



# NATIONAL DEFENSE RESEARCH INSTITUTE

THE ARTS  
CHILD POLICY  
CIVIL JUSTICE  
EDUCATION  
ENERGY AND ENVIRONMENT  
HEALTH AND HEALTH CARE  
INTERNATIONAL AFFAIRS  
NATIONAL SECURITY  
POPULATION AND AGING  
PUBLIC SAFETY  
SCIENCE AND TECHNOLOGY  
SUBSTANCE ABUSE  
TERRORISM AND  
HOMELAND SECURITY  
TRANSPORTATION AND  
INFRASTRUCTURE  
WORKFORCE AND WORKPLACE

This PDF document was made available from [www.rand.org](http://www.rand.org) as a public service of the RAND Corporation.

[Jump down to document](#) ▼

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world.

## Support RAND

[Purchase this document](#)

[Browse Books & Publications](#)

[Make a charitable contribution](#)

## For More Information

Visit RAND at [www.rand.org](http://www.rand.org)

Explore the [RAND National Defense Research Institute](#)

View [document details](#)

## Limited Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law as indicated in a notice appearing later in this work. This electronic representation of RAND intellectual property is provided for non-commercial use only. Unauthorized posting of RAND PDFs to a non-RAND Web site is prohibited. RAND PDFs are protected under copyright law. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents for commercial use. For information on reprint and linking permissions, please see [RAND Permissions](#).

This product is part of the RAND Corporation technical report series. Reports may include research findings on a specific topic that is limited in scope; present discussions of the methodology employed in research; provide literature reviews, survey instruments, modeling exercises, guidelines for practitioners and research professionals, and supporting documentation; or deliver preliminary findings. All RAND reports undergo rigorous peer review to ensure that they meet high standards for research quality and objectivity.

TECHNICAL  
R E P O R T

---



# The Department of the Navy's Civilian Acquisition Workforce

## An Analysis of Recent Trends

Susan M. Gates, Edward G. Keating, Bryan Tysinger,  
Adria D. Jewell, Lindsay Daugherty, Ralph Masi

Prepared for the United States Navy

Approved for public release; distribution unlimited



NATIONAL DEFENSE RESEARCH INSTITUTE

The research described in this report was prepared for the United States Navy. The research was conducted in the RAND National Defense Research Institute, a federally funded research and development center sponsored by the Office of the Secretary of Defense, the Joint Staff, the Unified Combatant Commands, the Department of the Navy, the Marine Corps, the defense agencies, and the defense Intelligence Community under Contract W74V8H-06-C-0002.

**Library of Congress Cataloging-in-Publication Data** is available for this publication.

ISBN 978-0-8330-4618-5

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors.

**RAND**® is a registered trademark.

© Copyright 2009 RAND Corporation

Permission is given to duplicate this document for personal use only, as long as it is unaltered and complete. Copies may not be duplicated for commercial purposes. Unauthorized posting of RAND documents to a non-RAND Web site is prohibited. RAND documents are protected under copyright law. For information on reprint and linking permissions, please visit the RAND permissions page (<http://www.rand.org/publications/permissions.html>).

Published 2009 by the RAND Corporation  
1776 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138  
1200 South Hayes Street, Arlington, VA 22202-5050  
4570 Fifth Avenue, Suite 600, Pittsburgh, PA 15213-2665  
RAND URL: <http://www.rand.org>  
To order RAND documents or to obtain additional information, contact  
Distribution Services: Telephone: (310) 451-7002;  
Fax: (310) 451-6915; Email: [order@rand.org](mailto:order@rand.org)

## Summary

---

While workforce issues in general—human capital strategic planning efforts in particular—are important throughout the DoD, the AT&L workforce has received special attention. The strategic human capital plan for the AW, which is currently in its third revision (see DoD, Acquisition, Technology, and Logistics, 2007), emphasizes several critical workforce issues: the eventual loss of retirement-eligible personnel and their knowledge, understanding the differences in the workforce generations (aging baby-boomers compared with Generations X and Y, for example), and coping with the increasing demand for workers educated in science and engineering.

In 2006, the Office of the Under Secretary of Defense for Acquisition, Technology and Logistics, Director of Human Capital Initiatives (OUSD(AT&L)/HCI), asked RAND to analyze DoD AW data. RAND's findings for OUSD(AT&L)/HCI are presented in Gates et al. (2008). While that inquiry was under way, the United States Navy asked RAND to undertake a complementary analysis focusing on the DoN's civilian AW.<sup>1</sup> The DoN asked RAND to provide a descriptive overview of the DoN civilian AW and conduct preliminary analyses of data related to specific workforce management issues of retention, professional development, and leadership. This report summarizes what we learned about DoN's civilian AW and these workforce management issues.

### Data Sources and Methods

The DMDC maintains rich data sources on the DoD's military and civilian workforces. Because of congressional reporting requirements, there is even more information available about the acquisition workforce. However, these data are spread out among several data files and are not readily usable for more elaborate types of workforce analysis that require longitudinal information. To create analytical files, RAND assembled data from several sources and linked records across time and across data files.

DMDC provided RAND with annual civilian inventory and transaction file data covering the period September 30, 1992, to September 30, 2006. The inventory data provide annual demographic “snapshots” of each civilian employee, e.g., their grade, location, and education level. The transaction data complement the inventory data by noting “transactions” that occur to workers between inventory snapshots. Attrition transactions were of central interest to us.

DMDC also provided RAND with acquisition workforce person file data covering fiscal year (FY) 1992 through FY 2006. These data identify both military and civilian personnel

---

<sup>1</sup> The DoN includes the United States Marine Corps along with the United States Navy.

who are part of the acquisition workforce, and provide additional information relevant to the acquisition community on these workers, such as acquisition career field and certification level. In addition, the DoN gave RAND a list of individuals who were identified as part of the DoN AW at the end of each fiscal year for FYs 1998–2006. These data include individuals who work for the Navy and the Marine Corps. Unlike the DMDC acquisition workforce data, the DoN acquisition workforce data distinguish between “incumbents” (those who are currently in designated acquisition positions) and “nonincumbents” (individuals who are considered part of the acquisition workforce but are not currently in designated acquisition positions). Our analysis of the DoN AW is restricted to incumbents in FYs 1998–2006.<sup>2</sup>

## The DoN Civilian Acquisition Workforce: Profile

As of September 30, 2006, there were 36,164 DoN civilians in the AW, representing about 27 percent of the DoN’s non–wage grade civilian labor force. There was a considerable increase in the size of the DoN civilian AW between September 30, 2001, and September 30, 2002. The preponderance of that increase occurred because 6,586 non-AW Naval Sea Systems Command (NAVSEA) civilians were recategorized into the AW during FY 2002.

DoN AW civilians are more likely than non-AW civilians to be scientists and engineers. DoN AW civilians have a higher level of educational attainment than non-AW civilians. These differences between the AW and non-AW workforces are not specific to the DoN and are true for the DoD as a whole (Gates et al., 2008).

Reflecting the fact that acquisition is the primary function of the major commodity commands (NAVSEA, Naval Air Systems Command [NAVAIR], and Space and Naval Warfare Systems Command [SPAWAR]), two-thirds of all DoN AW civilians are in NAVSEA and NAVAIR. Naval Air Station Patuxent River, Maryland, is the single biggest DoN AW civilian location.

The number of DoN AW civilians who become fully retirement-eligible will increase in FY 2012 and will remain at higher than current levels for about seven years after that. However, proportionally fewer DoN AW civilians have attained that status in recent years than has been the case for non-AW civilians.

As is true for the DoD as a whole, the DoN civilian AW has had consistently lower attrition than the DoN’s non-AW civilian workforce, even controlling for education and experience level, a finding that is driven by lower rates of nonretirement separation from the AW.

Our descriptive overview reveals that the AW is a sizable share of the DoN’s civilian workforce and that it looks quite different from the non-AW civilian workforce in terms of occupation and education level. Despite concerns about attrition among members of this workforce, our analysis shows that the AW actually experiences lower rates of separation than non-AW civilians.

---

<sup>2</sup> The findings presented in our companion report, TR-572-OSD, on the entire DoD AW include both incumbents and nonincumbents.

## Retirement Behavior of the DoN's Acquisition Workforce

The analysis confirms that there is a burst of attrition when DoN AW civilian employees become fully retirement-eligible. Annual attrition rates jump from around 3–5 percent in the years preceding full retirement eligibility to more than 20 percent in the year in which individuals attain retirement eligibility. This is true for both the AW and for non-AW civilians, although the jump is slightly larger for AW civilians.

Most DoN civilians who became fully retirement-eligible in recent years were covered by the Civil Service Retirement System (CSRS). However, the fraction of the newly retirement-eligible workers in CSRS will decrease because most newer DoD civilian employees are instead in the Federal Employees Retirement System (FERS).

Whereas CSRS is an “all-or-nothing” retirement plan, FERS has a “deferred benefit” for which a civilian worker becomes eligible after five years of creditable service. We observe that attrition among those not yet retirement-eligible is greater for DoN civilians covered by FERS than for those covered by CSRS. However, we also see that employees covered by FERS do not experience as large a leap in attrition upon attainment of full retirement eligibility as their CSRS counterparts do.

The ongoing DoN-wide transition from “mostly CSRS” to “mostly FERS” retirement eligibility lags in the DoN's civilian AW. DoN AW civilians are disproportionately in CSRS, controlling for years until full retirement eligibility.

These findings on the retirement of the DoN AW civilians mirror our findings for the DoD AW workforce (Gates et al., 2008). They point to a need for AW managers to track retirement eligibility and to understand and plan for the differences between those covered by CSRS and those covered by FERS. It is also important to note that while attrition rates increase dramatically once individuals become retirement-eligible, it is not true that all employees depart immediately upon reaching retirement eligibility.

## DoN Acquisition Workforce Interns

In light of possible future challenges in maintaining the size of the civilian acquisition workforce as a growing share of the workforce reaches retirement eligibility, the DoN has put special emphasis on intern programs to attract and train high-quality new civilian employees.

We studied the 271 DoN AW civilians hired into the Naval Acquisition Intern Program (NAIP) during FY 2001 and how their careers have evolved. We compared their outcomes with those of other new hires to the DoN AW in that fiscal year.

Our analysis of the career experiences of new DoN AW hires in FY 2001 suggests that NAIP participants are promoted quickly to mid- and senior-level positions and that they are neither more nor less likely to remain in the DoN AW or the DoD overall through FY 2006 than other DoN AW new hires. Our analysis also suggests that the DoN AW has a harder time retaining new hires into the contracting career field compared with those in the engineering field, regardless of whether new hires are in the intern program or not. We caution that this analysis is based on the outcomes of only one cohort of new hires (those hired in FY 2001) and may not apply to current new hires. However, similar analyses could be done to track the outcomes for more-recent cohorts over shorter periods of time and to further explore the disparity in retention based on career field.

## **Analysis of the DoN's Acquisition Workforce Senior Executive Service Members**

The DoN had 151 AW Senior Executive Service (SES) members as of September 2006. Over half were in NAVSEA or NAVAIR. Of those 151, 140 were DoN civilian employees on September 30, 1992. One-hundred nineteen of the 151 had not changed DoN command since 1992. This suggests that DoN AW SES personnel have a command-specific depth of knowledge and experience rather than DoN-wide breadth.

The limited number of intercommand switches that we see in the data most often involves an employee leaving NAVSEA. NAVSEA is disproportionately the “cradle” of DoN AW SES members. DoD-wide, it has been more common for a civilian worker to leave the DoN and become an AW SES member elsewhere than it has been for the DoN to hire a civilian worker from another service who eventually becomes an AW SES member in the DoN.

In some respects, the experience of the DoN's civilian AW SES members complements the experience of the Navy's and Marine Corps's military leaders. While Navy and Marine officers rotate extensively, DoN AW SES members generally have focused expertise in their current command.

Our analysis of DoN AW SES careers reveals a high degree of retention among those in senior leadership positions and a low degree of intraorganizational mobility within the DoD.

## **More Detailed Analysis of the Current Acquisition Workforce and Historical Trends Could Yield Additional Insight**

In this report, we provide only a few examples of the type of analyses of current AW data that could more fully inform the AW management process. Further analysis of these issues, as well as an exploration of others, could provide useful information for acquisition workforce managers.

Our analysis suggests that the DoN should continue to monitor the effectiveness of the DoN AW intern program in improving the retention of new hires for post-2001 entry cohorts. Improved retention is a primary goal of most DoD intern programs, and organizations spend substantial resources providing interns with mentoring and professional development experiences in support of this aim.

While this report illustrates that, overall, the AW actually experiences lower rates of separation than do non-AW civilians, we also find evidence that attrition is higher for those entering the contracting career field in 2001. Further analysis should be done to monitor retention by career field. If trends persist over time, the DoN may need to develop targeted retention efforts.

The analysis also points to a few potential policy issues related to the senior DoN AW. First, we found that senior-level DoN AW personnel are more likely to move from the DoN to other DoD services or agencies than the reverse. This may be due to changes in the overall demand for senior AW executives (e.g., declining demand in the DoN and increased demand in other parts of the DoD) and thus may not be a cause for concern. Alternatively, it may reflect a desire on the part of DoN senior leaders to work in other parts of the DoD—an idea worthy of further exploration by DoN AW managers. Second, we found that few senior DoN AW SES members have experience in more than one naval command. This lack of intracom-



mand mobility may reflect a belief that senior AW leaders of a particular system must have deep knowledge of that system. However, a command focus can inhibit senior leaders from developing an “enterprise” (DoD- or DoN-wide) perspective, and the DoD has emphasized the need for such breadth among its senior leaders.