National Defense Research Institute

Aft and Fore

A Retrospective and Prospective Analysis of Navy Officer Management

Harry J. Thie ◆ Margaret C. Harrell
Jefferson P. Marquis ◆ Kevin Brancato
Roland J. Yardley ◆ Clifford M. Graf II
Jerry Sollinger

RAND

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PREFACE

The Manpower, Personnel, and Training section of the Assessments Division of the Deputy Chief of Naval Operations for Resources, Warfare Requirements, and Assessments asked RAND to review past and present officer management practices, assess the ability of the Navy to meet its authorizations for officers, and examine likely future needs for officers and changes in their management. We were asked to make our assessment as data-based as possible.

This research reviews the evolution of policy and the management of the officer corps as a basis for discerning trends and cycles in requirements and inventory of officers that may need to be accommodated in the future. It also identifies where mismatches between authorizations and inventory exist as well as the costs of such gaps. The research identifies dynamic factors affecting officer requirements for unrestricted line, restricted line, and staff corps and identifies the past, present, and future officer manpower requirement in response to such factors. Moreover, this research outlines the officer personnel structure designed to support the requirement; examines the gaps and excesses resulting from existing accession, development, and transitioning processes; and proposes methods to provide better support to the future force structure.

This report describes the results of the research and should be of interest to the defense manpower and personnel community. The project has a large scope—past, present, and future, by community and grade, for both requirements and inventory of naval officers. In particular, the data within this document represent a resource for manpower and personnel planners. This work is both broad in

scope—it includes historical observations about Navy manpower as well as current manning gaps and cost implications—and detailed in the modeling approach used and the policy implications discussed.

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SUMMARY

The Navy recently examined its officer structure with an eye toward determining how well it can meet current and future demands. It was particularly interested in gaps between the supply of and demand for officers and the potential costs of such gaps. Of equal interest was how demands might change in the future and whether the current system for managing officers—accession, development, assignment, promotion, and, ultimately, separation—would satisfy tomorrow's requirements.

The Navy asked RAND's National Defense Research Institute (NDRI) to assist and, more specifically, for

- an analysis of the documents—studies, statutes, and policies—that influence personnel authorizations and inventory and for a catalogue of the changes in both over the past 20 years.
- a comparison between authorizations and inventory and an analysis of the cost of any differences.
- an estimate on the personnel requirements for 2010 and 2017.

The purpose of these estimates was not to determine specific requirements. Rather, it was to assess the adequacy of officer personnel management practices to manage the types of structures that would exist then.

THE GAPS

We refer to any difference between authorization and inventory as a "gap." Navy personnel managers frequently use different terms,

such as deltas, mismatches, and differences. Many tend to view a gap only as a difference between authorizations and inventory at the aggregate level of a community or the officer corps. Our use of gaps refers not only to these situations but also to differences in grade or skill. Gaps can be either overages or shortages of inventory compared with authorizations.

Any investigation into the gaps between authorizations and officers assigned must examine specialties rather than the officer corps as a whole because gaps occur in different communities for different reasons. For example, the system can respond to large-scale changes most easily at the junior grades. It is far easier simply to access or stop accessing additional officers than it is to correct imbalances at, say, the O-4 level (although not necessarily less expensive). But making large-scale changes among the junior grades results in officer cohorts of different sizes moving through the system, which engenders complex management problems later on.

Other influences can also affect gaps. Nurses provide an example of how external constraints can cause gaps. The Nurse Corps lacks a history of senior officers because, before 1967, women generally could not be promoted beyond O-4. Therefore, they tended either to retire at O-4 or to leave the service before becoming O-3s. The Navy revisited the policy in the late 1980s and opened up more field-grade assignments to nurses. However, because field-grade billets were limited as a matter of law, any additional nurse promotions would come at the expense of some other community, and the Navy did not create enough billets to avoid promotion stagnation, even though nurses were receiving a reasonable share of promotions.

Grade structures of individual communities can also contribute to gaps. For example, the inventory of doctors at the O-5 and O-6 levels has exceeded authorizations since the early 1990s. Analysis of the grade structure shows high authorizations for O-3s and O-4s. The senior grades do not have enough authorizations to absorb the junior grades as they get promoted, leading to overages at the senior grades.

THE COST OF GAPS

Gaps create two types of costs: hard and soft. *Hard costs* are the most straightforward and include dollar costs of acquiring, paying,

and training officers. *Soft costs* are more nebulous but nonetheless real. They include such elements as lower productivity due to low morale or readiness problems that result from unfinished work or low retention.

Gaps can have positive or negative hard-cost implications. If a community is understaffed relative to authorizations, savings accrue. If overstaffed, then the Navy incurs costs. These costs and savings vary by community. The costs of overages in senior doctors are relatively more expensive than, say, overages among junior supply officers. An O-3 pilot is estimated to cost about a third more than an O-3 surface warfare officer (SWO). An O-6 doctor costs more than an O-6 SWO but less than an O-6 submariner.[1] Current Navy practice does not take these differential costs into account in its planning and programming procedures, but it should.

Soft costs also occur when the system is out of balance. An excess of junior officers and a shortage of senior officers might lead to more junior personnel occupying senior positions or carrying out the duties de facto without the seasoning and experience to perform them well or without the recognition of being in the position, although they would potentially benefit from having greater responsibility. Thus, job performance suffers, and the morale of the junior officers may also decline because of lower job satisfaction and resentment over carrying out responsibilities without being compensated fairly. The reverse situation—too few junior officers—can be equally poor, with senior officers stretched thin and carrying out duties normally performed by junior personnel (e.g., standing watch).

Most communities have various overages and shortages by grade, but in general the costs and savings offset each other. However, this is not true for all communities. For example, the cost of the surface warfare community has increased steadily since about 1993, meaning that inventory has consistently exceeded authorizations, largely at the junior grades. While junior officers are less expensive, when the number of overages becomes substantial, costs get quite high.

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[1] Cost differences were calculated using the Navy COMET (Cost of Manpower Estimating Tool) model.

Intelligence officer billets have historically been staffed at less than authorized.

The cost differentials have important implications for how the Navy staffs its communities and uses its different officers. For example, it is expensive to have overages in aviators and submariners. Similarly, overstaffing joint billets with aviators and submarine officers, which the Navy tends to do, is relatively more expensive than staffing them with SWOs.[2] Indeed, the aviation community is far and away the most expensive in the Navy. Each aviator is costly—and there are many. Given the cost differences among communities, the Navy should always seek to replace higher-cost personnel with lower-cost personnel, all other things being equal. Also, in bringing inventory and authorizations into line, the aviation community would be a good place to start because of its relative size (50 percent of the unrestricted line community) and the cost of training and compensating each aviator.

The Navy must review its costs and savings by community and grade. In the past, the Navy has saved dollars by persistent understaffing. However, that trend has reversed, and costs have climbed as inventory has moved toward authorizations. Unknown at this point is whether the short-term dollar costs of minimizing gaps will ultimately be offset by the reduction in soft costs that could lead to future savings through such effects as increased retention.

FUTURE REQUIREMENTS

To gain some insight into how the personnel system might have to respond in the future and its ability to do so, we developed two scenarios: one for 2010 and another for 2017. Factors that will affect the shape of the future officer corps include changes in force structure, doctrine, organizations, emerging technologies, joint activities, and

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[2]This assumes that the Navy would need to "grow" fewer aviators or submariners if there were not a consistent use of them in the joint community. If community managers are placing them there because they have an excess of senior officers propagated by the current system that does not—in part due to legal restrictions—manage to requirements, then placing these officers in joint assignments is not costly because of sunk cost. This assumption is addressed later in this report as we recommend managing officers to requirements, provided relief is given from such constraints as the Defense Officer Personnel Management Act (DOPMA).

training procedures. These scenarios, to include the force structure and other assumptions, are described in greater detail in the body of this report. The text below summarizes the scenarios.

The 2010 Navy

The 2010 Navy remains essentially stable compared with the Navy of today, but some changes occur. Force structure and organizational changes, adoption of innovations, and continuing base realignment efforts will alter the shape of the officer corps. The effect will vary by community. For example, force structure changes, or the expected changes in the numbers and types of platforms and personnel assigned to them, will have the greatest effect on submarine and limited duty officers (LDOs) by reducing their numbers. Organizational streamlining will effect reductions across most unrestricted line officer specialties. Special warfare officers increase in number in response to mission needs, and restricted line billets will increase largely in response to administrative changes.

The 2017 Navy

The Navy, acutely aware of its need for transformation, also realizes that the process will not be rapid. Even by 2017, about two-thirds of the fleet will include ships and aircraft from the present era. However, additional force structure and organization changes will occur between 2000 and 2017, and the Navy will have adopted additional technologies and developed different functions. Overall, the number of officers will decline as a result of streamlining organizations, adopting technologies, outsourcing work, and shifting some functions to the enlisted force.

The upshot of the various influences will be a smaller, more skilled, more experienced (and thus more senior), more specialized, and more joint officer corps. The emphasis in the officer corps will shift from operating platforms to integrating them. Unrestricted line officers will continue to be in demand, and a new community will emerge to meet the need for broad warfare expertise. Staff officers ashore will decline in numbers as outsourcing and privatization take some functions out of the Navy. Demand for restricted line officers

will hold steady but will increase for some technical communities as well as for LDOs and chief warrant officers.

WHAT THE FUTURE IMPLIES FOR OFFICER MANAGEMENT

The prime purpose of the two future scenarios is not to establish requirements. Rather, it is to test the flexibility of existing management tools and to explore what policy changes might be necessary to respond to the types of changes outlined in our scenarios.

In broad terms, the Navy's officer management system needs to be more strategic, more systemic, less uniform, and more flexible. By "strategic," we mean that it needs to be a more active instrument in developing the Navy's overall future strategy. Put another way, the Navy should be trying to shape the size and composition of the officer corps so that it is structured to meet future missions rather than reacting to past changes in the internal and external environment, which is what it largely does now.

Officer management should work as a system. Accession is not a separate function from retention and retirement. The process of bringing officers into the service and educating, promoting, assigning, developing, and separating them is interlinked. The process has to be internally consistent, yet needs to answer the needs of multiple stakeholders. Above all, managers must recognize that changes in one functional area can ripple throughout the system.

The issue of uniformity relates to the current practice of a centralized approach to officer management that best suits the Navy's dominant officer occupations. That approach may not work well for other occupations, and thus the question arises of whether they should be managed differently. Our judgment is that, if it is to prosper in increasingly complex environments, the Navy may need to adopt a more specialized approach.

Finally, it may be that change is the only constant, and whatever system the Navy adopts should be flexible enough to react to that change. Imbuing a system with flexibility to accommodate inevitable change may mean fewer centralized policies and controls. More flexibility carries with it such increased risk as diminished Navy identity and increased rivalry among groups.

RECOMMENDATIONS

We suggest that the Navy

- Manage communities individually, flexibly employing such tools as longer careers and broader promotion zones as needed to align inventory and authorizations. This would require the Navy to seek legislative relief from DOPMA.
- Acknowledge that the grade structure for some communities (e.g., submarine, intelligence) is insupportable and either restructure it or employ management tools that will enable the Navy to meet the requirements.
- Restructure the management of LDOs so that they are managed within the communities they associate with.
- Consider manpower costs by community and grade when planning for and filling requirements. Using a homogenized average manpower cost in the planning process obscures the true costs and leads to expensive assignment policies.
- Recognize that recruiting and training fewer officers initially but using such incentives as better promotion opportunity to keep them longer may be considerably more cost-effective.
- Consider establishing communities that can accommodate likely force structure changes and technological advances—e.g., network-centric warfare.

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ABBREVIATIONS

AEDO	Aerospace engineering duty officer
AIR	Aviator (community)
AMD	Activity Manpower Document
BA	Billets Authorized
BRAC	Base Realignment and Closure
C4I	Command, control, communications, computers, and intelligence
CBO	Congressional Budget Office
CEC	Civil Engineer Corps
CNA	Center for Naval Analyses
CNO	Chief of Naval Operations
COB	Current onboard
COMET	Cost of Manpower Estimating Tool
COMNAVSURFLANT	Commander, Naval Surface Force, U.S. Atlantic Fleet
CRYPTO	Cryptologic (community)
CVBG	Carrier Battle Group
CWO	Chief warrant officer
DAWIA	Defense Acquisition Workforce Improvement Act

DFAS	Defense Finance and Accounting Service
DMDC	Defense Manpower Data Center
DMRR	Defense Manpower Requirements Report
DoD	Department of Defense
DOPMA	Defense Officer Personnel Management Act
EDO	Engineering duty officer
EDVR	Enlisted Distribution Verification Report
EOD	Explosive ordnance disposal
FMD	Fleet Manpower Document
FQ	Fully qualified
FSO	Fleet support officer
FY	Fiscal year
FYDP	Future Years Defense Program
GAO	General Accounting Office
GNFPP	Global Naval Force Presence Policy
Goldwaters-Nichols	Goldwaters-Nichols Department of Defense Reorganization Act of 1986
HR	Human resources
Intel	Intelligence (community)
IP	Information professional
JAG	Judge Advocate General
LDO	Limited duty officer
MCM	Mine countermeasures
MPN	Military Personnel, Navy

NMP	Navy Manning Plan
NWI	Naval warfare integrator
O&S	Operations and support
OCEANO	Oceanographer (community) `
ODCR	Officer Distribution Control Report
OGLA	Officer Grade Limitation Act
OPA	Officer Programmed Authorization
OSD	Office of the Secretary of Defense
PAO	Public affairs officer (community)
PERSTEMPO	Personnel tempo
POR	Program of Record
RL	Restricted line (officer)
RQMTS	Wartime requirements
SELRES	Selected reservists
SMD	Ship Manpower Document
SPECOPS	Special operations
SPECWAR	Special warfare
SQMD	Squadron Manpower Document
SUB	Submariner (community)
SWO	Surface warfare officer
TYCOM	Type commander
UAV	Unmanned aerial vehicle
UIC	Unit Identification Code
URL	Unrestricted line (officer)
VAMOSC	Visibility and Management of Operating and Support Costs
YOS	Years of service