application of existing pays and allowances can provide the added revenue. For example, revising the Combat Zone designations to better reflect actual combat would free up funds for use in other special pays. If pay can offset some of the negative effects of deployment, and retention appears to be sufficient to meet National defense needs, our conclusion is that compensation is adequate.

# Appendix D Statutory Authorities 

John Brinkerhoff

This chapter addresses the sources of military volunteers and covers the laws, policies, and practices that affect how self-selection works for each of them. These sources are discussed below in four sections: Active Components, Ready Reserve, Retired Military Personnel, and Other Sources. ${ }^{1}$ Each of these sources is governed by a set of laws that prescribe how they manage their personnel and constrain the strengths and composition of their respective personnel force structures, and specify how they are funded. Some of the fundamental authorities that govern self-selection for deployment of all military personnel to Combat Zones outside the United States are discussed in the following section. A fifth section describes some of the policies that govern how the units and personnel are mobilized and deployed to the Combat Zones. A final section offers some general observations on the utility of the various sources.

## A. Basic Authorities and Policies Currently in Place

This section presents some of the overall laws and policies that affect military selfselection from all sources, including Presidential Authorizations, policy on rotation cycles, definition of combat zones, eligibility for deployment, definition of trained strength, and constraints on military personnel strength.

## 1. Presidential Authorizations

Presidential Proclamation 7463 issued by President George W. Bush, authorizes Operations in Iraq, Afghanistan, and elsewhere "by reason of the terrorist attacks at the World Trade Center, and the Pentagon, and the continuing and immediate threat of further attacks...a national emergency has existed since September 11, 2001." ${ }^{2}$

[^42]Executive Order 13223 of September 2001 authorizes the Department of Defense to "order any units and any member of the Ready Reserve not assigned to a unit organized to serve as a unit, in the Ready Reserve to Active Duty for not more than 24 consecutive months." ${ }^{3}$

## 2. Definition of Combat Zones

Combat Zones are "designated by an Executive Order...as an area in which the U.S. Armed Forces are engaging or have engaged in combat." ${ }^{4}$ Currently there are three combat zones in force:

Operation Iraqi Freedom (OIF): Arabian Peninsula Area including Iraq, Kuwait, Bahrain, Oman, Qatar, Saudi Arabia, Jordan, the Persian Gulf, Red Sea, Gulf of Oman, the Gulf of Aden, and the airspace above. This combat zone will be referred to as "Iraq."

Operation Enduring Freedom (OEF): Afghanistan, Pakistan, Tajikistan, Kyrgyzstan, Uzbekistan, Yemen, Djibouti, Somalia, Philippines, and the airspace above. This combat zone will be referred to as "Afghanistan."

Kosovo Area: Kosovo, Albania, Serbia, Montenegro, the Adriatic Sea, and the Northern part of the Ionian Sea, and the airspace above. This combat zone is not addressed in this report.

## 3. Active Duty and Selected Reserve Strength Limitations

The Congress controls the military personnel strengths of the Armed Forces by two means. The annual Defense Authorization Act establishes a ceiling number that each Service may not exceed on the last day of each fiscal year-this is referred to as the endfiscal year strength, or simply "end strength." The annual Defense Appropriations Act establishes the number of military man-years for which they provide funds in the several Military Pay accounts in the DOD Budget.

The rules for strength authorizations are set forth in Title 10, U.S. Code, Section 115, in great detail. Congress authorizes for each fiscal year the "end strength for each of the Armed Forces (other than the Coast Guard) for...active-duty personnel who are to be paid from funds appropriated for active-duty personnel" unless they are a member of a Reserve Component on Active Duty for operational support or are "active-duty support

[^43]and full-time National Guard duty personnel who are to be paid from funds appropriated for reserve personnel." ${ }^{5}$

Congress also authorizes "the end strength for the Selected Reserve of each Reserve Component of the armed forces." ${ }^{6}$

The law and the intent of Congress is to allow members of the Ready Reserve (including the Selected Reserve) to serve on Active Duty for short periods on a full-time basis when serving in a reserve unit. However, the law specifies that reservists shall be included in the Active Duty end strength when the "call or order to active duty specifies a period of greater than three years...or...the cumulative periods of active...performed by the member exceed 1095 days [three years] in the previous 1460 days [four years]. ${ }^{7}$ Thus, ready reservists on Active Duty in combat zones do not count against the end strength limits unless they exceed the limits stated above. This provision provides a degree of flexibility for the use of reservists to augment the active forces. There is no limit on the number of personnel in the Individual Ready Reserve (IRR), Inactive National Guard (ING), Retired Reserve, or on retired military personnel.

Section 115 also includes authority for the Secretary of Defense in pursuit of the national interest to increase the authorized end strength for a fiscal year for any of the armed forces by a number equal to not more than 2 or 3 percent of that end strength depending on the category of Active Duty strength. The Service Secretaries are also given some latitude under specific conditions. The statute also lists a number of exemptions for which members of the Reserve Components and National Guard on active duty do not count against active duty limits.

## 4. Military Service Obligation (MSO)

Title 10 U.S. Code Section 651 obligates all persons who voluntarily join the Military Services to remain a member thereof either in on Active Duty or in a Reserve Component "for a total initial period of not less than six years nor more than eight years, as provided by the Secretary of Defense...unless such person is sooner discharged...for personal hardship." ${ }^{8}$ This period of service shall include Active Duty or as a member of a Reserve Component. Further, when released from Active Duty a member will be transferred to a Reserve Component to complete the period of obligated service. ${ }^{9}$ Under DOD policy the discharge of a member for immediate entry into the same or another

[^44]component of the Military Services does not constitute a discharge of the Military Service Obligation (MSO), and all service performed before and after these kinds of discharges count toward the fulfillment of the MSO.

It is the policy of DOD that each person "upon initial entry into a Military Service shall serve a total of 8 years...from the date of enlistment or appointment..." ${ }^{10}$ However, the Military Departments may discharge a member from the MSO before eight years when "the member is deemed to "have no potential for service under conditions of full mobilization. ${ }^{11}$ Acting on this broad authority, the Army and the other Services have routinely discharged members of their IRR pools before the expiration of their MSO. After the end of the Cold War, there was no emphasis on full mobilization, and the strengths of the IRR pools were reduced to retain mostly personnel who had recently left Active Duty and had retained skills that might be needed for minor operations. Thus, the MSO has had little impact on retaining mobilization assets. Former members who have been discharged from the IRR or have fulfilled their MSOs are discussed below as Veterans without an MSO.

## 5. Deployment Eligibility

Military members are not allowed to be assigned outside of the United States until they qualify as required by Title 10, U.S. Code, Section 671 as follows: ${ }^{12}$

- Sec. 671. Members not to be assigned outside United States before completing training.
- (a) A member of the armed forces may not be assigned to active duty on land outside the United States and its territories and possessions until the member has completed the basic training requirements of the armed force of which he is a member.
- (b) In time of war or a national emergency declared by Congress or the President, the period of required basic training (or its equivalent) may not (except as provided in subsection (c)) be less than 12 weeks.
- (c)(1) A period of basic training (or equivalent training) shorter than 12 weeks may be established by the Secretary concerned for members of the armed forces who have been credentialed in a medical profession or occupation and are serving in a health-care occupational specialty, as determined under regulations prescribed under paragraph (2). Any such

[^45]period shall be established under regulations prescribed under paragraph (2) and may be established notwithstanding section 4(a) of the Military Selective Service Act (50 U.S.C. App. 454(a)).

- (2) The Secretary of Defense, and the Secretary of Homeland Security with respect to the Coast Guard when it is not operating as a service in the Navy, shall prescribe regulations for the purposes of paragraph (1). The regulations prescribed by the Secretary of Defense shall apply uniformly to the military departments.

The Services are reluctant to deploy recruits that solely meet the legal standard for deployment. Instead they want them to complete not only basic training but also initial skill training at the entry level sufficient to be awarded a skill code designation before they can deploy. Upon completion of this initial entry training, the members may deploy, but again the Services prefer that they have some experience in a unit before they do so. Because recruits lack needed training, they are not considered a good source of volunteers for duty in a combat zone.

## B. Mobilization and Deployment Policies

The basic policies to mobilize and deploy military units and individuals conducting Operation Iraqi Freedom and Operation Enduring Freedom are set forth in the law and DOD policies. These policies were initiated in the immediate aftermath of the attacks of September $11^{\text {th }}, 2001$ and have been modified substantially as conditions in the combat zones changed and tactics and operational art were transformed to meet the new conditions. This section provides a brief account of the policies that were initiated and how self-selection can operate under the most recent versions. The next three topics are Rotation Cycles, Utilization of the Reserve Components, and Individual Augmentees.

## 1. Rotation Cycles

Rotation Cycles for the Military Services are based on DOD policy but vary considerably among Military Services. The OSD target for Active Component units and personnel is to have a one period of deployment followed by at least two periods of home station dwell time between successive deployments. The target for Reserve Component units and personnel is to have one period of mobilization (which includes a period of deployment) followed by at least five periods of dwell time between successive deployments. Due to a high operational tempo, these targets have not been met by the Army and Marine Corps. Although Table D-1 shows the general rules for how each Service operates its cyclic rotations, there are exceptions. For example, the Army has fixed theater forces that are stationed overseas but they are sustained by an individual personnel replacement system. This is also true for the Air Force, which has some personnel stationed overseas on six-month tours. The Marine Corps applies the seven-
month tour for battalions, but has a twelve-month tour for higher level headquarters. Although the exact durations and dwells may vary, the general framework is as shown in Table D-1.

Table D-1. Service Rotation Policies for Combat Zone Tours

| Months | Army | Navy | Marine Corps | Air Force | SOF |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Deployed Tour Length | 12 | 6 | 7 | 2 | 1 |
| Active Dwell Target | 24 | 6 | 7 | 2 | 1 |
| Reserve Dwell Target | 60 | n/a | 14 | 24 | 3 |

## 2. Utilization of the Reserve Components

Participation in OIF and OEF of Ready Reserve units and individuals, as well as those from other reserve pools, is governed by several DOD documents. In 2001 the basic document that set forth the conditions for utilization of the Reserve Components established the policy that the period of Active Duty for mobilized reserve units and individuals would be one year. ${ }^{13}$ Subsequently, it became apparent that Operation Iraqi Freedom would require large numbers of reserve units and individuals to augment the Active Components for a protracted counterinsurgency campaign. The Army in particular and the other Services in their own styles, adopted unit rotation as the way to sustain the operations in Iraq and Afghanistan. As noted above, each Service adopted a different tour length and rotational cycle.

The Army's rotation cycle has been governed by Army Force Generation (ARFORGEN), which was created after the current campaigns were underway for several years. ARFORGEN was created to sustain a constant number of supported Brigade comat Teams (BCTs) in a theater by moving away from tiered readiness to provide predictable periods of readiness and unreadiness and to provide a basis for prioritization of resources. This led to the de facto adoption of an active rhythm of one year deployed to two years between successive deployments. The comparable rhythm for reserve units and individuals was one year deployed with five years of dwell time between successive deployments. In 2007 these arrangements were codified and Secretary Robert M. Gates applied them to all of the Services as follows: ${ }^{14}$

- Involuntary mobilization for members of the Reserve Forces will be for a maximum of one year at any one time.
- Mobilization of ground combat, combat, support and combat services support will be managed on a unit basis.

[^46]- The planning objective for involuntary mobilization of Guard/Reserve units will remain a one year mobilized to five years demobilized ratio.
- The planning objective for the Active Force remains one year deployed to two years at home station. ${ }^{15}$
Additional policy guidance was provided in a follow-on directive that stated: ${ }^{16}$
- To the extent possible, RC [Reserve Component] forces shall be activated with the consent of the individual being called or ordered to active duty.
- Predictability for the RC force is maximized through the use of defined operational cycles and utilization of force generation plans to provide advance notification that allows the implementation of the train-mobilize-deploy-model.
- Volunteers shall be encouraged to the extent possible given operational considerations.
- Time spent by an RC member on Active Duty for Operational Support (ADOS) under Section 12301d is considered dwell time.
- The period of dwell time shall be from the demobilization date of one involuntary mobilization until the mobilization date of the subsequent involuntary mobilization.
- Cross-leveling of personnel shall be minimized. Alternate methods shall be used such as task-organizing at the unit level; the use of volunteers, the IRR, and ING, or cross-leveling personnel out of non-deployable units.


## 3. Individual Augmentees

Individual Augmentees (IAs) are a category of DOD military personnel and civilian employees used to "meet the combatant commander's (CC) and other government agencies temporary duty requirements...for directed or approved operations." ${ }^{17}$ The definition of an Individual Augmentee is as follows:

An IA is an unfunded temporary duty position (or member filling an unfunded temporary duty position) identified on a JMD [Joint Manning Document] by a supported CC to augment staff operations during contingencies. This included positions at permanent organizations required

[^47]to satisfy a 'heightened' mission in direct support of contingency operations. Either Active or Reserve Component personnel can fill IA positions. Individual mobilization augmentee (IMA) reservists filling, or activated to, their IMA billet is not considered an IA. ${ }^{18}$

There are three kinds of authorizing manpower documents for joint headquarters and joint activities: ${ }^{19}$

A Joint Table of Distribution (JTD) "identifies the permanent party positions and enumerates the spaces that have been approved and funded for each organizational element of a joint activity for a specific year..."

A Joint Table of Mobilization Distribution (JTMD) "identifies the reserve positions for mobilization and enumerates the spaces that have been approved for each organizational element of a joint activity for a specific fiscal year..."

A Joint Manning Document (JMD) for unfunded temporary duty positions "identifies the specific IA positions to support an organization during contingency operations." The JMD may designate positions to be filled by unit members, individual augmentees, coalition personnel, civilian employees, or contractors.

Combatant commanders are required to submit a validated JMD to the Joint Staff, which will arrange for prioritization and sourcing with personnel. Requests for IAs proceed from a Combatant Command (COCOM) headquarters through Joint Forces Command to the Joint Staff for review by the Joint Chiefs of Staff and thence to the Secretary of Defense for approval. The Military Departments, Special Operations Command, and the National Guard Bureau may be required to provide military personnel to fill JMD positions as IAs.

The use of funded (or programmed) personnel to fill unfunded temporary positions for a prolonged period creates shortages in the permanent positions allocated to each Service. The Services with oversight by the Under Secretary for Personnel and Readiness manage permanent positions. The Joint Staff manages JMD temporary positions. The growth in the number of IAs has been significant and jeopardizes the ability of the Services to meet other requirements.

## C. Observations

This brief overview of guidance documents and sources for self-selection indicates that the Services have been thorough and diligent in reaching into all available sources of trained military personnel to sustain OIF and OEF during eight years of operations. It also appears that there is a significant amount of self-selection for deployment and for

[^48]repetitive deployments that exceed the targets established by DOD. Despite the preference for volunteers stated in DOD policy documents, there are barriers to selfselection that stem from cultural factors and legacy processes, but there are also more paths to self-selection than were expected at the outset of the study.

The one potential source that has not received much attention is the veterans with prior military service that have no remaining military service obligation. These personnel can, of course, enlist or request Active Duty as prior service accessions. However, it is not clear how frequently this is occurring. With these veterans the Service can save on initial entry training and provide refresher training and perhaps cross-training. It is also possible for a veteran to join a Service other than the one in which he or she served previously. It would be useful to consider expanding outreach to veterans with needed skills and to instruct the Services to make it easy for them to return to Active Duty or Selected Reserve duty.

Another source of additional volunteers to fill scarce billets is lateral entry. Currently lateral entry from civilian life is limited mostly to the Professional Branches. It would be useful to consider the extent to which lateral entry can be applied to more skill sets.

Another observation is that much effort has been expended to establish policies and procedures to assure that the Ready Reserve is not unduly stressed by too frequent mobilizations and deployments. The perception of the leadership is that the Army has the greatest problem and that other Services do not have a problem. If that is so, one reason may be that the Army has by far the larger number of drilling (part-time) reservists. The total drilling reservist strengths of the Navy Reserve, Marine Corps Reserve, the Air Force Reserve, and the Air National Guard is 150,000. The total drilling reservist strength of the Army Reserve and Army National Guard is 390,000. So the Army has the biggest supply of true reservists and even that is apparently insufficient to meet the demands.

Another implication of this finding is illustrated in Table D-2. About 17.4 percent of the Selected Reserve consists of full-time Active Duty personnel-either Active Guard Reserve (AGR) personnel or dual-status civilian technicians who must also be members of a unit. They are de facto Active Duty personnel. Although the Marine Corps Reserve has only a few of these kinds of full-time support personnel, it has 4,400 Active Duty Marines as full-time support for the Marine Reserve units.

Table D-2. Selected Reserve by Part-Time and Full-Time Personnel (in thousands)

|  | USAR | ARNG | USNR | USMCR | AFR | ANG | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Drilling Reservists | 180.4 | 293.6 | 55.6 | 37.4 | 54.7 | 69.9 | 691.6 |
| Full-Time Support | 24.6 | 59.0 | 11.1 | 2.2* | 12.7 | 36.8 | 146.4 |
| Total Strength | 205.0 | 352.6 | 66.7 | 39.6 | 67.4 | 106.7 | 838.0 |

*There are also 4,400 active Marines instructing and inspecting Marine Corps Reserve units.

It is likely that the RC rotation cycle target of $1: 5$ is being applied to all of the reservists, including those that are on full-time duty. It would be worthwhile to consider whether the AC rotation cycle target of $1: 2$ should be applied to the full-time support personnel. Ceteris Paribus, doing this would ease the stress significantly on both the parttime drilling reservists and other Active Duty personnel.

Finally, this survey of laws and policies indicates that the various documents that govern how DOD and the Military Services provide units and trained individuals to the Combatant Commanders have been written and promulgated piecemeal to fix problems as they were discovered. As a result there is a degree of confusion and frustration at the working level about how to conform to these policies and still support combatant commanders adequately.

## Appendix E Illustrations

## Figures

1. Aggregated Monthly Data for All of the Services. ..... 16
2. Four Management Domains Shape Demand and Supply ..... 28
3. Tailored Timeline for Reserve Component Self-Selection ..... 47
A-1. Prototype of Utilization Metrics for a Skill Community ..... A-5
A-2. Service Component Occupational Utilization Summary Chart ..... A-7
A-3. Utilization Summary Charts, All Service Components ..... A-10
A-4. Utilization Metrics for Active Army and National Guard Infantry ..... A-17
A-5. Army Reserve Civil Affairs Specialist ..... A-21
C-1. FY09 Military Personnel (MILPERS) Budget for Active ..... C-1
C-2. Components of Military Compensation FY2006 (\$B) ..... C-2
C-3. Components of Cash Compensation FY 2006(\$B) ..... C-3
C-4. Comparison for Officers and Enlisted by Years of Service. ..... C-4
C-5. Percent of Total DOD Deployed vs. End Strength ..... C-13
Tables
4. Ready Reserve Mobilization Authorities ..... 12
5. Mobilization Orders ..... 14
6. Observations on Service Self-Selection Processes ..... 18
7. Active Duty and Selected Reserves (2009 Data for Enlisted Rank E4 and Above, in thousands) ..... 22
8. Observations on Combatant Command Management Processes ..... 29
9. Observations on OSD, Joint Staff, Joint Forces Command (JFCOM) Processes for Allocating Forces and Personnel ..... 32
10. Observations on Force Provider and Management Institutions ..... 36
11. Representative Templates for an SSaT Program ..... 48
A-1. Inventory Gaps Across the Service Components ..... A-13
A-2. Availability Gaps across the Service Components ..... A-14
A-3. Utilization of Army Active Infantry ..... A-19
A-4. Utilization of Army National Guard Infantry (Selected Reserve) ..... A-20
A-5. Army Reserve Civil Affairs Specialist (Selected Reserve) ..... A-22
A-6. AC Enlisted Occupations with U/S > 1 or Availability Margin < 1 ..... A-24
A-7. RC (Selected Reserve) Enlisted Occupations with U/S > 1 or Availability Margin < 1 ..... A-24
B-1. DOD Civilian Employees Serving in Central Command (CENTCOM) Combat Zones (As of 31 March 2010) ..... B-2
B-2. Data on Number of Civilian Employees serving Voluntarily in CENTCOM Combat Zones ..... B-3
B-3. Allocation of Proposed Non-Combat Essential (NCE) Civilian Expeditionary Workforce (CEW) Positions ..... B-7
B-4. Civilian Deployment Results as of 2 March 2010 ..... B-9
B-5. Examples of Current Program for Deploying Civilian Employees ..... B-10
B-6. Major Pays for Deployed Civilian Employees ..... B-18
B-7. Key Non-Monetary Incentives ..... B-19
B-8. In-Kind Goods and Services from Military Sources ..... B-19
C-1. Major Elements of Military Compensation in Each of These Categories ..... C-2
C-2. Synthesis of Special Pays and Tax Treatment ..... C-10
D-1. Service Rotation Policies for Combat Zone Tours ..... D-6
D-2. Selected Reserve by Part-Time and Full-Time Personnel (in thousands) ..... D-9

## Appendix F

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## Appendix G Abbreviations

| AAV | Assault Amphibious Vehicle |
| :---: | :---: |
| AC | Active Component |
| ADOS | Active Duty Operational Support |
| AEF | Air Expeditionary Force |
| AF | Air Force |
| AFB | Air Force Base |
| AfPaK | Afghanistan Pakistan |
| AGR | Active Guard Reserve |
| AIP | Assignment Incentive Pay |
| AIT | Automated Identification Technology |
| AKO | Army Knowledge Online |
| AMD | Air and Missile Defense |
| AOR | Area of Responsibility |
| APPO | Administrative Personnel Processing Office |
| ARFORGEN | Army Force Generation |
| ARH | Armed Reconnaissance Helicopter |
| ARNG | Army National Guard |
| ATC | Air Traffic Control |
| BAH | Basic Allowance for Housing |
| BAS | Basic Allowance for Subsistence |
| BCT | Brigade Combat Team |
| CBRN | Chemical, Biological, Radiological, and Nuclear |
| CBV | Capability-Based Volunteer |
| CC | Combatant Commander |
| CENTCOM | Central Command |
| CEU | Civilian Expeditionary Unit |
| CEW | Civilian Expeditionary Workforce |
| CI/HUMINT | Counterintelligence/Human Intelligence |
| CMO | Civil-Military Operations |
| CMS/ID | Career Management System Interactive Detailing |
|  | G-1 |


| COCOM | Combat Commanders |
| :--- | :--- |
| CONUS | Continental United States |
| CPAC | Civilian Personnel Advisory Center |
| CPP | Civilian Personnel Policy |
| CZ | Combat Zone |
| DCMA | Defense Contract Management Agency |
| DCPMS | Defense Civilian Personnel Management Service |
| DLI | Defense Language Institute |
| DMDC | Defense Management Data Center |
| DOD | Department of Defense |
| DOS | Department of State |
| E-E | Emergency Essential |
| EOD | Explosive Ordnance Disposal |
| FEGLI | Federal Employee Group Life Insurance |
| FICA | Federal Insurance Contributions Act |
| FSA | Force Sufficiency Assessment |
| FSA | Family Separation Allowance |
| GAO | Government Accountability Office |
| GEF | Guidance for Employment of the Force |
| GFM | Global Force Management |
| GSA | Individual Ready Reserve |
| GWOT | Global War on Terror Support Assignment |
| HDP | Global War on Terrorism |
| HECSA | Hardship Duty Pay |
| HIMARS | The Humphreys Engineer Center Support Activity |
| HR | High Mobility Artillery Rocket System |
| HU | Human Resources |
| IA | High-Use |
| ICBM | Individual Augmentee |
| IDP | Intercontinental Ballistic Missile |
| IED | Imminent Danger Pay |
| IMA | Improvised Explosive Device |
| ImInt | ING |


| JFCOM | Joint Forces Command |
| :--- | :--- |
| JMD | Joint Manning Document |
| JTD | Joint Table of Distribution |
| JTMD | Joint Table of Mobilization Distribution |
| LAV | Light Armored Vehicle |
| LOGCAP | Logistics Civil Augmentation Program |
| LS/HD | Low Supply/High Demand |
| MLRS | Multiple Launch Rocket System |
| MOS | Military Occupational Specialty |
| MSC | Major Subordinate Command |
| MSO | Military Service Obligation |
| NCE | Non-Combat Essential |
| NCO | Non-commissioned Officer |
| NEO | Non-Combatant Evacuation Operation |
| NG | National Guard |
| OA | Operational Availability |
| OASD | Office of the Assistant Secretary of Defense |
| OCO | Overseas Contingency Operations |
| ODUSD(CPP) | Office of the Deputy Undersecretary of Defense for Civilian |
| OEF | Personnel Policy |
| OIF | Operation Enduring Freedom |
| OPM | Operation Iraqi Freedom |
| Op-Ma | Reserve Duty Online Forces |
| OPORD | Operator-Maintainer |
| OSD | Operation Order |
| OSD/JS | Office of the Secretary of Defense |
| PDMRA | Office of the Secretary of Defense Joint Staff |
| PSRC | Post Deployment/Mobilization Respite Absence |
| QDR | Presidential Selected Reserve Callup |
| QRMC | Quadrennial Defense Review |
| R\&R | Quadrennial Review of Military Compensation |
| RC | ResC |


| RIRP | Reserve Income Replacement Program |
| :--- | :--- |
| RMC | Regular Military Compensation |
| S\&I | Special and Incentive |
| SCRA | Service member's Civil Relief Act |
| SecDef | Secretary of Defense |
| SF | Special Forces |
| SROC | Senior Readiness Oversight Council |
| SSaT | Self-Select and Train |
| SSCRA | Soldiers' and Sailors' Civil Relief Act |
| SSTI | Self-Selection Target Indicator |
| TAD | Transatlantic Division |
| TAG | State Adjutant General |
| TCS | Temporary Change of Station |
| TDY | Temporary Duty |
| U/S | Used/Sustainable |
| UAV | Unmanned Aerial Vehicle |
| UDC | USACE Deployment Center |
| USACE | United States Army Corps of Engineers |
| USAR | United States Army Reserve |
| USARSELRES | United States Army Selected Reserve |
| USMC | United States Marine Corps |
| USSOCOM | United States Special Operations Command |



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[^0]:    1 Department of Defense, Quadrennial Defense Review Report, February 2010, 45, http://www.defense.gov/qdr/images/QDR_as_of_12Feb10_1000.pdf.
    2 U.S. Department of Defense, Department of Defense Instruction 1235.12, Accessing the Reserve Components, 4 February 2010.

[^1]:    3 Mark D. Faram, "New war-zone tour setup to aid sailors, commands," Navy Times, May 31, 2010, 19.

[^2]:    4

[^3]:    8 George W. Bush, Proclamation 7463, Declaration of National Emergency by Reason of Certain Terrorist Attacks, 14 September 2001.
    9 George W. Bush, Executive Order 13223, Ordering the Ready Reserve of the Armed Forces to Active Duty and Delegating Certain Authorities to the Secretary of Defense and the Secretary of Transportation, 14 September 2001.
    10 A total of 760,218 Reserve Component (RC) individuals have been demobilized following Active Duty Service since September 2001. This number does not include those service members that have been mobilized more than once.
    11 As one example of current RC self-selection, the Army reports large numbers of RC personnel serving in Active Duty positions within the Active Duty Operational Support (ADOS) program. According to Army input, approximately 14,700 RC personnel self-selected and are on Contingency ADOS orders (CO-ADOS), with another 1,600 personnel on Administrative ADOS orders. These numbers are roughly paralleled by the data in the Defense Manpower Data Center (DMDC) Contingency Tracking System Activation File (Table 1), where 6,506 Army National Guard (ARNG) members and 9,964 USAR members are listed as having been activated under 10 USC 12301(d) order. Defense Manpower Data Center, Contingency Tracking System Activation File, as of 28 February 1010.

[^4]:    12
    ARNG Submissions to Institute of Defense Analyses (IDA) Questions in Conjunction with Task Order 2844A. The large requirements for cross-leveling are directly tied to the large number of ARNG soldiers that are currently listed as being "unavailable" according to Defense Department health and readiness reports.

[^5]:    13
    Air Force Submissions to IDA Questions in Conjunction with Task Order 2844A3.
    14 Navy Reserve Forces Command, Exception Report. May 21, 2010. Like all of the Services, the Navy tracks "exceptions" to Secretary of Defense Deployed to Dwell goals. Navy Reserve Forces Command provides the spreadsheets depicting whether each individual being mobilized is self-selecting or not.

[^6]:    * Based on Service responses to study questions

[^7]:    15 USMC Submissions to IDA Questions in Conjunction with Task Order 2844A.
    16 The Navy also uses its Assignment Incentive Program (AIP), whereby personnel self-select and bid on assignments; however, the program is currently being used only for shore duty billets outside of combat zones.

[^8]:    17 Department of the Army Personnel Policy Guidance for Overseas Contingency Operations, 1 July 2009, 26.

[^9]:    18 Reserve Component Categories, 13-17.

[^10]:    19 Employment Status of Veterans 2009, Bureau of Labor Statistics, News Release USDL-10-0285, March 12, 2010.

[^11]:    20 Appendix A provides examples of how relaxing deployment goals from 1 year in 6 to 1 year in 5 affects the self-selection need for selected occupations. Relaxing the utilization targets in the Reserve Components to 1:4 (1 year mobilized of every 5 years of Service versus 1 in 6) substantially reduces the self-selection need for all occupations. In aggregate, the need falls from 37,122 to 7,374. The great majority of the need remains in the Army National Guard and Army Reserve with their high nondeployable rates, but the breadth and scale of the challenge is reduced substantially.
    21 These are individuals in entry training, on other assignments, or unavailable for medical or family reasons. Data show that fewer than $20 \%$ of the individuals in this pool will deploy within the next year. So to be conservative, we have omitted them from the available pool of compliant individuals in the indicator.
    22 Unless otherwise specified, the data for the Reserve Component includes only Selected Reserve.

[^12]:    23 The unprogrammed billets include individual augmentees and ad hoc assignments.
    24 The Navy, in contrast, has set aside a pool of 2,700 billets in its programmed structure to aid in managing the demand for individuals in the theater.

[^13]:    25 Relaxing the utilization targets in the Reserve Components to 1:4 (one year mobilized of every five years of Service versus one in six) reduces the aggregate inventory gap from 130,765 to 67,079. The number of skill communities with inventory gaps is reduced from 240 to 184 . Still, over $90 \%$ of the need remains in the Army National Guard and Army Reserve, but the breadth and scale of the challenge is reduced substantially. Appendix A provides examples for selected occupations.

[^14]:    1 Because we do not know where each individual was in the deployment cycle as of September 30, 2009, HU and Non-HU designations are approximations for any given individual. Here, we assume that the inconsistencies related to the deployment cycle will average out across the individuals, and so the calculated proportion of HU to Non-HU service members should approximate the actual proportion.

[^15]:    1 Merilee Fitzgerald, Deputy Under Secretary of Defense for Civilian Personnel Policy, interview with author, 9 April 2010.
    2 David S. C. Chu, Under Secretary of Defense for Personnel and Readiness, Building Increased Civilian Deployment Capacity, memorandum, 12 February 2008.

[^16]:    3 These data were provided by Service representatives. They are being reviewed by the Office of the Deputy Under Secretary of Defense for Civilian Personnel Policy ODUSD (CPP). They do not include civilians of DOD or other intelligence agencies.

[^17]:    6 According to Secretary Fitzgerald, this has not been a problem, and there have been only a few cases in which an employee refused to live up the condition of employment clause. Merilee Fitzgerald, interview with author, 9 April 2010.

[^18]:    7 Under Secretary of Defense (Personnel and Readiness), "Building Increased Civilian Deployment Capacity," memorandum, Office of the Undersecretary of Defense, 12 February 2008.

[^19]:    8 Department of Defense Directive 1404.10, DOD Civilian Expeditionary Workforce, 23 January 2009. 9 Ibid.
    10 Merilee Fitzgerald, Acting Deputy Under Secretary of Defense (Civilian Personnel Policy), "Civilian Expeditionary Workforce," briefing:, March 2010.

[^20]:    ## Ibid.

    Title 10, U.S. Code, Section 1580. See also DODD 1404.10, 3.
    DODD 1404.10, 3.
    Ibid.
    Fitzgerald briefing, March 2010.
    DODD 1404.10, 3.

[^21]:    17 Alan Johnson and Eric Russi of the Office of the Deputy Under Secretary of Defense for Civilian Personnel Policy, interview with author, 3 May 2010.
    Ibid.
    Fitzgerald briefing, March 2010.

[^22]:    20 Johnson and Russi interview with author, 3 May 2010.
    21 Sharon Steward, Acting Director, Civilian Personnel Management System, "Civilian Expeditionary Workforce," briefing, 10 March 2010.

[^23]:    22 This assertion is based on a survey of position vacancies advertised on the CEW web page.
    Stewart Briefing,10 March 2010.

[^24]:    24 Deanna Rightmyer, Human Resources Policy \& Procedures, email message to author, 8 April 2010.
    25 Charlie Sullivan, Team Leader, Plans, Readiness, and Training, Combat Support Center, DCMA, telephone interview with author, 9 April 2010.

[^25]:    26 USACE website, http://www.usace.army.mil 18 March 2010.

[^26]:    27 Much of the content of this paper is based on a 17 March 2010 group interview of the following employees of USACE: Pat McNabb, Deputy HR Director, HQ USACE, HR Directorate; Jim Biggs, HR Specialist, HQ USACE, HR Directorate (Conference Call); Jim Spratt, Supv. Program Manager, HQ USACE, Military Programs Directorate, Transatlantic Division-Regional Integration Team; Lenny Kotkiewicz, Deputy for Business Management, HQ USACE, Military Programs Directorate, Transatlantic Division-Regional Integration Team; Jill Altemose, HR Director, Transatlantic Division (Conference Call); Kathy Genung, Director, HECSA Civilian Personnel Advisory Center (CPAC); and Helen Lenahan, Chief, Deployment Team, HECSA CPAC. Jim Biggs reviewed a draft of this section and provided many helpful comments and modifications.

[^27]:    28 USACE Deployment Center, www.tam.usace.army.mil/UDC/CIVILIAN.ASP.

[^28]:    30 LTG R. L. Van Antwerp, "USACE Support of Civilian Volunteers Who Deploy to Overseas Contingency Operations (OCO) Missions," Memorandum for All Commanders, Directors, and Chiefs of Separate Offices, 10 August 2009.
    31 Ibid.

[^29]:    32 Ibid.

[^30]:    36 David Chu, USD(P\&R), "Building Increased Civilian Deployment Capacity," memorandum, 12 February 2008.
    37 Deputy Under Secretary of Defense (Civilian Personnel Policy, "Benefits for Deployed Civilian Expeditionary Workforce Civilians," 16 August 2009, 48.

[^31]:    38 Ibid.
    39 Title 5, U.S. Code, Section 5307.

[^32]:    40 Chart furnished by OUSD(CPP).

[^33]:    41 Office of Management and Budget, Office of Federal Procurement Policy, Proposed Policy Letter: "Work Reserved for Performance by Federal Government Employees," Federal Register, 31 March 2010, 16188-16197.

[^34]:    42 Fitzgerald interview with author, 9 April 2010.
    43 U.S. Government Accountability Office, Human Capital, "Actions Needed to Better Track and Provide Timely and Accurate Compensation and Medical Benefits to Deployed Federal Civilians," June 2009.

[^35]:    44 Some Human Resource Specialists say that a valid cost-benefit comparison cannot be performed because the civilian and military compensation systems are too different.

[^36]:    1 Report of the Tenth Quadrennial Review of Military Compensation, Volume 1, Cash Compensation, February 2008, 37.

[^37]:    2 Navy Personnel Command website, Assignment Incentive Pay web page, AIP Max Rate Chart, http://www.persnet.navy.mil/CareerInfo/PayAndBenefits/AIP.htm Total Force AIP Rate Sheet Update 12 August 09.
    3 Peggy A. Golfin, "Manning Under AIP," Center for Naval Analyses, CAB D0014440.A1/Final June 2006.

    4 Malynnda Littky, eHow website: "Army Assignment Incentive Pay Rules," http://www.ehow.com/list_5943659_army-assignment-incentive-pay-rules.html.
    5 Rod Powers, "Assignment Incentive Pay for Extensions While Deployed," http://usmilitary.about.com/od/marinebonuses/a/marineaip.htm.

[^38]:    6 In 2007, the tour length for some military members was involuntarily extended from 12 to 15 months. As compensation for this extension, these members received an additional \$200 in HDP. This practice was discontinued in November 2008.
    7 In 2009 the following were the areas designated for hardship duty pay:
    Afghanistan, Alaska, Albania, Algeria, American Samoa, Angola, Antarctic Region, Antigua, Arctic Region, Armenia, Ascension, Australia, Azerbaijan, Azores, Bahamas, Bangladesh, Barbados, Belarus, Belize, Benin, Bolivia, Bosnia-Herzegovina, Botswana, Brazil, Brunei, Bulgaria, Burkina, Burma, Burundi, Cambodia, Cameroon, Canada, Cape Verde, Central African Republic, Chad, Chagos Archipelago, China, Colombia, Congo, Congo (Democratic Republic of), Cook Islands, Costa Rica, Cote D’Ivoire, Croatia, Cuba, Cyprus, Djibouti, Dominican Republic, East Timor, Ecuador, Egypt, El Salvador, Equatorial Guinea, Estonia, Ethiopia, Fiji, Gabon, Gambia, Georgia, Ghana, Greece, Greenland, Grenada, Guatemala, Guinea, Guinea Bissau, Guyana, Haiti, Honduras, Hungary, Iceland, India, Indonesia, Iraq, Israel, Jamaica, Johnston Island, Jordan, Kazakhstan, Kenya, Korea (Democratic Republic of), Korea (Republic of), Kuwait, Kyrgyzstan, Laos, Latvia, Lebanon, Lesotho, Liberia, Libya, Lithuania, Macedonia, Madagascar, Malawi, Malaysia, Mali, Malta, Marshall Islands, Mauritania, Mauritius, Mexico, Micronesia (Federated States of), Moldova, Mongolia, Mozambique, Namibia, Nepal, Nicaragua, Niger, Nigeria, Oman, Palau, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Puerto Rico, Qatar, Romania, Russia, Rwanda, Samoa (formerly Western Samoa), Sao Tome and Principe, Saudi Arabia, Senegal, Serbia (Kosovo Province, Serbia, and Montenegro), Sierra Leone, Slovakia, Solomon Islands, South Africa, Spain, Sri Lanka, Suriname, Swaziland, Syria, Taiwan, Tajikistan, Tanzania, Thailand, Togo, Trinidad and Tobago, Tunisia, Turkmenistan, Uganda, Ukraine, United Arab Emirates, Uzbekistan, Vanuatu, Venezuela, Vietnam, Western Sahara, Yemen, Zambia, Zimbabwe.

[^39]:    8 See http://www.roa.org/site/PageServer?pagename=advocate_121707_NDAA_success. And http://www.military.com/benefits/military-pay/retired-pay/military-reserve-component-retirementoverview.

[^40]:    9 This section draws heavily on James Hosek and Francisco Martorell, How Have Deployments During the War on Terrorism Affected Reenlistment? (Santa Monica CA: RAND Corporation, 2009).
    10 Hosek and Martorell, How Have Deployments During the War on Terrorism Affected Reenlistment?, 72.

[^41]:    11 This analysis is based upon Colin Doyle's, "The Effect of Activation Policies on Accession and Continuation in the Army Reserve Components," IDA Paper P-4270 (Alexandria, VA: Institute for Defense Analyses, August 2008), 88.

[^42]:    1 "Reserve Components of the Armed Forces," Office of the Assistant Secretary of Defense for Reserve Affairs, September 2005. This is an excellent and comprehensive explanation of the Reserve Components and is a primary source for this report.
    2 President George W. Bush, Proclamation 7463, Declaration of National Emergency by Reason of Certain Terrorist Attacks, 14 September 2001.

[^43]:    3 President George W. Bush, Executive Order 13223, Ordering the Ready Reserve of the Armed Forces to Active Duty and Delegating Certain Authorities to the Secretary of Defense and the Secretary of Transportation, 14 September 2001.
    4 EO Update 29 April 2010, at http://www.irs.gov is the source for the definitions of current combat zones.

[^44]:    5 Title 10, U.S. Code, Section 115, 14 March 2010, http://www.law.cornell.edu/uscode/html/uscode10/ Ibid.

    Ibid.
    Title 10, U.S. Code, Section 651, 5 May 2010, www.uscode.house.gov.
    Ibid.

[^45]:    10
    DOD Instruction, Fulfilling the Military Service Obligation (MSO), 25 August 1997.
    Ibid.
    Office of the Law Revision Counsel at http://uscode.house.gov, 29 April 2010.

[^46]:    13 David Chu, Memorandum, 20 September 2001.
    14 Robert M. Gates, Utilization of the Total Force, memorandum: 19 January 2007.

[^47]:    15 The literature search to this point has not found an earlier DOD statement of this policy for the Active Components of the Services.
    DOD Directive 1235.10, Activation, Mobilization, and Demobilization of the Ready Reserve, 26 November 2008.
    17 Chairman of the Joint Chiefs of Staff Instruction, CJCSI 1301.01C, Individual Augmentation Procedures, 1 January 2004 (Current as of 16 December 2008).

[^48]:    18 Ibid., 2
    19 Ibid., 2-3.

