Highlights of Recent RAND Research on Military Personnel Issues

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The RAND Corporation is a nonprofit institution that helps improve policy and decisionmaking through research and analysis. RAND analyses help policymakers understand how to recruit, train and educate civilian and military personnel and provide cost-effective health care for active and retired members and their families. RAND research on military personnel, training, and health issues is conducted within each of RAND’s national security research divisions and collaboratively across the RAND research community. RAND’s key military personnel research centers are: the RAND Arroyo Center, the RAND Army Research Division: Manpower and Training Program; RAND Project AIR FORCE: Manpower and Personnel Program, and Resource Management Program; RAND National Security Research Division: Forces and Resources Policy Center; and, The Center for Military Health Policy Research, a joint endeavor of RAND Health and RAND's defense research units.

**Fighter Drawdown Dynamics**  
**Effects on Aircrew Inventories**  
William W. Taylor et al, 2009

Even though the number of fighter aircraft in the Air Force inventory is decreasing, the demand for experienced fighter pilots is increasing because new nonflying staff positions are thought to require people with fighter skills. The authors use a dynamic mathematical model to show that, under current conditions and management practices, fighter units are unable to “absorb” enough new pilots — that is, provide enough flying hours to give them the experience they need — to meet the increased demand and that attempting to do so can decrease unit readiness. They also show how increasing credit for simulator training, new approaches to developing fighter pilot-like skills (such as unmanned aerial systems), and the integrated use of active, guard, and reserve fighter aircraft for pilot development can help the Air Force meet the increased demand for staff personnel with fighter pilot skills while maintaining the health of its fighter units.
Cross-Cultural Skills for Deployed Air Force Personnel
Defining Cross-Cultural Performance
Chaitra M. Hardison et al., 2009

Because of its strong interest in providing airmen with the cross-cultural skills that have grown ever more essential to successful mission accomplishment in foreign environments, the Air Force asked RAND to provide a foundation for the design of a comprehensive Air Force program of cross-cultural training and education. RAND researchers responded by first creating a taxonomy covering all behaviors relevant to cross-cultural performance after the need for such a taxonomy became evident from a review of the literature on cross-cultural performance and discussions with Air Force personnel. From this taxonomy, the researchers developed a framework of 14 categories of cross-cultural behaviors — nine categories of enabling behaviors and five of goal-oriented behaviors. This framework was then used in designing a survey for 21,000 recently deployed airmen that asked them to rate the importance of the behaviors to their deployed performance and the helpfulness of training they had received in the behaviors (both over their careers and just prior to deployment). Respondents were also asked to indicate how much training they had received. Recommendations and suggestions for the design of a comprehensive program of cross-cultural training and education and for further research steps were made based on extensive analyses of the results, which included determining whether training needs differed by AFSC, grade (enlisted/officer), and deployment location.

Qualifying Military Health Care Officers as "Joint"
Weighing the Pros and Cons
Sheila Nataraj Kirby and Harry J. Thie, 2009

The challenges facing the U.S. military at home and abroad have highlighted the need for officers, including health care officers, who are educated and trained in joint matters and prepared to take on the new roles and responsibilities demanded by the current environment. This research, part of a larger project examining the preparation and support of leaders in the medical field in the civilian and military sectors, evaluates the need for and feasibility of qualifying health care officers as “joint” officers. Traditionally, officers could attain joint qualification by attending joint professional military education courses and serving in billets that provide them with joint duty experience and are included on the Joint Duty Assignment List (JDAL). New policy states that officers can also receive this experience in non-JDAL billets. However, both the traditional and current policies preclude the inclusion of certain positions, particularly health care officer positions, on the JDAL and allow waivers on a case-by-case basis from the joint requirement for promotion to general or flag officer positions. In addition to an extensive policy review, the study included an assessment of data from the 2005 Joint Officer Management Census survey suggesting that some health care officers are indeed serving in billets that need and provide joint duty experience for which they should receive credit.
**Data for DoD Manpower Policy Analysis**
Jacob Alex Klerman, 2009

To allow analyses of its personnel practices, the Department of Defense maintains historical administrative data files and administers surveys of military personnel. Military manpower analyses also make use of civilian cross-sectional and longitudinal data. Klerman provides an overview of these data sources and discusses how they can be analyzed with currently underutilized data-matching strategies. These data-matching strategies involve matching DoD administrative data files to (1) civilian administrative data (such as Social Security Administration earnings data); (2) DoD survey data; and (3) civilian survey data. These strategies have the potential for large payoffs in terms of better analysis—and therefore better policy—for DoD. Klerman also discusses the degree to which DoD should help fund a future National Longitudinal Study of Youth, and whether DoD should initiate a new military panel survey. Data for DoD Manpower Policy Analysis maintains that the research questions that these proposed surveys would help answer can instead be explored through data matching. Moreover, streamlining procedures for data matching—that is, making it easier for researchers to analyze the data DoD already has—is likely to be much less expensive than engaging in major new data-collection efforts.

**Foundation for Integrating Employee Health Activities for Active Duty Personnel in the Department of Defense**
Gary Cecchine et al, 2009

If the Department of Defense (DoD) moves toward a more integrated employee health system, a foundation of information about the current system and requisite elements for such integration will be needed. The authors reviewed the research literature and DoD policy documents and interviewed DoD personnel to make several observations about the current state of safety and occupational health (SOH) arrangements in DoD. Currently, SOH policy cuts across several organizations at high levels in the Office of the Secretary of Defense, and SOH programs are implemented by each of the military services. Recently, leadership attention has focused on safety, mostly apart from occupational health, as a separate priority. DoD and the services have made efforts to increase coordination, including both high-level formal councils and through informal relationships among SOH practitioners. Health promotion and wellness have received considerable attention within DoD through periodic health assessments and educational programs, yet these areas have not benefited from the same increased coordination. As DoD contemplates a more integrated approach, the authors considered what DoD might learn from civilian experience with integrating employee health activities. To address this, the authors reviewed civilian models of integration to identify promising approaches and practices that might inform DoD efforts. The review of activities related to employee health in DoD—including industrial hygiene, safety, health promotion and wellness, occupational health, and its relatively mature health information technology infrastructure—indicates that there might be little need for DoD to introduce new programs but more need to make use of the information generated by the existing programs in a more coordinated, integrated manner.
Military Enlistment of Hispanic Youth
Obstacles and Opportunities
Beth J. Asch et al., 2009

An implicit goal of Congress, the Department of Defense, and the armed services is that diversity in the armed services should approximate diversity in the general population. A key aspect of that diversity is the representation of Hispanics. Although polls of Hispanic youth show a strong propensity to serve in the military, Hispanics are nevertheless underrepresented among military recruits. The authors discuss the major characteristics that disproportionately disqualify Hispanic youth and explore the following questions: If recruiting standards were relaxed, what would be the effect on military performance? What actions could be taken to increase Hispanic enlistments? Finally, they examine several approaches to increasing enlistments — increasing the number of Hispanic youth who are eligible and would meet the military’s entry standards, increasing interest and recruiting more intensively among the qualified Hispanic population, and targeting recruiting toward less-qualified Hispanics.

Deployment Experiences of Guard and Reserve Families
Implications for Support and Retention
Laura Werber Castaneda et al, 2009

Use of the Guard and Reserve has steadily increased since the first Gulf War in the early 1990s, and this trend is likely to continue as the Global War on Terror persists. Previous research on how deployments affect military families has focused almost exclusively on the Active Component; however, demographic differences between active component and reserve component families suggest that the latter may face different issues during deployment and consequently require different types of support. Castaneda et al. interviewed military family experts and guard and reserve service members and spouses about topics including family readiness for deployment, the problems and positives associated with deployment, family coping, resources used by these families for deployment support, and service member military career intentions. The authors analyzed data from over 600 interviews to provide a better understanding of the major issues faced by guard and reserve families, how they vary among families who differ demographically, and how they may relate to military career intentions. Castaneda et al. conclude with suggestions on how the Department of Defense can better support guard and reserve families, noting that such efforts can both promote general family well-being and increase service member readiness and retention.
Explaining the Increase in Unemployment Compensation for Ex-Servicemembers During the Global War on Terror
David S. Loughran et al., 2008

The Unemployment Compensation for Ex-Servicemembers (UCX) program provides income assistance to unemployed veterans as they search for work. Between 2002 and 2004, the number of veterans claiming UCX increased by about 75 percent, raising concerns that veterans of the wars in Iraq and Afghanistan are having difficulty transitioning to the civilian labor market. This report draws on data from the Department of Labor and the individual military services to examine the reasons for the increase in the UCX caseload.

Assessing Compensation Reform
Research in Support of the 10th Quadrennial Review of Military Compensation
Beth J. Asch et al., 2008

Military compensation is a pillar of the all-volunteer force. It is a fundamental policy tool for attracting and retaining personnel, and its structure — and the incentives implied by its structure — can affect U.S. service members’ willingness to join, exert effort, demonstrate their leadership potential, remain in the military, and, eventually, exit the military at an appropriate time. Military compensation is a composite of current pay and allowances, special and incentive pays, health benefits, disability benefits, retirement benefits, and other benefits. Its importance to the readiness and morale of the force is such that it is reviewed every four years to determine whether it is adequate to meet the U.S. military’s objectives. To inform the 10th Quadrennial Review of Military Compensation, this monograph presents an in-depth examination of the mix and structure of the U.S. military’s current retirement-benefit system and several policy alternatives.

Rethinking the Reserves
Jacob Alex Klerman, 2008

The United States is now engaged in a different type of war, not intensive combat operations but, instead, prolonged low-level operations to establish the context for a transition to stable local government in Afghanistan and Iraq. In these stability operations, the Department of Defense (DoD) has made unprecedented use of its Reserve Components (RC). Forces that had previously been called up less than once in a generation are now being used as an “Operational Reserve”, with an expectation of call-up as much as one year in six and, recently, even more frequently. The changed threat environment and utilization pattern suggest the utility of rethinking our conception of the RC.
Lawrence M. Hanser et al., 2008

The 2006 Quadrennial Defense Review (QDR) called for sweeping reform in the way the Department of Defense (DoD) manages its human resources in the new national security environment, which calls for more flexibility in quickly accessing the right skills at the right place. In response, DoD published a human capital strategy (HCS) in the summer of 2006 that it hoped would contribute to the transformation of the Total Force by providing a foundation for a coherent personnel management and manpower system. The HCS called for three initiatives: competency-based occupational planning, performance-based management, and enhanced opportunities for personal and professional growth. DoD requested that RAND form a panel of experts to perform an objective and independent review of the HCS and to help refine its implementation. This report presents the panel's review of the HCS, along with its conclusions and a number of recommendations that should be useful in the next iteration of the strategy. The panel recommends that DoD (1) establish an oversight organization, (2) develop a clear and specific statement of objectives and a range of options to meet those objectives, (3) conduct a cost-benefit analysis of options, (4) pilot-test selected options, and (5) regularly revisit the strategy. The HCS itself is reproduced in an appendix.

Enhancing the Performance of Senior Department of Defense Civilian Executives, Reserve Component General/Flag Officers, and Senior Noncommissioned Officers in Joint Matters
Raymond E. Conley et al, 2008

Today’s active-duty military has become progressively more joint. But in recent years, U.S. joint military activities have also seen higher participation rates by reserve component general and flag officers, senior civilians, and senior noncommissioned officers. This report examines the preparation of reserve component general and flag officers, senior civilians, and senior noncommissioned officers for participation in joint military activities. The authors interviewed a select group of senior people who had served at the highest executive levels of DoD and a number of senior members who had been identified as being exemplars with respect to participating in joint activities. They then used this information to develop their recommendations and worked with the appropriate OSD staffs to link them to possible initiatives.
Options for Improving the Military Child Care System
Gail L. Zellman et al, 2008

The evidence presented in this paper questions whether the current U.S. Department of Defense (DoD) system of in-kind subsidies for child care is meeting DoD recruitment, readiness, and retention goals or service member needs in an optimal way. DoD appears to be reaping limited benefits from the substantial subsidies provided to families that use Child Development Centers. Many families cannot or choose not to use the subsidized on-base DoD programs; these families receive no support for child care costs. The authors’ findings suggest that the DoD child care system could change in a number of ways to better meet DoD and family needs. First, it could redistribute resources within the current system. Rethinking priority policies from the perspective of both child care need and the degree to which care characteristics fit with likely DoD and service member needs would be another important way to change the system. DoD may also wish to expand the child care benefit to cover more military families and a broader set of child care needs. Alternatively, DoD could expand access to child care through the use of cash benefits, vouchers, and/or negotiated discounts with local providers that meet quality standards, while continuing to provide some amount of DoD Family Child Care homes and Child Development Center care. DoD may also want to invest more resources in assessing the value of child care benefits, as it does for other military compensation components.

The Defense Acquisition Workforce
An Analysis of Personnel Trends Relevant to Policy, 1993-2006
Susan M. Gates et al., 2008

The defense acquisition workforce includes more than 130,000 military and civilian personnel responsible for providing a wide range of acquisition, technology, and logistics support to the nation’s warfighters. This report summarizes workforce analyses that RAND has undertaken in support of the Defense Acquisition University, which is responsible for strategic human capital management of that workforce. It covers the civilian acquisition workforce, the careers of acquisition workforce senior executive service members, and the military acquisition workforce and its implications for the larger workforce. It also describes an inventory projection model that uses data on the civilian acquisition workforce as a key input. The authors conclude that better definition and tracking of the acquisition workforce would improve workforce planning and that workforce analysis is only one step in an overall strategic human capital planning effort.
The Weighted Airman Promotion System
Standardizing Test Scores
Michael Schiefer et al, 2008

Because test scores that are part of its enlisted promotion system are not standardized, the U.S. Air Force effectively emphasizes longevity and test-taking ability differently across and within specialties, and this emphasis varies randomly over time. The random aspects of the promotion reward system mean that the Air Force cannot be sure that it is selecting individuals with the highest potential to fill positions of increased grade and responsibility. Furthermore, not standardizing scores means that some specialties randomly produce higher percentages of senior non-commissioned officers. The authors discuss a range of outcomes that the Air Force could achieve by adopting various standardization strategies. They propose a modification that would not change the policy of equal selection opportunity but would affect selection outcomes within specialties. They recommend that the Air Force implement a standardization strategy that will produce predictable outcomes that are consistent with its personnel priorities and policies.

Developing Senior Navy Leaders
Requirements for Flag Officer Expertise Today and in the Future
Lawrence M. Hanser et al, 2008

As the array of expertise required to be a successful leader in the U.S. Navy has become more complex, Navy leaders have become increasingly concerned that senior officers need additional kinds of expertise, beyond those traditionally developed in naval officers, to be successful in commanding, leading, and managing the Navy enterprise. This study explores whether there is a gap in officer development that manifests itself in the flag officer ranks.

Planning for Diversity
Options and Recommendations for DoD Leaders
Nelson Lim, 2008

Despite the U.S. armed forces' historical role as a model for racial integration and decades of Department of Defense (DoD) efforts to promote racial and ethnic diversity, many groups are still underrepresented within the department, especially among DoD’s active duty and civilian leadership. This is a particularly important issue for DoD because many military leaders believe that maintaining a diverse workforce is critical for the department’s national security mission. This report discusses the initial steps that DoD should take in developing a department-wide plan to achieve greater diversity within its active duty and civilian leadership.
Invisible Wounds of War
Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery
Terri Tanielian and Lisa H. Jaycox et al., 2008

The study discussed in this monograph focuses on post-traumatic stress disorder, major depression, and traumatic brain injury, not only because of current high-level policy interest but also because, unlike the physical wounds of war, these conditions are often invisible to the eye, remaining invisible to other servicemembers, family members, and society in general. All three conditions affect mood, thoughts, and behavior; yet these wounds often go unrecognized and unacknowledged. The effect of traumatic brain injury is still poorly understood, leaving a large gap in knowledge related to how extensive the problem is or how to address it. RAND conducted a comprehensive study of the post-deployment health-related needs associated with these three conditions among OEF/OIF veterans, the health care system in place to meet those needs, gaps in the care system, and the costs associated with these conditions and with providing quality health care to all those in need. This monograph presents the results of our study, which should be of interest to mental health treatment providers; health policymakers, particularly those charged with caring for our nation’s veterans; and U.S. service men and women, their families, and the concerned public.

Performance Evaluation and Army Recruiting
James N. Dertouzos and Steven Garber, 2008

Designing and implementing performance metrics that support Army goals requires analysis of how different metrics would affect recruiter behavior and, in turn, recruiters’ contributions toward achieving the Army’s goals. The authors evaluate traditional performance metrics, such as number of contracts signed per month per recruiter, and find that they do not adequately measure recruiter effort, skill, and productivity. They then develop a “preferred performance metric” that takes into account the difficulty of recruiting different types of youth in various markets.

Stabilization and Reconstruction Staffing
Developing U.S. Civilian Personnel Capabilities
Terrence K. Kelly et al, 2008

The authors present the results of research on the U.S. civilian personnel and staffing programs for stability and reconstruction operations undertaken in other countries under U.S. leadership or with the participation of the United States. The study uses the Office of Personnel Management’s Human Capital Assessment and Accountability Framework to assess the personnel requirements for such operations. The Framework advocates strategic alignment, workforce planning and development, leadership and knowledge management, results-oriented performance culture, talent management, and accountability. The authors also present recommendations that the U.S. government should consider undertaking to deal with the types of problems that the United States has encountered in post-2003 Iraq.
Leader Development in Army Units  
Views from the Field
Peter Schirmer et al., 2008

Developing leaders is critical for the Army; given the amount of time officers spend in units, that experience should be important to their development. Yet few studies indicate whether Army units even have leader development programs, and, if they do, what the programs consist of and how well they are executed. To gain insight into these issues, Arroyo Center researchers met with over 450 officers (lieutenants through colonels) to discuss leader development within Army units.

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