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Military Compensation to Support Retention, Performance, and Talent Management

Testimony of Beth J. Asch¹
The RAND Corporation²

Before the Committee on Armed Services
Subcommittee on Military Personnel
United States House of Representatives

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Chairwoman Speier, Ranking Member Kelly, and distinguished members of the subcommittee, I would like to thank you for this opportunity to testify this afternoon. The Defense Officer Personnel Management Act (DOPMA) of 1980 is a key piece of legislation that governs officer management. In recent years, service leaders, Congress, and outside experts have come to the conclusion that DOPMA prevents the services from achieving certain personnel outcomes. It hampers the services' ability to recruit experienced civilians with specialized skills, such as cyber skills, or to accommodate nontraditional career paths, such as noncommand and technical career tracks. It provides insufficient opportunities for servicemembers to control their career trajectories, and it too closely ties promotions to rank and seniority, rather than performance. These concerns were highlighted in service leadership testimony to the Senate Armed Services Committee in January 2018.

The National Defense Authorization Act (NDAA) for 2019 created new authorities to address some of these concerns. It repealed the age limit of 42 for entry to the armed services; created more expansive constructive credit for relevant civilian labor market experience to allow direct commissioning (i.e., lateral entry) up to the grade of O-6; permitted merit-based promotion lists that allow officers up to five opportunities to compete for promotion; and allowed officers to opt out of promotion board consideration. At the same time, the services are also pursuing their own efforts. For example, the Army has established a Talent Management Task Force, and the Navy is pursuing its Sailor 2025 initiative to modernize personnel management and training systems.

¹ The opinions and conclusions expressed in this testimony are the author's alone and should not be interpreted as representing those of the RAND Corporation or any of the sponsors of its research.

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But any effort to improve retention, performance, and talent management must also consider whether and how the military compensation system might need to change. Like personnel management, military compensation is a critical strategic human resource tool. It helps the services attract and retain sufficient numbers of personnel with the necessary skills and qualifications to meet grade and experience requirements. The compensation system has performed remarkably well over time, despite dramatic changes in the military and the environment in which it operates. However, the concerns that led to DOPMA reform, as well as recent service initiatives to improve retention, performance, and talent management, raise questions about the current compensation system.

My comments today focus on these questions about the compensation system. Several areas merit a closer look for possible improvement.

- It should be ascertained if the appropriate benchmark for military pay is above the 70th percentile of civilian pay or if higher personnel quality, if required, can be achieved through more-targeted investments, such as bonuses.
- The annual pay adjustment mechanism might better track external wages relevant to military personnel.
- The structure of the officer pay table might need to be adjusted to create stronger incentives for performance. Some use of performance-based intra-grade pay should be explored, including the possibility of a time-in-grade pay table.
- Special and incentive (S&I) pay might become more flexible and efficient by making these pays a larger share of cash compensation and (for some pays) making the amount more explicitly based on performance or service obligation.
- The services should ensure that continuation pay for officers is set high enough to sustain officer retention under the new Blended Retirement System (BRS).
- Personnel policy efficiency might be improved and servicemembers' control over their careers might be improved if more elements of compensation were based on market mechanisms.
- Nontraditional career paths could also require changes to the military compensation system.

Objectives and Elements of the Compensation System

Beyond the overarching manning objective, compensation must also help achieve three additional human resource objectives. First, compensation, together with personnel policy, must be designed to provide individuals with proper incentives to work hard and seek advancement. Second, compensation should help sort personnel effectively into the ranks and jobs where they are best suited, including retaining and promoting more capable personnel to higher ranks. In addition, individuals with low ability or effort should be induced to leave. "Climbing" (seeking ranks for which one is unqualified) and "slumming" (the converse of climbing) should be discouraged. Third, compensation and personnel policy should induce personnel to stay long enough to provide a return on their training and experience and to meet mid-career and senior personnel requirements. However, compensation and personnel systems must provide incentives for individuals to leave when it is in the services' best interest for them to do so.

Other objectives or principles of military compensation are that it should be efficient and effective in both peace and war; predictable and understandable; fair; and sufficiently flexible to adapt to changing technology and tactics, supply and demand, and the environment in which the military operates.³

Military compensation is a complex system of pays, allowances, and benefits. The foundation is basic pay, determined by the military pay table, through which personnel of the same rank and years of service receive the same basic pay. Allowances, provided tax-free, are intended to meet servicemembers' living needs, such as food and housing. Members may also receive one or more of the 60 or so S&I pays targeted to personnel in specific circumstances, such as personnel who have strong alternatives in the civilian market (e.g., medical professionals). S&I pays are also used when the demand in the military for a skill, such as a certain language, increases; when compensation is required to offset dangerous or difficult aspects of the work; when training costs are very high, as with pilots; and when skills are particularly specialized, as with chaplains.

The military retirement system is the centerpiece of the compensation system. Servicemembers become vested after 20 years of service, and active component members receive an immediate annuity. As such, retirement provides a transition benefit for military retirees and an old-age benefit when they exit the labor force entirely. The elements of the new BRS are discussed later.

Setting the Level of Military Pay

Economists have argued that setting military pay for a volunteer force means that pay must be sufficiently high to induce sufficient numbers of people with the required qualities to voluntarily choose to forego civilian opportunities. Analyzing data from the 1990s, researchers found that the services were able to recruit and retain the required the quality and quantity of officers and enlisted personnel when military pay was at around the 70th percentile of civilian pay for individuals with similar demographic characteristics.⁴ This benchmark, at the 70th percentile of civilian pay, rather than the median (the 50th percentile), reflects the unique nature of military duty. Military jobs are often more hazardous, rigorous, and inflexible than civilian jobs, and a military career requires frequent moves. Servicemembers are subject to military discipline and are considered to be on duty at all times.

Since the early 2000s, the 70th percentile has been used as a guiding factor in setting military pay. Recent RAND analysis found that, over the 2000s, military pay relative to civilian pay

³ The objectives of military compensation are stated in the 2018 Military Compensation Background Papers as well as in the reports of the fifth (1984), seventh (1992), and 11th (2012) Quadrennial Reviews of Military Compensation. The Defense Advisory Committee on Military Compensation (2006) also reviewed the objectives of military compensation.

⁴ Office of the Under Secretary of Defense for Personnel and Readiness, *Report of the Ninth Quadrennial Review of Military Compensation*, Vol. 1-V, Washington, D.C., March 2002; Beth Asch, James Hosek, John Warner, *An Analysis of Pay for Enlisted Personnel*, Santa Monica, Calif.: RAND Corporation, DB-344-OSD, 2001.

increased substantially.⁵ Military pay is now above the 70th percentile benchmark and has been for some time; pay is at about the 90th percentile for enlisted members and at about the 83rd percentile for officers. Rising pay, allowances, and bonuses during the 2000s were needed to sustain recruiting and retention during wartime, when frequent and long deployments to Iraq and Afghanistan stressed the force. While military pay above the 70th percentile was critical for sustaining the force during wartime, the level of recruit quality is now also above the Department of Defense (DoD) benchmark for three of the four services. Throughout the services—with the exception of the Army—force quality, as measured by recruit aptitude, has increased considerably since the early 2000s. DoD requires that 60 percent of recruits have above-average aptitude.⁶ The increase in recruit aptitude is not entirely surprising, as a large body of research shows that, all else the same, higher military pay is associated with an increase in the supply of higher-quality enlistments.⁷

It is important to understand that the 70th percentile is not a goal in and of itself. Compensation should be set high enough to meet manning needs, including personnel quality objectives. **The services need to articulate if their quality requirements have increased, given that recruit aptitude currently exceeds the DoD standard.** Perhaps the complexity and highly technical nature of today’s defense environment requires a higher-quality force than in the early 2000s. If so, then perhaps the 70th percentile is not the right standard today, although research shows that military pay is not the most cost-effective instrument for improving recruit quality compared with bonuses and other targeted investments.⁸ On the other hand, if the services do not require higher personnel quality, then they need to explain why the quality of their enlisted recruits is generally higher than the DoD standard.

The annual percentage increase in basic pay is a related issue. The annual pay adjustment is an important source of income growth for military members. Section 1009c of Title 37 provides a formula for the annual increase in basic pay that is indexed to the annual increase in the Employment Cost Index (ECI) for the wage and salary of private-industry workers. The military pay increase is measured as the 12-month percentage change in the ECI for the third quarter of the calendar year where previous years’ values are used. For example, the ECI guiding the 2020 pay raise is the percentage change for the third quarter of 2018 relative to the third quarter of

⁵ James Hosek, Beth Asch, Michael Mattock, and Troy Smith, *Military and Civilian Pay Levels, Trends and Recruit Quality*, Santa Monica, Calif.: RAND Corporation, RR-2396-OSD, 2018.

⁶ W. Steven Sellman, “Predicting Readiness for Military Service: How Enlistment Standards are Established,” draft prepared for the National Assessment Governing Board, September 30, 2004.

⁷ For a summary of these studies, see Beth Asch and John Warner, “Recruiting and Retention to Sustain an Volunteer Force,” in *Routledge Handbook of Defence Studies*, David Galbreath and John Deni, eds., London: Routledge, 2018, pp. 87–97; Beth Asch, James Hosek, John Warner, “New Economics of Manpower in the Post-Cold War Era,” in *Handbook of Defense Economics*, Vol. 2, Todd Sandler and Keith Hartley, eds., Amsterdam: Elsevier, 2007, pp. 1076–1138; John Warner and Beth Asch, “The Economics of Military Manpower,” in *Handbook of Defense Economics*, Vol. 1, Keith Hartley and Todd Sandler, eds., Amsterdam; Elsevier, 1995, pp. 348–398.

⁸ Recent research for the Army shows that the relative effectiveness of bonuses, recruiters and advertising depends on the recruiting objectives and the external environment (see David Knapp, Bruce R. Orvis, Christopher E. Maerzluft, and Tiffany Tsai, *Resources Required to Meet the U.S. Army's Enlisted Recruiting Requirements Under Alternative Recruiting Goals, Conditions, and Eligibility Policies*, Santa Monica, Calif.: RAND Corporation, RR-2364-A, 2018).

2017. That said, the statute also allows the President to specify an alternative pay adjustment, so that the ECI is ultimately only a guide for adjusting basic pay. Recruiting and retention outcomes also inform the recommended pay raise. Historically, the military pay increase has often deviated from the increase in the ECI.

Using the ECI to compare military with civilian pay growth has the advantage that the ECI is readily available from the Bureau of Labor Statistics, and its use is codified in law. Further, it provides easily understandable information to military personnel about the nation's commitment to maintaining comparable pay. However, to function well, the ECI as an adjustment mechanism must be relevant to military enlistment and reenlistment decisions. A 1992 RAND study analyzed data between 1982 and 1991; although military pay lagged substantially behind the growth in the ECI, the services recorded no major recruiting and retention problems during this period.⁹ That is, measuring the “pay gap” using the ECI did not accurately track force management outcomes.

The problem with the ECI is that it does not accurately track the opportunity wages relevant to military personnel. The ECI is based on data from private industry wage and salary workers who are older and have a different mix of education and occupations than military personnel. Further, the size of the ECI-measured “pay gap” is sensitive to the base year chosen, so measures of the gap have an arbitrary component.¹⁰ Other pay adjustment mechanisms could be used that better reflect the demographics of military personnel. A RAND study developed the Defense Employment Cost Index (DECI) for this purpose; pay gap comparisons using the DECI found that it tracked military enlistment and reenlistment more accurately than the ECI.¹¹ That said, the ECI is available quarterly, while the DECI is an annual metric, and the ECI is less influenced by the more variable wages of young workers and so is more stable over time.

The DECI did not gain DoD or congressional acceptance when it was proposed in the 1990s¹²—but the ECI still has clear disadvantages. **The functioning of the ECI as an appropriate pay adjustment mechanism needs to be reevaluated and alternative approaches, including the DECI, should be reassessed with more recent data.** Inaccuracies in the pay adjustment mechanism should be minimized, especially given the growth in military personnel costs.

Structuring the Pay Table

Receiving much less attention than the annual adjustment to pay is the question of whether the structure of the military pay table is set appropriately. By structure, I mean by how much pay increases when a member is promoted, how much pay increases within a grade, and how these

⁹ James Hosek, Christine E. Petersen, Jeannette Van Winkle, and Hui Wang, *A Civilian Wage Index for Defense Manpower*, Santa Monica, Calif.: RAND Corporation, R-4190-FMP, 1992.

¹⁰ James Hosek, Beth Asch, Michael Mattock, Troy Smith, *Military and Civilian Pay Levels, Trends and Recruit Quality*, Santa Monica, Calif.: RAND Corporation, RR-2396-OSD, 2018.

¹¹ Hosek et al., 1992.

¹² See Congressional Budget Office, *Evaluating Military Compensation*, Washington, D.C.: U.S. Government Printing Office, June 2007.

pay increases are sequenced across grades and by longevity. This question is closely tied to retention, performance, and talent management because the structure of the pay table can affect performance and retention incentives for the best and the brightest. These incentives are produced when future outcomes such as higher compensation in the pay table is made contingent on current performance.

The structures of the commissioned officer and the enlisted pay tables have changed periodically since the end of World War II as a result of the addition of new grades in 1958, targeted pay raises such as those given in 2000–2004, and the extension of the pay table to 40 years of service in 2007. As with the level of pay, whether the pay tables are structured appropriately comes down to whether the services are satisfied with the performance and the retention of military personnel and these objectives are achieved at least cost. Recent DOPMA reform efforts, as well as service interest in improved talent management, suggests that it is prudent to consider whether the structure of the pay tables remain appropriate.

A first look at the structure of the officer pay table suggests that pay increases across rank may be overly compressed and may not provide adequate retention and performance incentives over a career. **For that reason, the structure of the officer pay table should be reevaluated to assess if the observed compression is appropriate.**

Research tells us that in a hierarchical organization like the military, the pay structure should be skewed across ranks for personnel to see a continuing reward to performance as they move up the ranks.¹³ “Skewed” means that the increase in pay associated with promotion rises with each subsequent promotion to a higher rank, so that the promotion pay bump is greater in upper than in lower ranks. For example, in a skewed pay structure, the pay bump associated with a promotion to O-7 should be higher than the pay bump associated with an O-6 promotion, and the O-6 pay bump should be larger than the O-5 pay bump, and so forth. It is important to note that the “pay bump” can occur in the form of both monetary and nonmonetary rewards, and even monetary rewards can take the form of other types of compensation, such as retirement or other deferred benefits—including better postservice civilian opportunities.

The military needs a skewed pay structure for three talent management–related reasons. First, larger pay raises in the upper ranks provide performance incentives for those in the more junior ranks, since those who perform well will have a higher chance of reaching those upper ranks and higher pay. Second, since more talented people are more likely to get promoted, a skewed structure motivates them to stay in the military and perform well. From a talent management perspective, it is important for the most talented to stay and seek advancement to the upper ranks, as the actions of those in the upper ranks have spillover effects on those in the lower ranks. Third, a skewed pay structure system addresses a key feature of the military’s promotion system: Namely, performance incentives will tend to decline as one moves up the ranks, for two main reasons. First, those in the upper ranks have lower promotion probability than those in the lower

¹³ See Beth Asch and John Warner, “A Theory of Compensation and Personnel Policy in Hierarchical Organizations with Application to the United States Military,” *Journal of Labor Economics*, Vol. 19, No. 3, 2001, pp. 523–562; Michael Bognanno, “Corporate Tournaments,” *Journal of Labor Economics*, Vol. 19, No. 2, 2001, pp. 290–315; Sherwin Rosen, “Prizes and Incentives in Elimination Tournaments,” *American Economic Review*, Vol. 76, 1986, pp. 701–715.

ranks and so a lower probability of receiving a promotion-related award. Second, competition for promotion is keener in the higher ranks. People who are not a good fit tend to be weeded out in the junior ranks, so those competing for a promotion to the upper ranks tend to be better performers. The keener competition makes it harder to earn a promotion in the upper ranks, thereby reducing performance incentives. The pay structure must be skewed to offset declining performance incentives and sustain incentives for performance across the officer pay table.

The current officer basic pay structure is not skewed but appears compressed.¹⁴ Under a skewed structure, the increase in pay associated with each subsequent promotion should increase with rank. Instead, under the current officer pay structure, the increase in pay associated with each subsequent promotion is roughly the same. Faster or slower promotion has relatively little effect on this finding.

It is possible that other factors have reduced the required skewness of the officer pay structure. Individuals may value sufficiently the status and other nonmonetary factors associated with higher ranks; military training may be sufficiently less transferable to the external market; and team-oriented work may make large pay variations across ranks seem likely to erode cooperation and esprit de corps. Finally, retired pay could provide an important source of skewness.

The structure of enlisted pay table should also be reevaluated. Entry enlisted pay increased considerably in the early 1970s prior to the beginning of the all-volunteer force, compressing the overall 1972 enlisted pay structure. But targeted pay raises in 2000–2004 and in 2007, when the 40-year pay table was created, increased the skewness of the current enlisted pay structure. Again, whether this structure has enabled the services to meet its performance and retention objectives is unclear.

Another aspect of the military pay structure is the pay differences within a grade—i.e., longevity increases. These pay differences could also be structured to motivate effort and induce the proper personnel sorting. Intra-grade pay should rise to some extent with experience to provide continuing skill acquisition and performance incentives. However, the longevity increases within a grade cannot be as large as the pay increases associated with promotion; otherwise, individuals will be encouraged to “slum.” At some point, longevity increases should stop, so that those who have low promotion chances will be induced to leave voluntarily when it is in the services’ interest that they do so. Today, intra-grade performance incentives are weakened by the lock-step nature of longevity increases in the current pay table.

Given interest in technical career tracks and lateral entry, any evaluation of the structure of the officer and enlisted pay tables should consider whether the structure of longevity increases continue to be appropriate and whether some use of performance-based longevity increase is warranted.

¹⁴ See Congressional Budget Office, *Military Pay and the Rewards for Performance*, Washington, D.C.: Congressional Budget Office, December 1995; Directorate of Compensation, Office of the Under Secretary of Defense for Personnel and Readiness, U.S. Department of Defense, *Military Compensation Tables*, Washington, D.C.: U.S. Department of Defense, 2018.

Setting Special and Incentive Pays

S&I pays are the primary way that compensation varies with occupation, assignment location, or type of duty for members in the same rank and years of service. The roughly 60 different S&I pays are intended to provide the services with flexibility to recognize persistently higher civilian pay for similar skills in the military, onerous or dangerous working conditions or assignments, specialized skills and proficiencies, temporary fluctuations in supply and demand conditions, and high training costs. The flexibility stems from the ability of the services to turn some of these pays on and off and to target them to specific groups of personnel to achieve potentially different experience or grade mixes across occupations. S&I pays are also considered by economists to be a more cost-effective means of addressing recruiting and retention challenges than across-the-board increases in basic pay.

Research shows that bonuses targeted toward critical occupations are both effective and cost-effective as enlistment and retention incentives.¹⁵ In the case of enlistment bonuses, research shows that they induce recruits to choose critical occupations and expand the recruiting market. Enlistment bonuses are found to be more cost-effective in expanding the market than across-the-board pay raises because the bonuses can be turned off and can be targeted to high-quality recruits. Analyses of special pays for such officers as mental health care providers and Air Force aviators show that special pays increase retention and induce officers in these communities to select longer obligations.¹⁶

S&I pays might be improved in three key areas. First, despite the large number of pays, S&I pays account for only \$1 in \$20 of the 2019 defense military personnel budget. For individual members, S&I pays make up about 3 percent of total compensation and 5 percent of cash compensation, although the percentage is much higher in certain occupations.¹⁷ Put differently, the primary source of flexibility and efficiency in the compensation system turns out to be only a small fraction of cash compensation. This shortcoming is seen by the small differences in cash compensation across broad occupational areas for both enlisted personnel and officers.

Pay variation is relatively small for members at similar points in their career, even when including bonuses and S&I pays in the measure of pay.¹⁸ This is likely attributable to a

¹⁵ Michael Polich, James Dertouzos, and James Press, *The Enlistment Bonus Experiment*, Santa Monica, Calif.: RAND Corporation, R-3353-FMP, 1986; Beth J. Asch, Paul Heaton, James Hosek, Paco Martorell, Curtis Simon, and John T. Warner, *Cash Incentives and Military Enlistment, Attrition, and Reenlistment*, Santa Monica, Calif.: RAND Corporation, MG-950-OSD, 2010; David Knapp, Bruce R. Orvis, Christopher E. Maerzluft, and Tiffany Tsai, *Resources Required to Meet the U.S. Army's Enlisted Recruiting Requirements Under Alternative Recruiting Goals, Conditions, and Eligibility Policies*, Santa Monica, Calif.: RAND Corporation, RR-2364-A, 2018.

¹⁶ James Hosek, Shanthi Nataraj, Michael G. Mattock, and Beth J. Asch, *The Role of Special and Incentive Pays in Retaining Military Mental Health Care Providers*, Santa Monica, Calif.: RAND Corporation, RR-1425-OSD, 2017; Michael G. Mattock, James Hosek, Beth J. Asch, and Rita Karam, *Retaining U.S. Air Force Pilots When the Civilian Demand for Pilots Is Growing*, Santa Monica, Calif.: RAND Corporation, RR-1455-AF, 2016.

¹⁷ Defense Advisory Committee on Military Compensation, *The Military Compensation System: Completing the Transition to an All-Volunteer Force - Report of the Defense Advisory Committee on Military Compensation*, Arlington, Va.: Defense Advisory Committee on Military Compensation, April 2006.

¹⁸ Beth J. Asch, James Hosek, and Craig Martin, *A Look at Cash Compensation for Active Duty Military Personnel*, Santa Monica, Calif.: RAND Corporation, MR-1492-OSD, 2002.

longstanding egalitarian philosophy that governs the setting of military pay, in which everyone in the same grade and year of service should receive similar pay regardless of job type, location, and exposure to danger. But this egalitarian approach is expensive, because significant cost savings might be realized by flexibly targeting pay to specific communities and circumstances rather than across-the board. **Past commissions have argued that S&I pays should comprise a larger share to improve pay flexibility and efficiency.**¹⁹ So far, reallocating compensation from basic pay to S&I pays has been slow.

Second, S&I pays could be set to better sustain and reward performance. In a number of cases, these pays are flat monthly amounts fixed by law. For example, Special Duty Assignment Pay (SDAP) ranges from \$75 to \$450 per month. The amount varies with the responsibility and demands of the assignment, but not with performance. For instance, recruiters receive SDAP, but the amount is unrelated to the recruiter's productivity in achieving the recruiting mission. One approach for linking S&I pays to performance is to make these pays a function of pay grade and, therefore, promotion. Linking S&I pays to grade would reinforce the relationship between financial return and performance and promotion. Another approach would be to explicitly base payment of some S&I pays on whether the member met performance criteria. For example, in the case of recruiting, different SDAP levels could be set so the payment depended on meeting recruiting goals over a period of time. Different approaches should be explored.

Third, S&I pays are more cost-effective when they include an incentive to select a longer service obligation. For example, RAND research finds that a dollar-for-dollar increase in aviation continuation pay (an S&I pay for aviators that depends on obligation length) has a larger effect on aviator retention than an increase in aviation continuation incentive pay (an monthly S&I pay amount that does not change with obligation length).²⁰ Therefore, to achieve a given change in retention, an S&I pay would have to increase more if it does not depend on a service obligation. **Careful consideration should be given to identifying if S&I pays that are currently flat amounts per month should be made contingent on a service obligation.**

Blended Military Retirement System

The creation of the BRS in NDAA 2016 (and its amendment in NDAA 2017) represents the first major change to the military retirement system since the end of World War II. The BRS retains a defined-benefit plan from the legacy system and adds a defined-contribution plan and a new pay called continuation pay (CP). Under a defined-contribution plan, a percentage of earnings is paid on a regular basis into an investment fund during the worklife of the future retiree and then paid out at retirement age as a lump sum or as an annuity. The BRS was introduced to modernize the legacy system and addressed several criticisms raised by past commissions and study groups.

¹⁹ See Defense Advisory Committee on Military Compensation, *The Military Compensation System: Completing the Transition to an All-Volunteer Force—Report of the Defense Advisory Committee on Military Compensation*, Arlington, Va.: Defense Advisory Committee on Military Compensation, April 2006.

²⁰ James Hosek, Michael G. Mattock, and Beth J. Asch, *A Wage Differential Approach to Managing Special and Incentive Pay*, Santa Monica, Calif.: RAND Corporation, RR-2101-OSD, 2019.

Two issues regarding the BRS have been raised by force managers and researchers. First, some have argued that BRS embeds a weaker incentive to remain in service because of the reduction in the defined benefit annuity from a multiplier of 2.5 percent to 2.0 percent for those reaching 20 years of service and because of vesting after two years of service in a portable retirement benefit—the TSP—gives early-career service members an incentive to leave earlier. RAND analysis shows this concern is likely to be unfounded.²¹ Since the TSP benefit cannot be claimed until age 59-and-a-half at the earliest and the annuity is claimed after 20 years of service, these incentives to leave are not likely to be large for members in their early career. Further, offsetting the increased incentive to leave is also a stronger incentive to stay. The BRS includes continuation pay, which increases the incentive to stay both for junior personnel looking to the future and those who are under a CP service obligation. In addition, while early vesting of the TSP increases the value of leaving, the matching contributions that would be foregone by a member who leaves provide an incentive to stay.

The second concern is related to the continuation pay. Congress mandated that CP be set at a minimum of 2.5 times monthly basic pay (e.g., a 2.5 multiplier), but concerns have been raised about whether the minimum is too low for officers. RAND research shows that retention can be sustained under the BRS for officers and for enlisted personnel relative to the legacy retirement system, but only if CP multipliers are set appropriately.²² For enlisted personnel, the appropriate multiplier was found to be 2.5, the mandated minimum. But for officers, the analysis found that the minimum is too low to sustain officer retention and should be closer to 12 or about a year's worth of basic pay. The analysis found that in the transition years, retention problems may not show up immediately or may be relatively muted; new officers who are automatically enrolled in the BRS will be under an initial service obligation and officers who opted into the BRS will tend to be relatively junior and may not be influenced by the CP until they reach their mid-career. But, in the long term, absent any other change, the BRS is predicted to lead to lower officer retention unless the CP is set higher than the minimum.

Thus, the adequacy of the minimum CP differs for officers and enlisted. The move to BRS is predicted to have a larger effect on the retention of officers than enlisted, so the CP must be higher for officers to offset this effect. The larger retention effect is attributable to three factors. First, an individual in early or midcareer looking forward toward military retirement will expect a lower annuity under the BRS because of the reduced multiplier. Because officers have higher retention and a higher likelihood of reaching 20 years of service, they are more likely to experience the reduction in the multiplier than their enlisted counterparts. Second, officers earn higher basic pay and can expect a larger annuity if they become eligible at 20 years of service. Consequently, the reduction in the multiplier has a larger effect for officers than for enlisted personnel with a given number of years of service. Finally, we estimate that officers place a higher value on a dollar received in the future than do enlisted personnel, so a given reduction in future benefits, such as the reduction in the annuity, is perceived as larger for officers. Both CP

²¹ Beth J. Asch, Michael G. Mattock, and James Hosek, *The Blended Retirement System: Retention Effects and Continuation of Pay Cost Estimates for the Armed Services*, Santa Monica, Calif.: RAND Corporation, RR-1887-OSD/USCG, 2017.

²² Asch, Mattock, and Hosek, 2017.

and TSP help to offset the negative effects of the reduced multiplier, but the CP multiplier that sustains retention still must be higher for officers than for enlisted personnel. **Thus, it is important that the services ensure that CP is set appropriately to sustain officer retention under the BRS.**

Increasing Volunteerism

The foundation of the all-volunteer force is the use of compensation and other policies to induce civilians to volunteer for service, and then once in service, to voluntarily remain in service. However, other aspects of service are anything but voluntary. For example, the matching of personnel to assignments or locations is often done through bureaucratic methods whereby personnel may end up in undesirable assignments or locations. In other words, there is a “share-the-pain” policy: “If you take a bad assignment today, we’ll give you a better one tomorrow.” This is a kind of “command-and-control” philosophy that is better suited for a draft military than a volunteer force.

One place where innovations in compensation policy could make the services and their personnel better off is in using compensation to induce volunteers for onerous or dangerous assignments. The Navy piloted a test of this approach in its use of assignment incentive pay (AIP) in the early 2000s. In the pilot, Navy AIP rates were set in an auction based on sailor willingness to go to particular locations and the number of unfilled billets (i.e., supply and demand). AIP was found to be more efficient than the “share-the-pain” approach. Specifically, the Center for Naval Analyses found that involuntary assignments fell to 5 percent (from 100 percent), the Navy saved money (estimated at \$2,200 per billet in 2006), and manning improved in sea duty jobs.²³ The Navy was better off because it achieved its manning objective at less cost, and members were better off because they exercised more control over their career. **In the future, more elements of compensation could be based on market mechanisms.**

Compensation for Nontraditional Career Paths

As mentioned, NDAA 2019 included DOPMA reforms that would give constructive credit to facilitate lateral entry as well as other changes to permit less traditional career paths. Still unknown, though, is whether following a less traditional career path will also mean a less traditional pay trajectory over a career, and importantly, whether the current pay system can easily accommodate possible nontraditional pay trajectories while still facilitating the pay trajectories for traditional careers. As with those following traditional careers, the pay for those following nontraditional careers should be set to attract, retain, motivate, and otherwise assist the services in meeting their manning objectives efficiently, given the external opportunities faced by those following these careers.

²³ Peggy A. Golfin, Diana S. Lien, and David Gregory, *Evaluation of the Assignment Incentive Pay (AIP) System*, Alexandria, Va.: Center for Naval Analyses, CAB D0010240.A2/Final, June 2004; Peggy A. Golfin, *Manning Under AIP*, Alexandria, Va.: Center for Naval Analyses, 2006.

The 13th Quadrennial Review of Military Compensation is currently considering the advisability of replacing the time-in-service pay table with a time-in-grade pay table. A time-in-grade table has been suggested as a way to better facilitate lateral entry as well as to reward better performers.²⁴ Thus, it is possible an alternative time-in-grade system would be improvement. On the other hand, appropriately structured constructive credit for time in service might be equally effective. **More information will be needed from the forthcoming 13th Quadrennial Review of Military Compensation report about the relative merit of a time-in-grade table for facilitating the pay of nontraditional careers.**

Conclusion

The key recommendations and areas for consideration are:

- To better ascertain if the appropriate benchmark for military pay is above the 70th percentile of civilian pay, the services should articulate if their quality requirements have increased.
- If quality requirements are greater, the services should also articulate whether pay, rather than more targeted resources such as bonuses, is the most appropriate means of achieving higher aptitude requirements.
- Reevaluate the pay adjustment mechanism. The ECI has clear disadvantages. Measuring the “pay gap” using the ECI did not performed well historically in terms of tracking force management outcomes like recruiting and retention, and the size of the ECI-measured “pay gap” is sensitive to the base year chosen, so measures of the gap have an arbitrary component. The functioning of the ECI as an appropriate pay adjustment mechanism and alternative approaches, including the DECI, should be reassessed with more recent data.
- Consider increasing performance incentives embedded in the pay table: First, some use of performance-based intra-grade pay should be explored, including the possibility of a time-in-grade pay table. Second, the officer pay structure appears compressed and pay compression has increased over time, so that inter-grade performance incentives for officers appear to be dampened and occurring through nonmonetary factors. Third, greater incentives associated with promotion should also be explored for officers.
- Improve the setting of S&I pay:
 - To increase pay flexibility and efficiency, S&I pays should comprise a larger share of cash compensation.
 - Consider basing some S&I pays explicitly on members meeting specific performance criteria and making S&I pays that are currently flat amounts per month contingent on a service obligation.
- Ensure the appropriate setting of CP for officers so that retention is sustained under the BRS.
- Consider ways of using compensation to a greater extent to induce more volunteerism and greater efficiency of compensation, such as the unit or location assignment system.

²⁴ David Chu, *Statement on the Defense Officer Personnel Management Act: Hearing Before the Subcommittee on Personnel, Committee on Armed Services*, Washington, D.C.: U.S. Government Printing Office, January 24, 2018.

- Recognize that changes to DOPMA to achieve nontraditional careers should also consider whether and how military compensation should change.

These recommendations point to the value of developing new measures of performance that will enhance the services' capability to determine empirically the extent to which alternative compensation and personnel policies result in better performance and improved retention of high performers relative to nonhigh performers. Data containing the new measures of performance would also be helpful in evaluating policies.