

Creating Innovative Career Paths

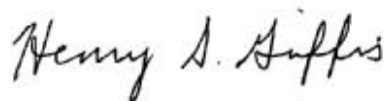
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A handwritten signature in black ink that reads "Henry S. Griffis". The signature is written in a cursive style with a large initial 'H'.

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Executive summary

Career paths and compensation are ideally tailored to fit the unique requirements of specific occupational fields and individual workers. Different skills, occupations, and abilities call for different pay as well as different amounts of in-house training (entry points), career lengths (exit points), and assignment patterns.

In the military, however, career paths and the structure of compensation tend to be very rigid and the basic outlines have persisted since before the beginning of the All-Volunteer Force (AVF). Furthermore, analysts believe that the future Navy will be even more complex, both technologically and in its missions and how it responds to them. If these predictions are correct, the need for innovative and flexible career structures will be even greater.

Military career paths are rigid

To greatly oversimplify a complex process, the three most significant causes of rigidity in military career paths and experience profiles are:

- *A “closed” personnel system.* Under military accession policies, almost everyone enters with no military experience. This means that a very high proportion of service members are in the earliest years of service (YOS).
- *The military retirement system.* Unlike other retirement systems, the military grants full retirement at 20 YOS with no vesting before that point. As a result, there is a cliff in the experience distribution with few people staying beyond 20 years.
- *An assignment system for generalists.* This system is designed to give future leaders general training in a number of fields, thus rotating them fairly quickly through many tours.

The closed-loop accession policy coupled with the military retirement system drive military YOS profiles to look similar—regardless of occupation, branch of service, or officer or enlisted status. These profiles are not only rigid but much more junior than nonmilitary profiles. For example, 45 percent of Navy personnel have less than 4 YOS compared with 3 to 5 percent of nonmilitary personnel in our selected industries. At the other extreme, less than 3 percent of Navy personnel have over 20 YOS compared with at least 40 percent of nonmilitary workers.

The consequences of the lack of variation in military experience profiles cannot be overstated. Experience profiles driven solely by accession and retirement policies will only coincidentally align with the real needs of the service. It is important to search for innovations at other career points in order to loosen the constraints.

Options for creating innovative career paths

The problems caused by rigidities in career paths are likely to worsen as the Navy moves to a future with an emphasis on a smaller, more technical workforce and getting the right worker to the right job at the right time. In particular, we envision future requirements that have fewer junior personnel and more skilled, experienced technicians. The target requirements profile, then, would move from a pyramid to an oval and require increased lateral entry, longer careers, and greater specialization for at least some military careers.

Innovative entry points

Flattening out the left-hand side of the experience profile requires breaking the Navy's closed-loop accession policy and bringing in more lateral entries. The entire system of bringing in new recruits straight from school and providing all training in-house is deeply ingrained in military culture. Yet, there is no other way to significantly lower the proportion of very junior personnel.

In addition to cultural issues, some of the other lateral entry issues include how to separate pay, experience, and command authority enough to compensate lateral entrants adequately. Also, how can

the Navy become flexible enough that it does not duplicate training that people have acquired before entering the Navy?

Retirement reform

The current military retirement system is the major influence on the right-hand side of the experience profile. Keeping significant numbers of people beyond 20 YOS will not be possible without changing the cliff-vesting feature. Currently, a typical enlisted member might join after graduating from high school at age 18, then retire and claim his or her full pension at age 38. This may have been a reasonable exit point when the Navy required a workforce characterized by youth and vigor, but it is arguably not optimal for more technical occupations.

Most retirement reform proposals separate the retired pay into two distinct components: an old-age pension and a flexible force-management tool. The old-age pension is similar to those in the private sector. It is vested at 5 to 10 years but does not begin to pay benefits until the beneficiary reaches normal retirement age. With this form of retirement pay plus a flexible separation pay, the Navy will have the tools it needs to shape career exit points.

Innovative assignment and rotation policies

With more varied entry points and career lengths, it also makes sense to reexamine assignment and rotation policies. In the old pattern, most people rotated quickly, and sometimes involuntarily, through a series of assignments designed to train senior leaders. Choice of assignments was limited and tours had to be short to expose people to a broad range of fields.

With people entering specifically for an assignment in one career area, assignment choice will be important. If retirement reform makes pensions portable so that exit is freer, moving to choice vs. involuntary assignments will be important. If careers become more focused in one technical area, longer tours may be better. In general, it will be important to be able to create innovative assignment and tour length paths.

Introduction

Career paths in the military follow standard models of enlisted or officer development. They vary only slightly by occupation, performance level, branch of service, and enlisted vs. officer status. Entry, tenure, and exit points tend not to vary, assignment patterns and tour lengths are also similar, and generalists are more prevalent than specialists. Furthermore, these basic outlines have persisted since before the beginning of the All-Volunteer Force (AVF).

Most analysts and policy-makers agree that the future Navy will consist of more technologically advanced platforms and be organized to have greater surge capability. This fleet will call for a workforce with fewer active duty members who are, on average, more experienced and better educated. In addition, it is predicted that these Sailors will spend more of their time in operational billets but have more choice in their assignments and more opportunity in their careers. If these predictions are correct, substantial changes must occur in current manpower, personnel, and training systems. It will be necessary to have more innovative and flexible career structures.

In their 2005 testimony to Congress, both the Chief of Naval Operations (CNO) and the Chief of Naval Operations (Manpower & Personnel) (CNP) shared this vision of a smaller, more experienced, active duty workforce. They called for developing new policies that would get the “Warfighter with the right skills, in the right place, at the right time.”¹ The CNP warned that:

The demands of the 21st Century security environment are markedly different from those that shaped the manpower requirements and personnel systems and policies that are used in the (Defense) Department today. The current set

¹ This quotation is from the Statement of ADM Vern Clark, USN, Chief of Naval Operations Before the House Armed Services Committee, 10 March 2005.

of human resources policies and practices will not meet the needs of the 21st Century if left unchanged.²

In this paper, we will first examine the current Navy workforce and see that it has a much different experience profile than nonmilitary workforces. We will review literature that shows that this has already created problems for the Navy. We will then argue that future changes in both demographics and the type of Sailor the Navy needs will make it even more compelling to undertake reforms needed to create a more experienced force. Then we will see how making the necessary changes will require a combination of reforms to the compensation system and personnel policies.

This paper is one in a series from a CNA project that examines military human capital management in a changing world. Two of the other papers involve more extensive examinations of some of the reforms touched on in this paper. Reference [1] describes a pilot program for one form of lateral entry, recruiting pretrained civilians from community colleges. These pretrained recruits are a subset of lateral entrants—those who enter after completing the equivalent of a Navy A-school, for example in the Advanced Electronics/Computer Field (AECF). Reference [2] discusses the current retirement system, options for reform, and how these options would affect force structure. In this paper, we will focus on how retirement reform would affect career paths.

Causes and options

To greatly oversimplify a complex process, the three most significant causes of rigidities in military career paths and experience profiles are:

- A “closed” personnel system. The standard practice in the military is to fill positions by recruiting young people just out of school, training them to perform entry-level jobs, and then

² This comes from The Defense Board Task Force on Human Resources Strategy as quoted in the Statement of ADM Gerald L. Hoewing, USN, Chief of Naval Operations (Manpower & Personnel) Before the House Armed Services Committee, 16 March 2005.

promoting them to more senior positions as they acquire the necessary skills and experience.³ There is little lateral entry or exit and reentry. The lack of lateral entry means that the senior leadership for 2025 must be entering the Navy today.

- The military retirement system. Unlike other retirement systems, the military grants full retirement at 20 years of service (YOS) with no vesting before that point. As a result, very few people leave with between 10 and 20 years of experience, but then there is a cliff in the experience distribution with very few staying beyond 20 years.
- An assignment system designed to give future leaders general training in a number of fields, thus rotating them fairly quickly, and often involuntarily, through a number of tours.

The lack of lateral entry, the structure of the military retirement system, and assignment policies, as well as associated personnel and compensation policies, place major constraints on innovation. This is important because different skills or occupations call for different amounts of in-house training (entry points), different career lengths (exit points), and different assignment patterns.

Given these causes of rigidities in career structures, we will consider a few (of many) options for creating innovative career paths:

- Allowing later entry points, even beyond recruiting from community colleges
- Facilitating movements in and out of the military and longer careers through retirement reform
- Allowing more voluntary assignment patterns and longer tour lengths
- Using specialists more, especially in technical fields.

³ In general, young enlisted recruits are fresh from high school and officers are just out of college.

Military career paths are rigid

Navy vs. civilian experience profiles

The Navy's experience profile is unlike almost any nonmilitary industry or occupation in two dimensions. First, it is very junior because virtually everyone enters from the bottom and is trained in-house. Second, there is a lack of more senior people because almost everyone leaves at the 20-year retirement point. This profile was derived at a time when the emphasis in the armed forces was on "youth and vigor" and when military technology and culture required skills and knowledge that were unique to the military. Furthermore, past population and educational patterns were such that relatively large pools of young men who stopped their education at high school were available to recruit.

Two policies are the primary forces driving more junior military than nonmilitary workforces:

- Closed-loop entry. Under military accession policies, almost everyone enters with no military experience. This, coupled with existing attrition and reenlistment rates, means that a very high proportion of servicemembers are in the earliest YOSs.
- Cliff-vested retirement. The military retirement system grants full retirement at 20 YOS, which causes a cliff in the experience distribution with an extremely low proportion of personnel having more than 20 YOS.

Figure 1 illustrates the difference in experience levels between the Navy and some nonmilitary employers. There are critical differences between Navy and civilian data that complicate comparisons of experience measures. The most important difference is that for civilian workers we can only proxy work experience by total years since leaving school; for the Navy, however, years of experience equals

the length of active-duty military service. The Navy measure, then, will always be equal to or lower than the civilian because it doesn't include employment in other industries or time not working. In spite of these differences, there are points where the Navy and civilian profiles differ so markedly that some conclusions can be drawn.

Figure 1. The Navy's workforce profile is radically different from nonmilitary profiles

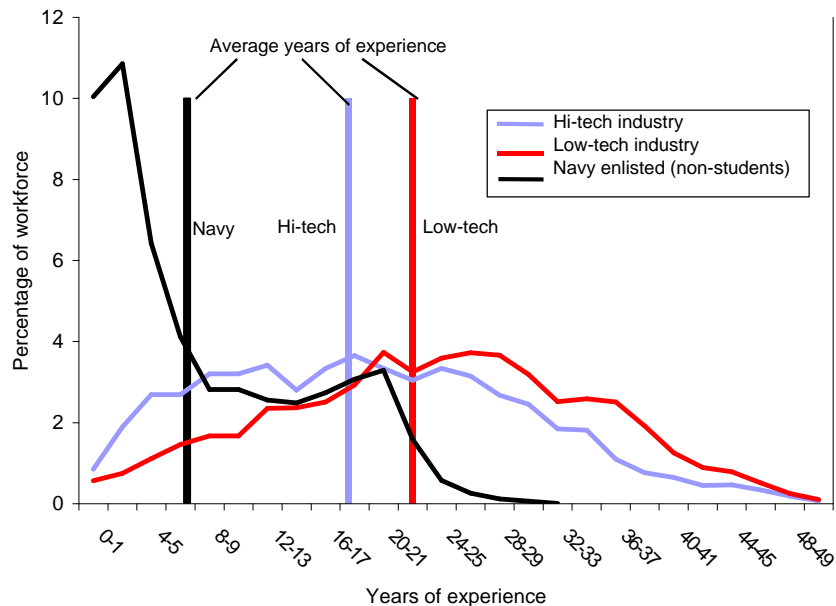


Figure 1 shows the percentage of the workforce with various experience levels. We compare Navy enlisted nonstudent personnel with composites of some more and less technical industries taken from the Bureau of Labor Statistics (BLS) Current Population Survey (CPS).^{4,5} The most striking differences in figure 1 follow:

⁴ We excluded students from the Navy measure to make it more comparable with the CPS measure of experience, which is “years of work since leaving school.” The two metrics will always suffer from differences in their definitions. The Navy measure with students would have to look more junior than CPS, since CPS is total time since leaving school and Navy is time with one employer. If the Navy personnel still look more junior after removing students, it can only help our argument that the workforce is more junior.

- A very high proportion of Navy enlisted personnel are in their first 8, and especially first 4, years of service. Even after excluding students, 45 percent of Navy enlisted personnel have less than 4 years of service. In contrast, only about 3 percent of employees in low-tech industries and 5 percent in high-tech industries have less than 4 years of service.
- There is also a striking disparity in the proportion of people with over 20 years of service. In the Navy, less than 3 percent fall in this category; however, for the nonmilitary composites, around 55 percent of the low-tech workforce and 40 percent of the high-tech workforce have 20 or more years of service.

Remember that Navy enlisted personnel frequently enter service straight from high school at age 18, so at YOS 20 they are still under age 40. Thus, figure 1 shows that Navy enlisted typically leave the service by 40 to 50 years of age, whereas the years since leaving school (the years of experience measure from CPS) ranges much higher for both high- and low-tech industries.

What shapes the profiles?

Left-hand side

On the left-hand side of the experience profile, where the new entrants join the force, the shape of the profile is driven by closed-loop entry, the need for careerists, and attrition, retention, and continuation rates. Given that everyone enters from the bottom, that some people will leave, and that there are goals for how many

⁵ Highly technical industries were selected by choosing industries with a high percentage of occupations that are considered technical, and low-tech industries were defined by having a low percentage of occupations considered technical. The high-tech industries are Computers and Data Processing, Engineering and Architectural Services, and Broad High-Tech Services. The low-tech industries are Trucking Service, Shipping, and Durable Goods and Transportation.

careerists are needed, a downward slope is inevitable.⁶ Typically, this slope is very steep, with many people leaving before the end of the first term or not reenlisting for a second term. For example, in FYs 2003-2005, the 48-month attrition rate for Navy enlisted was over 30 percent, meaning that more than 30 percent left before the end of their contracts (which must have been 4 years or longer). Also, the first-term reenlistment rate was about 50 percent in FYs 2004-2005.⁷ Taken together, this means that out of every 100 new accessions, perhaps only 35 might reenlist for a second term.⁸

Right-hand side

The shape of the right-hand side of the experience profile is dictated by the pull and then push of the military retirement system. The retirement package is the reason that people who get to about 10 YOS usually stay until 20 YOS. Most remain with the expectation of receiving the full retirement benefit [6]. This is the “pull effect,” or the golden handcuff period. Furthermore, the services are reluctant to involuntarily separate senior personnel during this period; there seems to be an implicit contract [7].

Continuation rates for all types of military personnel are extremely high between 10 and 20 YOS, up to 95 to 97 percent, because of the

⁶ Attrition, retention, and continuation rates do change over time. There is an extensive literature on how enlisted and officer retention, continuation, and accession behavior responds to changes in pay as well as other variables. See [3 and 4] for summaries. Pay elasticities, however, are small and (as discussed above) a small proportion of total pay is devoted to retention or continuation bonuses. Personnel policies to adjust attrition and retention rates, therefore, generally work on the margin. As a result, the left-hand side of the experience profile is very steep under any circumstances.

⁷ First-term, or Zone A, reenlistment rates fell sharply from the late 1990s and early 2000s; rates before then were as high as 60 percent. Also, reenlistment rates vary by contract length (as well as many other factors), with Sailors who have 4-year obligations having the lowest rates [5].

⁸ These numbers won't match the experience profile in figure 1 because that figure excludes students, and the attrition figures we discuss here included losses during bootcamp and A- and C-school.

golden handcuffs [2]. Once the 20-year mark is reached, enlisted personnel become eligible to receive their full retirement benefit. They become not only vested, which means they could take their pension with them if they moved to another job, but also eligible to start collecting benefits. As far as the shape of the experience profile, it produces a sharp cliff at 20 YOS because servicemembers get no money if they leave before 20 years but get the full amount at 20 years.

Evidence of rigidity

The YOS profiles in figure 1 show the striking contrasts between experience levels in nonmilitary workforces and the Navy enlisted workforce. The overall experience profile for Navy enlisted personnel, however, closely mirrors the experience patterns for the other three services and for officers in all four services [8].⁹ Furthermore, within services, experience profiles are remarkably similar across a broad variety of military occupations.

Reference [8] presents evidence that the reason military experience profiles are similar is that the compensation system leads to similar patterns of pay by YOS regardless of service or occupation. These relatively fixed components of pay are basic pay, the basic allowance for housing and other components of Regular Military Compensation (RMC),¹⁰ as well as retired pay. In FY 2003, RMC and the retirement accrual for the active force accounted for over 90 percent

⁹ There are exceptions on the margin; for example, the Marines are the most junior force and the Air Force the most senior, but even given these, the military profiles are an order of magnitude different from nonmilitary profiles. Also, the Air Force has the most similar experience mix across career fields, presumably because of its policy of maintaining equal promotion opportunities. Also, compared with enlisted personnel, the typical officer with a given YOS will be about 4 years older, on average, because of entering after college rather than high school. Finally, relatively more officers stay beyond 20 years because they are more likely to have future chances of promotion at that point.

¹⁰ RMC includes basic pay, Basic Allowance for Housing (BAH), Basic Allowance for Subsistence (BAS), and the tax advantage on the allowances, which are considered tax-free benefits.

of direct compensation [9]. If other forms of fixed, noncash compensation are added, such as the health care benefit, the flexibility available to the services is even more limited.

There are bonuses and special pays that can be targeted by service, occupation, skill, location, or other attribute, but they form a small portion of total compensation: about 7 percent of cash pay and 3 to 4 percent of total compensation. The basic levels of compensation will motivate people to have, on average, the same continuation and retention behaviors. Thus, as a broad rule, the experience profiles of military personnel will be dictated by the dominant, across-the-board, one-size-fits-all compensation and personnel policies rather than the needs of individual occupations or communities.

Consequences of rigidity

The consequences of the lack of variation in military experience profiles cannot be overstated. The closed-loop entry policy and the retirement system strongly affect the ability of the services to shape the experience level of its force. As we have seen, the shape of the left-hand side of the experience profile is largely dictated by the lack of lateral entry, goals for numbers of careerists, and attrition and continuation rates. Since up to 97 percent of total compensation cannot be targeted by service, occupation, performance, or assignment, the ability of the services to create innovative experience paths here is limited. In the 10th through 20th YOS, the experience profile is flat, then drops off in a cliff because of the retirement system. Therefore, given current personnel, compensation, and retirement policies, the points of innovation are mostly in accessions and careers from the first reenlistment to 10th YOS.

It is important for several reasons to search for innovations and to try to loosen the constraints that prevent innovations at other career points. The experience profile for Navy enlisted shown in figure 1, and shared by the other services and by officers, is a one-size-fits-all profile that dates from a time when military mission and technology called for youth and vigor. Experience profiles driven by the outside forces we've discussed will only coincidentally align with the real needs of the services. For some skills, a relatively junior experience

profile is desired, while longer career lengths would have more value in other skills.

Many researchers have noted the consequences of this inflexibility in experience profiles, and some have done empirical work that shows the costs of constraining career lengths to be equal across communities. For example, [10] used civilian wage growth to proxy increases in the value of experience over time in technical and non-technical Navy enlisted jobs. They found that the technical jobs had relatively higher civilian wage growth and, by implication, higher returns on experience. In the Navy, however, wage profiles over time were similar for both technical and nontechnical ratings. A useful innovation here, then, might be to have flexible bonuses to match the experience premiums of technical workers.

Similar proposals are discussed in [11] for commissioned officers. The author discusses various commissions and study groups who have recognized that a one-size-fits-all system no longer fits a diverse officer force. He then summarizes some of the proposed solutions.

Future trends might force innovations

In the previous sections, we looked at how the Navy's experience profile differs from nonmilitary profiles, what drives those differences, and some of the problems that have arisen. In this section, we will look at what future trends might change the shape of the experience profile and force the services to make changes in their personnel and compensation policies.

In the future, both supply and demand factors may lead to significant changes. On the labor supply side, the American population is getting older, and young people will become a smaller proportion of the workforce. At the same time, the level of postsecondary education is expected to increase among young people, and there are ways that the Navy can benefit from bringing more college recruits

into the enlisted ranks.¹¹ Recruiting lateral entrants with more job experience is also a possibility.

On the demand side, future organizational and platform innovations will reduce the requirements for low-skilled labor and increase requirements for highly skilled and more experienced enlisted personnel. Future ship and aircraft acquisitions will change requirements slowly, with most changes occurring after 2011 and not accelerating until 2020. Changes in strategies for organizing and manning current platforms, however, may have an earlier impact.

Future requirements¹²

Overall, today's experience profile is very junior and forms a pyramid leading to very low requirements for personnel over YOS 20. We can think of the manpower requirements for the future Navy as coming from three distinct functions, as shown in figure 2:

- The requirements for unskilled labor will be small, but with some holdover. Even the most advanced designs for ships, submarines, and squadrons use some unskilled labor; making skilled workers do routine work can lead to dissatisfaction.
- There will be a larger requirement for skilled, experienced technicians. We've primarily extended the E6 and E7 grades to be consistent with industries' relatively greater use of technicians with 20 or more YOS. In today's Navy, E1–E9 paygrades are ranks and imply command authority. In a Navy with more technical jobs, however, advancement might sometimes mean gaining technical skill or experience, and not necessarily command authority. Breaking or loosening this

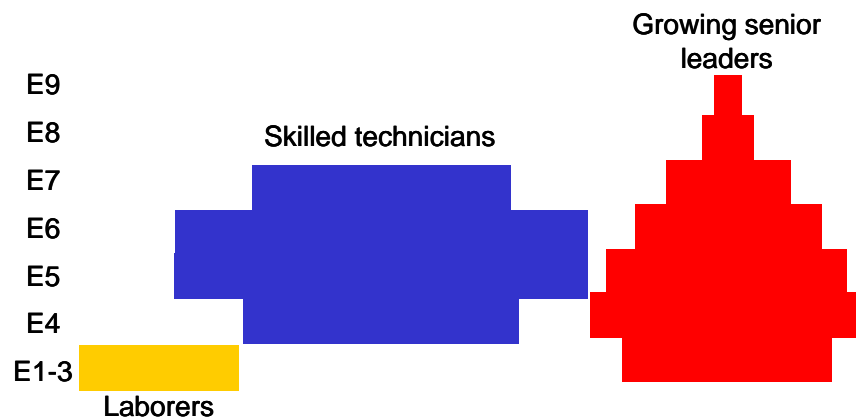
¹¹ For a discussion of available educational statistics, their shortcomings, and what can be inferred about likely future trends, see [12]. For a discussion of the extent to which the Navy needs college recruits to fill enlisted accession requirements and how it can benefit from college recruits, see [13].

¹² Reference [14] looks at major acquisition programs and Human Systems Integration literature and provides a synthesis of expert opinion on manpower requirements for future naval platforms. Much of the material in this section is drawn from this reference.

distinction will become an important issue. In some occupations, the Navy will need some proportion of highly skilled and highly paid technicians who do not necessarily have much military experience, high ranks, or command authority.

- A pyramidal ladder will remain to gain military experience and grow senior leaders. This requirement is not much changed from today's, except that we assume that more people enter at somewhat higher paygrades due to the possibility of lateral entry.¹³

Figure 2. Different functions drive different requirements



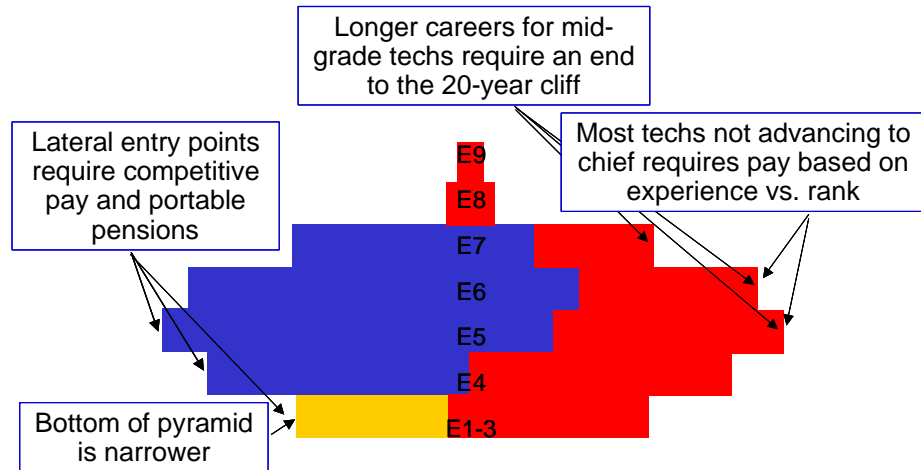
Moving from pyramids to ovals

The combination of the need for unskilled labor, technicians, and future leaders would together form a requirements profile for the entire enlisted force that looks something like that shown in figure 3. Compared to today's requirements it has many fewer E1-3s and relatively more E6s and E7s. If this is the target profile for the future force, then both increased lateral entry and changes in the length of at least some military careers are essential. These changes, in turn, require transforming the compensation and personnel

¹³ Many who become leaders may initially enter at relatively low ranks because of the model of senior leaders having a broad range of assignments over their Navy careers and strong acculturation in the service.

systems, especially entry and retirement pay, and pay advances tied to skill, experience, and performance rather than rank.

Figure 3. The end of the manpower pyramid?



Oval force profiles, or experience profiles that more closely resemble the nonmilitary ones in figure 3, cannot be sustained with current military personnel management and compensation systems. In order to move toward innovative career paths, the military will have to adopt many compensation reforms and personnel policy changes. The next sections will discuss a few of the many innovations that might be considered.

Options for creating innovative career paths

Innovation must include both compensation and personnel policies

The "right" answers to the design of a compensation system depend on the skill and experience levels that the pay and benefits are meant to attract and retain. The old pyramidal force profile, with many personnel at low paygrades and progressively fewer at higher grades, required a different personnel and compensation system than a force profile that has a larger proportion of personnel with moderate or extensive levels of experience. Also, the future Navy may require more people with specialized knowledge rather than generalists. And as a result, both optimal career lengths and assignment/rotation policies would change. Greater flexibility will also be key: more variation in pay and policies by occupation, experience, performance, and assignment.

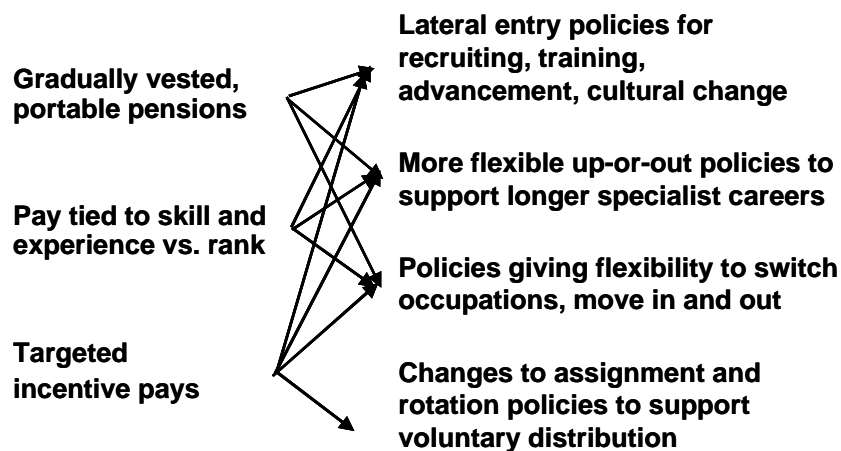
Oval force profiles and voluntary assignments cannot be sustained with the current personnel management and compensation systems. First, compensation changes needed to support significant levels of lateral entry, longer career lengths, and voluntary assignments include the following:

- Make entry pay for technically skilled recruits competitive at all levels. This is relatively easy at the first-term E1 vs. E3 level, but gets more complicated for officers and at higher levels of experience.
- Reform the defined-benefit, 20-year, cliff-vested retirement system.
- Increase the ability to target pay by occupation, experience, assignment, and performance.

These changes in the compensation system have several purposes. First, the intention is to break the paradigm of bringing in accessions only at the bottom of the system. The new model will be a more varied pattern of accessions, in which lateral entry and in-and-out paths are also possible. The second purpose of compensation reform is to allow more variation in pay and career length among different kinds of personnel, based on occupation and assignment.

In addition to changes to the compensation system, major changes in Navy and DoD personnel policies will be required. Some of the policy changes, and their relation to compensation changes, are shown in figure 4.

Figure 4. Compensation reforms go hand in hand with policy changes



Given the momentum to make the appropriate changes in both compensation and personnel policies, many beneficial changes could be made in traditional military career paths. We have seen that some of these old career patterns have already served the Navy poorly. Furthermore, they promise to create greater problems for a future Navy with a more agile force, different technologies and missions, and a wider diversity of skills and occupations. Many possibilities for change have been discussed since the beginning of the AVF, and many more are being discussed now.

Innovative entry points

Since growing people from within fills almost all military jobs, many human resource policies are designed to develop members for future jobs. Training, rotation, and up-or-out policies, and even some compensation policies, are heavily influenced by the closed system.

Flattening out the left-hand side of the experience profile requires breaking the Navy's closed-loop accession policy and bringing in more lateral entries. Almost all pilot programs to date have been of early lateral entry—that is, replacing A-school training or NEC training by bringing in pretrained recruits. In general, CNA studies of these programs have recommended greater reliance on private-sector training where clear civilian counterparts exist [15]. Another paper in this study reviews lessons learned from previous attempts and then proposes a pilot program for recruiting pretrained civilians [1]. The author has an extensive literature search and description of previous programs to recruit pretrained civilians and evaluations of those programs. She makes, however, this distinction: “we use the term pretrained to refer to those who have civilian education and/or training in an occupational field, but little or no work experience. Lateral entrants, in contrast, have both training and significant experience.” In addition, [13] examines how the Navy can take greater advantage of the broader college market.¹⁴

What we are suggesting, however, is that within the near future the services will have to move beyond a very structured program to allow a minimal number of junior college or college graduates to enter as relatively high paygrade enlisted personnel. To create this innovative career path, however, some very difficult issues will have to be resolved.

Questions that must be addressed regarding lateral entry include:

- How can pay, experience, and command authority be separated enough to compensate lateral entrants adequately?

¹⁴In addition, a study in CNA's FY 2005-2006 program is investigating lateral entry at other, higher points, including with some job experience.

- How can the Navy become flexible enough that it doesn't duplicate training or knowledge that people have acquired before entering the Navy?
- How can recruiting be restructured to take advantage of the new markets?
- What systems would have to be in place to distinguish occupations that are Navy specific and thus not candidates for lateral entry?
- How will military-specific training, acculturation, and indoctrination be provided to lateral entrants? This issue becomes more difficult the later in people's careers they are allowed to enter.
- What processes would have to be in place to support people moving in and out of the Navy?
- The entire system of bringing in new recruits and providing all training in-house is deeply ingrained in Navy culture. How could the Navy manage the whole range of cultural issues that would arise from deviating from it?

Adjusting career paths through retirement reform

The current military retirement system dates back to 1947 and was controversial from the start. Despite almost universal criticism of the system by commissions and analysts, retirement pay has proved to be remarkably resilient. In 1986, Congress passed the REDUX reforms, which would have reduced benefits for post-1986 entrants. But then the changes were repealed in 2000, before a single servicemember retired under the new system. This experience is a strong signal that any changes to the retirement system will be difficult and will require a great deal of cooperation between the services, DoD policy-makers, advocacy groups, and Congress.

The military retirement system differs from most private or government pensions. Typical retirement plans have defined contribution rather than defined benefit plans, earlier vesting, don't start paying

benefits at 20 years of service, and are less generous.¹⁵ In the private sector, the Employee Retirement Income Security Act (ERISA) requires employers to vest employees in their retirement system within 5 to 7 years. Once employees are vested, they may take their account balances with them when they leave their current employer. In contrast, the military is exempt from ERISA, and its retirement system has no vesting until 20 years of service. At 20 YOS, it gives full eligibility and a uniquely generous payout to servicemembers who can be as young as 38 or 40 [16].

We have already discussed how the military retirement system affects experience profiles, and the consequences of cliff vesting on transition behavior cannot be overstated. The military retirement package is the driving force behind why people stay in or leave the military after around 10 years of service. Reference [2], another white paper in this series, discusses in more depth the history of the retirement system, its strengths and weaknesses, and reform proposals. In this section, we will discuss some of the general features of the best reform proposals. Then we will outline career path innovations that would be feasible if the reforms discussed in [2] were adopted.

Reforming retirement pay

Retirement benefits should accomplish two goals. One is to induce personnel to separate voluntarily when the services want them to. The second is to provide people who have served their country with something to live on in their old age. There are, therefore, strong arguments for the services to provide some form of retirement benefit.

¹⁵ Defined contribution plans have individual accounts for each participating employee. Employer contributions are allocated among employees' accounts according to a plan formula. Participants are entitled to their vested balance. The account can contain both employer and employee contributions, depending on the plan's terms. A defined benefit plan specifies participants' benefit entitlements. The benefit is usually determined by a formula based on a percentage of compensation times years of service.

Drawbacks of the current system

However, as we have discussed, the current military retirement system has serious drawbacks. Retirement reform is a perennial issue and, as we have noted, the current system is firmly entrenched. Nevertheless, there is no doubt that reform is needed. Some of the problems with the current system are:

- As a deferred benefit its value to recruit or to retain people in their early years of service is limited. Replacing an overly generous retirement benefit with more upfront cash pay would improve the present value of compensation to younger servicemembers.
- The pull and push effects of the 20-year cliff system make it difficult to manage voluntary transitions during the 10-20 YOS period. People are more or less locked in from 10 to 20 years, and then leave at 20. This inhibits on- and off-ramp innovations.
- Its inflexible 20-year cliff vesting drives the experience profiles for YOS 10 to 20 to be similar across occupations, services, and outside circumstances. Furthermore, many analysts argue that military technology, missions, and occupations used to be such that the services designed their retirement benefit to make sure that people separated early. Even now an older, more experienced, more diverse force is needed. Given anticipated changes in naval technology, an even more diverse and experienced force will be needed in the future. Because of the rigid retirement system, however, creating significant variation in experience profiles across occupations is difficult.

Outline of reform proposals

A successful outline for reform, then, would address the drawbacks above while recognizing that an effective retirement system should support the two separate objectives of allowing people to save for old age and allowing the services to manage separations from the force.

Today's system does not support the objective of helping people save for old age very well. It would perform better if servicemembers

were vested earlier in an old-age pension that could be either the current defined benefit type or a defined contribution more similar to those offered in the private sector (or some combination). The earlier vesting would allow portability to other jobs and increase its appeal to recruits who do not plan to stay for 20 years. The old-age part of the system would be an entitlement that people earn based on how long they serve. The beneficiaries could then begin to withdraw benefits at a standard retirement age (e.g., from 60 to 65).

The second purpose of the retirement system is to improve force management by enabling the services to separate members when it is in their interest. A flexible force management tool would give each service more discretion to shape experience profiles by skill, changing circumstances over time, and even individual performance. The separation payments might take the form of an annuity (as under the current system) or a lump-sum cash payment. But because they are intended to be a force management tool, the separation payments are explicitly not an entitlement. The services currently have legislation written for flexible Voluntary Separation Pay, but its usefulness will be limited without retirement reform [17].

Even if the military services change their old-age pension to one similar to the private sector, they will still need a flexible force-shaping tool that will allow them to pay targeted separation bonuses by YOS, occupation, and performance. Even though most civilian employers terminate employees at-will, and the military does to some extent, the military will continue to be more of a “grow from within” system. A Variable Separation Bonus (VSP) would provide a lever to target payments at different career points to those the services would like to leave, i.e., the least productive and those who would not otherwise leave [2, 17].

In his review of retirement reform literature and the proposals of past study commissions, Warner [2] summarizes features that best meet the criticisms leveled at the old retirement system. He then points out that some features, such as very early vesting, make plans even more expensive than today’s military retirement costs, so that tradeoffs would have to be made. As a result, he makes a proposal that includes:

- Separating the old-age benefit and the force management tool.
- The old-age benefit would be vested earlier, at 10 years or before, and paid starting at around age 60. It would be either defined benefit or defined contribution. Some options mentioned were one similar to the Federal Employee Retirement System (FERS) or government TSP contributions at a 50-percent matching rate, up to 5 percent of pay.
- The force management tools still have to be designed but could consist of a system of transition benefits for all personnel who serve past a specified career gate, and exit payments begun at career points that may vary by skill, service, and officer-enlisted status. This system could place existing retirement and force-shaping compensation tools in their proper roles in order to meet the two goals of providing for retirees and having a flexible, force-management tool.

This proposal is largely consistent with those advanced in earlier papers, such as [6], although it is more detailed and some of the details are different.

Resulting innovations

If the retirement reforms described in the previous section were adopted, a number of career path innovations would be possible. Without retirement reform, only marginal changes in many policies will be feasible.

For example, increased complexity in some job fields implies a need to change experience levels in these fields. Considerable investments are made by the services to provide highly technical training to some personnel. As careers become more tailored, increased flexibility in the timing of promotion and retirement may be necessary. The current one-size-fits-all compensation and retirement systems, however, limit the Navy's ability to create different career paths in different occupations.

Changes to experience profiles and generalist vs. specialists

Developing generalists who can perform a variety of jobs well and advance to top leadership positions requires broad education and a range of experience. Conversely, specialists may be more efficient in some circumstances but may also limit their ability to compete for future promotions. Clearly there is a tradeoff, but in the past the military has followed the generalist model for nearly all specialties. Innovations involving the specialist model at least for some specialties, then, might be promising.¹⁶

Some of the areas in which innovations may be needed include where the greater technical sophistication of combat systems, decentralization of decision-making, and changes in management structures are tipping the balance to a greater need for experience. Current policies often result in the release of key personnel with valued expertise, especially in fields where specialized, technical knowledge is needed.

The Defense Officer Personnel Management Act (DOPMA) and other policies that establish parameters for the length of careers, the rates and timing of promotions, the proportion of senior officers, and assignment patterns influence officers' careers. As the mission of the Navy has shifted to a multidimensional approach across a range of missions, and as technology and demographic factors have changed, the previous parameters may no longer be appropriate.¹⁷ This is an area for innovation, but within current limits of compensation policy.

Similar policy constraints on the enlisted side establish parameters for career lengths and rates and timing of promotions [19]. Again, these are reinforced by compensation policies that inhibit lateral entry, promotion without rank increases, and staying beyond 20 years.

¹⁶ There are certainly exceptions to this rule in the many existing career specialists in the military, such as medical corps, lawyers, and many warrant officer communities.

¹⁷ See [11 and 18] for more complete discussions of innovations in personnel systems for officers, including how DOPMA rules and up-or-out rules might have to be changed.

Navy experience profiles cannot be made substantially more senior, either overall or in select technical specialties, without retaining more people beyond 20 years of service. Although adopting incentive pays and changing up-or-out policies will make some difference, the 20-year retirement cliff is clearly the major driver of the upper end of the experience profile.

Off- and on-ramps

One novel approach to longer or more diverse careers would be to establish better mechanisms for transitions out of and back into active duty. Especially for occupations that have clear civilian counterparts, such as pilots, spending nonoperational assignments in private-sector jobs might provide enhanced educational and training opportunities not available otherwise. These years outside active duty could be spent either in the private sector or serving in the Guard or Reserve.

The current military retirement system may have little appeal to the kind of experienced, skilled Sailor with the ability and desire to move in and out of the Navy who is discussed in this paper. A portable and vested defined contribution retirement plan may be more attractive to these people.

An up-and-stay system¹⁸

A possible alternative to the current up-or-out personnel system would be an up-and-stay system. Under this system, there would be a two-tier progression. The junior force might be larger, but the senior force would be smaller and have longer careers. Selection into the career force might be congruent with some significant mid-career milestone, such as selection of O5 or for command. Promotion opportunities would sharply drop for officers entering the career force. However, once selected as a careerist, the officer would experience greater opportunities for multiple tours in key assignments and more substantial pay increases. Furthermore, once

¹⁸ This discussion is framed in terms of officers, but a similar system could be designed for enlisted. Reference [11] provides the most complete description of the officer innovation.

officers are selected in the career force, they would be able to complete their entire careers in the military (i.e., retirement age in the late 50s or early 60s instead of much earlier).

Obviously, as we have discussed, longer careers aren't possible without compensation reform as well. In particular, pay tables and the retirement system would have to be changed to accommodate this new system. In addition, given changes in requirements that are likely to result from the various trends discussed earlier, DOPMA and other force management tools will need greater flexibility.

Innovations in assignment policies and rotation patterns

With more lateral entry, more variation in experience profiles, and freer entry and exit from the force available, we also need to examine assignment policies and rotation patterns. In the traditional model, almost everyone entered from the bottom and rotated quickly through a series of assignments designed to train Sailors to be leaders. Choice of assignments was generally limited, and tours had to be relatively short to expose Sailors to a broad range of fields by the time they reached leadership positions. The emphasis was on producing leaders with general rather than specific knowledge. In this section, we will look at some options for changing assignment and rotation policies and how they could affect career paths.

Assignment policies¹⁹

Having more choices in entry points, force management, on- and off-ramps, and retirement decisions will make the contradiction between voluntary service and involuntary assignments more obvious. The concept of letting Sailors choose assignments, rather than having the Navy issue orders, may seem in conflict with traditional military culture. Without challenging the need to retain culture in some areas, there are times when members may value having a choice and the military has no reason related to its mission to deny choice.

¹⁹ The discussion in this section owes much to [6].

Servicemembers value many attributes of jobs, tours, and careers in addition to monetary payments. Since military compensation is heavily weighted toward in-kind compensation and benefits, the value of its compensation package tends to vary widely with differences in individual tastes and circumstances. When inflexible assignment policies are layered on top of an already inflexible compensation system, Sailor dissatisfaction is almost inevitable. Exploring innovations in assignment policies that will give Sailors more choice will give the Navy a means to build on, rather than ignore, individual differences.

Under the current system, the Navy tends to fill most sea billets but always be short in some shore billets. Its primary incentive for filling sea billets is sea pay. In general, the military offers a host of special pays and other incentives that are available for those who take on the jobs that are most difficult to fill. For example, people may be offered “higher valued” assignments as a reward for reenlisting. In the Navy, this could mean another assignment in the same location. For some officers, it could mean being accepted in an education program.

Allow Sailors to choose their assignments

An innovative system to allocate Sailors to different jobs would address the role of servicemember choice. An optimal system would be able to fill hard-to-fill assignments and would provide incentives for personnel to choose to do what the services desire. The Navy’s use of Assignment Incentive Pay (AIP) has shown early promise and is an innovative example of a service allowing its members to express their preferences and be compensated for them.²⁰ AIP, in use since 2003, gives incentives to match the service’s need to have people in particular jobs with Sailors’ preferences.

Rotation policy and tour lengths

One aspect of military service is that people are rotated between jobs. Rotation has its roots in moving servicemembers in and out of

²⁰ For a description and early evaluation of the AIP program, see [20].

jobs that involve arduous duty, family separation, and/or danger. Changing jobs is also a career progression tool, just as in the private sector, and is sometimes done with a promotion but not a physical move.

Different tour lengths for experienced and inexperienced Sailors

Rotation has costs in some situations. High turnover in operational units has been found to reduce performance. Reference [21] found that the proportion of enlisted personnel who were new to their ship had a negative effect on whether the ship deployed fully ready to undertake its wartime missions. Reference [22] analyzes relationships between (a) turnover and unfilled positions and (b) the material condition of the ship and performance during training exercises. The authors again find that turnover, which could be tied to rotations, has a negative effect on readiness. These studies and other aspects of the relationships between crew rotation and readiness are summarized in [23].

Reference [24], however, examines civilian and MSC ships where rotation takes the form of experienced crewmembers replacing other experienced crewmembers. In this case, rotation doesn't have a negative effect since, unlike in the Navy model, there is no need to train new, unskilled crewmembers. The conclusion, then, may be that a useful innovation would be to allow more rotation, or more rapid rotation once Sailors have established their skills, but to keep rotation to a minimum while they are still inexperienced.

Greater assignment stability for specialists

In the traditional model with shorter careers, rapid turnover increased the population with a broad range of experiences and allowed for greater competition for promotions. If the retirement reform were adopted, however, another possible innovation would be to create specialist career paths with greater assignment stability. This could allow for greater return on investment in specific training and more on-the-job training in complex systems or complicated jobs. As naval technology becomes more complex, there will be relatively greater need for assignment stability [6].

Conclusion

As the Navy transforms into a more agile force, with different technologies and missions, it will encounter a number of challenges. Policy-makers and analysts have consistently cited urgent needs to reform the military personnel systems. In spite of this broad consensus, however, the basic structure of these systems and resulting career paths have remained largely unchanged.

Creating innovative career paths will not be easy. It will require extensive examination of options for both compensation and personnel policy reform. This paper has examined a few of these options and pointed out how interrelated the changes are.

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