



INSTITUTE FOR DEFENSE ANALYSES

Revisiting the Criteria for Military Essentiality in Total Force Manpower Management

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Executive Summary

The Department of Defense employs a Total Force approach to accomplish national security objectives, including military, government civilian, and contracted support. Military personnel are the most restricted workforce type due to their necessity in ensuring the legitimate use of force in conflict. In updating Section 129 of Title 10, United States Code, the 2017 and 2019 National Defense Authorization Acts require that military personnel be reserved to perform functions only Service members can discharge in order to achieve national defense goals or to enable the proper functioning of the military departments. DoD Directive (DoDD) 1100.4 specifies the guiding principles for the military Services and other DoD components to use when determining their workforce mix of military, civilian, and contract labor.

In addition to this directive, DoD Instruction (DoDI) 1100.22, establishes policy requiring tasks that are not “military essential” in nature to be designated for government civilian or contracted support where appropriate. The DoD’s September 2017 Workforce Rationalization Plan renews attention to the importance of civilians as enablers of mission success and provides guidance on employing civilians to ensure the sustainability of the All-Volunteer Force. Guided by both legal and economic considerations, DoDI 1100.22 provides specific criteria and guidance to determine which manpower category—military, government civilian, or contracted support—should perform which functions across the defense establishment. In determining the appropriateness of military personnel use, the instruction further states that a function should only be designated for military performance when

- Military-unique knowledge and skills are required to perform the duties;
- Military incumbency is required by law, executive order, treaty, or international agreement;
- Military performance is required for command and control, risk mitigation, or esprit de corps;
- Military manpower is needed to provide for overseas and sea-to-shore rotation, career development, or wartime assignments; or
- Unusual working conditions are not conducive to civilian employment.

Implementing these criteria across DoD components remains inconsistent—each of the Components has developed its own justifications and definitions for so-called “military essential” positions. Some of these criteria—such as esprit de corps, military-unique knowledge and skills, and unusual working conditions—are vague and do not reflect the realities of work performance within a modern defense establishment. Re-examining these criteria in light of their legal and

economic foundations and how they are applied across the diverse components, can potentially uncover opportunities for the Department to create a more efficient total workforce mix.

The Director, Total Force Manpower and Resources, Manpower and Reserve Affairs, Office of the Under Secretary of Defense for Personnel and Readiness (OSD P&R, the Sponsor) asked the Institute for Defense Analyses (IDA) to review existing DoD policy guidance and procedures used to determine manpower mix in order to ensure that they are clear, comprehensive, up-to-date, and serve as a useful catalyst for decision making across the Department. The sponsor also requested IDA to examine the legal foundations for determining military incumbency with a particular focus on emerging warfighting domains (cyber, unmanned, space) and to gather insights using authoritative manpower data (such as the Inherently Governmental and Commercial Activities (IG/CA) Inventory) to document and assess differences between Components on how “military essentiality” is interpreted and applied. The sponsor also requested recommendations for improving guidance, standardizing processes, and better incentivizing managers to designate military manpower appropriately, as well as identifying specific functional areas that could be converted to government civilians or contractor support based on revised criteria codes.

This report on military essentiality will help inform the development of implementation guidance and future revisions of the family of policy documents dealing with this issue. The research approach for this effort included reviewing previous studies of military manpower requirements and workforce mix, reviewing relevant Office of the Secretary of Defense (OSD) and Service policies, stakeholder engagements, and analyzing the IG/CA Inventory.

Findings and Recommendations

Finding #1: DoDI 1100.22 is infrequently used and needs to better align with other DoD guidance distinguishing military and civilian manpower roles and functions. Stakeholders reported that the DoDI seems to focus on distinguishing inherently governmental functions in designating new manpower requirements while neglecting issues of military essentiality. The definitions need to be clarified to reduce ambiguity and to detail guidance without necessarily restricting overall macro manpower management options. However, IDA’s research indicates that updating the DoDI will not be enough to guide the Services and DoD Agencies (i.e., “Fourth Estate”) to better implement the manpower mix policy, because the document is seldom used except as a back-door check to ensure no major policy red lines have been crossed. Three of four Services indicated that workload requirements are met by allocating the most readily available manpower to perform a given function. Greater clarity in the policy guidance will help lay the foundations for other changes that more directly address barriers inhibiting a shift from the most readily available labor source to the most appropriate labor source.

Recommendation: Update DoDI 1100.22 and revise guidelines for determining military essentiality using simplified categories and standardized definitions. The criterion of military-unique knowledge and skills in particular should be defined more narrowly. The

DoDI should also include a decision tree to help manpower managers determine military essentiality and to provide parameters for applying criteria codes to specific functions.

Finding #2: Stakeholders perceive disconnects between the bottom-up communication of manpower requirements at lower levels and the top-down manpower planning processes and total force management. There is no formal process at OSD for reviewing the IG/CA report or for assessing the implications of the manpower data on the individual Services, the Joint Force, and overall readiness to perform missions across the spectrum of conflict, as well as for assessing impact to the longevity of the All-Volunteer Force. This gap inhibits leaders—both military and civilian—from adopting a holistic view and more comprehensively understanding the trade space between the three legs of the Total Force triad: military personnel, government civilians, and contracted services.

Recommendation: Establish a Flag Officer/Senior Executive Service-level “Manpower Utilization and Readiness Review Council” in coordination with other stakeholders within OSD. This council will increase oversight and make recommendations to Components and the Secretary of the Defense on how the Total Force could be managed more effectively and efficiently to heighten readiness. The council’s review of the IG/CA report (and other emergent reports required from stakeholders) will generate a strategic conversation at senior leadership levels that should lead to enhanced performance, accountability, and personnel readiness across the DoD enterprise in the following ways. First, senior stakeholder representatives to the Council will have a forum for discussing why CONUS non-deployable billets or functions coded Inherently Governmental (IG) in the IG/CA report should be performed by military personnel vice government civilians or contracted services. A stakeholder’s rationalization for using a particular labor source should transcend bureaucratic drills aimed at preserving military end strength and exercising Title 10 prerogatives at the expense of sound Total Force manpower management. Second, the Council will be postured to review military and civilian personnel accounts included in Service’s Program Objective Memorandums submitted annually as part of the Planning, Programming, Budgeting and Execution process. Such reviews will allow the Council to monitor stakeholder progress over the Futures Years Defense Plan in converting positions from military to civilian labor and track fluctuations in Service O&M accounts—used to fund civilian manpower—which disincentivizes the Military Departments from undertaking voluntary conversions.

Finding #3: The IG/CA report reveals inconsistencies across the Services. Analysis of the FY 2016 IGCA data raised questions about the interpretation and application of the manpower criteria codes, including broad and imprecise application of some criteria codes and Service differences in military/civilian authorization ratios within a function. Some Service differences are to be expected; however, disproportionate military manpower in infrastructure functions

and associated differences in criteria codes suggest room for improvement in practices to determine manpower.

Recommendation: Oversight of the Services' IG/CA input should identify inconsistencies and opportunities to realign military manpower to military essential functions. Additional review and analysis of the data will facilitate better understanding and enable leaders and manpower specialists at all echelons to use the IG/CA as a management tool.

Finding #4: The advent of cyberwarfare, unmanned, space, and artificial intelligence/machine learning is changing the character of 21st century warfare and may challenge assumptions about what is military essential. Many high-tech skills in these emerging domains may be performed by the civilian workforce. Even in cases where the Services may be biased toward using military manpower, demographics and the relatively low percentage of American youth who meet today's recruiting standards suggest that not all of this highly skilled work can be sourced by military personnel. These technologies may call for different approaches to manpower mix as the Department clarifies the roles and personnel costs. Better understanding the numbers and costs of contracted support in these functions will be critical to determining a sustainable manpower mix.

Recommendation: DoD should further research and analyze workforce manpower requirements for emerging and expanding technologies in order to ascertain how government civilians and contracted support can help mitigate projected future personnel shortages in key high-tech domains.

Finding #5: Converting positions in functional areas already identified for cost savings and civilian performance would free military manpower to perform more military-essential functions. Previous studies assessed how DoD might more effectively and efficiently manage the Total Force to achieve enhanced readiness and improved cost management, and the recommendations from those studies are pending implementation. These studies have identified five functional areas with significant potential impact for military-to-civilian conversion: Education and training, personnel and social services, cyber operations, unmanned aircraft systems operations, and medical. Shifting to civilian manpower in these functions could yield up to \$1billion annual savings.

Recommendation: That OSD P&R re-evaluate these recommendations and assess ways to fully or partially implement them in order to achieve efficiencies in performing infrastructure functions and to re-allocate military manpower.

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1. Introduction

A. Background

For more than 50 years, the Department of Defense (DoD) has struggled to determine the appropriate manpower mix of uniformed military personnel and civilians—both civilian government employees and contracted support—necessary to secure US sovereignty and other US national security interests. A number of factors continue to make this determination a formidable challenge: 1) the expansion of the Armed Services in wartime and subsequent de-mobilization (or Congressionally mandated force reductions) when peace returns; 2) the state of the US economy which, in part, impacts the level of Congressionally approved defense expenditures and mandated end-strength caps (maximum authorized military manning levels negotiated between Congress, the Office of the Secretary of Defense, and the individual military departments (i.e., Services); 3) evolving military missions that require existing formations to modify their force structure and new units to be created to perform emerging tasks; 4) expansible garrison or shore establishments necessary to support warfighting commands at home and abroad; 5) executive branch orders; and 6) policies and procedures governing DoD’s Total Force management.

Over the years, diverse political forces and bureaucratic pressures have sometimes worked at cross purposes to render aligning requirements with the appropriate labor source difficult and elusive. And exactly how DoD policymakers and the Services are supposed to agree on a common definition of *optimum* is less than clear. Moreover, bureaucratic and systemic factors such as structural impediments and incentives, divergent views about how best to frame the manpower mix issue, ambiguous Department policy guidance promulgated to the Services (which provides the military departments flexibility but also permits the Services to interpret and apply the manpower mix criteria differently), and assorted implementation hurdles—continue to erode the policy goals DoD explicitly seeks to attain in managing its invaluable human capital.

In this sea of challenges, DoDI 1100.22 provides guidance for Components to employ each workforce type.¹ If military essential, then use military personnel. If inherently governmental, then use the cheaper of military or civilian labor. Otherwise, the function is considered commercial, and Components should use the cheapest of all three, except where exempted from commercial performance for specific reasons delineated in the policy. DoDI 1100.22 defines *military essentiality* as, “a function that requires military personnel to perform it successfully,

¹ OUSD(P&R), Department of Defense Instruction (DoDI) 1100.22, *Policy and Procedures for Determining Workforce Mix*, 12 Apr 2010.

either because it involves a function that is inherently military—such as combat or the command and control of military forces—or because it entails military unique skills or knowledge.”² That said, DoD policy requires that functions be designated as civilian—the DoD enterprise default position—unless military incumbency is required for reasons of law, command and control of crises situations, combat readiness, or esprit de corps; when unusual working conditions are not conducive to civilian employment; or when military-unique knowledge and skills are required for successful performance of the duties.³ Additional exceptions to the civilian default rule are intended to maintain a rotation base, promote career development, satisfy mobilization requirements, and to meet other contingencies. These intentional exemptions (to be examined in detail later in this report) allow the Services maximum flexibility to determine the proper manpower mix to accomplish their assigned roles, missions, and tasks.

Such latitude seems logical and appropriate. After all, the primary mission of the United States Armed Forces is to provide for the common defense and, as required, to fight and win America’s wars. For that reason, it is DoD policy that, “the workforce shall be established to successfully execute Defense missions at a low to moderate level of risk. This workforce shall consist of both military and civilian personnel and be augmented, when necessary, by contracted services.”⁴ The policy further stipulates that

The defense workforce shall have sufficient flexibility to reconstitute or expand the capabilities of the Military Services on short notice to meet a resurgent or increased threat to US national security. Accordingly, risk mitigation shall take precedence over cost savings when necessary to maintain core capabilities and readiness.⁵

Yet, the potential monetary savings from converting military to civilian positions continues to powerfully influence Congressional and DoD leaders, especially in times of fiscal austerity. This creates a near-permanent tension between senior military commanders—who first and foremost value mission accomplishment—and management specialists who sometimes view efficiency as an equal priority.

Of course, filling a billet with military personnel when the function could otherwise be performed by civilians undermines readiness because those military personnel are not in operational units or formations that directly support the warfighter. Moreover, assigning military members to non-military essential billets creates personnel shortfalls that other service mem-

² OUSD(P&R), “Department of Defense Instruction (DoDI) 1100.22, Policy and Procedures for Determining Workforce Mix, Draft,” (2017).

³ OUSD(P&R), Department of Defense Directive (DoDD) 1100.4, dated 12 Feb 2005, 3.

⁴ OUSD(P&R), DoDI 1100.22, 2010, 2.

⁵ OUSD(P&R), DoDI 1100.22, 2010, 2.

bers must fill to maintain readiness levels across military formations. But, as this report highlights, there are valid reasons why some Soldiers, Sailors, Airmen, and Marines must be assigned to stateside (non-deployable) positions that civilians may be qualified to perform.

One researcher correctly noted that the story of DoD’s relationship with civilianizing the workforce has “...boiled down to two opposing forces in unstable equilibrium—internal pressure to replace military personnel with civilians to save money, and external pressure to reduce civilian staff across the Defense establishment, particularly in times of declining budgets and personnel downsizing. When both forces exert themselves simultaneously, the result has typically been inertia, leading to another report several years down the line with the same logical arguments and conclusions as the others.”⁶

B. Recent History

On 30 June 2017, DoD submitted a plan (along with other government agencies and departments) to the Office of Management and Budget (OMB) for executing near-term civilian workforce reductions already in progress. Accompanying the paper on workforce reductions was an “Overarching Workforce Rationalization Strategy.” DoD intentionally drafted the latter document and a companion document, “DoD Workforce Rationalization Plan,” to serve as a strategic roadmap for optimizing its management of the Total Force in support of the Nation’s defense requirements.

The central idea underpinning both documents is that DoD’s government civilians are an essential enabler of US military mission capabilities and operational readiness—“...we cannot fight without them. Civilians are also intrinsically critical to supporting our All-Volunteer Force and their families. Without question, our Soldiers, Sailors, Airmen, and Marines would not be ready or able to perform their missions without their civilian partners.”⁷

The Workforce Rationalization Plan describes how an optimally sized and balanced Total Force is one in which the mix of labor sources supports the Department’s strategic priorities and the needs of the US Armed Forces effectively and cost efficiently. In accordance with 10 USC 129, the Workforce Rationalization Plan also directed that the Military Departments each submit a report on the management of the civilian workforces under their jurisdiction by 1 February of each year. The reports are required to, at a minimum

...include an assessment of the projected size of the civilian workforce in the current year and for each year in the future-years defense program; an explanation of the

⁶ David F. Eisler, *A Brief History of Military-to-Civilian Conversions in the Department of Defense, 1965–2015*, (Alexandria, VA: Institute for Defense Analyses, March 2017), 1.

⁷ US Department of Defense, DoD Workforce Rationalization Plan (September 2017), 1.

reasons for the increase or decrease from the previous projection, including an explanation of any efforts that have been taken to identify offsetting reductions and avoid unnecessary overall growth in the size of the civilian workforce; and in the case of a transfer of functions between military, civilian, and contractor workforces, an explanation of the reasons for the transfer and the steps taken.⁸

The Workforce Rationalization Plan advances the goals of the 2018 National Defense Strategy (NDS). The third goal of the NDS is “reforming the Department’s business practices for greater performance and affordability.” The NDS notes that prioritizing risk minimization over other considerations makes DoD unresponsive at times and identifies better stewardship of taxpayer resources as an important goal. More efficiently using manpower plays an important role in that stewardship. Reserving military manpower for military essential requirements not only makes for a more efficient workforce, it also benefits the first goal of the NDS, rebuilding readiness and building a more lethal force, allowing military manpower to focus on more direct contributions to readiness. To achieve these goals, the National Defense Business Operations Plan aims to implement initiatives for continuous review and improvement in choosing among labor sources in the Total Force for maximum efficiency and effectiveness. Improvements may include reassessing traditional military incumbency and reducing management layers.

Although this report does not pretend to be the final word on the complex issue of military essentiality, we hope our research will shed new light on a perpetual problem, and that our analysis will inform creative approaches and enduring solutions.

C. Military Problem

DoD relies on a combination of military, government civilian, and contracted support to accomplish its missions. DoDI 1100.22 codifies the department’s policy and guidance to the Services on how to determine the type of manpower requirement. However, a range of factors beyond the implementation guidance drive how the Services make manpower mix decisions. For example, different funding structures have the unintended effect of incentivizing some labor sources while deterring others. These factors may result in an inefficient total force mix, leading to higher costs and with detrimental effects on readiness.

D. Objective

The Sponsor requested that the IDA team investigate alternative manpower mix criteria that would more clearly and unambiguously define the rationale for military essentiality, and then to assess functional areas and duties categorized as military essential to determine if there are opportunities for potential military-civilian/contractor conversions in these areas. This analysis in-

⁸ US DoD, Workforce Rationalization Plan, 8.

cluded examining the readiness side of the military essentiality issue and possible process improvements that might better motivate DoD leaders to more effectively employ military personnel—in concert with government civilians and contracted support to meet US security needs.

E. Research Methodology

We began our research with a literature review that included DoD policy and guidance as well as independent studies and open source articles. The literature review layed the foundation for conducting informed stakeholder engagements across the DoD in OSD, the Office of the Joint Chiefs of Staff (JCS), the Military Departments, Defense Agencies (i.e., “Fourth Estate”) and assorted key officials (see Appendix A for a list of engagements).⁹

We also examined the 2016 Inherently Governmental and Commercial Activities (IG/CA) dataset, which contains military and civilian manpower authorizations from across the enterprise. The IG/CA data highlights differences between the Components in how the military essential criteria is interpreted and applied across DoD.

Finally, we synthesized the results of our research into findings and recommendations that we then presented to an internal IDA review board before furnishing our final report to the Sponsor.

F. Organization of the Report

We finish Chapter 1 by summarizing previous analyses on military and civilian workforce mix to highlight examples of functions that offer opportunities to shift from military to civilian manpower. Chapter 2 reviews the DoD manpower mix challenge to help the reader appreciate the multi-faceted nature and complexity of the issue. Chapter 3 examines specific legal restrictions and constraints on using military personnel, government civilians, and contracted support to perform inherently military tasks both in and outside of combat zones. Chapter 4 discusses DoD instructions and directives germane to the military essentiality issue. Chapter 5 examines the IG/CA report and the impact its underutilization across DoD has. Chapters 6 and 7 highlight the significant insights obtained from our engagements with key stakeholders. Chapter 8 contains findings, recommendations, and conclusions.

⁹ Christopher A. Kapellas, Director, Human Resources Directorate Washington Headquarters Services, “Fourth Estate 101,” ed. DoD (2016). The Fourth Estate comprises 20 defense agencies, eight field activities, the Uniformed Services University of the Health Sciences, the Defense Acquisition University, and National Defense University.. The Fourth Estate provides essential support to US military operations in CONUS and overseas, and to DoD enterprise operations worldwide. Staffed by a workforce of roughly 160,000 civilian and uniformed personnel, the Fourth Estate accounts for ~20% of the Department’s annual budget and 25% of its workforce.

G. Previous Analyses

Previous reports discuss a variety of challenges to optimizing the total force mix on the parameters of readiness and cost. The reports also offer recommendations, which, if implemented, could help DoD initiatives to improve total force management. We start with a study addressing workforce mix issues more broadly, followed by studies of specific functions.

1. Managing the Total Force: Using Civilianization to Militarize the Military¹⁰

This study contained two major focus areas: The first was an historical review of DoD's efforts to civilianize non-military essential positions starting in the 1960s, emphasizing challenges and obstacles that have time and again hindered civilianization. The second focus area documented the workforce mix across the three military departments, discussed problem areas that contribute to undermining civilianization, and identified functional areas where there is potential for significant budgetary savings.

IDA observed that one major factor limiting civilianization is the inconsistency in methodology for coding manpower authorizations in the IG/CA inventory. The researchers found civilian authorizations that fell within the criteria codes originally thought to be military only. They also determined that the IG/CA data cannot be used to separate functions on a military/non-military basis without looking at individual cases.

Therefore, IDA's research team advised that revising criteria for military essentiality as identified in DoDI 1100.22 would help reduce inconsistencies in the IG/CA data. Furthermore, IDA advised that reporting and coding criteria for manpower analysts across the Services should be standardized in future revisions of DoDI 1100.22 to avoid known inconsistencies in similar functions such as specialized skill training or military personnel operations.¹¹

Most importantly, the research team identified the potential for significant savings through civilianization in two functional areas: Education and Training (E&T), and Personnel and Social Services (P&SS). The researchers estimated that 14,200 military authorizations could be converted to about 11,300 civilian authorizations across E&T and P&SS functions. Such conversions would save about \$530 million each year for DoD over the future years defense program and about \$1.1 billion each year government-wide when considering additional costs such as veterans' benefits. Therefore, IDA advised that identifying non-military essential billets that could be more efficiently performed by civilian employees in the E&T and P&SS functional areas is critical to help generate such savings.

¹⁰ David F. Eisler, Stanley A. Horowitz, Nancy M. Huff, Julie A. Pechacek, Susan K. Whitehead and Linda Wu. *Managing the Total Force: Using Civilianization to Militarize the Military*. (Alexandria: Institute for Defense Analyses, 2018).

¹¹ Eisler, et al., *Managing the Total Force: Using Civilianization to Militarize the Military*, 50.

2. Replacing Military with Civilian Manpower in Support Functions

The Congressional Budget Office examined commercial functions for which the Services are using a different mix of military and civilian manpower – for example, in finance and accounting and retail supply operations.¹² Authorizations in these functions were designated exempt from commercial performance for a variety of reasons, including readiness or workforce management objectives such as job rotation and career progression. Focusing on functions with more than 500 military and civilian authorizations, CBO estimated the relative cost of all Services adopting the workforce mix as the Service with the largest proportion of civilians in each function. CBO determined that approximately 80,000 active-duty authorizations could be converted to civilian manpower, saving the federal government \$3.1 to \$5.7 billion per year. These costs are annualized costs to the federal government, rather than the annual cost to DoD's budget.

3. Staffing for Cyberspace Operations¹³

This research focused on the Cyber Mission Force (CMF) to determine that, of the roles open to the least costly performance type (government civilian or contracted support), which should be considered military essential, inherently governmental, or commercial activities. According to initial staffing plans, approximately 80% of the CMF jobs were designated military; however, IDA observed that a majority of these jobs are office jobs that do not require deployment and can be done at fixed facility locations in the United States, suggesting that they can be performed by non-military essential personnel. IDA developed an alternative staffing plan for CMF that satisfied the staffing criteria as economically as possible by computing the potential savings if generally less expensive government civilians were substituted for military personnel where operationally feasible. This plan was based on replacing almost half of a staff consisting of more expensive officers, enlisted personnel, and contracted support with less expensive government civilian employees for positions where military manpower was not necessary. IDA found that this plan could save DoD ~15% on manpower costs (\$130 million in manpower annually).¹⁴ This analysis also provided a protocol for determining which billets are military essential on the basis of the potential for participating in cyber hostilities.

¹² Congressional Budget Office. *Replacing Military Personnel in Support Positions with Civilian Employees*. (Congressional Budget Office, December 2015).

¹³ Thomas H. Barth, Jerome J. Burke, Mark F. Kaye, Linda Wu, Stanley A. Horowitz and Drew Miller. *Staffing for Cyberspace Operations*. (Alexandria, VA: Institute for Defense Analyses, 2016).

¹⁴ Barth, *et al.*, *Staffing for Cyberspace Operations*, 6–7.

4. Staffing for Unmanned Aircraft Systems Operations¹⁵

IDA analyzed missions utilizing unmanned aircraft systems (UAS) in each Service to identify tasks associated with these missions and to determine the best force mix for these tasks. The analyses utilized a decision tree to identify the categories of staff permissible for each UAS mission task. Findings indicated that not all UAS positions filled by military personnel are military essential, and that “If government civilians are integrated into Continental United States (CONUS)-based operations (e.g., to transit the UAS), the Air Force could save \$68.3 million across the Future Years Defense Program (FYDP).”¹⁶

According to the IDA research team, each Air Force operational squadron should convert one Combat Air Patrol’s worth of manpower to DoD civilian positions (20 positions), understanding that the same individuals can perform basic mission support up to but not including weapons employment. This would save ~\$1.57 million annually. If each of the 10 operational Air Force MQ-1/9 squadrons did this conversion, total program annual savings could total \$13.65 million and \$68.3 million across the FYDP.¹⁷

Additionally, “applying a mix of government civilians and uniformed military to the Air Force MQ-1/9 launch and recovery force saves approximately \$25.65 million across FYDP.” This could be accomplished by converting approximately half (74 of 150) of the launch and recovery elements positions from military to civilian.¹⁸

5. Medical Total Force Management¹⁹

IDA reviewed existing measures of medical force demand and requirements focusing on the underlying causes of force mix challenges and identified the degree to which the historic force-mix inefficiencies remain. IDA further assessed the causes and consequences of these inefficiencies and developed recommendations for things DoD could do to improve the medical force mix.

The study determined that the active duty medical force still understaffs operationally required specialties; however, FY 2004 to 2011 saw improvements in reducing the understaffing. To further reduce the understaffing of operationally required specialties, IDA recommended to improve determining requirements and to ensure that requirements are consistent with guidance for military essentiality. Additionally, IDA advised reconsidering the active component to reserve

¹⁵ Travis L. Norton, Lt. Col., USAF. *Staffing for Unmanned Aircraft Systems (UAS) Operations*. (Alexandria, VA: Institute for Defense Analyses, 2016).

¹⁶ Norton, *Staffing for Unmanned Aircraft Systems (UAS) Operations*, iv.

¹⁷ Norton, *Staffing for Unmanned Aircraft Systems (UAS) Operations*, 97–98.

¹⁸ Norton, *Staffing for Unmanned Aircraft Systems (UAS) Operations*, iv, 83.

¹⁹ John E. Whitley, Brandon R. Gould, Nancy M. V. Huff and Linda Wu. *Medical Total Force Management*. (Alexandria, VA: Institute for Defense Analyses, 2014).

component balance because maintaining medical forces in the Reserves with civilian healthcare employees could produce more efficient alternatives to maintaining personnel on active duty.

In contrast to operationally required specialties, the active duty medical force has been increasingly overstaffing beneficiary care specialties in some areas from FY 2004 to 2011. IDA suggested developing annual estimates of training costs by specialty for all medical specialties in order to make full cost personnel more visible.

Moreover, IDA followed the guidance of DoDI 7041.04 to estimate the full cost of the military medical force and compared it to less costly civilian personnel. The research team estimated the full cost to taxpayers to be \$125,000, \$435,000, and \$230,000 for the average Army medical enlisted Soldier, Navy physician and Air Force nurse, respectively. IDA then estimated the full cost to the taxpayer for the equivalent civilian personnel to be \$75,000, \$329,000 and \$142,000, respectively.

To further illustrate the savings that could be generated by civilianizing military medical personnel where applicable, IDA analysed a series of scenarios with civilianized manpower alternatives. IDA found that if the Navy and Air Force adjusted military-to-civilian force ratios to match that of the Army, the savings would be about \$500 million per year. This figure would grow to more than \$1 billion per year if considering longer-term costs, including fixed costs, deferred costs, and non-DoD costs.²⁰

6. Summary

This series of studies highlights the challenges in implementing changes in the workforce mix, and estimates potential efficiencies in re-configuring the workforce mix. Significant funds could be saved by military-to-civilian conversions; education and training, personnel and social services offer opportunities for conversions in the near term. Analyses of cyber, UAS, and medical specialties reveal that cost analyses need to be performed by functional area to determine the most appropriate manpower mix.

²⁰ John E Whitley, et al., *Medical Total Force Management*, iv.

2. DoD Manpower Mix Challenge

This chapter outlines the manpower mix challenge facing DoD senior civilian and military leaders. It highlights the multi-faceted, complex, systemic nature of the problem. Topics include the competing ideas of effectiveness, resiliency, and efficiency; why military manpower is regarded as “free labor”; and how the changing character of 21st-century warfare continues to shape conventional wisdom about what constitutes a “military essential” task.

A. Effectiveness, Resiliency, and Efficiency

The 2018 NDS highlights the challenge DoD civilian policymakers and military leaders confront when determining the optimum mix of military personnel, government civilians, and contracted support across the DoD enterprise. The strategy calls for “a more lethal, resilient, and rapidly innovating Joint Force...” that can deter and, if necessary, fight and win, against primary peer competitors—China and Russia—as well as other threats.²¹ This requires properly sized, trained, and ready forces that can successfully conduct a diverse range of military missions.

The surest way to prevent war is to be prepared to win one. Doing so requires a competitive approach to force development and a consistent, multiyear investment to restore warfighting readiness to field a lethal force. The size of our force matters. The Nation must field sufficient, capable forces to defeat enemies and achieve sustainable outcomes that protect the American people and our vital interests. Our aim is a Joint Force that possesses decisive advantage for any likely conflict, while remaining proficient across the entire spectrum of conflict.²²

Although the Strategy discusses the importance of *lethality*, *readiness*, and *resiliency*, it does not explicitly define the terms.²³ However, the intended goal is unambiguous: DoD seeks to organize, train, equip, and sustain highly *effective* military forces that are capable of performing a diverse range of missions across the full continuum of conflict.

²¹ US Department of Defense, “Summary of the National Defense Strategy Sharpening the American Military’s Competitive Edge,” Washington, DC, 2018, 1.

²² DoD, Summary of the National Defense Strategy, 5.

²³ FY 2019 Defense Budget Overview, Office of the Under Secretary of Defense (Comptroller) and Chief Financial Officer, February 2018, 2–5, defines *lethality* as the ability to destroy massed enemy forces in contested domains from the outset of conflict; *resiliency* as the ability to sustain operations while under sophisticated multi-domain attacks; *agility* as the ability to move unpredictably; *readiness* as the ability to fight on short or no notice.

Implicit in the idea of the Joint Force, “possessing decisive advantage for any likely conflict” is recognition that the individual Services must be *resilient*—regenerating capability and capacity when confronted with unexpected crises or campaign set-backs. The strategy also highlights the need to recruit, train, and retain a high quality military and civilian workforce that can meet 21st-century security requirements.

While enhancing US war fighting *effectiveness* is the predominant theme of the 2018 NDS, reforming DoD’s bureaucratic processes is also a high priority. The over-arching reform goal is to help the DoD transition to a “culture of performance where results and accountability matter...where leadership can harness opportunities and ensure effective stewardship of taxpayer resources.”²⁴

The Strategy outlines aspirational measures for making the Department’s financial processes, cost management, and procurement of materiel and services, more efficient, including streamlining contracts in areas such as logistics, information technology, and support services.²⁵ These *efficiency*-focused initiatives include reducing management overhead and the size of headquarters staffs.²⁶ In short, the NDS articulates an inextricable connection between the individual Services organizing, training, and equipping forces that will enable the Joint Force to deter and win US wars, and a concomitant requirement for the DoD enterprise to *efficiently* manage scarce resources.

Effectiveness, resiliency, and efficiency are not mutually exclusive ideas nor part of a zero-sum undertaking. Rather, they are intertwined concepts and require a holistic understanding of their inter-relationship if the three legs of the Total Force management triad—active and reserve military, government civilians, and contracted support—are to be fully integrated into the same business enterprise. As the Deputy Secretary of Defense noted in a 30 June 2017 report to OMB,

If we fail to better rationalize how we choose among total force alternatives for our work, our Commanders will lack the capabilities and readiness they require. And the associated waste will prevent essential war fighting recapitalization.²⁷

Thus, improving efficiency in workforce mix is key to achieving DoD’s modernization and readiness goals, a point emphasized in subsequent strategic documents.²⁸

²⁴ DoD, Summary of the National Defense Strategy, 10.

²⁵ DoD, Summary of the National Defense Strategy, 10.

²⁶ DoD, Summary of the National Defense Strategy, 10.

²⁷ DoD, Workforce Rationalization Plan, 2.

²⁸ US Department of Defense, *DoD Workforce Rationalization Plan* (September 2017).

US Department of Defense, *National Defense Business Operations Plan* (May 2018).

B. Impediments to Efficiency: Military Manpower as “Free Labor”

As noted earlier, DoD policy prescribes using government civilians (and contracted support) except when military personnel are required to meet militarily essential requirements.²⁹ The rationale for this policy is two-fold. First, trained military personnel are needed primarily to staff combat and combat support organizations to sustain high unit readiness across the Services. Defense planners embrace a long-recognized axiom that ready forces enhance deterrence while hollow forces invite miscalculation and risky adventurism on the part of potential adversaries. Second, the fully burdened costs of military service members is higher than comparable DoD civilians on average. According to a 2015 Congressional Budget Office report, DoD civilian labor, “costs the federal government 29% less than active-duty service members: about \$96,000 per year compared with \$135,000. Those totals include the costs to DoD, VA, the Treasury, OPM and the Department of Education, as well as any revenue effects.”³⁰ However, civilian labor appears more costly within the more limited perspective of DoD.

The reason civilian employees cost DoD (vice the entire US Government) ~3% more than active-duty service members is because a significant portion of military personnel costs are borne by other government agencies and their higher incomes generate larger tax payments to the Treasury.³¹ The Defense Business Board has noted that neglecting to account for these lifecycle costs within DoD means DoD has no incentive to consider cost savings in workforce mix decisions.³² Thus, military manpower is perceived as “free labor” and a more flexible labor source because military personnel are not subject to the same labor protections as civilians.³³ However, because military personnel are frequently assigned additional duties, more service members are needed to accomplish a given task. The military workforce also includes an extra “tail” of transients, patients, prisoners and holdees as well as personnel assigned to schools, which increases the aggregate number of personnel required to perform a given function.³⁴

One might conclude that the combined effect of these two factors—the need for military personnel to perform military essential functions and higher manpower costs for military personnel—would motivate the Services to not allow military members to be siphoned off or “borrowed” for non-military essential tasks that could otherwise be performed by civilians. But, as we will demonstrate later in this report, the opposite is true. In Chapters 4 and 5, we discuss in detail why the Services are incentivized to over-employ military personnel and how DoD’s sufficiently ambiguous policy guidance allows the Services to assign military personnel to a

²⁹ CBO Report Dec 2015, 5.

³⁰ CBO Report Dec 2015, 15.

³¹ CBO Report Dec 2015, 15.

³² Defense Business Board. *Fully Burdened and Lifecycle Costs of the Workforce*. (December 2017).

³³ Defense Business Board. *Fully Burdened and Lifecycle Costs of the Workforce*. (December 2017).

³⁴ DoDI 7041.04, “Estimating and Comparing the Full Cost of Civilian and Active Duty Military Manpower and Contract Support” dtd July 3, 2013 was also used during our research.

wide range of jobs—many of which are only tangentially related to warfighting tasks and that could arguably be performed by a qualified civilian work force.

While a detailed history of military to civilian conversions is outside the scope of this effort, a brief recap of recent efforts in this regard is instructive to highlight the complexity of such an undertaking. In a 2016 study for the same sponsor, RAND estimated that between FY 2004 and FY 2012, fewer than 4,500 positions were converted annually from military to civilian positions (or ~32,000 conversions across all of the Services during an eight year period). The study noted, for example, that in FY10 alone, 4,428 positions were converted, which equated to ~0.32% of the FY 2009 military positions across DoD.³⁵ But, the real insight the study offered was its finding that few of the positions vacated by military personnel were *actually* converted to civilian positions. Instead, most were filled by other military personnel or simply remained vacant.³⁶

Below in our report we examine some of the impediments to hiring civilian labor, such as the difficulty of finding skilled civilian labor to perform specialized functions within the timeframe installation commanders must accomplish mission essential tasks, coupled with insufficient operations and maintenance (O&M) accounts that are used to pay government civilian labor costs. Compounding these challenges are episodic civilian hiring freezes that were not synchronized with Congressional- or Department-directed conversion efforts. In essence, the Services have been periodically directed to give up military manpower without being granted the authority or afforded the means to hire government civilians to fill the vacated positions.³⁷

An example of this challenge occurred when the FY 2013 National Defense Authorization Act (NDAA) mandated reductions in civilian personnel and contracted support expenditures commensurate with reductions in funding for basic military pay achieved from reductions in military end strength. Not surprisingly, the conversion process naturally increases civilian personnel expenditures; however, the overall total manpower costs to the Services generally decline as end-strength declines. Thus, Section 955 restricted the amount of funds commanders could spend on expanding their civilian workforce by linking it to military end strength as opposed to work load requirements that a properly-sized civilian labor pool must perform.³⁸ Moreover, Pentagon programming and budgeting processes

do not permit installations to tie the surrender of a military position to an equivalent increase in O&M funds to cover the cost of a civilian replacement. If installations were able to “cash in” a military position in exchange for the means to hire a new

³⁵ Jennifer Lamping Lewis, et al., “U.S. Department of Defense Experiences with Substituting Government Employees for Military Personnel,” (Santa Monica: RAND Corp., 2016), 3.

³⁶ Lewis, et al., “U.S. Department of Defense Experiences with Substituting Government Employees...” 3.

³⁷ Lewis, et al., “U.S. Department of Defense Experiences with Substituting Government Employees...” 4.

³⁸ Lewis, et al., “U.S. Department of Defense Experiences with Substituting Government Employees...” 6.

civilian, the price of military personnel would, in effect, be set equal to the foregone O&M funds, and local commanders would internalize the trade-off between military and civilian personnel. The siloing by appropriation inherent in the current system stymies the establishment of such a link and incentivizes installations to resist military-to-civilian conversions.³⁹

Herein lies a central problem. Historically, DoD's civilian workforce has not been protected from arbitrary reductions and hiring freezes, which has made it an unreliable or unavailable labor pool in the eyes of many military commanders (and senior civilian executives) who must manage their workloads and accomplish their assigned missions with the resources they have vice those that they have planned for or want.

Other impediments to using the civilian work force to its full potential and to "right sizing" it through targeted growth to help restore readiness are

- Civilian positions are more vulnerable to cuts than military positions,
- Hiring procedures for civilian competitive service are cumbersome and slow,
- Some military positions are inappropriately shielded from conversion,
- Local commanders perceive military personnel to be free from cost,
- Civilian candidates may not possess the desired skill sets or be available to fill converted positions,
- Practical guidance on the process for executing authorized conversions is sparse,
- Services generally resist conversions for the purpose of reducing military end-strength.⁴⁰
- Negative perceptions of government bureaucracy tend to focus differentially on the civilian workforce relative to other labor sources.

While each of the above impediments poses a unique challenge to maximizing the effective use of civilian labor, the continued false perception that military personnel are a free labor source is perhaps the most difficult to surmount. Many commanders across the Services who must hire civilians using O&M funds hold this view. Because military personnel are centrally funded, their cost is invisible to the user. Congress authorizes each Service's end-strength request for military personnel and appropriates necessary funds to the Services to manage their military manpower accounts at the Service level. When military personnel report to a command, they are already paid for, whereas civilian labor must be funded locally from O&M accounts.

³⁹ Lewis, et al., "U.S. Department of Defense Experiences with Substituting Government Employees..." xv-xvi.

⁴⁰ Lewis, et al., "U.S. Department of Defense Experiences with Substituting Government Employees..." xvi-xvii, 9.

These different processes help foster the misperception that military manpower is free and fungible in how servicemembers are used at the local level.

In the aggregate, myriad factors have fostered a bias against using government civilians that manifest as, “treating them not as valued employees, but rather as symbols of government that (some) believe is too large.”⁴¹ In short, the civilian workforce has been largely managed in isolation from the other Total Force elements of military manpower and contracted services, which has encouraged “the use of military manpower or contracted services to assume workload more appropriately performed by civilians.”⁴²

However, near-term fixes to strengthen the civilian labor pool will not happen quickly. In its FY19 budget request, DoD seeks to increase the number of civilian Full-Time Equivalents (FTEs) by 0.4%, from 773,000 to 776,000. This is a marginal increase from the status quo compared to the requested military end-strength increase of 25,900 uniformed personnel.⁴³ If past practice is prologue for the future, just how many of these 25,900 service members will end up in essential warfighting related billets will vary across the Services.

C. The Changing Character of 21st-century Warfare

The exemption of military personnel from budget cuts imposed by the 2011 Budget Control Act (also known as Sequestration), combined with the substantial military end-strength and pay increases contained in DoDs FY19 budget request, likely means the Services will have even less incentive to civilianize existing positions. This is unfortunate given the dramatic impact cyber, unmanned, space, and artificial intelligence/machine learning (AI/ML) are having on 21st century warfare. On the one hand, the high skill levels required of DoD personnel working in these fields (or domains) will make it difficult for the Services to recruit qualified military members on a sustainable basis. As former Secretary of Defense Ashton Carter noted:

The U.S. military needs at least 250,000 young people to join up every year. But of the more than 4 million men and women who turn 18 each year, a mere 29%, or about 1.2 million, are high school graduates (or have earned their GED) who meet the military’s recruitment standards and are eligible to serve. (The main barriers are obesity, drug use, and problems with the law.)⁴⁴

⁴¹ Undersecretary of Defense Robert Hale, quoted in David Eisler, *A Brief History of Military-to-Civilian Conversions in the Department of Defense, 1965-2015*. (Alexandria, VA: Institute for Defense Analyses, March 2017), 30.

⁴² DoD Workforce Rationalization Plan, 1.

⁴³ Office of the Under Secretary of Defense (Comptroller), National Defense Budget Estimates for FY 2019 (April 2018).

⁴⁴ Ashton Carter, “What I Learned from Transforming the US Military’s Approach to Talent,” *Harvard Business Review*, (May 2017): 2–3.

However, overcoming the barriers to military service that Secretary Carter cited without lowering recruiting standards is not the central problem. Rather, the challenge to the Department is to recognize that many of the functions necessary to wage 21st-century warfare are not by definition military essential and could be performed by government civilians or contracted support if so designated and funded. Current data on the impending recruiting-retention challenges attendant to increasing cyber, space, and AI/ML capabilities across DoD is lacking. And while detailed analysis of these specific domains and fields is outside the scope of our project, the issue of “military essentiality” will figure prominently in how DoD attempts to meet the high skill requirements the digital age demands.

The anticipated termination of Overseas Contingency Operations funds and continued fiscal challenges that all of the Services are experiencing as they strive to recover readiness eroded by wars in Iraq and Afghanistan and other factors may motivate the Services to try to preserve end strength by defining sub-specialties—especially in high-tech domains—as “military essential” vice trying to hire civilian labor out of constrained O&M accounts. But this will require the recruiting force to meet higher goals, which they are currently struggling to meet. Meeting high-tech labor demands might require many of the cyber, space, and AI/ML billets to be “inherently governmental.” This approach would bring in older employees who already possess baccalaureate and advanced degrees and would require less training. Competitive pay will be required to lure such talent away from Silicon Valley and retain them.

Changes in the operational environment sometimes call into question assumptions about workforce mix and operational risk, as illustrated by the more expansive use of contracted support in recent conflicts. As recently as 31 March 2010, the United States had deployed 175,000 troops and 207,000 contracted support to Afghanistan and Iraq; contracted support represented 50% of the DoD presence in Iraq and 59% in Afghanistan—numbers that included both armed and unarmed personnel.⁴⁵ The use of contracted support in both wars was controversial as many performed functions that had previously been assumed to be “inherently governmental” and “military essential.” Examples include contracted support running base camps, driving trucks in supply convoys, providing security at fixed site installations, training local police, and furnishing other support activities. One defense analyst estimates that contracted support replaced at least two division equivalents of troops.⁴⁶

The key point is that two long wars made it necessary for DoD to revisit assumptions about what is considered “military essential” and “inherently governmental.” Assumptions about operational risk that had previously guided decision making about workforce mix shifted. And there is no reason to assume the US military will not be dependent on contracted support in the

⁴⁵ T.X. Hammes, “Private Contractors in Conflict Zones: The Good, The Bad, and The Strategic Impact,” Strategic Forum, National Defense University, Nov 2010.

⁴⁶ Hammes, “Private Contractors in Conflict Zones: The Good, The Bad, and The Strategic Impact,” 3.

next conflict, even though truck drivers may have been replaced with autonomous vehicles and contractors may be writing cyber code or helping their Service counterparts maintain robots and fleets of unmanned aerial vehicles.

Thirty years ago, DoD had military personnel preparing meals in stateside mess halls (dining facilities) and checking vehicle decals at the main gates of most military installations. Over time, enlightened commanders (with some help from Congress and the harsh reality of declining defense budgets) found it prudent to re-classify these functions so they could be converted or out-sourced. Reclassifying these billets meant fewer military personnel had to be diverted from combat and combat support units where lethality and readiness matter the most.

Given the recruiting challenges associated with attracting and retaining high-tech military manpower, the Services may be forced to rely on government civilians and contracted support where the time needed to train military personnel to perform cyber, unmanned, space, and AI/ML functions will be challenged to keep pace with emerging workforce requirements. The cost of training and retaining military personnel for these functions calls for close comparison of alternative manpower sources where military personnel are not required. Many functions in these fields such as controlling unarmed reconnaissance drones or writing cyber code to defend against hackers will not remain closed to the civilian workforce by decree of either US law or DoD policy. However, the civilian workforce is facing similar, if not greater, challenges in accessing talent for high-tech occupations. The Cyber Excepted Service aims to provide the flexibility needed to attract and retain civilian manpower for these functions. The next chapter in this report examines additional legal and policy restraints that impact the manpower mix issue.

3. Legal Constraints and Considerations

When making manpower and military essentiality determinations, DoD officials must consider the legal considerations that constrain labor decisions. Depending on location, function, and the context of the function, several layers of legal restraints may be applied, derived from US statute, bilateral or multilateral agreements, and international law. These can help to explain some less evident rationales for using military personnel in seemingly non-military-essential positions.

A. Statutory Constraints

US statute outlines a series of legal restrictions on manpower within the DoD. In particular, Title 10 of the US Code (10 USC.) outlines several procedures that DoD must follow when employing different types of labor in Sections 129, 129a, and 2463. 10 USC. Section 129a delegates manpower mix authorities to the Secretary of Defense, Under Secretary of Defense for Personnel and Readiness, and the Secretaries of the military departments and heads of the Defense Agencies.⁴⁷ Section 129 states that changes in the size of the civilian workforce require specific reporting and explanations of the reasons for increases or decreases. Section 2463 outlines the requirement to give due consideration to civilian employees when such functions can be performed by civilians.

Congress has imposed a variety of constraints on the Department's ability to convert military to civilian manpower. Some of these constraints limit the DoD's workforce in specific professions—medical personnel in particular⁴⁸. In response to conversions implemented by the Services in FY2005 to 2007, Congress imposed certification requirements for future conversion and then subsequently imposed a limited ban on conversions. These changes were intended to reduce the negative impact to the Defense Health Program of unfilled civilian authorizations. Although subsequently repealed, the NDAA for Fiscal Year 2010 amended 10 USC. Section 701 to prohibit permanently the use of military-to-civilian conversions for medical and dental personnel.⁴⁹ Following a period of budget pressures, the 2017 NDAA provided limited authority for conversion, stating that “A military medical or dental position within the Department of Defense may be converted to a civilian medical or dental position if the Secretary determines

⁴⁷ Title 10, US Code § 129a—General policy for total force management.

⁴⁸ David F. Eisler, *A Brief History of Military-to-Civilian Conversions in the Department of Defense, 1965–2015*, (Alexandria, VA: Institute for Defense Analyses, March 2017), 37.

⁴⁹ 10 US Code § 977.

that the position is not necessary to meet operational medical force readiness requirements...” Other restrictions are Service-specific. For example, Section 9067 states that medical, dental, veterinary, nursing, biomedical science, judge advocate, and chaplain functions in the Air Force “shall be performed by commissioned officers of the Air Force who are qualified under regulations prescribed by the Secretary.”⁵⁰ Any revision to or analysis of military essentiality will have to contend with similar designations for each Service.

Congress has also enacted more general constraints on civilian manpower in infrastructure roles by directing a 25% cut to headquarters, administrative, and support functions in the FY 2016 NDAA.⁵¹ In combination with periodic civilian hiring freezes over the past ten years, these cuts have acted as a deterrent to using civilian manpower. We cover this issue in more detail in a subsequent chapter, as stakeholders highlighted the impact of Congress’ actions in this area.

Section 1580 of Title 10 allows the Secretary of Defense some latitude, albeit narrowly defined, to designate civilian personnel as “emergency essential” so they can be used in specific circumstances that might otherwise be regarded as “military essential” to be performed only by servicemembers. These unique circumstances are

- (1) It is the duty of the employee to provide immediate and continuing support for combat operations or to support maintenance and repair of combat essential systems of the armed forces.
- (2) It is necessary for the employee to perform that duty in a combat zone after the evacuation of nonessential personnel, including any dependents of members of the armed forces, from the zone in connection with a war, a national emergency declared by Congress or the President, or the commencement of combat operations of the armed forces in the zone.
- (3) It is impracticable to convert the employee’s position to a position authorized to be filled by a member of the armed forces because of a necessity for that duty to be performed without interruption.

This could allow civilian personnel to perform functions or operate in environments usually reserved for military personnel, albeit in limited circumstances.⁵²

The John S. McCain National Defense Authorization Act for Fiscal Year 2019, signed on 13 August 2018, prescribes a series of changes to manage costs across the Department.⁵³ In

⁵⁰ Title 10, US Code § 8067.

⁵¹ US Congress, “National Defense Authorization Act for Fiscal Year 2016,” 25 Nov 2015.

⁵² Title 10, US Code § 1580.

⁵³ 115th Congress, “John S. McCain National Defense Authorization Act for Fiscal Year 2019,” 13 Aug 2018.

particular, the act emphasizes the need for reviewing logistics, human resources, and other activities across the Department to reduce duplication, improve effectiveness, and better justify end strength and force structure.⁵⁴ While the developments arising from the 2019 NDAA do not have a direct impact on the distinctions of military essentiality, the act places renewed priority on properly identifying the need for military personnel to perform specific functions. Ways to improve this process will be discussed in subsequent chapters.

B. International Legal Considerations

International agreements often dictate the type of labor and function that US personnel can perform on foreign soil. In many instances, overseas military operations will apply host nation laws and jurisdiction, which can have implications on US forces deployed abroad. An extensive series of international agreements and treaties in the 20th and 21st centuries have also shaped DoD's ability to act.

When operating in foreign countries, DoD employees often operate under Status of Forces Agreements (SOFA), which enact certain restrictions on military manpower.⁵⁵ Depending on the host nation, SOFAs can require that only uniformed military personnel conduct operations, thereby limiting the employment of civilians overseas. On the other hand, in Iraq, limits on troop levels were the combined result of force management decisions by the executive branch and the 2008 SOFA, which led to a surge in contracted support during the peak years of the war.

Largely, however, SOFAs dictate the legal jurisdictions of the United States over military and civilian personnel operating within the host country. DoD policy is to protect US personnel from criminal trial in foreign courts. Allowing US personnel to be tried in the host country limits the Department's ability to protect their disciplinary authority over their own personnel, and risks a public backlash against their international engagements if US personnel are seen to be unprotected and unfairly treated. Without a SOFA, US personnel may risk prosecution for crimes committed in a foreign nation's territory. DoD decision makers are reluctant to send military personnel to a foreign country without a SOFA agreement in place due to this legal risk.⁵⁶

Even with SOFAs, the legal protections for civilian and military personnel vary depending on the established agreement. In some agreements, SOFAs will grant the United States exclusive jurisdiction over US personnel operating in the host country. In other cases, SOFAs provide shared jurisdiction over US personnel to both the United States and the host nation. This limitation

⁵⁴ Joe Gould, "The fate of DISA, and other org chart changes in the new defense policy bill," Defense News.com, 25 July 2018.

⁵⁵ US Department of State, "International Security Advisory Board: Report on Status of Forces Agreements," Washington: US Dept of State, 16 Jan 2015.

⁵⁶ DoDD 5525.1, "Status of Forces Policy and Information," 7 Aug 1979, incorporating through change 2, 2 July 1999; certified current as of 21 Nov 2003.

to jurisdictional authority may limit DoD decisionmakers' appetites for deploying military or civilian personnel in those countries. In addition to SOFAs, international treaties may impact the numbers or status of personnel in certain countries.

The Law of Armed Conflict (LOAC) also has a bearing on the use of civilians and military personnel for certain functions, especially civilians participating in hostilities. This body of law is largely derived from the Geneva Conventions, their Additional Protocols, and the Hague Regulations and Conventions, although many other international treaties contribute to the understanding of this customary law.

LOAC outlines the definitions and rights of individuals in international and non-international armed conflict. At its clearest, it defines combatants as all members of the armed forces as party to the conflict.⁵⁷ Disagreement and ambiguity with this body of law arises in applications when it becomes difficult to distinguish between uninvolved civilians afforded protection under LOAC and cannot be targeted, and civilians who forfeit their protected status by participating directly in hostilities.⁵⁸ This means that under LOAC, they may be legally targeted and attacked. States disagree on the duration that a civilian must be directly participating in combat related activities to lose their protection, or the amount of time that has elapsed after such activities in order to regain their non-combatant protection.

It is even more difficult to discern the definition of "direct participation." Individuals working in intelligence clearly lose their civilian protections, as do those preparing and planning an attack for a party to the conflict. Much of the supporting force, however, falls into a murky legal category. Should those who procure or transport weapons for combatants be considered directly participating? What about those who create weapons? What about civilian logisticians, strategic planners, or cooks? Due to the ambiguity in the protections for those individuals, civilian manpower deemed to have "directly participated" may be considered targetable abroad, and may be at higher risk than may be expected in their particular role. DoD may hesitate to dedicate civilians to those causes.

C. Conclusion

Federal laws, international agreements and treaties, and customary international law are all considered when determining the most appropriate type of labor to meet a requirement, but legal considerations alone do not answer the question of military essentiality. In addition to various legal restraints on the question of military manpower, policy restraints such as DoDI 1100.22 also guide DoD decision makers. We now examine the policy guidance in detail.

⁵⁷ Hague Regulations, Third Geneva Convention (4A (1), (2), (3), and (6)), and Article 43 of Additional Protocol I.

⁵⁸ Hague Regulations, Article 50 of Additional Protocol I

4. DoD Policy Guidance on Military Essentiality

Department policy for manpower sourcing and workforce mix is set by DoDD 1100.4, *Guidance for Manpower Management*, and DoDI 1100.22, *Policy and Procedures for Determining Workforce Mix*. These policies specify principles and procedures for determining manpower requirements and enable the Department to comply with the Federal Activities Inventory Reform (FAIR) Act of 1998,⁵⁹ OMB Circular A-76,⁶⁰ and the Office of Federal Procurement Policy (OFPP) Policy Letter 11-01.

DoD policy designates civilian manpower as the default labor source, with military manpower to be used by exception.⁶¹ Government civilian labor is also preferable over private sector contracted support, except when contracted support can be obtained at lower cost or when there are impediments to using civilians for activities not exempt from private sector performance.⁶²

Use of military manpower must meet specific criteria for military-essential requirements, identified in DoDD 1100.4:

Manpower shall be designated as civilian except when military incumbency is required for reasons of law, command and control of crisis situations, combat readiness, or esprit de corps; when unusual working conditions are not conducive to civilian employment; or when military-unique knowledge and skills are required for successful performance of the duties.

DoDI 1100.22 adds a criterion related to rotational requirements,:

- (1) Military-unique knowledge and skills are required for performance of the duties.
- (2) Military incumbency is required by law, Executive Order (EO), treaty or International Agreement (IA).
- (3) Military performance is required for command and control, risk mitigation, or esprit de corps.

⁵⁹ Federal Activities Inventory Reform Act, Public Law 105-270, 112 Stat. 2382, 1998.

⁶⁰ Office of Management and Budget, Executive Office of the President, Circular A-76, 2003.

⁶¹ DoDD 1400.5, *DoD Policy for Civilian Personnel*, 12 Jan 2005.

⁶² DoDI 1100.22, *Policy and Procedures for Determining Workforce Mix*, 12 Apr 2010.

(4) Military manpower is needed to provide for overseas and sea-to-shore rotation, career development, or wartime assignments.

(5) Unusual working conditions or costs are not conducive to civilian employment.

With the exception of esprit de corps, the criteria for military manpower are not substantially different from the criteria in the previous version of DoDD 1100.4, published in 1954:

Civilian personnel will be used in positions which do not require military incumbents for reasons of law, training, security, discipline, rotation, or combat readiness, which do not require a military background for successful performance of the duties involved, and which do not entail unusual hours not normally associated or compatible with civilian employment.

The 1954 version identifies morale and optimum personnel utilization as additional considerations, and the 2005 version retains this language and added esprit de corps as a distinct criterion for designating military manpower.

Only a subset of the criteria are fundamentally military requirements: military incumbency is required by law, Executive Order, treaty, or International Agreement, and military performance is required for command and control. For the other criteria, the requirement itself is not necessarily military in nature, but other considerations require military performance. These considerations are discussed in more detail below.

The policies explicitly prioritize risk mitigation and flexibility over cost savings. DoDI 1100.22 identifies three considerations as higher priority than cost: maintaining control of government operations, expanding military capabilities, and maintaining core capabilities and readiness. In other words, effectiveness and resiliency take precedence over efficiency. However, the policies also strongly emphasize the objective of maximizing effectiveness while minimizing cost. DoDD 1100.4 directs that missions are to be accomplished with the “least costly mix of personnel” and emphasizes manning at minimum levels.⁶³ DoDI 1100.22 directs components to conduct cost analyses to ensure that new or expanding manpower requirements are met with the lowest cost labor source where appropriate.

DoDD 1100.4 distinguishes among peacetime, mobilization, and wartime demands and directs that these considerations be integrated in determining manpower requirements. It also requires manpower to be designated as either military or civilian, not both. Thus, even when an activity is designated military only for rotation or career development purposes, designating the activity for civilian performance would require recoding the position. This constraint fails to address the flexibility that components may need to staff for rotation and career development

⁶³ DoDI 1100.22, Sections 3.2.3, 3.1, 3.2.

purposes. Some inherently governmental functions could be served by either military or civilian, and some organizations may need military-unique knowledge and skills at a collective level, rather than in a specific position.

DoDI 1100.22 provides manpower mix criteria to identify the rationale for designating manpower as military or civilian (see Figure 1). The criteria include military essential, but focus primarily on inherently governmental functions versus commercial activities. Only two of the four inherently governmental categories involve functions to be performed exclusively by military, indicated in bold below:

1. Direction and control of combat and crisis, which includes both civilian and military manpower (Criterion A)
2. DoD civilian authority direction and control, which is civilian only (Criterion E)
- 3. Military-unique knowledge and skills (Criterion F)**
- 4. Military augmentation of the infrastructure during war (Criterion I)**

The exemptions from private sector performance identified in the policy include roles performed by military, but all of the exemptions also include civilians. The criteria, including exemptions, are listed in order of precedence in Figure 1.

A	A	Direction and Control of Combat and Crisis Situations
B	Exemption of Combat Support	
D	Exemption of Manpower Dual-Tasked For Wartime Assignments	
E	DoD Civilian Authority Direction & Control	F Military-Unique Knowledge & Skills
G	Exemption for Esprit de Corps	
H	H Exemption for Continuity of Infrastructure Operations	I Military Augmentation of the Infrastructure During War
J	Exemption for Civilian & Military Rotation	K Exemption for Civilian & Military Career Development
L	Exemption by Law, Executive Order, Treaty or International Agreement	
M	Exempted by DoD Management Decision	
P	Pending Restructuring of Commercial Activities	
R	Subject to Review for Public-Private Competition	
W	Non-Packageable Commercial Activity	
X	Alternative to Public-Private Competition	

Figure 1. Manpower Mix Criteria

These criteria primarily distinguish inherently governmental from commercial functions. They also distinguish military from civilian functions, but these distinctions are less evident and require a close read of the sub-criteria. The criteria do not sufficiently differentiate unique military functions from inherently governmental functions more broadly, nor do they reflect the emphasis on civilian manpower indicated in the DoDI and in the Workforce Rationalization Plan.

In addition, the language used in manpower management can be misleading, according to Service stakeholders (see Chapter 6). As reflected in the criteria above, policies use the term *manpower mix* or *the workforce mix* to refer to the Total Force. This implies that there is some ideal proportion of military, civilian, and contracted support that components should target. Indeed, DoDI 1100.22 is titled, *Policy and Procedures for Determining Workforce Mix*, when the policy more directly addresses how to identify the appropriate labor source, rather than the mix itself. More specifically, the policies provide guidance for decisions of when to deviate from using government civilians, because civilians are the default labor source required by DoDD 1100.4 and DoDD 1400.5. The mix of manpower resulting from those decisions is incidental. Manpower

mix at different organizations may look quite different and still be optimum, as long as the labor sources are appropriate to the functional requirements and institutional needs.

Consistent with Department policy, the Services' manpower management policies similarly refer to manpower mix as though achieving a particular mix is the goal. The Army provides guidance to managers on "determining the proper mix."⁶⁴ The Air Force provides "tools for determining the appropriate mix."⁶⁵ The Navy states that the aim of planning, programming, budgeting, and execution processes is "to provide the best mix of total force."⁶⁶

This emphasis on mix reflects an inconsistency in the policy. Although it directs component to consider an overall mix, the policy also directs components to first examine the function to be performed and then assess whether the function requires military rather than civilian manpower. For functions that are not inherently governmental, components also must consider whether contracted support could perform the function at lower cost. However, when DoDI 1100.22 directs components to "consider all available sources when determining manpower mix," and delineates "manpower mix criteria," it further directs attention away from aligning function to manpower source, in favor of focusing on the relative proportions of manpower sources.⁶⁷ Though perhaps unintended, this language gives precedence to the mix itself, over aligning manpower to function. In reality, the mix is simply a byproduct of determining manpower requirements.

A. Military Manpower Requirements

As noted above, designating manpower requirements as military essential is driven by the function to be performed and other considerations. The DoDI currently enables many requirements to be designated as military essential even when military functions are not involved.

1. Military Unique Knowledge and Skills

One criterion that designates military performance without necessarily involving military functions is the category of "military-unique knowledge and skills" (Criterion F in Figure 1). This criterion refers to personnel qualifications rather than the function. This criterion is particularly problematic due to its overlap with other criteria and its broad scope.

The guidance for applying this criterion overlaps with that for direction and control of combat/crisis situations (Criterion A). Some guidance for military-unique knowledge and skills repeats points from Criterion A about operational control, though refers to "accomplishment of

⁶⁴ Army Regulation 570-4, *Manpower Management*, Section 6-3, 2006.

⁶⁵ Air Force Instruction 38-201, *Management of Manpower Requirements and Authorizations*, 22, 30 Jan 2014.

⁶⁶ OPNAV Instruction 1000.16L, *Navy Total Force Manpower Policies and Procedures*, 24 June 2015.

⁶⁷ DoDI 1100.22, Section 3.2.3.

military missions” rather than crisis situations and refers to authorities under the UCMJ.⁶⁸ Criterion F of military-unique knowledge and skills also includes functions for which military performance is required by Title 10. In these cases, there is no need to invoke references to required knowledge and skills, as the instances are more appropriately accounted for in other ways.

The remainder of Criterion F falls under the sub-criterion of “Military-Unique Knowledge and Experience.” For this sub-criterion, the description notes parenthetically that, “The required knowledge and experience must be more substantial than what DoD civilians with prior military experience could provide.”⁶⁹ The policy then offers examples of qualifying activities. These include determining operational requirements and gaps in military capabilities for which recent experience in the operating force is needed, military training, and research, development, test, and evaluation of operational systems.

This sub-criterion also includes several law enforcement and detention functions, which appear to be at least partially redundant with Criterion A in addressing military authorities. With the exception of the one reference to recent experience, none of the examples for Criterion F indicate what would constitute “more substantial” military knowledge and skills than DoD civilians or contracted support with prior military experience may possess.

Criterion F also overlaps with the criterion “military augmentation of the infrastructure during war” (Criterion I). This criterion applies to military manpower used to backfill positions dual-tasked for wartime (Criterion D). Because these functions can already be coded as the higher-precedent Criterion F, Criterion I may be unnecessary. Such overlap in categories undermines the reliability of responses, as it leaves room for many different interpretations and for inconsistencies in application. “Military-unique knowledge and skills” could be interpreted narrowly to mean that the function requires interface with the operational force and the military incumbent should be coming from the operational force and subsequently returning to the operational force. Alternatively, it could be broadly interpreted as applicable to almost any function that requires institutional knowledge.

The supporting descriptions in DoDI 1100.22 that define military-unique knowledge and skills include a range of divergent conditions, including functions that require military performance by statute, functions that require technical expertise that could be found in recently-retired veterans, and functions that are simply inherently governmental and not clearly military essential, including training roles requiring “substantial discretion.”

Components have to determine for themselves how to apply Criterion F. The Navy’s criteria refer to mobilization requirements for which “current military experience” is needed, but the Services’ policies otherwise do not offer descriptions or standardization of the criteria for

⁶⁸ DoDI 1100.22, 33.

⁶⁹ DoDI 1100.22, Enclosure 4, Section 5.g, 34.

military essentiality. As a result, it is unclear how components are currently applying the criterion of military-unique knowledge and skills in their manpower requirements. In present policy, this criterion is too broad to justify its continuing use as its own category, separate from other reasons for using military manpower.

In a previous version of its manpower management policy, the Army once provided guidance that addressed the ambiguity in requirements for a military background.⁷⁰ To designate military manpower in Table of Distribution and Allowances (TDA) organizations, the function had to “require the application of knowledge or skill that could be acquired and maintained only through extensive and continuing military training and experience.” The policy specified delineation criteria and positions that are typically military in TDA organizations, noting that it does not include positions “requiring merely a knowledge of Army administration, terminology, or administrative procedures.” Although the Army applied this criterion only to a subset of its organizations and did not retain it in more recent versions of its policy, the description is broadly applicable. Because a substantial proportion of DoD civilians and contracted support are prior service and have military-unique knowledge and skills, narrowing this criterion and eliminating its redundancy with other criteria would improve guidance.

2. Exemption for Esprit de Corps

The exemption for esprit de corps is another criterion that the Services have interpreted broadly and inconsistently; further detail and examples are in Chapter 5. The DoDI clearly defines this exemption, indicates it should have only limited application, and provides concrete examples (such as military bands and recruiters). Nonetheless, the Services have applied this criterion to dozens of different functions. Strengthening the language about the limited nature of this exemption and providing counter-examples of functions that do *not* serve esprit de corps would enhance the likelihood that components apply this exemption consistently. It would also help ensure that manpower more appropriately coded under another criterion would not be coded as esprit de corps.

B. Challenges with Implementation

Shifts in how the Department conducts its activities and in the role of different manpower sources in conflict pose challenges for the policy in its current form. In addition, feedback from stakeholders indicated several areas of concern that create implementation challenges for DoDI 1100.22 (see Chapter 6). Stakeholders in manpower management roles generally reported that the DoDI does not substantially guide their decision making and acknowledged that other factors are dominant. Perceptions that military manpower is easier to access and more fungible

⁷⁰ Army Regulation 570-4, Manpower Management: Policies, Procedures, and Responsibilities, 10 Oct 1969.

represent one driver that sometimes outweighs policy considerations. Stakeholders acknowledged that improvements to the DoDI would be helpful, but would be secondary to other factors in sourcing manpower requirements. On the other hand, a few stakeholders indicated that the DoDI does not constrain their decision making. These stakeholders did not advocate for any policy improvements.

In outlining procedures for determining the workforce mix, DoDI 1100.22 discusses designating units and/or organizations; however, designating manpower requirements for new organizations occurs infrequently.⁷¹ More commonly, units and organizations were previously established, and the manpower mix is reviewed when the organization takes on new missions and functions, anticipates cuts, or is re-organized. The DoDI is not clear about the expected procedures for existing organizations and enduring requirements. Both the previous version and the current DoDI indicate that the guidance should be applied both when addressing new missions or programs and when revalidating the workforce mix for existing activities; however, the current DoDI does not distinguish *procedures* for developing new requirements from those for validating existing requirements.⁷²

According to stakeholders, efforts to make the DoDI comprehensive have also made it less useful. Their feedback suggested that the Manpower Mix Criteria are simultaneously too detailed and in some places too vague to aid decision making, as discussed further in Chapters 6 and 7. For example, some view as vague the exemption from commercial performance for purposes of career development (Criteria K). The criteria do not specify what functions are appropriate to use for career development, and components could potentially categorize any activity under this criterion. Stakeholders also indicated that the policy conflates the concepts of inherently governmental and military essential, which causes confusion.

The inclusion of specific examples and of the justification for why certain activities are inherently governmental in the Manpower Mix Criteria also constrains the DoDI's utility to stakeholders. The DoDI provides legal and statutory justification for the inherently governmental nature of certain functions, and although this justification is important background for some purposes, manpower analysts responsible for designating or validating manpower requirements do not always find it relevant. Manpower analysts may be looking to the DoDI more for procedural guidance than for explanatory guidance, and as a result may rely more on component policies and procedures for day-to-day activities than on the DoDI, as indicated by stakeholders as described in Chapter 6. Thus, from the perspective of manpower analysts, providing clear, foundational principles that inform component policies and procedures may be the most important role of the DoDI. For that reason, the policy would benefit from more emphasis on how

⁷¹ DoDI 1100.22, 12.

⁷² DoDI 1100.22, *Guidance for Determining Workforce Mix*, 7 Sept 2006, and DoDI 1100.22, Section 4.a.

to align functions with the appropriate manpower source and less emphasis on the notion of an “optimal mix.”

C. Revisions to the Criteria

Although the criteria for military-essential manpower requirements in DoDI 1100.22 are not the driving force in manpower sourcing decisions, improvements to the policies could clarify the criteria and help components more consistently and more rigorously define their manpower requirements. We recommend that revisions

- **Revisit use of the term *manpower mix*.** Language should refer to *an* appropriate mix rather than *the* appropriate or best mix. In many instances, *manpower mix* should be avoided altogether; the language should instead refer to identifying the appropriate manpower source or labor source. This change would shift the policy’s focus back to aligning manpower with functional requirements rather than implying a desired proportion of different labor sources. This recommendation applies to both DoDD 1100.4 and DoDI 1100.22.
- **Include the procedures outlined in Enclosure 3 of the DoDI to more explicitly address the military versus civilian manpower distinctions.** The policy currently focuses on inherently governmental functions, as noted by stakeholders and described in Chapters 6 and 7. Discussion of personnel shortfalls and non-availability of civilians is currently addressed in the policy primarily in terms of preventing contracted support from being used for inherently governmental functions. Civilian personnel shortfalls may also result in military manpower being used for non-military essential functions. The procedures provide limited guidance on how to code for functions that should undergo conversions, but guidance is lacking on how to pursue conversion and ensure that Components can access the appropriate manpower source.
- **Clarify guidance for using the manpower source criteria in revalidating requirements.** Stakeholders reported the DoDI to be ambiguous regarding principles and procedures for using the criteria in revalidating requirements. Military-to-civilian conversions may be desirable in the abstract, but if funding is not available to support accessing civilian labor, then the criteria may be used simply to support the status quo. Stakeholders reported that criteria are often used in this post-hoc manner. If the criteria are to be meaningful, then greater clarity is needed on procedures to document requirements more accurately in revalidation. Explicit procedures should be provided for applying the criteria not only for new functions and missions, but also to existing units and organizations.
- **Define more clearly the criteria for *military essential*.** The criteria would be more useful by eliminating overlap and redundancy across manpower criteria codes and more narrowly defining some criteria. It may help to make more explicit the distinc-

tion between functions deemed military essential and roles that are not military essential, but that require military performance for other reasons. For example, training and education functions may not be military essential but require military performance for rotation or professional development. The policy currently addresses this issue with the categories of exemptions. However, because the exemptions are intended for exemption from commercial performance, not exemption from civilian performance, the criteria combine inherently governmental with military essential in ways that tend to obscure the meaning of military essential. Defining the exemptions in the same or similar terms for civilian and military performance conflates civilian and military manpower and is a missed opportunity to distinguish the special conditions warranting unique exemptions of military manpower requirements. Specifically:

- **Revise the criterion of military unique knowledge and skills.** Eliminate the redundancy with other criteria and more narrowly define this criterion. Functions designated for military performance by statute should not be included in this criterion, such as military advice and counsel required by Title 10. Knowledge of military organizations, military authorities, and military processes can be found in the civilian workforce and contracted support. Therefore, this criterion should, at a minimum, be limited to “recent and continuing military training and experience.” The criterion could be even more narrowly limited to functions requiring a close exchange with the operational force, and applied only to circumstances in which personnel are coming from an assignment in the operational force and are likely to return to the operational force.

For example, operational test and evaluation for explosive ordnance disposal technologies may be designated for military performance due to the need to consider recent operational conditions in technology development, combined with the benefits to the operational force of having explosive ordnance disposal personnel who are experienced in the design, development, and testing process. In this case, military knowledge enhances performance of the function, and a future military function in the operating force is enhanced by the previous experience. Such circumstances warrant retaining military-unique knowledge and skills as a military essential criterion, but are likely to be more limited than the present policy allows.

- **Eliminate the exemption for civilian esprit de corps.** The criterion of esprit de corps was intended for military manpower, and its application to civilians simply dilutes the concept. Our analysis indicated that civilian esprit de corps is used rarely; however, military esprit de corps is applied broadly (to 69 different functions, as detailed in Chapter 6). Thus, further limiting the concept of esprit de corps may help. In addition, unlike for military manpower, there is no visible distinction between government civilians and contracted support, and it is likely that many personnel interacting with them do not know which they are. It is difficult

to argue that a Title 10 civilian at an educational institution, working under a term-limited contract, bears any substantive distinction from a contractor, or that students are even aware of the different non-military labor sources. Analysis of the IG/CA data indicated that this exemption is very rarely used, but the overuse of the exemption for military esprit de corps suggests that the general notion of esprit de corps is poorly understood or very loosely applied, and a less expansive use of the term would be beneficial.

- **Provide a decision aid for manpower analysts.** Stakeholders suggested that the DoDI should include a decision tree or matrix that analysts could use when determining requirements. The DoDI directs heads of components to issue implementing guidance, and some components have included a decision aid in that guidance, which manpower analysts are using. However, if the OSD aims to have manpower analysts use the DoDI itself, in addition to their Service or component guidance, a decision aid would broaden the policy's utility and encourage greater consistency in implementation.
- **Address the need for military unique-knowledge and skills at the collective level.** The policy currently does not acknowledge or readily accommodate the need for military manpower at an organizational level, but only at the individual position or billet level. Some organizations in the Fourth Estate reported that they need personnel with recent experience in the operational force as a resource within the organization, but not necessarily in a specific position.⁷³ In these cases, the requirements are flexible with regard to fill by either military or civilian manpower, as long as there are enough military personnel within the organization to provide an operational perspective. As a result, organizations may have difficulty justifying their military requirements under the current policy, as the function itself is inherently governmental without being inherently military essential. Guidance on how to code and report these more flexible requirements would be helpful. This guidance could take the form of an additional exemption for this purpose.
- **Consider eliminating or reducing material drawn from references.** Because stakeholders reported that the extensive examples in the criteria complicate the policy and make it harder to follow, future revisions should simplify where possible and direct stakeholders to other resources to guide specific functions and scenarios. For example, *interrogation* is covered under other policies and may not need to be addressed in detail within the DoDI.

⁷³ Stakeholder engagements with the Defense Contract Management Agency and the Defense Information Systems Agency, April 2018.

These recommended revisions will need to be accompanied by additional oversight of the policy and support for potential conversions that may emerge while revalidating existing authorizations. Components are unlikely to more rigorously or consistently apply the manpower criteria if they anticipate that their efforts won't effect decision making or manpower availability. To have an impact on manpower planning, a feedback mechanism is needed to ensure that the military-essential manpower requirements are accurately determined and reported and is not just a compliance exercise. We address the need for additional oversight in the recommendations and conclusions of this report (Chapter 8). The following chapter details the current use of the manpower criteria codes as reflected in the IG/CA inventory.

5. Inherently Governmental and Commercial Activities Inventory

The IG/CA inventory is an annual reporting requirement within the Department of Defense, designed to satisfy the requirements arising from the 1998 FAIR Act and from OMB Circular A-76—Performance of Commercial Activities.⁷⁴ The dataset includes “all appropriated funded military authorizations (Active and Reserve Components, in unity and in the Individuals Account) and DoD civilian authorizations (US and foreign national).” The inventory is provided bottom up from across the DoD enterprise. OSD compiles and sends the data to OMB, who is assigned with the responsibility to guide and monitor compliance with the FAIR Act’s reporting requirements.⁷⁵

A lack of analysis or oversight of the data produced from the Services up to OSD has resulted in missed opportunities in the IG/CA inventory’s potential use. IDA’s extensive engagements with stakeholders revealed most do not understand the purpose of submitting the IG/CA report and recognize its potential as a management tool, but question its current utility for that purpose. Completing the report provides little tangible benefit to organization submitting it other than to summarize the manpower authorizations within their department. From the stakeholders’ perspective, the inventory does not offer OSD or OMB much benefit either, outside of demonstrating compliance with the FAIR Act and Circular A-76. The reporting process is bottom-up and self-reported, and no stakeholders acknowledged receiving queries about their submissions from headquarters, OSD, OMB, or Congress—a phenomenon that breeds a lack of interest and undermines the credibility of the IG/CA reporting process. This perceived lack of oversight and accountability is a disincentive to maintain and report accurate manpower data, greatly limiting its utility.

A. Background

As part of the ongoing struggle to most efficiently and transparently allocate federal resources, Congress passed the Federal Activities Inventory Reform (FAIR) Act in 1998, which requires an annual inventory of government activities that are not inherently governmental in nature. The inventory requires the submitting organization to determine whether a given function or activity is inherently governmental, and includes the number of full-time employees

⁷⁴ Office of the Secretary of Defense, “2016 Inherently Governmental and Commercial Activities Inventory Guidance.”

⁷⁵ *Federal Activities Inventory Reform Act*, Public Law 105-270, US Government Printing Office (1998). www.gpo.gov/fdsys/pkg/PLAW-105pub1270/content-detail.html

authorized for the performance of a function or activity. OMB Circular A-76 supplements the FAIR Act and “sets forth the procedures for determining whether commercial activities should be performed under contract with commercial sources or in-house using Government facilities and personnel.”⁷⁶ Together, these documents guide the development of DoD’s input to OMB, which takes the form of the IG/CA.

Within DoD, the Office of the Under Secretary of Defense for Personnel and Readiness (OUSDP&R) issues annual guidance to the DoD components on functional categorizations and how to respond to the IG/CA data call.⁷⁷ Each component has its own internally developed processes for collecting and aggregating its data, as elaborated in Chapter 6 of this paper, although the annual guidance defines functional categorizations across the components. Once the components complete their annual review, OUSDP&R sends the Department’s inventory to OMB.

Though studies have identified limitations of the dataset in other contexts, our research focused on using IG/CA data to identify potential policy improvements and potential targets of opportunity for shifting military to civilian manpower.⁷⁸ The IG/CA data may not have the level of granularity needed for decision making in every case, but does indicate potential gaps between policy and practice. IDA reviewed the FY 2016 IG/CA inventory and explored the distribution of military and civilian personnel across the DoD enterprise. We identify several areas deserving further explication and analysis, detailed below. Military authorizations reported below include Active Component, Guard, and Reserve.

B. Broad and Imprecise Application of Criteria

Our discussions with the Services and the Fourth Estate affirmed that each stakeholder has a unique culture and mission that necessitates differences in the use of military personnel. However, the IG/CA data capture significant discrepancies in the categorization and use of the term *military essentiality*. Stakeholders reported that their military authorization requests often arose from multiple justifications, not falling neatly into one criterion category, which requires them to make a subjective judgment on which criterion most accurately justifies a specific billet. But differences between the Services in how they apply the criteria codes make it difficult for manpower managers to interpret the numbers and draw meaningful conclusions from the data sets.

⁷⁶ Office of Management and Budget, “Circular No. A-76: Performance of Commercial Activities,” Executive Office of the President, Aug 1983 (Revised 1999).

⁷⁷ Office for the Secretary of Defense, “2016 Inherently Governmental and Commercial Activities Inventory Guidance,” Jan 2016.

⁷⁸ Government Accountability Office, “Defense Headquarters: Improved Data Needed to Better Identify Streamlining and Cost Savings Opportunities by Function,” June 2016; and Congressional Budget Office, “Replacing Military Personnel in Support Positions with Civilian Employees,” Dec 2015.

Because the IG/CA function codes do not perfectly align with positions, career fields, or military occupational specialty, the Services may categorize the same job differently, resulting in inconsistencies across the Department.

This lack of clarity may be most evident in the category of “Military Unique Knowledge and Skills” (Criterion F), which appears to be broadly applied (see Table 1). According to the FY16 IG/CA data, 209,769 military authorizations fall into this category, ranging from combat service support (10,842) to flight training (4,484) to dental care (1,733). In particular, the Air Force uses this category heavily for its combat, combat support, and combat service support roles. The Army more heavily uses Criterion F for its health services and recruiting, education, and training functions. As currently defined, this category is vague and overly broad, and can be used to justify the existence of military authorizations with little consistency. The category also implies that only currently serving military personnel have this requisite knowledge, though recently retired military personnel or government civilians with DoD experience or training can frequently provide that knowledge or skillset.

Table 1. Select Military Authorizations Coded as Military Unique Knowledge and Skills

Functions		Air Force	Army	Navy	Marines	Total
M480	Combat Support	21969	72	11	4	22056
M510	Combat Service Support	10319	523	0	0	10842
M415	Combat	5085	5	1	0	5091
U400	Flight Training	2887	626	676	295	4484
A620	Developmental and Operational Test and Evaluation	2781	437	434	271	3923
H203	Ambulatory Care Services	77	2263	314	0	2654
H999	Other Health Services	105	2136	150	0	2391
H113	Dental Care	4	1655	74	0	1733
T110	Retail Supply Operations	12	2078	138	86	2314
B820	Military Recruiting and Examining Operations	567	14740	169	355	15831
U150	Multiple Category Training	894	3827	0	0	4721
U599	Other Military Education and Training Activities	313	3488	129	43	3973
U550	Training Development and Support for Military Education & Training	4	3001	1212	2	4219
U510	Professional Military Education	582	1460	112	413	2567
U050	Military Institutional Education and Training Management	274	2190	328	29	2821
Grand Total		78576	87789	25120	18284	209769

The same can be said of Criterion G: Exemption for Esprit de Corps. While the most used functions in the criterion—12,280 military authorizations for military recruiting or 1,014 for military bands, for instance—may be understandable, 69 different functions have authorizations claiming this exemption. Claiming that military personnel are needed in “Motor Vehicle Transportation Services” or “Military Personnel Operations” for the purposes of esprits de corps is questionable and warrants further scrutiny.

Analysis by function code reveals additional examples of criteria that may be more broadly applied than intended. For example, although authorizations for military recruiting include manpower codes that one would expect, these authorizations are also categorized in less intuitive ways. Table 2 demonstrates that even within the function of military recruiting and examining operations, the Services apply widely different criteria for their authorizations. Whereas the Air Force exempts their military recruiting authorizations based largely upon esprit de corps, the Army posits that their authorizations are mainly necessary for continuity of infrastructure operations and military unique knowledge and skills. The Marines have broadly distributed their military recruiting authorizations across almost all of the criteria codes. However, other codes applied to military recruiting include direction and control of combat and an exemption for continuity of infrastructure (254; Army only), and others are considered subject to review for public-private competition (202).

Table 2. Authorizations for Military Recruiting and Examining Operations by Criteria Code and Service within the United States

	Air Force				Grand Total
	Force	Army	Navy	Marines	
A - Direction and Control of Combat & Crisis Situations	32			20	52
D - Exemption of Manpower Dual-Tasked for Wartime Assignment				124	124
F - Military Unique Knowledge & Skills	557	14740	169	355	15821
G - Exemption for Esprit de Corps	2270	17	5762	4206	12255
H - Exemption for Continuity of Infrastructure Operations		254		2	256
I - Military Augmentation of the Infrastructure During War				107	107
J - Exemption for Civilian & Military Rotation				5	132
K - Exemption for Civilian & Military Career Development				1	1
L - Exempt by Law, Executive Order, Treaty or International Agreement			1		1
R - Subject to Review for Public-Private Competition				197	202
Grand Total	2859	15012	6134	4951	28956

Table 3 shows a similar breadth of interpretation within Military Personnel Operations. The Navy exempts 448 of their 1,131 military authorizations in this function for esprits de corps, whereas the other Services apply the esprit de corps criterion to few authorizations for personnel operations. The Air Force and Marine Corps categorize personnel operations primarily as requiring military unique knowledge and skills. Each of the Services distributes these military authorizations differently, suggesting a need for more clearly defined criteria codes.

Table 3. Military Authorizations for Military Personnel Operations within the US by Select Criteria

	A - Direction and Control of Combat & Crisis Situations	B - Exemption of Combat Support & Combat Service Support Due to Operational Risk	F - Military Unique Knowledge & Skills	G - Exemption for Esprit de Corps	H - Exemption for Continuity of Infrastructure Operations	I - Military Augmentation of the Infrastructure During War	Grand Total
Air Force	9	16	1195	11		70	1301
Army		5038	4766	37	748	5	10594
Navy		3	541	448	9	130	1131
Marines	4		713		42	14	773

The “99” series of function codes—”used to code work that is not identified by other functions on the list”⁷⁹—is similarly vague and broad. Despite the fact that these “miscellaneous functions should be used only as a last resort when no other function applies,” 43,506 military authorizations are categorized as miscellaneous functions. Catch-all “other” functions and criteria like “Military Unique Knowledge and Skills” dilute OSD’s ability to use these data to strengthen Total Force planning.

C. Military/Civilian Authorization Ratios

The IG/CA data also reveals differences between the Services in the mix of military and civilian personnel performing a given function. Some Service differences are to be expected, as the conditions for performance of those functions and operational risk may differ by Service. Nonetheless, functions that are performed by both military and civilians may indicate an opportunity for military-to-civilian conversion for cost avoidance or realignment of military manpower to more direct roles in readiness. Where one or more Services use a lower proportion of military for a particular function, other Services may be able to use that as a model of how to civilianize effectively.

Table 4 below shows that only 60% of the Air Force’s personnel performing the function of “Training Development and Support for Military Education and Training” are military, compared to near 100% for the Army and Navy. For “Surgical Care” however, almost all personnel in the Air Force are military, whereas the Navy and Army have a higher proportion of civilian personnel. These differences in approach to military essentiality extend to other medical categories such as “Ambulatory Care Services,” and support previous IDA studies that suggest medical services as an area for potential military-to-civilian conversions.

Table 4. Percentage of Total Labor Authorizations that are Military, by Service and Function

Function		Military Auths	Percentages			
			Army	Air Force	Navy	Marines
H203	Ambulatory Care Services	18497	49.58	96.30	80.13	
T110	Retail Supply Operations	9951	70.32	27.54	47.86	53.08
U150	Training Development/Support for Military Education/Training	9468	97.02	60.17	100.00	
J501	Aircraft (Repair/Maintenance Management)	7345	38.49	75.13	92.54	80.00
H102	Surgical Care	5350	53.59	95.14	84.79	
A620	Developmental and Operational Test and Evaluation	5094	15.11	64.52	17.15	62.14

No doubt, there are valid operational and cultural reasons for Service differences in how they employ military and civilian personnel for the same functions. However, as it exists, the

⁷⁹ OSD, “2016 Inherently Governmental and Commercial Activities Inventory Guidance.”

data reflected in the IG/CA does not comprehensibly rationalize these differences. So, for example, naval operational risk often extends to all sailors on a US Navy vessel regardless of function (i.e., cooks, ships laundry, etc.) thereby limiting the Navy’s ability have civilians fill certain billets at sea on certain classes of ships—even though Military Sealift Command effectively uses civilian mariners. However, these distinctions and the potential trade space for using various labor pools cannot be discerned from the data alone, resulting in many unanswered questions about the use of military personnel across the Services.

D. Military Authorizations in Infrastructure Functions

We found many examples of infrastructure functions appropriately designated civilian manpower and included few to no military authorizations. However, the data also reveal certain functions for which the number of military personnel appeared high, considering the tasks are generally amenable to civilian labor. We particularly noted the high number of military authorizations for function T110: “Retail Supply Operations” (Table 5). This function includes “supply operations typically performed at an installation, base, or facility to include providing supplies and equipment to all assigned or attached units. This includes all basic supply functions to include the requisition, receipt, storage, issuance, and accountability of materiel. This includes but is not limited to: Supply Operations, Central Issue Facilities, Retail Supply Operations, Materiel Services, and Other Retail Supply Services.”⁸⁰

Table 5. Authorizations for Retail Supply Operations

Total		Army		Navy		Marines		Air Force	
Military	Civilian	Military	Civilian	Military	Civilian	Military	Civilian	Military	Civilian
9,951	5,793	7,601	3,208	2,080	2,266	224	198	46	121

As seen above, there are 15,744 authorizations for this function in the Services, 9,951 of which are military. More than 7,500 of these military authorizations come from the Army alone, a surprising number of military personnel—especially when one considers that this figure equates to roughly nine infantry battalions, or approximately an infantry division’s worth of combat power.

Similar to the esprit de corps category, the broad distribution of exemptions for retail supply suggests that the function is not universally understood. When reviewing the Services’ justifications for using military personnel, the data shows that most of the authorizations do not

⁸⁰ Office of the Assistant Secretary of Defense, Manpower & Reserve Affairs, “2017 Inherently Governmental and Commercial Activities Inventory Data Call,” June 2017.

involve the military-only criteria of military-unique knowledge and skills (Criterion F) or military augmentation during war (Criterion I) (see Table 6). Many of them are coded with criteria involving operational risk or wartime assignment, indicating perhaps that these functions are more inherently governmental than strictly military essential. In addition, these billets have been justified differently within and between the Services, suggesting an overly broad and subjective application of the criterion as it relates to specific functions.

Table 6. Military Authorizations within the US for Retail Supply Operations by Criteria Code

	Total	Air Force	Army	Navy	Marines
A - Direction and Control of Combat & Crisis Situations	2				2
B - Exemption of Combat Support & Combat Service Support Due to Operational Risk	2455		2447	8	
D - Exemption of Manpower Dual-Tasked for Wartime Assignment	2069	1	2049		19
F - Military Unique Knowledge & Skills	2232	12	2055	114	51
G - Exemption for Esprit de Corps	12		1	11	
H - Exemption for Continuity of Infrastructure Operations	941		920	19	2
I - Military Augmentation of the Infrastructure During War	142	7		132	3
J - Exemption for Civilian & Military Rotation	500	4		491	5
K - Exemption for Civilian & Military Career Development	595	22	11	562	
L - Exempt by Law, Executive Order, Treaty or International Agreement	23		22	1	
M - Exempted by Management Decision	5			5	
P - Pending Restructuring of Commercial Activities	13			9	4
R - Subject to Review for Public-Private Competition	383			283	100
Grand Total	9372	46	7505	1635	186

E. Conclusion

Table 7 highlights several other support functions with substantial numbers of military authorizations. While many of these functions are performed largely by civilians, the military authorizations for these infrastructure functions warrant further scrutiny. The Air Force has 1,400 military authorizations for legal services and support. The Marines have almost 1,000 military labor authorizations dedicated to fire prevention and almost 400 authorizations for postal services. The Navy's need for 650 military authorizations performing housing management is unclear from the data alone, as is the Army's need for 1,000 military authorizations in finance and accounting services. These six functions alone comprise 12,228 military authorizations. Although these authorizations may indeed be military essential, the fact that the Services already have so many civilians performing these infrastructure functions suggests that the standard for assigning military manpower to these functions could be higher. Even when examining the criteria used for these authorizations, the data are unclear. Some military authorizations in postal services are being exempted for direction and control of combat and crisis situations. Some authorizations for administrative management and correspondence services are exempted for esprits de corps. More investigation would verify that these positions conform with DoD policy on military essentiality. OSD could benefit in the future from requiring the Services to address the more obvious anomalies and policy deviations.

Table 7. Authorizations within the United States for Select Functions by Service

Functions		Total		Army		Navy		Marines		Air Force	
		Military	Civilian	Military	Civilian	Military	Civilian	Military	Civilian	Military	Civilian
Y415	Legal Services and Support	5,403	3,284	1,907	1,601	1,422	988	606	93	1,468	602
Y820	Administrative Mgmt/Correspondence Services	2,391	7,032	114	212	1,864	4,732	2		411	2,088
C700	Finance/Accounting Services	1,432	5,297	1,001	1,777	39	3,094	231	159	161	267
S440	Fire Prevention	1,523	7,255	158	3,477	348	2,718	925	893	92	167
S310	Housing Management	796	1,648	103	818	653	633	39	173	1	24
G210	Postal Services	683	479	79	458	226	18	377	3	1	
Grand Total		12,228	24,995	3,362	8,343	4,552	12,183	2,180	1,321	2,134	3,148

While stakeholders indicated that the IG/CA is being dutifully completed and submitted each year, the dataset is underutilized as a management tool. Although these examples from the IG/CA are merely illustrative and should not be considered conclusive, they do suggest a critical need to re-examine the manpower mix criteria for clarity and to help identify functions for potential military-to-civilian conversions. The IG/CA inventory may achieve its basic goal of providing a transparent overview of the Department’s manpower requirements under the Fair Act and OMB Circular A-76; however, to derive analytic value from the report and have it serve as an effective tool for identifying military to civilian conversions or “in sourcing” actions, much greater fidelity of the data entered into the IG/CA by the Services will be required especially in such fields as personnel operations or medical services that have been identified in this by this report and previous IDA studies.⁸¹ In the following section, we revisit our findings and outline recommendations for improvement.

⁸¹ Eisler, *et al.*, *Managing the Total Force: Using Civilianization to Militarize the Military*. John E. Whitley, James M. Bishop, Sarah K. Burns, Kristen M. Guerrero, Philip M. Lurie, Brian Q. Rieksts, Timothy J. Wojtecki, Linda Wu. *Medical Total Force Management: Assessing Readiness and Cost*. (Alexandria, VA: Institute for Defense Analyses, 2018).

6. Service Perspectives

A. Summary

This chapter summarizes the perspectives of the Services, based on input from manpower managers and specialists in the Army, Navy, Air Force, and Marine Corps. Each section briefly describes stakeholder perspectives on manpower, and broadly discusses pressing manpower issues seen through the lens of the professionals in the field. We aimed to capture stakeholders' concerns at multiple levels, including department to Service-level issues, internal institutional management challenges, and more specific comments and observations about policy, policy tools, and implementation issues. While there are many similarities and consistent themes, stakeholder concerns also show some differences.

1. Service Prerogatives and Military-to-Civilian Conversions

All the Services want to preserve the flexibility of the current system, but Service stakeholders also want more clarity about DoD manpower function categories and reporting requirements. The Services also want to understand how OSD interprets and uses military manpower data.

Every stakeholder expressed frustration with the bureaucratic difficulties of converting military billets to government civilian positions. Manpower managers indicated that the conversion process is broken, fraught with policy pitfalls, and hampered by red tape that makes it difficult to convert billets from military to civilian, and to hire civilians to perform important functions. Some of this difficulty stems from confusion about the definitions for *military essential* and *inherently governmental*. Stakeholders said DoD should clarify the definitions. Stakeholders agreed that DoD manpower mix policy across the Services, Combatant Commands, and the Fourth Estate is inconsistent. They say “perverse incentives” inherent to the system undermine their efforts to remain compliant with DoD manpower policy. Manpower managers view DoD’s definition of “*military essential*” as an elastic principle. Stakeholders prioritize their Military Service policies to flexibly assign military and civilian personnel to any billet that enables the mission. The result is a patch-work of manpower decisions that makes sense for each Service, but that may not match Department policy to the letter.

2. The Politics of Military Manpower Reform

Stakeholders generally agreed that the public’s perception that the Fourth Estate is using military manpower inefficiently is erroneous. And they maintained that this negative perception

produces powerful political currents that drive unhelpful short term fixes, but that hamper serious attempts at manpower reform in DoD. More specifically, stakeholders emphasized the difficulty of obtaining congressional approval to execute military-to-civilian conversions. Stakeholders also said that congressionally-mandated budget and personnel caps, and restrictive manpower policies imposed by DoD are eroding manpower availability. Every stakeholder had a story about top-down fiscal pressure, manpower reductions, and hiring freezes—imposed from outside the Services, combatant commands, and the Fourth Estate—that hampered effective manpower management.

3. Comments on DoDI 1100.22

Stakeholders generally agreed that guidance in DoDI 1100.22 is insufficient for decisions about military and civilian manpower. In these cases, manpower managers told IDA that their high-level manpower management policies are informed by the DoDI, but lower-level processes are not. Stakeholders say this is due to ambiguous guidance in the DoDI that leaves it open to interpretation.

B. US Army

The Assistant Secretary of the Army (Manpower and Reserve Affairs) (ASA(M&RA)) is responsible for and has approval authority for all manpower policies in the Army. ASA(M&RA) provides guidance and direction on manpower management issues to all Army activities, and oversees manpower plans, policies, and procedures. ASA(M&RA) reviews and approves Army Management Headquarters Activities manpower allocations, functions, and organizations. ASA(M&RA) is also responsible for establishing and approving civilian and military manpower controls and allocations within resource levels based on workload.

On the Army Staff, manpower management responsibilities are distributed between the Deputy Chief of Staff, G-3/5/7 (DCS G-3/5/7) and the Deputy Chief of Staff, G-1 (DCS G-1). DCS G-3/5/7 is responsible for ensuring compliance with manpower management policies and procedures (including position management or internal structure). DCS G-1 coordinates with ASA(M&RA) to review, analyze, and validate military manpower requirements for affordability and personnel supportability. The DCS G-1 is also responsible for establishing civilian and military budget manpower controls. DCS G-1 exercises manpower management responsibility for the Army portion of Non-Defense Activities, Defense agencies, Unified Commands, international activities, and other joint activities.⁸²

Army policy requires manpower specialists to manage the Army's operating force and generating force for effectiveness and efficiency. This goal is generally achieved through the

⁸² U.S. Department of the Army, "AR570-4, Manpower Management," (United States Department of the Army, 2006).

Planning, Programming, Budgeting & Execution (PPBE) process and the Program Objectives Memorandum, and the allocation and distribution of Army military and civilian manpower through Program and Budget Guidance.⁸³ The objective of the Army PPBE process is to “establish, justify, and acquire the fiscal and manpower resources needed to carry out and execute the Army’s assigned missions.” The Program and Budget Guidance provides direction on “authorized spaces to Army Commands and Service Component Commands and operating agencies for reallocation to subordinate echelons.”⁸⁴ The Army Secretariat and Staff, Army Commands and Service Component Commands, Army National Guard, Army Reserves, and Program Executive Offices are all key stakeholders in the PPBE process.⁸⁵

Policy requires manpower specialists to be “committed to economies, efficiencies, and productivity improvements,” which use the minimum essential number of positions needed to accomplish the mission. Army planners use doctrine to determine manpower requirements for the operational Army, and to ensure the Army’s warfighting forces are responsive to dynamic changes in strategic direction.⁸⁶ Planners for the Army generating force use the Manpower Staffing Standards System (MS-3), staffing guides, manpower surveys/studies, comparative and statistical analyses, and local appraisals to determine manpower requirements and quantify workload for peacetime and non-combatant strategic, institutional, command missions and their supporting infrastructures.⁸⁷ Army policy allows managers to detail assigned personnel or to use temporary employees to meet surge requirements, and to meet special projects requests from headquarters elements.⁸⁸

1. Military-to-Civilian Conversions

The Army shares the frustration of its Service counterparts that there are too many active duty military personnel performing jobs more appropriately performed by government civilians. Some critics argue that the Services are not using military manpower well, pointing to uniformed personnel serving in non-combat roles, which depletes combat power and negatively impacts readiness: Soldiers should be in operational units and not assigned to large garrison headquarters that never deploy. But this argument ignores complex workforce dynamics and

⁸³ U.S. Department of the Army, “AR1-1, Planning, Programming, Budgeting, and Execution,” (Washington, DC: U.S. Department of the Army, 2016).

⁸⁴ U.S. Department of the Army, “AR570-4, Manpower Management.”2.

⁸⁵ Stakeholder Engagement with Army Personnel, by IDA, Pentagon, Arlington, VA, 27 October 2017

⁸⁶ Carver, Christopher, “Army Transformation and the Role of Tables of Distribution and Allowances,” *Army Sustainment* 47, no. 2 (2015), 12.

⁸⁷ U.S. Department of the Army, “AR570-4, Manpower Management.” 1-2. FM1-01 (12 May 2008) defines the Army generating force as consisting of Army organizations whose primary mission is to generate and sustain the operational Army.

⁸⁸ U.S. Department of the Army, “AR570-4, Manpower Management.” 11.

the range of services that military and civilian personnel must perform in support combat missions and global operations.

Army capabilities come from two functionally discrete but organizationally integrated entities known as the *operational Army* and the *generating force*. The Army's operational capability resides in units and headquarters of the operational Army. The generating force generates and sustains the operational Army, and provides operational capabilities to joint force commanders.⁸⁹ The generating force provides the rotation-base to support and sustain global military operations, uniformed manpower for Joint Force billets, non-operational assignments (internal and external to the Army), and manpower to sustain Army Reserve and National Guard units. Military manpower constitutes the smallest portion of the generating force (just 20% of active duty Army personnel); civilians comprise the remaining 80%. But it is the uniformed personnel serving in generating force billets that get the most political scrutiny because those personnel are not viewed as serving in operational warfighting functions. Some see the institutional need for uniformed personnel to serve in generating force billets as a less-than-optimal use of military manpower, and hold this up as an example of manpower inefficiency and ineffectiveness.⁹⁰

Congress authorizes the end-strength or maximum number of military personnel each Service is allowed. Stakeholders reported that congressionally-mandated budget and personnel caps on end strength—as well as restrictive manpower policies the Department imposes—affect manpower availability. They contended that the Army's manpower needs often exceed available labor pools. Manpower managers must contend with new missions, expanding workload requirements, and a limited/shrinking workforce. In this environment, there is special sensitivity to manpower utilization issues (e.g., major headquarters size, core logistics, supervisory levels), including the use of military manpower to fill special duty requests.⁹¹ While these manpower constraints reflect the realities of the fiscal environment, the Army struggles with policy implementation on the operational end.

As evidence of this friction, the Army pointed to past OSD-mandated manpower reductions and Army-mandated manpower and resource realignments that have disproportionately affected the generating force. Army stakeholders indicated that a significant portion of the Army's government civilians serve in “controlled” positions under the auspices of other departments and agencies like OSD, the Joint Staff, the Defense Health Program, the Defense Logistics Agency, and the Defense Information Systems Agency. When OSD directs the Army to reduce manpower, or the institutional Army decides to reduce manpower or realign resources,

⁸⁹ United States Department of the Army,, “FM1-01: Generating Force Support for Operations,” (Headquarters, Department of the Army, 2008).

⁹⁰ Stakeholder Engagement with Army Personnel, by IDA, Pentagon, Arlington, VA, 27 October 2017.

⁹¹ US Department of the Army, “AR570-4, Manpower Management,” 1–2.

only that segment of the civilian workforce directly under Army control is impacted. This means a high percentage of core functions that civilians perform are put at risk.

Army policy requires commanders and managers to use the minimum number and category of personnel needed to perform mission essential work (given quantitative and qualitative factors). This guidance applies to all organizational levels of the operational Army. The generating force uses input from major commands and other organizations to determine total force requirements in response to changes in workload, missions, programs, procedures, technology, and doctrine.⁹² Yet conflicting interpretations of DoD policy can sometimes thwart reasonable workforce changes.

In FY06, for example, the Army Training and Doctrine Command (TRADOC) converted a number of training support billets, staffed by military personnel, to government civilian billets and contracted support. The Army then implemented a DoD-wide manpower freeze, which forced TRADOC to significantly reduce its government civilian workforce, but the Army made no corresponding adjustments to the training workload requirements, which put some key training functions at risk. When TRADOC attempted to convert government civilian billets back into military billets—to augment and re-balance TRADOC’s workforce with skilled military instructors who could offset the workload for training support functions—the Army was faced with a dilemma. DoD and Army policy discourages the use of active duty Army personnel to perform tasks that should be performed by government civilians.⁹³ Because TRADOC had just gone through the process of converting some training functions performed by military personnel to civilian billets, reversing that decision could be seen as TRADOC attempting to circumvent DoDI 1100.22 policy guidance. The situation was further exacerbated by what Army manpower specialists said was a vague interpretation of what constitutes military essentiality within the exemptions of career progression and rotation base.⁹⁴

The Army also noted that trying to achieve an “appropriate manpower mix” of military, civilian, and contracted support is a challenge because of cost constraints as well as the preferences and prerogatives of commanders. Many commanding officers prefer to have military personnel working for them, not civilians, because they perceive that military personnel are free

⁹² “Workload is the amount of work assigned/directed to and expected to be accomplished by a worker or unit of workers in a given time period. Measurement and determination of workload will consist of quantitative processes that are credible and accepted by audit agencies and oversight authorities. These processes include manpower staffing standards system (MS-3), manpower survey/study, and staffing guides as well as other methodologies such as modeling, comparative analysis, bench-marking, other statistical analyses, and local appraisal when workload isn’t quantifiable and measurable. More than one process may be utilized to derive the manpower requirements for a specific work center, organizational element, or an entire organization.” “Army Regulation 570-4, Manpower Management.” US Army, ed., 2006, 13.

⁹³ US Department of the Army, “AR570-4, Manpower Management,” 12.

⁹⁴ Stakeholder Engagement with Army Personnel, by IDA, Pentagon, Arlington, VA, 27 October 2017.

labor and are not subject to the inherent vagaries of the civilian hiring process. Commanders do not often have the luxury of waiting for conversions to take effect or a new hire to come on-board when immediate workload demands require more timely personnel solutions that can be more readily provided by on-hand military personnel. These factors can complicate manpower policy implementation and make it difficult to realize desired efficiencies.⁹⁵

Despite what appears to be clear Army policy guidance, stakeholders revealed that there are external political pressures on the Army, and internal inconsistencies between policy and practice, that stymie Army's efforts to manage its workforce as efficiently and effectively as possible.⁹⁶

2. Complaints of Conflicting Guidance

Army manpower specialists expressed frustration with what they called poor synchronization of manpower policy at the Department level, noting that coordination among OSD offices—Personnel and Readiness, Cost Assessment and Program Evaluation, Comptroller and Chief Financial Officer, and the Chief Management Officer (CMO)—is fragmented. The Army's chief complaint appears to stem from confusion about conflicting manpower policy decisions made at the OSD level, which have resulted in less than optimal manpower mix outcomes.⁹⁷

For example, in FY11, OSD imposed a hiring freeze on government civilian positions in response to President Obama's executive order to cap the DoD civilian workforce at FY10 budget levels.⁹⁸ The Army eliminated 8,000+ funded government civilian billets. According to stakeholders, this resource-driven decision, supported by OSD (Cost Assessment and Program Evaluation) and OUSD (Comptroller and Chief Financial Officer), had unintended consequences for Army workforce mix decisions in the generating force. OSD's decision virtually ignored existing Army mission and workload requirements—essentially, OSD instructed the Army to do more (or the same) work with fewer people.⁹⁹

According to the Army, the Department's application of manpower mix policy across the Services is inconsistent.¹⁰⁰ As noted previously in this report, DoDI 1100.22 provides DoD-wide policy and procedures for determining the appropriate mix of manpower (military and government civilian) and private sector support.¹⁰¹ But Army representatives say the notion that there is a "uniform and correct" manpower mix—common to all the Services—is incorrect.

⁹⁵ Stakeholder Engagement with Army Personnel, by IDA, Pentagon, Arlington, VA, 27 October 2017.

⁹⁶ Stakeholder Engagement with Army Personnel, by IDA, Pentagon, Arlington, VA, 27 October 2017.

⁹⁷ Stakeholder Engagement with Army Personnel, by IDA, Pentagon, Arlington, VA, 27 October 2017.

⁹⁸ "Fact Sheet: Cutting the Deficit by Freezing Federal Employee Pay," (States News Service, 2010).

⁹⁹ Stakeholder Engagement with Army Personnel, by IDA, Pentagon, Arlington, VA, 27 October 2017.

¹⁰⁰ Stakeholder Engagement with Army Personnel, by IDA, Pentagon, Arlington, VA, 27 October 2017.

¹⁰¹ "Department of Defense Instruction, 1100.22, Policy and Procedures for Determining Workforce Mix," (United States Department of Defense, 2010).

Stakeholders also noted the impact of perverse incentives. For example, DoD policy requires the Services to make maximum use of government civilians, or to convert military billets to civilian positions to achieve an effective and efficient workforce. They maintained that repeated hiring freezes and sharp reductions to O&M accounts imposed by OSD have undermined stakeholder confidence and trust in the system, because DoD decisions frequently appear to prioritize fiscal concerns over operational needs.¹⁰² Moreover, stakeholders contended, discussions about mission and workload reductions are not incorporated into manpower conversions or reductions directed by CAPE, the Comptroller, or CMO. As a result, the Army perceives OSD-mandated manpower adjustments as “bait and switch” tactics that force the Army to convert military manpower to government civilian positions primarily to make fiscal targets, with seemingly scant attention paid to the potential impact of arbitrary OSD-mandated cuts. Moreover, the Army maintains that manpower reductions imposed by OSD as a result of the Program Budget Review process are “especially onerous.” Stakeholders noted that there is never a serious discussion about the risks the Services incur when making personnel cuts to meet arbitrary fiscal goals imposed by OSD.¹⁰³

The Army recommended a study to examine deployment data to develop a more complete picture of Army-wide personnel issues.

In short, military-to-civilian billet conversions are made more difficult because of ad hoc processes the Army and other Services use to comply with OSD manpower reductions and conflicting policy guidance.¹⁰⁴

3. Army Stakeholder Comments on DoDI 1100.22

Regarding DoDI 1100.22, Army manpower specialists indicated that the Department’s policy guidance is “not useful because it is largely unintelligible, difficult to interpret, and frequently results in misinterpretation.” They said it was both too specific in some circumstances (e.g., when it describes specific scenarios) and too general in others (e.g., stakeholders contend the definition for military essentiality is open to interpretation). They argued that the DoDI would be more useful to manpower specialists if it provided principles to inform manpower management, as opposed to specific vignettes with limited utility.¹⁰⁵ The DoDI should include a decision tree (diagram) to help manpower specialists understand how to implement DoD pol-

¹⁰² “The most common constraint commanders and managers must face is money. Although civilian and military manpower costs consume a majority of the Army dollars, there is never enough funding available to hire people to meet all requirements. Mission and workload must be properly prioritized to efficiently use the manpower that is affordable...” “AR570-4, Manpower Management.”

¹⁰³ Stakeholder Engagement with Army Personnel, by IDA, Pentagon, Arlington, VA, 27 October 2017.

¹⁰⁴ Stakeholder Engagement with Army Personnel, by IDA, Pentagon, Arlington, VA, 27 October 2017.

¹⁰⁵ Stakeholder Engagement with Army Personnel, by IDA, Pentagon, Arlington, VA, 27 October 2017.

icy for determining the correct workforce mix. The Air Force includes a manpower mix determination decision tree in its guidance document, which is discussed in a subsequent chapter. The Army could benefit from using the Air Force decision tree—which is based on guidance from the DoDI—as a model.

4. Conclusion

In testimony before the Senate Armed Services Committee on April 26, 2018, Secretary of Defense Jim Mattis told Senators that to restore the US military’s competitive edge, he wanted to “build a more lethal force.” For the Army, Secretary Mattis said this meant designing a new “Sustainable Readiness” force generation model that makes “greater use of Reserve forces, updating the force structure model, and providing greater home station training against a broad range of threats.”¹⁰⁶ It is clear from stakeholder input that Army manpower mix decisions are focused on supporting the operational Army, including active and reserve forces that conduct combat operations; however, the manpower mix trade-offs required to meet operational demands have had unintended consequences. The Army generating force has borne the brunt of manpower actions that convert military manpower into civilian billets to resource operational needs. This trade-off is logical, but problematic because personnel reductions in the generating force have not been matched by commensurate reductions in missions, functions, and workload. Instead, the Army’s generating force has been left to figure out how to perform important functions and provide required services with fewer and fewer personnel.

Army stakeholders indicated that seemingly ad hoc and top-down manpower reductions, coupled with the OSD backsliding on promised replacements for lost civilian manpower, have decreased Army confidence in the manpower management system. The Army also complained about a lack of synchronization on manpower policy between OSD and the broader stakeholder community, especially as it pertains to interpreting the Department’s manpower guidance.

C. US Navy

The Deputy Chief of Naval Operations/Chief of Naval Personnel (CNO (N1) and CNP) presides over a large US Navy manpower management bureaucracy, comprising interdependent stakeholders and a complex system of policies and procedures to manage the US Navy’s Total Force. CNP has the overall responsibility to plan, program, manage, and execute active duty and reserve military requirements and to oversee Navy civil service manpower and contracted

¹⁰⁶ The Honorable Jim Mattis, U.S. Secretary of Defense, “Secretary of Defense Jim Mattis Senate Armed Services Committee Written Statement for the Record, Thursday, April 26, 2018,” (2018) 10.

support requirements determination policy. CNP also provides oversight and guidance on manpower mix criteria to Navy Budget Submitting Offices (BSOs), and approves the processes BSOs use to determine and validate the Navy's total force requirements.¹⁰⁷

In addition to the CNP and BSOs, the central stakeholders in determining Navy manpower mix and military essentiality decisions include the Navy Manpower Analysis Center (NAVMAC), Resource Sponsors, and Type Commands (TYCOMs).¹⁰⁸ NAVMAC and the 21 BSOs are the prime movers within the Navy's federated manpower management community. NAVMAC manages Navy manpower requirements programs, which includes manpower requirements for ships, squadrons, submarines, and other deployable units.¹⁰⁹ Navy BSOs determine, validate, and approve Navy total force requirements ashore, ensure manpower resources match Resource Sponsor program proposals, and manage large accounts like aviation, shipyards, and submarines.¹¹⁰ BSOs also work with the Bureau of Naval Personnel to ensure they are assigned sufficient numbers of Sailors to accomplish "military essential" tasks. BSOs also manage O&M funds that are used to pay the salaries of government civilians and contracted support. Manpower managers at NAVMAC and the BSOs oversee issues of military essentiality and workforce mix.¹¹¹ Resource Sponsors prioritize and fund navy manpower requirements, and work with Commander, US Fleet Forces Command to coordinate the programming efforts of component elements and BSOs to maximize the Navy's warfighting capability.¹¹²

1. Flexibility in Manpower Decisions Contributes to Fleet Readiness

Navy manpower managers indicated that the Navy views DoD's definition of "*military essential*" as an "elastic" principle—as opposed to an absolute rule. From the Navy's perspective, this philosophy affords the Services important flexibility in being able to assign military

¹⁰⁷ US Department of the Navy, Office of the Secretary, "OPNAVINST 1000.16L, Navy Total Force Manpower Policies and Procedures," (Department of the Navy, Office of the Chief of Naval Operations, 2015), 2-1. Budget Submitting Office definition: In the resource management system, the major commanders or bureaus that are authorized manpower resources directly by the CNO for the accomplishment of the assigned missions and tasks. "SECNAVINST 5000.2e, Department of the Navy Implementation and Operation of the Defense Acquisition System and the Joint Capabilities Integration and Development System." 2011.

¹⁰⁸ TYCOMs (e.g., US Fleet Forces Command, US Pacific Fleet) perform vital administrative, personnel, and operational training functions for the fleet's naval combat systems and platforms (e.g., naval aviation, submarine warfare, surface warships).

¹⁰⁹ The Navy Manpower Analysis Center is responsible for assisting Navy PMs and integrated product teams with manpower requirements estimates, independent manpower impact statements, and contractor-developed manpower estimates. US Department of the Navy, Office of the Secretary. "SECNAVINST 5000.2e..."

¹¹⁰ U.S. Department of the Navy., "OPNAVINST 1000.16L..." 1-7.

¹¹¹ Stakeholder Engagement with Navy Personnel, by IDA, Pentagon, Arlington, VA, 7 November 2017.

¹¹² U.S. Department of the Navy., OPNAVINST 1000.16L..." 1-6. Resource Sponsors include CNO (N1), Deputy Chief of Navy Operations for Information Dominance (CNO (N2/N6)), Deputy Chief of Naval Operations for Readiness and Logistics (CNO (N4)), and Deputy Chief of Naval Operations for Warfare Systems (CNO (N9)).

and civilian personnel to any billet that enables the mission. In the Navy’s case, that means flexibility for manpower decisions that facilitate sea-to-shore rotations.¹¹³

Navy policy identifies four types of requirements for Navy manpower specialists to manage:

1. Fleet manpower requirements: ship, squadron, submarine and other deployable unit requirements determined by the NAVMAC.
2. Shore manpower requirements at Navy commands: sailors and government civilians determined and approved by the BSOs.
3. Individuals account requirements: sailors in transient, patients, prisoners, and in holdee status; students and trainees; as well as midshipmen on active duty.¹¹⁴ Individuals account requirements are determined by the responsible Resource Sponsor.
4. Outside Navy requirements: Navy personnel assigned to the Joint Chiefs of Staff, OSD, combatant commands, defense agencies, North Atlantic Treaty Organization, and outside DoD.¹¹⁵

To meet these requirements, the Navy uses military personnel, government civilians, and contracted support both ashore and afloat. For example, the USS Lewis B. Puller (ESB-3) is a mobile landing platform that also operates as an afloat forward staging base for allied forces. The ship’s company includes a hybrid military-civilian crew, comprised of a military detachment (including the captain) that provides the C2 function and conducts the afloat intelligence mission, and a civilian crew that is responsible for ship operations and engineering functions.¹¹⁶ Without civilians, the Navy workforce would lack the capacity and capability to accomplish its missions. Moreover, shore billets are used to accommodate Sailors when they are not at sea. Many of these billets provide services the Navy needs in order to accomplish its operational mission. Navy personnel indicated they appreciate having the flexibility to assign military and civilian personnel to billets in a way that promotes accomplishing the mission and includes having enough shore billets.¹¹⁷

BSOs determine manpower requirements for Navy shore activities, based on workload assessments, mission requirements, functions, and tasks.¹¹⁸ All manpower requirements must be based on fulfilling the Navy’s mission. In some cases, the Navy acknowledged that shore-based billets may not be considered “military essential” in terms of their function; however,

¹¹³ Stakeholder Engagement with Navy Personnel, by IDA, Pentagon, Arlington, VA, 7 November 2017.

¹¹⁴ Navy policy defined “*holdees*” to include patients, prisoners, and personnel in the process of being separated (separatees).

¹¹⁵ U.S. Department of the Navy, “OPNAVINST 1000.16L,” 1-3.

¹¹⁶ Stakeholder Engagement with Military Sealift Command, 20 June 2018.

¹¹⁷ Stakeholder Engagement with Navy Personnel, by IDA, Pentagon, Arlington, VA, 7 November 2017.

¹¹⁸ U.S. Department of the Navy, “OPNAVINST 1000.16L,” p. 2-1, 4-1.

consistent with DoDI 1100.22, shore-based billets are essential because they help the Navy manage sea-to-shore rotations in a way that enhances fleet readiness, morale, and personnel retention.¹¹⁹ A robust sea-to-shore rotation base not only contributes to the health and welfare of Sailors and their families, it also provides training, education, and career growth opportunities that enable the Navy to recruit and retain sailors.¹²⁰

2. Navy Views on Workforce Mix

Navy policy directs total force requirements to reflect the appropriate mix of military, civil service, and contracted support necessary to accomplish DoD missions consistent with applicable laws, policies, and regulations per DoDI 1100.22. The NAVMAC Activity Manpower Management Guide establishes manpower mix criteria codes that assist manpower specialists in determining whether a requirement should be military, civil service, or contracted support.¹²¹ Navy policy also provides some exemptions that enable commands to assign sailors to shore billets that are not classified as military essential. For example, sailors can be assigned to non-military essential billets for overseas and sea-to-shore rotation, or for educational and career progression assignments.

Similar to the other Services, Navy manpower specialists voiced concern about “perverse incentives” that undermine total force manpower policy relative to decisions about workforce mix. In particular, the Navy pointed to DoD decisions that have directed military-to-civilian billet conversions at the same time the Department reduced Navy O&M accounts, making it extremely difficult to implement the conversion guidance. Additionally, the Navy also reported that in cases where it may have appeared prudent to “in source” (i.e., convert contracted support roles to government civilian positions), DoD-imposed hiring freezes on civilian positions that negated such action. Exacerbating these challenges are Congressionally-imposed end strength caps on military manpower that increase personnel tempo and degrade overall fleet readiness.¹²²

Navy stakeholders also noted poor alignment between DoD Comptroller, legislative affairs, and manpower management communities on workforce mix decisions. Internal to the Navy, there are formidable challenges to managing multiple labor categories and sub-sets, without a review process that “looks inside each BSO” to question the rationale underpinning the criteria codes

¹¹⁹ Stakeholder Engagement with Navy Personnel, by IDA, Pentagon, Arlington, VA, 7 November 2017.

¹²⁰ Stakeholder Engagement with Navy Personnel, by IDA, Pentagon, Arlington, VA, 7 November 2017

¹²¹ U.S. Department of the Navy., “OPNAVINST 1000.16L...” Dec 2014, 2–3.

¹²² Stakeholder Engagement with Navy Personnel, by IDA, Pentagon, Arlington, VA, 7 November 2017

assigned to certain occupational fields. Navy manpower managers also indicated that it is regarded as bad practice to ever show a surplus of military or civilian personnel at the BSO level because then Resource Sponsors will be tempted to make permanent manpower cuts.¹²³

3. Management of Key and Emergency-Essential Civilian Billets

Navy policy follows DoDI 1100.22 and DoD IG/CA guidance for planning and managing specially designated civilian billets, and the Navy has centralized management oversight of key billets to ensure consistent application and tracking of key civilian personnel requirements and resources billets.¹²⁴ Navy stakeholders indicated civilians provide stability in highly technical and hard-to-fill billets that are essential to supporting combat forces during natural disasters, crises, and hostilities, including a mobilization.

According to stakeholders, missing from a Service-wide discussion inside the Navy is a conversation about the level of risk associated with military-to-civilian conversions. In general, there is a feeling that previous conversions have gone too far and placed the fleet at higher risk than in the past, because key functions have been civilianized without sufficiently examining the potential operational impact. That said, conversions of other functions may not be happening fast enough. For example, cyber represents a new occupational field that the Navy may want to civilianize to a greater extent because not every cyber position is “military essential” and some of these positions could be performed by civilians at shore installations.

4. Conclusion

Navy policy stipulates that total force requirements be supported by resources through the Planning, Programming, Budgeting, and Execution process, which balances the Navy’s near term readiness, sustainability, and force structure requirements with long term modernization requirements that are needed to ensure that the Navy’s current and future war-fighting capabilities, including manpower, are adequately met.¹²⁵ The DoDI 1100.22 is just one of many drivers in Navy workforce mix determinations, which includes Navy sea-to-shore rotations that factor into manpower and billet decisions.¹²⁶

¹²³ Stakeholder Engagement with Navy Personnel, by IDA, Pentagon, Arlington, VA, 7 November 2017.

¹²⁴ U.S. Department of the Navy, “OPNAVINST 1000.16L,” 4–18.

¹²⁵ U.S. Department of the Navy, “OPNAVINST 1000.16L,” 1-3.

¹²⁶ Stakeholder Engagement with Navy Personnel, by IDA, Pentagon, Arlington, VA, 7 November 2017
Obvious caveats apply: certain seagoing billets are not open to civilians because they are “military essential” and if O&M funds are not available, then civilian labor cannot be hired.

Navy policy allows manpower managers to use contracted support for requirements that do not meet established criteria for military or government civilian requirements, unless military or civilian manpower can be demonstrated to be more cost effective.¹²⁷ Navy manpower managers also suggested that OSD P&R should consolidate all policy instructions on “in sourcing” into one document. This policy is discussed in multiple documents and memorandums, which is a barrier to implementation.¹²⁸

D. US Air Force

The Air Force Directorate of Manpower, Organization and Resources, under the authority of the Secretary of the Air Force, is responsible for manpower standards, policy, and guidance. It develops and disseminates plans and procedures that govern Air Force manpower requirements and the effective and economical use of manpower through the Air Force Management Engineering Program.¹²⁹ The Air Force Personnel Center Manpower Directorate advises Air Force leadership on manpower issues in support of strategic plans, develops and maintains active component manpower standards, and provides tools and methodologies to quantify essential manpower requirements to effectively and efficiently accomplish capabilities supporting Air Force missions.¹³⁰ Manpower offices at Major Commands (MAJCOMs) ensure the effective and economical use of each command’s manpower resources, and provide command policy and guidance to installations. MAJCOMs also ensure their commands follow DoD and Air Force directives on military essentiality.¹³¹ Air Force Career Field Managers coordinate all manpower standards for their functional areas. They work with the manpower community to keep manpower standards applicable and current. Career Field Managers also help conduct workload assessments and align manpower requirements to command missions.¹³²

Overall, the Air Force total workforce programming and budgeting structure is designed to minimize manpower cost while maximizing support to the Air Force mission. Headquarters Air Force translates defense security policy into force structure programs, and the manpower community implements Air Force manpower policy, standards, and procedures across the force. Commanders and manpower managers use the Air Force Management Engineering Program as

¹²⁷ U.S. Department of the Navy, “OPNAVINST 1000.16L...” 2–5.

¹²⁸ Stakeholder Engagement with Navy Personnel, by IDA, Pentagon, Arlington, VA, 7 November 2017

¹²⁹ U.S. Department of the Air Force, Office of the Secretary, “Air Force Instruction (AFI) 38-201, Management of Manpower Requirements and Authorizations,” (Secretary of the Air Force, 2014), 8–12.

¹³⁰ U.S. Department of the Air Force, “AFI 38-201, Management of Manpower Requirements and Authorizations,” 8–12.

¹³¹ U.S. Department of the Air Force, Office of the Secretary, “Air Force Instruction 38-201, Management of Manpower Requirements and Authorizations,” (Secretary of the Air Force, 2014). 8-10.

¹³² U.S. Department of the Air Force, “AFI 38-201, Management of Manpower Requirements and Authorizations,” 13–15.

a framework to systematically identify the minimum and essential manpower required to accomplish Air Force missions. MAJCOMs execute manpower requirements and translate budget and resource allocations into programs and units.¹³³

1. Operating Lean: Managing Combat v. Installation Requirements

Similar to the Army generating force-operating force concept, and the Navy sea-to-shore rotation focus, deployments outside the continental United States (OCONUS) are the structural driver of Air Force manpower decisions. Wing commanders resource military manpower requirements for deployable fighter/bomber squadrons and air bases inside the continental United States (CONUS) from the same manpower pool. The chief benefits of this “lean” manpower construct are cost-savings and efficiency. According to manpower managers, the system works well in peacetime because there is little duplication of functions (e.g., military police, post office, emergency services). During a crisis or war, the drawback of this “lean” structure becomes apparent as combat units take airmen who perform vital installation functions with them when units deploy. Overseas deployments can strip a garrison of its manpower, leaving holes in the work force at CONUS home station.¹³⁴

These vacancies must be back-filled by Air Force personnel (military and civilian) using a global sourcing model. In many cases, it is not possible to substitute less expensive civilian labor to meet operational requirements because the tasks are “military essential” or because civilian labor with the necessary skill sets cannot be procured quickly enough to close gaps at CONUS air bases. In short, it is not unusual to have manpower shortages across multiple CONUS air bases, which adversely affects overall Air Force operations.¹³⁵

One idea proffered by the Air Force to ameliorate pressure on Air Force manpower requirements is for DoD to conduct another Base Realignment and Closure round. The manpower and fiscal savings that could be realized by conducting another Base Realignment and Closure round could potentially be significant across the four Services even though the prospects of Congress doing so in the immediate future is unlikely.¹³⁶

Moreover, Air Force manpower management processes are not always in sync with OSD manpower oversight. The Air Force uses measures of effectiveness to manage manpower requirements and to ensure air wings are mission capable in both peace and war. Unfortunately, OSD sometimes prioritizes efficiency and cost metrics when making manpower decisions.

¹³³ U.S. Department of the Air Force, “AFI 38-201, Management of Manpower Requirements and Authorizations,” 11.

¹³⁴ Stakeholder Engagement with Air Force Personnel, by IDA, Pentagon, Arlington, VA, 19 October 2017.

¹³⁵ Stakeholder Engagement with Air Force personnel, IDA research team, 19 October 2017.

¹³⁶ Stakeholder Engagement with Air Force personnel, IDA research team, 19 October 2017.

These two different manpower perspectives are not well aligned, which makes it difficult for the Air Force to manage its workforce.¹³⁷

2. Military to Civilian Conversions

The lower cost of government civilians relative to military personnel creates institutional pressure to convert some billets/functions to civilian billets. The pressure has been reinforced by increased demand for military manpower to fill increased operational requirements, even as military manpower has declined (the most recent exception being the 2019 end strength increases approved by Congress). However, as manpower managers have tried to convert installation (CONUS) billets performed by borrowed military manpower to civilian billets, installation commanders have run into difficulty finding and hiring qualified personnel to perform important functions. Adding to the pressure is the statutory hurdle of obtaining Congressionally approved end-strength increases while executing Congressionally mandated military to civilian conversions.¹³⁸

Air Force input also pointed out the difficulty of manning growing mission requirements. For example, for cyber functions Air Force manpower experts questioned why some non-lethal cyber functions could not be converted from military to civilian functions as many of these duties can be performed in CONUS and out of harm's way. If that is deemed impractical, then manpower managers suggested another option would be to establish warrant officers, who are less expensive and line officers.

Manpower managers indicated that additional pressure on Air Force civilian manpower requirements is coming from the Joint Staff and OSD. Both organizations have asked Air Force government civilians to volunteer for work in headquarters functions at Combatant Commands. Wing commanders initially declined to comply with those requests. Government civilians perform important installation functions when military manpower deploys for operational missions. Installation commanders cannot afford to release the civilian manpower that fill those roles. But manpower managers indicated that OSD required the Air Force to provide civilian manpower to the combatant commands (CCMDs).¹³⁹

Hiring government civilians can be difficult and time intensive, a fact that drives some commanders to borrow available military personnel to perform important functions. Air Force manpower managers cited this as a case of "perverse incentives" at work.

Civilian manpower and pay is managed at the command level and commanders pay for civilian labor from O&M funds. Military personnel are managed at the Service level, and uniformed personnel are paid for by the Services. Commanders may use military personnel on

¹³⁷ Stakeholder Engagement with Air Force personnel, IDA research team, 19 October 2017.

¹³⁸ Stakeholder Engagement with Air Force personnel, IDA research team, 19 October 2017.

¹³⁹ Stakeholder Engagement with Air Force personnel, IDA research team, 19 October 2017.

hand to perform inherently governmental functions that help to meet mission requirements instead of hiring civilians to perform to work. Manpower managers indicated that commanders may find it easier to use military personnel to perform inherently governmental functions that civilians might otherwise do because of the red tape involved in hiring civilians. Moreover, because the Services pay for military manpower, commanders may be incentivized to use military personnel instead of civilian labor because they view it as more economical. Commanders are sometimes reluctant to dip into O&M funds to pay for civilian positions. Manpower managers said that commanders may view the use of military manpower as a more affordable and flexible alternative to the difficulty and cost of hiring or converting billets and may not appreciate the Service-wide implications of the broader manpower picture.¹⁴⁰

3. Manpower Mix and Blurring the line between Military Essential and Inherently Governmental Functions

Air Force policy treats military essentiality as a priority when determining the appropriate manpower mix. When manpower managers determine that authorized civilian positions are military essential, then Air Force policy requires that these billets be converted to military positions through attrition, unless conversions must be executed faster to meet mission requirements. Manpower managers must also coordinate with the National Guard Bureau before converting functions that impact training Air National Guard forces. Similar coordination is required with Air Force Reserve Command for the Air Force Reserve component.¹⁴¹

The Air Force Directorate of Manpower, Organization and Resources has primary responsibility for policy defining military essentiality and ensuring MAJCOMs follow DoD policies and procedures when identifying manpower positions as military essential. The Air Force manpower management community uses guidance in AFI 38-201 and DoDI 1100.22 to determine the appropriate mix of manpower and private sector support necessary to accomplish Air Force missions. Installation/Service Manpower Offices determine military essentiality based on the requirements of the position, or the need to maintain a specific capability. They also code manpower positions in the Manpower Programming and Execution System (MPES) for military essentiality, using IG/CA codes. Installation/Service Manpower Offices work with local servicing civilian personnel offices to coordinate actions involving civilian manpower authorizations, and validation of the civilian manpower requirements.¹⁴²

¹⁴⁰ Stakeholder Engagement with Air Force personnel, IDA team, 19 October 2017.

¹⁴¹ U.S. Department of the Air Force, Office of the Secretary, “Air Force Instruction 38-201, Management of Manpower Requirements and Authorizations, 23.

¹⁴² US Department of the Air Force, Office of the Secretary, “Air Force Instruction 38-201, Management of Manpower Requirements and Authorizations,” 38–40.

The wars in Afghanistan and Iraq have been a powerful driver in Air Force manpower decisions. Wartime manpower requirements have eroded the dividing line between the definitions of “militarily essential” and “inherently governmental.” Some Air Force manpower specialists believe that it may not be possible to “put the genie back in the bottle” because of the increased reliance on government civilians and contracted support who perform important functions previously performed by military personnel in war zones and high-risk operational areas, suggesting that operational risk calculations used to define military essentiality may be outdated.¹⁴³

In light of this information, measuring compliance with OSD manpower mix policy may be a challenge. Manpower managers indicated that the Air Force reports formally designated requirements; there is no mechanism to report situations in which personnel are performing functions outside of those designated for their billet.¹⁴⁴

4. Air Force Stakeholder Comments on DoDI 1100.22

Air Force stakeholders indicated that they sometimes use the DoD Manpower Mix Criteria Codes in the DoDI 1100.22 as post hoc justification for designating a billet military or civilian—after the fact, not before. They acknowledge that DoD guidance is not the starting point for manpower decisions, but that they rely more on Air Force policy, which mandates a 31-step decision process and a well-defined set of rules to determine manpower (military, civilian, or contractor) when validating manpower requirements.¹⁴⁵ Guidance on the decision process and rule-sets are in AFI 38-201.¹⁴⁶ This guidance is based on DoDI 1100.22 and serves as the ultimate reference for manpower decisions. Air Force manpower decisions consider unit level and are not based solely on the individual Airmen. In this sense, Air Force manpower criteria for military essential billets differ somewhat from the other Services. Manpower managers expressed general concern about the lack of a standard set of cost factors that all the Services can agree on and said that the Services appreciate the current flexibility they are afforded under the status quo.

To this end, Air Force stakeholders noted that the manpower criteria in DoDI 1100.22 is not onerous, but flexible enough to justify workforce mix decisions. They seek to maintain enough military manpower to source a solid rotation base so that Airmen can maintain a healthy balance between overseas and CONUS tours.

Regarding the IG/CA report discussed in Chapter 5, Air Force manpower managers said the report is “flawed” because it focuses on billets as opposed to missions/activities: Air Force organizations organize and operate as organizations or units, not as individuals, but the IG/CA

¹⁴³ Stakeholder Engagement with Air Force Personnel, by IDA, Pentagon, Arlington, VA, 19 October 2017.

¹⁴⁴ Stakeholder Engagement with Air Force Personnel, by IDA, Pentagon, Arlington, VA, 19 October 2017.

¹⁴⁵ Stakeholder Engagement with Air Force Personnel, by IDA, Pentagon, Arlington, VA, 19 October 2017.

¹⁴⁶ Stakeholder Engagement with Air Force Personnel, by IDA, Pentagon, Arlington, VA, 19 October 2017.

report requires the Services to report information on individual positions. This is a disconnect that Air Force manpower managers say should be corrected if the report is to be useful.

5. Conclusion

Air Force manpower managers said that they need improved mechanisms to allow the Services to convert manpower and functions from military and civilian positions to contracted support when it is more economical to do so. They also expressed they would like DoD to define better criteria that include a broader range of considerations beyond cost (i.e., emerging or expanding missions, and effectiveness). They also noted that a Total Force perspective involving the Reserve Component and Air National Guard is not really considered part of the manpower mix debate, but should be included because doing so would expand the number of manpower options and potentially alter the range of trade-offs.

E. US Marine Corps Manpower Community

The United States Marine Corps (USMC) manpower community is structured according to guidance in Marine Corps Order 12250.2, which provides policy and procedural guidance for effective workforce management in support of command-level missions throughout the Marine Corps. The Marine Corps manpower management community includes five key stakeholders. First, the Deputy Commandant Manpower & Reserve Affairs oversees workforce policy and procedure development. Second, the Civilian Personnel Policy serves as the primary advisor on workforce shaping policies related to Command Level Strategic Workforce Planning. Third, the Civilian Workforce Planning and Development branch acts as the primary Command Level Strategic Workforce Planning Integration Office, responsible for ensuring USMC organizations and key stakeholders are trained and supported by the procedural guidance, tools and templates designed for implementing workforce policies. Fourth are the Major Subordinate Commands that implement Command Level Strategic Workforce Planning guidance throughout their subordinate organizations via commanding officers. Finally, there are branch and division chiefs at Headquarters Marine Corps who contribute manpower information to planning teams that help formulate personnel policies. This guidance includes strategic initiatives communicated from USMC Community of Interest Leaders, programmed budget elements across the FYDP, legislative policy changes, and organizational priorities and mission needs. The Deputy Commandant for Combat Development and Integration, Marine Corps Combat Development Command owns and manages the USMC Total Force Structure process.¹⁴⁷

¹⁴⁷ “Marine Corps Order 12250.2, Civilian Command-Level Strategic Workforce Planning Procedures,” (United States Marine Corps, 2014); “Marine Corps Order 5311.1e, Total Force Structure Process,” (United States Marine Corps, 2015).

1. Marine Corps Manpower Community Perspectives

Marine Corps manpower managers agreed with many of the same views as their counterparts in the sister Services: namely, that there are perverse incentives at work that complicate military manpower decisions. Commanders view military manpower as “free” labor, because it is enterprise-funded as opposed to civilian manpower that is paid for by installation commanders out of O&M accounts. Stakeholders noted that if improved incentives were adopted, the DoDI criteria might not even be necessary, although they acknowledged this was unlikely given the organizational necessity to provide all of Services manpower guidance. They also noted the challenge of trying to modify existing Marine organizations vice creating new units from scratch because the former requires them to work at the margins of preexisting manpower requirements.¹⁴⁸

Marine Corps stakeholders provided informal comparisons of military and civilian manpower, noting that the DoDI does not acknowledge some of the inherent advantages of using military personnel. For example, Commanders can use Marines in diverse ways to best accomplish the mission, whereas civilians can only be used for the function they were hired to perform. Civilians are frequently perceived to be “clock-watchers,” while Marines can be required to work long hours without overtime pay to accomplish the assigned task. Whereas military personnel are rotated throughout their careers on fairly predictable schedules for the duration of their contract, civilians can terminate their employment at will. Furthermore, in the event Congress passes a continuing resolution, civilians must be furloughed while military personnel can continue working. It was also noted that many government-wide civilian personnel processes dictated by the Office of Personnel Management are outdated for hiring and retaining a highly qualified 21st century national security workforce. Hiring and firing is cumbersome and slow, illuminating just one area where greater flexibility and personnel reforms are needed.¹⁴⁹

Stakeholders noted that the nature of the work in a given billet affects what type of labor is typically used within organizations. For example, in situations where 90% of a billet’s duties may lend themselves to civilian performance but the remaining 10% still involves “military essential” activities, the billet should remain military and not be converted. For other billets, an operational understanding may be needed within the organization even though that military knowledge and experience is not necessarily tied to a specific function. The DoDI partially addresses the need in the criteria for military-unique knowledge and skills and exemptions for rotation, but does not thoroughly address the issue as a question of manpower mix.¹⁵⁰

¹⁴⁸ Stakeholder Engagement with Marine Corps Personnel, by IDA, Headquarters Marine Corps, 12 December 2017.

¹⁴⁹ Stakeholder Engagement with Marine Corps Personnel, by IDA, Headquarters Marine Corps, 12 December 2017.

¹⁵⁰ Stakeholder Engagement with Marine Corps Personnel, by IDA, Headquarters Marine Corps, 12 December 2017.

Marine Corps manpower managers noted that DoD-directed manpower reductions are difficult to implement without adversely impacting mission accomplishment. Moreover, manpower planning methods and tools frequently ignore workload requirements, which remain constant or increase but seldom decrease commensurately with directed personnel reductions. As a result, during periods of manpower draw-downs, commanders are not confident that they will be able to meet their manpower requirements. This tension was most acute during combat operations in Afghanistan and Iraq where multiple overseas deployments created high unit and personnel tempo and stressed both the operating forces and supporting establishment. Similar to the other Services, the Corps often views manpower cuts as arbitrary and not based on rigorous analysis; this hampers USMC efforts to right size its military and civilian workforce plan.¹⁵¹

2. Marine Corps Stakeholder Comments on DoDI 1100.22

Manpower managers noted that the DoDI's usefulness as a policy document is limited more by its lack of positive incentives than by the criteria themselves. The DoDI is seldom the primary driver of Marine Corps manpower decisions because it is perceived as limiting the Services' ability to assign the most available (and most qualified) labor source to fill a billet vacancy. For Marines, the mission is going to be accomplished at all costs. As a result, finding the most readily available source of labor—military or civilian—is often a matter of necessity. This explains why Marines are sometimes “borrowed” from the operating forces and temporarily assigned to duties in the Fleet Assistance Program, many of which could be discharged by government civilians or contracted support. But, because civilians are not available, Marines are used to perform duties that are neither “military essential” or “inherently governmental.” In short, the DoDI is not always viewed as relevant to the overriding need to find the most available labor source to perform a specific task.¹⁵²

Marine Corps stakeholders agreed with manpower managers in their sister Services that the DoDI conflates the definitions for *military essential* and *inherently governmental*. They said that high-level manpower decisions are driven by the DoDI, but lower-level processes are not. Manpower managers use Marine Corps manpower policy and requirements as the primary driver of manpower mix decisions, which is focused on mission first, followed by building the most cost-effective force. They emphasized the Commandant's prerogatives under Title 10 in determining how to structure the workforce to best meet the needs of the Service.¹⁵³

¹⁵¹ Stakeholder Engagement with Marine Corps Personnel, by IDA, Headquarters Marine Corps, 12 December 2017.

¹⁵² *Stakeholder Engagement with Marine Corps Personnel*, by IDA, Headquarters Marine Corps, 12 December 2017.

¹⁵³ Stakeholder Engagement with Marine Corps Personnel, by IDA, Headquarters Marine Corps, 12 December 2017.

3. Conclusion

As the Marine Corps looks to future manpower requirements, stakeholders indicated that cyber and intelligence functions will be given a high priority. However, past reductions in civilian manpower—in many cases viewed as arbitrary—will make future use of civilian labor problematic. The Marine Corps stakeholders also recommended that DoD should introduce more flexibility into the civilian hiring process.¹⁵⁴

¹⁵⁴ Stakeholder Engagement with Marine Corps Personnel, by IDA, Headquarters Marine Corps, 12 December 2017.

7. Perspectives from the Joint Community

A. Joint Staff and Combatant Command Manpower Coordination

1. Coordinating Manpower Requirements between the Joint Staff and Combatant Commands

The Joint Staff coordinates sourcing functional and Geographic Combatant Command (GCC) manpower requests with the Services to ensure that CCMD headquarters are adequately staffed and Joint Force manpower requirements are met.¹⁵⁵ This coordination includes working with the Services to validate, prioritize, align, and allocate manpower resources to meet Joint Force requirements.¹⁵⁶ Coordination between CCMDs and the Joint Staff is facilitated by the Joint Manpower Validation Board process. CCMDs are responsible for overseeing the manpower requirements within their respective headquarters. They do this by submitting their manpower requirements to the Joint Staff J-1 (JS) Manpower and Personnel Directorate for review.¹⁵⁷

Manpower requirements are justified by CCMD personnel needs, the GCC integrated priority list, Joint Functional Capabilities Board studies and input from Joint Quarterly Readiness Reviews. When requesting personnel for new billets, CCMDs are normally required to identify internal billet offsets for consideration as part of the manpower request they send to the Joint Staff for validation.¹⁵⁸ GCC representatives told IDA interviewers that a preponderance of CCMD manpower requests are submitted to replace enduring personnel requirements. The Joint Staff is inclined to approve these requests, even if the Services are disinclined to source them.¹⁵⁹ In times of national emergency or surge requirements, more expedient processes can be used. For example, after 9-11, US Central Command needed to rapidly expand the size of its headquarters in order to prosecute the wars in Afghanistan and Iraq. It did so by requesting temporary individual augmentees that were approved by the Joint Staff and sourced from the Services.¹⁶⁰ But this is an exception, and the normal process for backfilling personnel and requesting manpower increases

¹⁵⁵ Joint Staff, J-1, "CJCSI 1001.01b, Joint Manpower and Personnel Program," (Chairman, Joint Chiefs of Staff, 2014).

¹⁵⁶ Stakeholder Engagement with Joint Staff, by IDA, Pentagon, Arlington, VA, November 8, 2017.

¹⁵⁷ Stakeholder Engagements with Geographic Combatant Command Personnel, November 2017, by IDA.

¹⁵⁸ Joint Staff, CJCSI 1001.01b, C-5.

¹⁵⁹ Stakeholder Engagements with Global Combatant Command Personnel, November 2017, by IDA.

¹⁶⁰ Stakeholder Engagements with Global Combatant Command Personnel, November 2017, by IDA.

requires the CCMDs and other joint activities to submit their manpower request to the Joint Staff for validation.¹⁶¹

2. Validating Manpower Requirements

The Joint Staff J-1 convenes a Joint Mission and Manpower Assessment Team to analyze CCMD requests and make recommendations to the Operations Deputies Tank. The Tank decides whether to endorse the mission brought forward by the CCMDs for further resourcing consideration. If the Joint Mission and Manpower Assessment Team approves the request, it is sent to the Joint Manpower Validation Board for sizing. That considers grade, skill, quantity, and other attributes. Board membership comprises representatives from the Services, Joint Staff J-1/J-3 or J-5 (depending on the request), and J-8, with each member allowed one vote. The outcome of the Joint Manpower Validation Board is an implementation memorandum signed by Joint Staff J-1. Policy mandates that Board-validated billets be initially documented on the Joint Table of Distribution/Joint Table of Mobilization Distribution as unfunded requirements. The PPBE process determines whether GCC requirements will be funded. If validated billets do not receive funding within three Program Budget Review cycles, policy requires CCMDs to remove billets from the Joint Table of Distribution/Joint Table of Mobilization Distribution.¹⁶²

Joint Staff and CCMD personnel generally concurred with their Service counterparts that perverse incentives have stalled meaningful manpower management reform. Efforts to convert functions being performed by military personnel to the civilian workforce have not yielded desired results due to caps on military end strength, civilian hiring/pay freezes, fluctuating O&M accounts, and mandated headquarters reductions. These constraints have perversely motivated the Services to hedge by using military manpower to perform non-military essential tasks—treating Service members as if they are “free” and fungible labor, regardless of whether a task meets the standard in the DoDI. Joint Staff and CCMD stakeholders believe it is unlikely the Services will refrain from hedging and more aggressively convert stateside functions from military performance to the civilian workforce, at least until Overseas Contingency Operations funds are discontinued.¹⁶³

¹⁶¹ Joint Staff, CJCSI 1001.01b, C-5, C-6.

¹⁶² CJCSI 1001.01b, C-5, C-6.

¹⁶³ Multiple Stakeholder Engagements with Global Combatant Command Personnel, by IDA, November 2017.

B. Fourth Estate Perspectives

1. Sourcing Manpower in the Fourth Estate

Military manpower provided by the Services helps the Fourth Estate support global US military operations and warfighting missions.¹⁶⁴ As the Department looks to a more robust 2019 budget, Fourth Estate manpower managers expressed concern that renewed questions about military essentiality will threaten their already limited number of military billets. This could potentially include a Department review of workload balance and manpower mix between the Services and the Fourth Estate. This review could possibly eliminate additional military billets and include the reexamination of Service-level contracts. Nevertheless, Fourth Estate manpower managers remain in “wait and see” mode, and few of the agencies participating in this analysis planned to request personnel plus-ups, request military members to replace vacancies, or convert civilian positions to military essential tasks. According to stakeholders, the Services are understandably reluctant to lose Service members to work in Defense Agencies, even with compensation from the Working Capital Funds (addressed in greater detail in the following section). In short, aside from the Working Capital Fund incentive, “there is simply no forcing function or oversight mechanism in Department guidance that requires the Services to provide manpower to the Fourth Estate.”¹⁶⁵

Although the Department, Services, and CCMDs rely heavily on Fourth Estate support, the Services question their return on investment for the manpower they provide because much of the Fourth Estate support is indirect or hidden. For example, the Defense Information Systems Agency provides the infrastructure and networks that power the global information exchange for DoD, secure access to global communications, cyber-security, and cyber-defense in support of the warfighter—activities that have become largely institutionalized across the DoD enterprise vice supporting a single Service or agency.¹⁶⁶

A number of Fourth Estate stakeholders spoke candidly about the challenges of trying to balance their manpower needs to meet mission requirements against competing political pressures, conflicting DoD guidance, and the Services’ reluctance to lose experienced and highly competent military personnel. Thus, civilian government employees and contracted support

¹⁶⁴ Christopher A. Kapellas. The Fourth Estate comprises 20 defense agencies and eight field activities that fall outside of the authority of the Services. The Fourth Estate provides essential support to US military operations in CONUS and overseas, and to DoD enterprise operations worldwide. Staffed by a workforce of roughly 160,000 civilian and uniformed personnel, the Fourth Estate accounts for ~20% of the Department’s annual budget and 25% of its workforce. See also Thornberry, Rep. Mac, “Thornberry: Congress Must Act to Rein in Dod Waste, Red Tape,” *Defense Drumbeat* (2018), <https://armedservices.house.gov/news/defense-drumbeat/thornberry-congress-must-act-rein-dod-waste-red-tape>.

¹⁶⁵ Fourth Estate Stakeholder Engagements, by IDA, January 2017- June 2018.

¹⁶⁶ Fourth Estate Stakeholder Engagements, by IDA, January 2017- June 2018.

make up the bulk of the Fourth Estate workforce. Civilians provide continuity and bring new expertise and skills to Fourth Estate agencies, while uniformed personnel bring current operational expertise and first-hand knowledge of Service and Joint priorities. The Fourth Estate requires a sustainable balance of civilian and military personnel (approximately 2/3 civilian and 1/3 or less military) to operate effectively; however, even at this ratio, stakeholders spoke about the difficulty of acquiring and retaining adequate numbers of uniformed personnel.¹⁶⁷

In 2015, then-Secretary of Defense Chuck Hagel directed workforce reductions take place in a “delaying” effort to shrink the Department—which required personnel reductions across the Services and in the Fourth Estate. Stakeholders viewed these personnel cuts as arbitrary and counterproductive because they then had fewer employees to accomplish the same mission and workload. Stakeholders reported that the defense enterprise would have been better served had Congress, DoD, and the Services analyzed Fourth Estate manpower requirements before making targeted reductions. This would have potentially achieved the desired cost savings much less disruptively.¹⁶⁸

2. Incentive Structures (Working Capital Funds)

Many Fourth Estate functions and services are categorized as inherently governmental (i.e., the function/service must be performed only by military or civilian personnel, and may not be contracted for) or military essential (i.e., the function/service must be performed by military personnel).¹⁶⁹ In some cases, functions performed by military personnel assigned to the Fourth Estate are inherently governmental, but not necessarily military essential. This case is especially troubling to the Services that are asked to provide military personnel to perform Fourth Estate functions that civilians could otherwise perform. It could also be viewed as problematic by the Services who provide military manpower to the Fourth Estate but complain that doing so is a “tax” on their resources in terms of military billets.

In some cases, Fourth Estate agencies and activities use Defense Working Capital Funds (DWCF) to reimburse the Services for the manpower they provide.¹⁷⁰ DWCF are revolving funds that finance operations that function like commercial business activities. For example,

¹⁶⁷ Stakeholder Engagement, 1 June 2018.

¹⁶⁸ Stakeholder Interviews with Fourth Estate, by IDA, January 2017- June 2018

¹⁶⁹ OUSD(P&R), “(U//FOUO) Department of Defense Instruction, 1100.22, Policy and Procedures for Determining Workforce Mix (Draft),” (2017).

¹⁷⁰ Working Capital Funds were established under the authority of Title 10, United States Code (USC) Section 2208, in fiscal year (FY) 1992.

DWCF can be used to pay for equipment maintenance, supply and storage activities, and transporting equipment, and manpower.¹⁷¹ Congress established DWCF's as a cost control and accounting mechanism for specific DoD programs and work. This revolving fund structure creates a customer-provider relationship between the military units and the DWCF. This enables a Fourth Estate agency like the Defense Information Systems Agency to reimburse the Services for military manpower it borrows. Similarly, an Air Force squadron can use O&M funds to purchase goods or services from a DWCF-funded organization (e.g., a depot).¹⁷²

According to the Congressional Research Service, the Defense-Wide Working Capital Fund includes activities managed by the Defense Logistics Agency, the Defense Finance and Accounting Service, and the Defense Information Systems Agency.¹⁷³ Defense Working Capital Funds allow the DoD to engage in limited commercial business-like purchasing power.¹⁷⁴ According to the Congressional Research Service, Congress typically provides a direct appropriation to the DWCF that does not expire;¹⁷⁵ however, when agencies accumulate an excess of cash in a DWCF, DoD officials and Congress tend to view them as alternative funding sources for other requirements.¹⁷⁶ In short, the best way to view DWCF is as a reimbursement tool and not as a funding source.¹⁷⁷

Fourth Estate stakeholders agreed that the best interests of the Services and the Department are served by maximizing the use of military manpower for military functions and combat roles. The Services sometimes perceive little benefit from sending military manpower to work at Fourth Estate agencies, but Fourth Estate stakeholders assert that this view is incorrect. They argue that the Fourth Estate provides important support to global military operations, the Services, and the Department; and that functions classified as inherently governmental require special knowledge and skills that only military personnel possess. Moreover, working capital funds can be used to reimburse the Services for the manpower they provide to commands and agencies, giving agencies contractor dollars to buy back civilians. The Service Chiefs may see a benefit to working capital funds if it means making progress on their modernization priorities. But accurate data on the fully burdened life cycle costs of manpower must be gathered, analyzed, and accurately reported. Then the Fourth Estate could be approached to pay for military manpower via a pilot program that transfers funds in specified amounts from Fourth Estate

¹⁷¹ "Defense Primer: Defense Working Capital Funds," (Congressional Research Service, 2018). 1.

¹⁷² "Defense Primer," 1.

¹⁷³ "Defense Primer," 2.

¹⁷⁴ "Financial Management: Defense Working Capital Fund (Dwcf)," *AcqNotes* (2018), <http://acqnotes.com/acqnote/careerfields/defense-working-capital-fund>.

¹⁷⁵ "Defense Primer," 1.

¹⁷⁶ "Defense Primer," 2.

¹⁷⁷ "Funding Product Support Strategies - Working Capital Funds (Wcf)," (2016), <https://www.dau.mil/acquikipedia/Pages/ArticleDetails.aspx?aid=d6751d46-d245-4710-862a-4d6410763c8a>.

agencies to the Services for military manpower.¹⁷⁸ But experts say the working capital fund concept is poorly understood, particularly by Congress. What is needed then, to make working capital funds a more viable tool is better awareness and visibility of manpower costs.¹⁷⁹

¹⁷⁸ Major General Arnold Punaro, 10 January 2018.

¹⁷⁹ Honorable Mike Mccord, Former under Secretary of Defense (Comptroller)/Chief Financial Officer, by IDA, Alexandria, VA, 31 May 2018.

8. Recommendations and Conclusions

This study aimed to examine the manpower mix criteria for potential improvements that would more clearly define military essential roles and functions, as well as to identify process improvements to facilitate using the appropriate manpower source. The findings and recommendations below reflect a synthesis of stakeholder input, analysis of the IG/CA data, and review of previous studies.

A. Findings and Recommendations

1. **DODI 1100.22 is infrequently used and needs to better align with other DoD guidance distinguishing roles and functions of military and civilian manpower.**

Stakeholders reported that the DoDI seems to focus on distinguishing inherently governmental functions in designating new manpower requirements and is less relevant for designating military versus civilian manpower. The guidance also seems more applicable to new requirements than for revalidating established requirements. The definitions and criteria in the DoDI need to be clarified to reduce ambiguity and to provide the Services more targeted guidance without necessarily restricting overall manpower management options. A useful example is that, in the FY16 IG/CA Inventory, 69 functions were coded as exempt from contractor performance for reasons of *esprits de corps*, including combat service support, operational planning and control, and administrative management and correspondence services. A re-write of the DoDI could provide examples of the kind of permissible functions that should be categorized under *esprit de corps* (e.g., military bands, recruiters and military historians), while excluding functions that are incongruous with a specific criteria code.

That said, our research indicates that updating the DoDI will not be enough to guide the Services and “the Fourth Estate” to better implement the manpower mix policy—the document is seldom used except as a post-hoc check to ensure no major policy red lines have been crossed. Three of four Services indicated that they meet workload requirements by allocating the most available manpower pool to perform a given function. Because the DoDI is oriented toward determining new manpower requirements, stakeholders have difficulty applying it to the more common challenge of determining whether their manpower mix needs to shift. If manpower analysts identify functions that are not military-essential but are being performed in military billets, it is unclear how they would communicate the incongruity and prompt change. As a result, revalidating requirements tends to be cursory and simply carries forward the existing

workforce mix. Unless there are top-down directed cuts or conversions, the workforce mix tends to maintain the status quo.

Recommendation: Update DoDI 1100.22 and revise guidelines for determining manpower requirements using simplified categories and standardized definitions. As discussed in Chapter 4, the DoDI focuses on inherently governmental functions and insufficiently addresses the distinctions between military and civilian manpower. The criterion of “military unique knowledge and skills” in particular should be defined more narrowly, because the civilian workforce and contracted support may have those knowledge and skills as well. Military-unique knowledge and skills should be limited to recent and continuing military training and experience, and the redundancies in this criterion with other criteria—such as those functions requiring military performance for reasons of command and control, statute, or international agreement—should be eliminated. Policy should also reduce the emphasis on the best or most appropriate workforce mix and instead focus on identifying the appropriate manpower source for a particular function. Stakeholders suggested that the DoDI include a decision tree to help manpower managers determine military essentiality and revalidate existing requirements. It should also provide parameters for applying criteria codes to specific functions.

2. Stakeholders perceive disconnects between bottom-up communication of manpower requirements at lower levels and the top-down manpower planning processes and total force management.

The IG/CA is a rich data set but is under-utilized as a management tool. DoD stakeholders use the IG/CA inventory in only one direction: to capture and aggregate bottom-up input with no communication back to the Services afterward. Organizations required to submit the annual IG/CA report indicated that they do not receive feedback that the chain of command (to include the Joint Staff, OSD, OMB and Congress) reviews their submissions or uses the report for constructive analytical purposes. During IDA’s research, no organization reported having ever received an official inquiry about a specific data field in their submission. This apparent disinterest in the IGCA report undermines confidence in its utility.

There is no formal process at OSD for reviewing the IG/CA report or for assessing the implications of the manpower data on the individual Services, the Joint Force, overall readiness to perform missions across the spectrum of conflict, or the longevity of the All-Volunteer Force. This process gap inhibits leaders—both military and civilian—from adopting a holistic view and more comprehensively understanding the trade space between the three legs of the Total Force triad: military personnel, government civilians, and contracted support. A process for reviewing the Services’ IG/CA input, providing feedback on anomalies or inconsistencies, and seeking clarification would help identify where military manpower may be performing non-military-essential functions and could be converted to civilian or contracted support.

Recommendation: Establish a Flag Officer/Senior Executive Service-level “Manpower Utilization and Readiness Review Council” to increase oversight and to make recommendations to Components and the Secretary of the Defense on ways the Total Force could be managed more effectively and efficiently. The council’s review of the IG/CA report (and other relevant information provided by stakeholders) will generate a strategic conversation at senior leadership levels that should lead to enhanced performance, accountability, and personnel readiness across the DoD enterprise. In addition, IG/CA reporting instructions disseminated across the Department should inform stakeholders are aware that inputs will be reviewed more closely and used in Total Force planning.

The council could also compare what the Services are reporting in their annual IG/CA submissions with what they are reporting about their military personnel status in other information systems, such as the the Defense Readiness Reporting System. For example, low military personnel readiness at a command with few civilians performing garrison support activities could possibly mean “borrowed” military manpower is draining combat units of essential military personnel. In short, an OSD-chaired board could be an effective tool for restoring oversight and accountability to a process that has grown overly deferential to Service prerogatives.

The council could also review military and civilian personnel accounts included in the Service Program Objective Memorandums that are submitted annually as part of the Planning, Programming, Budgeting and Execution process. Such reviews would allow the Council to monitor stakeholder progress across the FYDP in converting positions from military to civilian labor and track fluctuations in Service O&M accounts which are used to fund civilian manpower. O&M fluctuations are a major disincentive for why the Military Departments do routinely undertake voluntary conversions.

The council could also monitor the manning ratios being proposed for new headquarters (e.g., CYBERCOM and SPACECOM) to ensure DoD’s manpower mix policy is being strictly adhered to in terms of civilian labor being the recognized as the DoD default position. Whenever practice appears to be significantly diverging from policy, the council should request a formal written response from a stakeholder.

3. The IGCA report reveals inconsistencies across the Services.

Analysis of the FY 2016 IG/CA data raised questions about the interpretation and application of the manpower criteria codes, including broad and imprecise application of some criteria codes and Service differences in military/civilian authorization ratios within a function. Service differences in the following areas raise questions about potential gaps between policy and practice:

- a) Numbers of military personnel that are allocated to perform the same function—A good example is the US Army report of having 7,601 soldiers performing retail sales operations in infrastructure whereas the US Navy reports 2,080 sailors, the US Air Force 46 airmen, and the US Marine Corps 224 marines;
- b) Different criteria codes used for manpower performing the same function—A good example is the Air Force classifies combat roles “military unique knowledge and skills” whereas the other Services do not. These examples highlight areas where additional clarity may be needed in the policy, or where greater oversight is needed of implementation to ensure the policy is applied as intended. Some Service differences are to be expected; however, disproportionate military manpower in infrastructure functions and associated differences in criteria codes suggest potential room for improvement in manpower determination practices.

Recommendation: Oversight of the Services’ IG/CA input should identify inconsistencies and opportunities to realign military manpower to military-essential functions. Such analysis will help the Services better understand what the IG/CA is advising, and will enable leaders and manpower specialists at all echelons to use the IG/CA as a management tool. More explicit guidance on the inventory may be needed to ensure that organizations submitting IG/CA reports interpret and apply manpower mix criteria codes consistently.

4. The advent of cyberwarfare, unmanned, space, and artificial intelligence/machine learning is changing the character of 21st-century warfare and may challenge assumptions about what is military essential.

Emerging and expanding technologies will continue to require increased numbers of tech savvy personnel to meet workload requirements across the DoD enterprise. Near-term increases in military end strength may indirectly incentivize Services to designate these roles as requiring military manpower, but military manpower may not be the appropriate long-term solution. Demographics and the relatively low percentage of American youth who can meet today’s recruiting standards suggest that not all of this highly skilled labor pool can be sourced by military personnel. These technologies may also call for different approaches to manpower mix as the Department clarifies the roles and personnel costs. Costs associated with training and retaining these skill sets may differ from other technical functions, and figuring out how to imaginatively augment military personnel with highly skilled government workers and contracted support will continue to challenge the DoD enterprise. Better understanding the appropriate roles, numbers, and costs of contracted support in these functions will be critical to determining a sustainable manpower mix.

Recommendation: DoD should further research and evaluate workforce manpower requirements for emerging and expanding technologies in order to ascertain how government civilians and contracted support can help mitigate projected future personnel shortages in key high-tech domains.

5. Converting positions in functional areas already identified for cost savings and civilian performance would free military manpower to perform more military-essential functions.

Previous studies have identified opportunities for significant cost savings from converting military positions performing non-military-essential functions to civilians. Recommendations addressed how DoD might more effectively and efficiently manage the Total Force to enhance readiness and improve cost management and are pending implementation. The functional areas that would likely yield substantial opportunities for realignment of military manpower include

- Education and Training and Personnel and Social Services. A 2016 study recommended converting two functional areas—Education and Training and Personnel and Social Services—from ~14,200 military personnel to 11,300 civilian employees. Projected manpower savings was estimated at \$530 million annually, not including the “fully burdened” cost of continued reliance on military manpower which would yield a \$1.1 billion annual savings across the US Government.
- Cyberspace Operations. A 2015–16 study recommended a more agile staffing plan for the Cyber Mission Force that would replace almost half of the military staff with less expensive but highly qualified government civilians. Projected manpower savings was estimated at \$130 million annually.
- Unmanned Aircraft Systems Operations. A 2016 study recommended integrating some government civilians into Air Force MQ-1/9 squadrons to assist their military counterparts with non-lethal launch and recovery operations. Projected manpower savings was estimated at \$13.65 million annually or \$68.3 million across the FYDP.
- Medical Specialties. A 2018 study recommended innovative ways to convert select military medical functions that are not performing readiness-related workload (and, thus, not maintaining deployable individuals) to civilian labor. Only eight of ~100 medical specialties would be impacted, for an estimated annual cost savings of \$326 million or \$1.63 billion over the FYDP.

Recommendation: OUSD P&R should assess how to fully or partially implement these recommendations in order to achieve up to \$1 billion in aggregated cost savings annually. The recent NDAA lifting the prohibition on converting medical functions from military to civilian manpower will enable the Department to press ahead on these conversions.

B. Conclusions

IDA was asked to explore alternative manpower mix criteria that would more clearly and unambiguously define military essentiality, and then to assess functional areas to identify opportunities for military-to-civilian or military-to-contract conversions. OSD continues to grant the Services maximum latitude in determining the most effective and efficient labor pool necessary to accomplish their respective Title 10 missions. But the second order effects of such a decentralized approach comes at a price the Department may no longer be able to bear given the escalating personnel costs of the All-Volunteer Force and negative impact on readiness when military personnel perform jobs that civilians can do.

The ambiguity of some criteria and a lack of oversight have allowed the Services to define *military essentiality* in different ways to meet their own perceived needs. Although Service policies align with OSD guidance, they diverge in practice. Some Service variation is to be expected; however, inconsistency between the Services in how they apply the manpower criterion codes to the same job function erodes the credibility of the overall process.

The same is true when a Service claims a specific function requires military unique knowledge. For example, it is obvious that machine gunners in the Army and Marines need to be Service members because they are applying lethal force in accordance with the Law of Armed Conflict and Geneva Convention, which requires them to be members of an organized military with a chain of command in order to be legally protected (i.e., not regarded as a terrorist or criminal). But the same is not true of military personnel assigned to retail sales, traffic management, base safety, base inspection divisions, and property control offices, to name only a few. Fundamental differences in how the Services classify the same functions make it difficult for manpower and readiness experts to assess whether DoD's manpower mix guidance is understood and being properly implemented.

This creates the appearance of a “shell game,” which obfuscates and hinders OSD's ability to conduct comparative analysis of similar tasks between the branches. Service cultures notwithstanding, it is not self-evident why the Marines have more military personnel assigned to the postal function than the Army, Air Force or Navy—all significantly larger forces. Military:civilian ratios in the same occupational specialties are important at the Service and DoD-wide levels because they may indicate key areas requiring further analysis: to assess if the manpower requirements identification process needs to be further refined, to determine if installation commanders require additional O&M funds to pay for military to civilian conversions, to learn whether structured billets should be reduced or even eliminated.

Feedback from stakeholders and analysis of the IG/CA data indicated room for improvement in the criteria and other guidance in DoDI 1100.22. Specifically, the criterion of “military unique knowledge and skills” is outdated and overly broad given the knowledge and skills available in the civilian workforce and contracted support. In addition, stakeholders suggested

that the policy should include how to apply manpower source criteria in revalidating requirements, as well as a decision aid that simplifies the policy into procedural guidance.

However, factors beyond the DoDI are the primary drivers for workforce mix, and shifting military manpower to more military-essential functions will require a much broader set of reforms. At the Department level, there is no formal IG/CA review process to scrutinize and interpret stakeholder manpower data. The lack of Flag Officer/SES involvement in the manpower mix decision space undermines the seriousness with which military essentiality is viewed across the enterprise. For this reason, the research team believes an OSD chaired Flag Officer/SES Manpower Utilization and Readiness Review Council be established to evaluate IG/CA submissions. Unlike the Joint Staff Manpower Validation Board that screens and approves individual personnel requests from the combatant commands, this OSD-chaired council would focus on policy implementation trends as gleaned from the IG/CA reports—to include questionable categorizations of military essentiality by stakeholders. The council would serve as a catalyst for a sustained strategic level discussion about the veracity of IG/CA data reported by the stakeholders, promote a better understanding of the similarities and anomalies between the Services; explore ways to broaden understanding of the “military essentiality” definition, and flag irregularities that should be corrected.

Another major insight that emerged from our research is that the incentive structure is misaligned with the policy. Additional analysis is required of the incentive structure underpinning command-level decisions about whether to civilianize stateside garrison functions aboard major DoD installations. Recent negative experiences with attempting to convert military billets to civilian positions while budget freezes and reductions in O&M funding occurred has understandably contributed to commanders/supervisors viewing the civilian personnel system as unreliable and unpredictable. The result is that military manpower is often viewed as a free commodity and fungible labor source, least susceptible to reductions.

Thus, military manpower is perceived to be the lowest risk. This perception works at cross purposes with DoD’s stated policy goal of relying on civilian labor as the default position until the high standard of “military essentiality” is demonstrated for specific functions. Without the pressure of wartime necessity or declining end strength, the Service may revert to using military for more infrastructure functions. Military manpower is the only labor source that can perform all functions—military essential, inherently governmental, and commercial—and recent trends indicate that military manpower is the least susceptible to reductions.

Previous studies of specific functional areas have revealed opportunities to improve efficiency without negatively impacting effectiveness, and the Department should consider options for facilitating conversions in those areas already identified. Although the present study focused on military manpower, civilian personnel reform will be critical to ensuring that military manpower is reserved for military-essential functions. Stakeholders identified obstacles to using civilian manpower, including funding and hiring procedures, that contribute to over-relying on

military manpower. Success of the Workforce Rationalization Plan requires that these obstacles be addressed.

Until the incentive structure is improved at the Department level, however, the attraction of using military manpower to perform tasks that civilians might otherwise perform just as effectively and efficiently will likely continue unabated. Our research team hypothesized at the outset of this project that requiring non-operational organizations to reimburse warfighting units for borrowing military manpower might serve as an adequate free market incentive for hiring civilians over military personnel. Unfortunately, we did not successfully unravel the complex accounting modalities necessary to validate our hypothesis that the Fourth Estate has successfully implemented with its Working Capital Fund program.

Finally, our research indicates a comprehensive review of manning alternatives in such information-dominant fields as cyber, space, AI/ML, and unmanned/robotics is sorely needed. The scope of our project did not allow for the rigorous analysis necessary to illuminate the comparative advantages and disadvantages of trying to train tomorrow's recruits to be high performers in high tech jobs where the time required to achieve basic competence exceeds the duration of their first term enlistment contracts. DoD's recent experience with contracted support in Iraq and Afghanistan—where historically high numbers of armed and unarmed contracted support personnel augmented US forces fighting in war zones—may be prologue for future conflicts given that in many cases contracted support was readily available, less expensive (over the long-term), and was mostly trained before they came to work for DoD. This trend will likely continue for many years as DoD seeks increased readiness and lethality required to deter and, if necessary, fight and win against peer adversaries. No doubt, additional reforms will be required to optimize how DoD uses its three labor pools of military personnel, government civilians, and contracted support to protect US security interests.

Appendix A. Site Visits and Stakeholder Engagements

2017

19 October	Headquarters US Air Force, AIMR Requirements Division
27 October	US Army, Office of the Assistant Secretary of the Army, Manpower and Reserve Affairs
07 November	US Navy, Office of the Assistant Secretary of the Navy, Manpower and Reserve Affairs
08 November	Joint Staff, Combatant Commanders
27 November	Defense Civilian Personnel Advisory Service, International/Expeditionary Program Office
12 December	US Marine Corps

2018

10 January	Major General (ret) Arnold Punaro, The Punaro Group
12 January	Office of the Chief of Naval Operations
17 January	Office of Cost Assessment and Program Evaluation, Office of the Secretary of Defense
19 January	US Marine Corps Total Force Structure Division
29 January	Naval Sea Systems Command
6 February	Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics
12 February	Joint Staff J1: Manpower and Personnel
22 February	US Army Manpower Analysis Agency
7 March	Air Force Manpower Analysis Agency
13 March	Congressional Budget Office
17 April	Defense Information Systems Agency
18 April	Defense Contract Management Agency
29 May	United States Transportation Command
30 May	United States European Command
31 May	North American Aerospace Defense Command
1 June	Defense Logistics Agency
6 June	Office of the Under Secretary of Defense for Personnel and Readiness
19 June	Office of the Under Secretary of Defense (Comptroller)
20 June	Military Sealift Command

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Appendix C. Abbreviations

ASA(M&RA)	Assistant Secretary of the Army, Manpower & Reserve Affairs
ASD(HA)	Assistant Secretary of Defense for Health Affairs
ASD(RA)	Assistant Secretary of Defense for Reserve Affairs
CAP	Combat Air Patrols
CBO	Congressional Budget Office
CCMD	Combatant Command
CJCSI	Chairman of the Joint Chiefs of Staff Instruction
CMF	Cyber Mission Force
CONUS	Continental United States
DEW	Distant Early Warning
DoD	Department of Defense
DoDD	Department of Defense Directive
DoDI	Department of Defense Instruction
DRRS	Defense Readiness Reporting System
DWCF	Defense Working Capital Fund
E&T	Education and training
FAIR	Federal Activities Inventory Reform
FTE	Full time equivalents
FY	Fiscal year
FYDP	Future Years Defense Program
GCC	Geographic Combatant Command
IDA	Institute for Defense Analyses
IG/CA	Inherently government and commercial activities
LOAC	Law of Armed Conflict
LRE	Launch and recovery elements
MHS	Medical Health System
MILPERS	Military Personnel Budgetary Accounts
MPES	Manpower Programming and Execution System
NAVMAC	Navy Manpower Analysis Center
NDAA	National Defense Authorization Act
NDS	National Defense Strategy

NSA	National Security Agency
O&M	operations and maintenance
OEF/OIF	Operation ENDURING FREEDOM/Operation IRAQI FREEDOM
OMB	Office of Management and Budget
OPM	Office of Personnel Management
OSD	Office of the Secretary of Defense
P&SS	Personnel and Social Services
PPBE	Planning, Programming, Budgeting, and Execution
RC	Reserve Component
SES	Senior Executive Service
SOFA	Status of Forces Agreement
TRADOC	Training and Doctrine Command
UAS	Unmanned Aircraft Systems
USD(P&R)	Under Secretary of Defense for Personnel and Readiness
VA	Veteran's Affairs
WCF	Working capital fund
WO	Warrant officers

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