



DEFENSE BUSINESS BOARD

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Department of Defense

OFFICE OF PREPUBLICATION AND SECURITY REVIEW



Strengthening Defense Department Civilian Talent Management

DBB FY 22-03

An independent report evaluating the effectiveness of Department of Defense civilian talent management, as well as approaches to upskilling.

May 12, 2022

EXECUTIVE SUMMARY	3
PREFACE	6
STRATEGIC IMPERATIVE	7
BACKGROUND	8
OBSERVATIONS AND FINDINGS	10
1. Civilian Development is not seen as a priority in DoD culture.	10
2. The organizational structure is not postured to effectively manage talent	20
3. Talent data is a strategic asset. The way the Department collects it and uses it to plan is flawed.	24
FULL RECOMMENDATIONS and PRIORITIES	30
CONCLUSION	37
APPENDICES	37
TAB A: Terms of Reference	38
TAB B: DBB Presentation, May 12, 2022	42
TAB C: Methodology	61
TAB D: List of Interviewees	65
TAB E: Defense Department Functional Community Construct	69
TAB F: Policies identified for change	73
TAB G: Subcommittee member bios	75
TAB H: Acronyms	87
TAB I: Public Comments	90
TAB J: References	92
CASE STUDIES	
1. When a company allowed its employees to “choose your own adventure” for career paths	11
2. When a major airline turned to learning councils for future skills	17
3. When a global consulting firm chose to “go big on our own people”	18
4. When a global technology company invested big in upskilling its workforce	19
5. Modernizing human resource organization structures	23
6. Private sector approaches to Future employee skills	25
7. GAO says the federal government should use skills & competencies to plan its workforce	28
8. When a global investment banking company went digital	29

EXECUTIVE SUMMARY

Tasking: On November 12, 2021, the Deputy Secretary of Defense (DepSecDef) requested the Defense Business Board (DBB) submit an independent report examining and recommending specific approaches and actions to improve talent management in the DoD civilian workforce. This report would include leading practices and innovative ideas from private industry and the DoD and would address talent identification, acquisition, and retention, matching talent and jobs, reskilling and upskilling, as well as the necessary human resources policies and procedures that would enable to DoD to achieve and maintain superiority in this new technological, data and intelligence-driven, environment.

The study Terms of Reference at **TAB A** guided the full scope of research and interviews for this study.

Approach and Methodology: The Subcommittee conducted six months of study, including interviews with key stakeholders, surveys, and a literature review. Our discussions included the full spectrum of perspectives; from senior Pentagon and Office of Personnel and Management (OPM) officials; to touch labor employees at the naval yards, depots, and arsenals; from futurists and academics to private sector executives. Our findings are their experiences. Our recommendations are grounded in their collective desire for a better DoD.

Background: The Department of Defense's mission is to provide the military forces needed to deter war and ensure our nation's security. As part of the total force, DoD Civilians are critical to the Department's ability to meet its mission to stay ahead of the global competition. The battlefield of today and tomorrow is a function of intelligent systems and data, supply chains, and the Organic Industrial Base as much as major weapon systems. Maintaining the military advantage requires the successful adoption of emerging technologies and skillsets that drive the transformational impact of these elements on the future of warfare and the workforce.

This has taken on a sense of urgency, given several factors and developments:

- The advancements, capabilities, and prowess of the Department's most consequential strategic competitor, China, and other acute and persistent threats, such as Russia, North Korea, Iran, and violent extremist organizations.
- The lack of focus in our universities and education system on turning out STEM graduates.
- DoD's "outdated" methods, policies, and systems for civilian talent management in the Department.
- DoD's lack of leadership and focus on the "new" skillsets and talent within the DoD and extended ecosystem, including private companies.
- The COVID-19 global pandemic disrupted labor markets, accelerated the shift to remote work, and forced approximately 25% more workers to rethink their occupations¹

Synopsis: Department leaders are responsible for ensuring the DoD has a workforce with the skills that can manage and adapt to these new changes. Currently, DoD hires talent to fill short-term vacancies with little regard to future technology needs and/or a strategy to upskill or reskill as needed. This needs to change for DoD to keep pace with changing technology and compete for and attract the best talent.

¹ <https://www.mckinsey.com/featured-insights/future-of-work/the-future-of-work-after-covid-19>

In the private sector, companies focus on talent management. It is the only way they can remain a viable business enterprise and compete in their business space. As such, many private companies make talent management a priority and have implemented technologies such as artificial intelligence to recruit and retain that talent. Said another way, many private companies don't simply fill vacancies based on the skills the employee has now; rather, they hire talent employee potential to grow and learn, with an eye toward what their company needs for the future. Talent management comprises identification of needed and available skills, attraction and acquisition of talent, upskilling and reskilling, and succession planning – the life cycle of talent in the organization to manage today and prepare for the future.

The DoD must improve its ability to identify and optimize its current talent and, where talent shortages persist, reskill and upskill its existing civilian workforce. Further, it must project future skill requirements for the future. These shortcomings are symptomatic of the DoD's adherence to the outmoded practices of managing talent the private sector has long left behind. While this study primarily focuses on the skills portion of talent management (identifying, tracking, matching, upskilling), improvements in these areas will lay the groundwork for modernizing the system.

***Note:** Reskilling is learning new skills to do a completely different job. Except in rare instances, like in the case of base realignment and closure where a mission may completely change, our study found reskilling to be uncommon in the DoD Civilian Workforce. It was only mentioned once in all our interviews. Therefore, the study will hereafter focus discussion primarily on upskilling.*

Conclusion: Overall, the talent management that drives the DoD civilian workforce lags behind private industry and is behind the times. The Department doesn't know its employees' capabilities and requirements for the future, the systems to manage them, the policies to enable the new generation of skilled employees, or the programs to upskill them. Most pressing, it lacks the **cultural foundation, organization, and data approach** to take its place as a bastion of STEM development. The DoD must address these issues with coordination, focus, urgency, and a sense of priority at all levels; some would say, the Department has a **“capability burning platform,”** and time is running out.

Key Observations:

1. Civilian development is not seen as a priority in DoD culture.
2. Talent data is a strategic asset. The way the DoD approaches lags behind the private sector and is flawed.
3. The organizational structure is not postured to manage talent effectively.

Despite the Department's existing talent management challenges, there are best practices currently in practice within the DoD that components can share across the enterprise and others from private industry that could improve the current system. Some of these recommendations can be adopted immediately, while others will require a longer, more strategic view. However, in order to do so there must be a leader and integrator to drive change at the enterprise level.

Key Recommendations (Summarized):

1. Transform civilian culture to prioritize talent management.
2. Prioritize and elevate Talent Management within the organization.
3. Modernize the Department's workforce planning and data.

Final Comments: The DBB appreciates the confidence shown by the DepSecDef in entrusting this important study to it. In addition, the Subcommittee sincerely applauds all the hardworking people that commit themselves daily to improving the lives and experiences of the Total Force. We commend and sincerely thank them for their assistance and valuable cooperation during the course of this study.

The full DBB approved observations and recommendations on May 12, 2022.

Respectfully submitted,

A handwritten signature in black ink that reads "Larry Spencer". The signature is written in a cursive, flowing style.

General Larry Spencer, USAF (Ret)
Subcommittee Chair

PREFACE

This study, DBB FY22-03, *Strengthening Defense Department Civilian Talent Management*, is a product of the Defense Business Board (DBB). Recommendations provided herein by the DBB are offered as advice and do not represent DoD policy.

The Secretary of Defense established the DBB in 2002 to provide the Secretary and Deputy Secretary of Defense with independent advice and recommendations on how “best business practices” from the private sector’s perspective might be applied to the Department. DBB members, appointed by the Secretary of Defense, are senior corporate leaders with demonstrated executive-level management and governance expertise. They possess a proven record of sound judgment in leading or governing large, complex organizations and are experienced in creating reliable and actionable solutions to complex management issues guided by proven best business practices. All DBB members volunteer their time to this mission.

Authorized by the Federal Advisory Committee Act of 1972 (5 U.S.C., Appendix, as amended), and governed by the Government in the Sunshine Act of 1976 (5 U.S.C. § 552b, as amended), 41 CFR 102-3.140, and other appropriate federal and DoD regulations, the DBB is a federal advisory committee whose members volunteer their time to examine issues and develop recommendations and effective solutions, aimed at improving DoD management and business processes.

The management of this study was governed by the Federal Advisory Committee Act of 1972 (5 United States Code (USC), Appendix, as amended), the Government in the Sunshine Act of 1976 (5 USC § 552b, as amended), 41 CFR 102-3.140, and other appropriate federal and DoD regulations.

TASKING

On November 12, 2021, the Deputy Secretary of Defense requested the DBB, Talent Management, Culture, & Diversity Advisory Subcommittee (“the Subcommittee”) submit an independent report examining from a private industry perspective the methodologies and approaches used to identify talent and match jobs, as well as reskilling/upskilling its civilian workforce. The Deputy Secretary of Defense directed this report review:

1. How private industry projects the number and types of skills they will need in the future;
2. The Department’s current civilian workforce planning methods;
3. The Department’s existing approaches to identifying and categorizing worker skill sets and tracking them over time, and identifying the laws, policies, or practices that inhibit implementation within the Department;
4. The Department’s approach to matching worker skill sets to the needs of particular jobs or career fields and identifying practices that impede effective matching of employee skills to jobs;
5. Changes to statutory requirements that inhibit the Department’s ability to reskill its civilian workforce;
6. Case studies of large companies that structured successful reskilling/upskilling programs either enterprise-wide or within a major sector.
7. Any other related matters the DBB determines are relevant to this task.

The study Terms of Reference at **TAB A** guided the full scope of research and interviews for this study.

SUBCOMMITTEE MEMBERS

General Larry Spencer, USAF (Ret) served as chair of the DBB Talent Management, Culture, & Diversity Advisory Subcommittee. Other Subcommittee members that contributed to the study are General Johnnie Wilson, USA (Ret), Dr. Chris Gopal, PhD, Ms. Jennifer McClure, Ms. Cheryl Eliano, and Secretary Deborah Lee James. Subcommittee support was provided by Lt Col Kyle Harrington, USAF; Mr. Jud Crane, contractor and Defense Innovation Board augment; and Ms. Emma Vitale, contractor and Defense Innovation Board augment. **TAB F** provides biographies of the Subcommittee members.

The Subcommittee presented the study and its findings and recommendations to the entire DBB membership at an open public meeting on May 12, 2022. After discussion and deliberations, the study was approved unanimously. The briefing slides presented and approved are in **TAB B**, and any public comments received are at **TAB I**.

APPROACH AND METHODOLOGY

Subcommittee members conducted this study over roughly 24 weeks: researching and analyzing documents and literature, as well as interviewing Subject Matter Experts. The interviews with 59 DoD, OPM, and private industry leaders, principals, and employees followed Chatham House Rules. Since last refined in 2002, the Chatham House Rule states, "When a meeting, or part thereof, is held under the Chatham House Rule, participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed." The Subcommittee also interviewed members of the American Federation of Government Employees and held round-table discussions with federal employees potentially impacted by the recommendations of this study. A full list of interviewees is at TAB D. Additionally, detailed questionnaires were developed and provided to each participant before the conversation. These questionnaires are included in TAB C.

The Subcommittee conducted a literature review of over 40 past studies, reports, and assessments, dating back to 2011. A listing of literature reviewed is at TAB C. The Subcommittee also collected written questionnaire responses from 16 DoD Components, including one from each military department and OPM.

STRATEGIC IMPERATIVE

The Department of Defense's mission is to provide the military forces needed to deter war and ensure our nation's security. As part of the Total Force, DoD Civilians are critical to the Department's ability to meet its mission and stay ahead of the global competition. Maintaining the military advantage requires a successful adoption of emerging technologies because of their transformational impact on the future of warfare and the workforce.

Department leaders are responsible for ensuring the DoD has a workforce with the skills to harness and drive that technological change. In the past, DoD could simply acquire that talent, but it can no longer simply be bought. To get the right people with the right skill, the Department needs effective talent management to ensure employees are upskilled to include the right policy and processes to prepare the workforce for the future.

In terms of talent management, some would say the Department is standing on a **“capability burning platform.”** It cannot afford to continue to pursue the future with the same programs, processes, and systems against the same barriers as it did in the past. Most importantly, the DoD must **change the cultural view** of the civilian professional, **better organize**, and change its approach to **workforce data**.

BACKGROUND

With a budget of \$740 billion, 2.9 million employees, and 4,800 sites across 160 different countries, the Department of Defense (DoD) is arguably the largest and most complex enterprise in the world. While DoD’s mission has remained constant, the world is changing and requires the Department to adapt.

The current security environment is affected by rapid technological advancements and the changing character of war. The first nation to understand and adopt emerging technologies will have a significant advantage. Many of these new technologies will come from the commercial sector, where the United States’ most capable adversaries can also access them. As a part of the fourth industrial revolution, these new technologies blur the lines between the physical, digital, and biological spheres and force organizations to change how they do and manage their business.² New advancements such as AI and machine learning, robotics, data science, automation, blockchain, and advanced analytics will change the relationship between workforces and their tools and require all employees to adapt.

While the pace of technology development is advancing at an increasing rate, the supply of technologically skilled workers has not kept up with demand, partly caused by declining U.S. domestic enrollment in science, technology, engineering, and mathematics (STEM) programs, which are instead dominated by foreign countries (notably, China). The unemployment rate for technology workers is around 1.7 percent, compared with around 4 percent in the general population, and by 2030 there is estimated to be a global shortage of more than 85 million tech workers—6 million in the United States.³

Additionally, just as STEM work increasingly requires technical skillsets related to data, automation, and supply-chain analytics, the disruptive innovations that drive the industry to require non-technical “soft” skills to use, interpret, analyze, and market them. Skills like adaptability, critical thinking, emotional intelligence, decision-making, and cognitive flexibility are crucial to a growing technological workforce.

As these workplace skills gain importance, competition for them in the talent marketplace is growing, adding to the power shift in the U.S. workforce from employer to employee. The “Great Resignation” trend of employees quitting in search of better and more lucrative opportunities continues—the U.S. Department of Labor reported that 11.5 million workers left their jobs in the second quarter of 2021, and according to Gallup’s research, 48 percent of employees are actively looking to change jobs.⁴ With the lowest unemployment rate in nearly two decades and the growing boom in digital technology, the balance of power is firmly in the employee’s court.

Therefore, many companies are shifting from “buying” or contracting for talent to leveraging their existing talent: identifying the skills gaps in their workforce and launching training, upskilling, and reskilling programs to better

² <https://www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/>

³ <https://www.imf.org/external/pubs/ft/fandd/2019/03/global-competition-for-technology-workers-costa.htm>

⁴ <https://internationalbanker.com/finance/are-you-ready-for-three-big-power-shifts-facing-your-company/>

match employees' skills to new requirements. This talent management is essential to meeting current and future requirements for the workforce, particularly to realize technology-related initiatives and boost employee retention. Faster changing technology means employee skills must evolve while employed, and companies realize the need to support, incentivize, and manage that skill evolution and development.

Talent management (definition): The anticipation of required human capital for an organization and the planning to meet those needs. Talent management activities include workforce planning, talent acquisition, talent development, performance management, succession planning, and retention.

Many of the private sector's largest and most successful companies have announced investments in talent management: Accenture is spending nearly \$1 billion annually to retrain its workers and committed to retraining almost every employee at risk of losing a job to automation; PwC committed \$3 billion to upskill all 275,000 of its employees, and Amazon has invested \$700 million in retraining one-third of its U.S. workforce to help employees in non-technical roles move into more technical IT roles, and in 2021 expanded its Upskilling 2025 goal from 100,000 to 300,000 employees.

The Department, facing these same challenges (but with the added challenge of pay caps and contracted augmentees), similarly can no longer afford to buy its way out of talent shortages. The urgent need for tech-skilled workers pits companies against each other to attract (or poach) talent by offering the highest salaries: DoD has been priced out of the market for experienced, high-performing technologists. Additionally, while DoD's advantage in talent competition has been its national security and public-service oriented mission, private sector companies are narrowing this advantage by putting purpose at the core of their strategy to build trust, stay relevant, and attract a younger and increasingly social justice-focused workforce.

The Department is in danger of falling behind both the private sector and global competitors, namely China. Technology innovation is being driven by private companies, which are also appealing to employees' desire to seek challenges, interesting problems, and job satisfaction in addition to a high salary. Additionally, while the United States still leads the world in creating and developing most technologies that will be crucial to winning wars in the coming decades, China and other adversaries are working to overtake that lead and dominate the high-tech future. The Department has worked to improve its technological readiness on the battlefield for the wars and conflicts of the future, but it has not given the same focus to adapting its civilian talent management to the realities of the fourth industrial revolution.

"I would just tell you right now that recruiting to the military is challenging work in the war for talent."
- General James McConville
Army Chief of Staff

OBSERVATIONS AND FINDINGS

1. Civilian Development is not seen as a priority in DoD culture.

The future of DoD Civilian talent management must include a reimagining of the civilian workforce in line with modern best practices and culture to compete for, identify, and match critical skill sets. Disruptive change will not come without fundamentally thinking differently about the institution of civil service. A new mindset is needed as a stage setter for optimizing the workforce and identifying the opportunities for employees to embrace upskilling.

Our study has found the following issues with the way the DoD perceives the civil servant:

- Civilians aren't hired to train & develop. Therefore, opportunities are limited, upskill programs are insufficient, and incentives don't move the needle.
- Civilians are seen as agency/service assets, not DoD assets (parochialism)
- Civilians aren't seen as mobile (relocation)
- Managers are not incentivized to upskill or development employees

Civilians aren't hired to train & develop

The civil service structure lacks a free-flowing pipeline of new talent. There isn't a continual class of civil servant basic training graduates injecting the next wave of personnel through apprentice, journeymen, and craftsmen positions of ever-increasing technical scope and responsibility to one day graduate to the Department's most critical posts. The service member pipeline infuses diversity and new ideas; and often arrives well-versed in the technology of their generation. With no "up or out" system in place, civilian employees can and do stagnate. They frequently remain in the same or similar jobs for an entire career. Title 5 ensures that if a job exists and the employee meets minimum requirements, they do not have to move or ever retire. But that doesn't mean they have to remain inactive. If available, education incentives can be taken advantage of in order to fight stagnation and improve the DoD workforce. While remaining in the same job for a long time can sometimes be beneficial, especially in areas with little upward mobility, it is not always in the best interest of the employees who seek professional growth or employers who need growing professionals.

Upskilling and professional development is beneficial to civil servants and some voluntarily participate in these opportunities. High-quality training programs, schools, tuition assistance, certification courses, cross-training, and talent exchanges can enhance an employee's career and provide a pathway to better pay, greater responsibility, or more localities. New roles with greater technical depth or those that provide different perspectives within the organization enrich the employee's career. One private sector company we talked to has buried career development so deep in its culture that it asks survey questions about employee career growth as a condition of logging in to their computer each day. But in the DoD, the development of the civilian workforce does not reach such depths, nor are the opportunities always readily available.

"We do a really good job of [grooming and vectoring our military]...but on the civil service side, if a person doesn't upskill on their own dime, we replace them with someone with the [capability we need]."

- Senior Defense Department Official

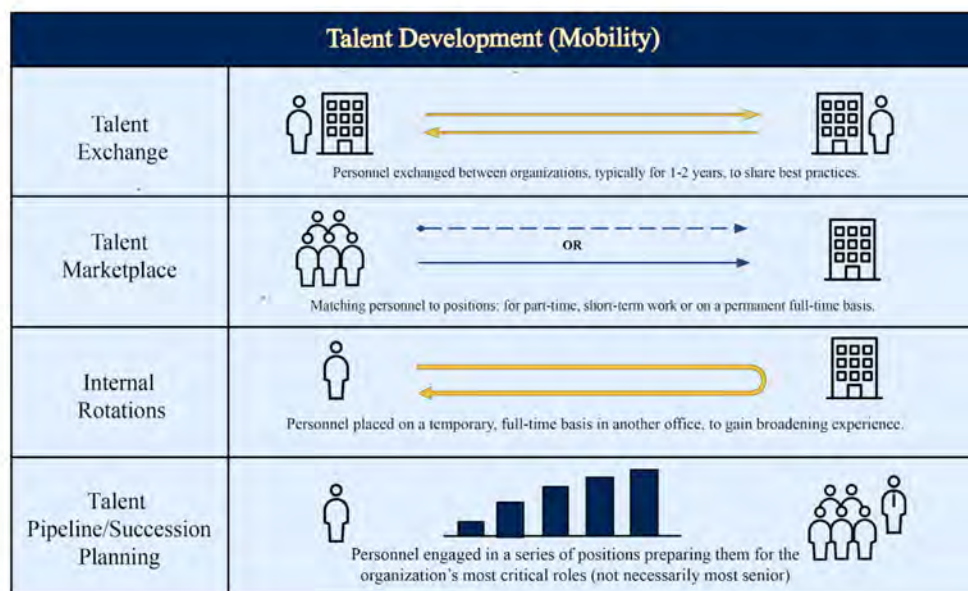
The Department’s approach to Civilians breeds a lack of career mobility for civilians in career paths and succession planning. Many components still treat civilian billets in isolation: acquiring talent for a single position instead of connecting pathways between positions and developing a pipeline of individuals with increasing capabilities to fill the highest skilled positions. Effectively, most personnel are aligned through hiring decisions or where organizations have placement boards (such as when returning from a developmental rotation or for the senior executive service).

Some organizations are developing career pathways, but many development opportunities are constrained by limited training resources and low turnover in stretch assignments. Private sector experts we spoke with, by contrast, emphasized creating job mobility at an early stage of an employee’s career and creating “talent marketplaces”-- opportunities for employees to get part-time career-broadening work to develop skills and “test-drive” other positions while fulfilling office needs. Through this practice, some companies are giving employees visibility into

more areas of the business and helping them assess what the next good role for them might be, without necessarily resulting in a full-time transfer between offices.

For example, one global energy management company and a multinational consumer goods firm both employ Gloat, an internal gig talent management platform where, with

manager approval, employees can pursue other skills within the organization, and another manager can offer development in return for part-time assistance on their team. In this way, talent marketplaces are about risk mitigation. Since they offer project-based learning, it helps employees avoid too much risk by moving to a job without the necessary skills or experience. It also allows the manager to try out an employee before hiring them.



Case Study: When a company allowed its employees to “choose your own adventure” for career paths

Software company Palantir doesn’t have pre-described career paths but instead employs a “choose your own adventure” model that it sees as critical for innovation. While Palantir has a few loosely defined roles, what one person does in the job versus another person is highly varied based on the path they’re looking to pursue. Employees’ leads aren’t their managers, their role is to help employees navigate and explore their career development.

When an employee wants to develop their skills in a certain area, Palantir looks at their strengths, relative

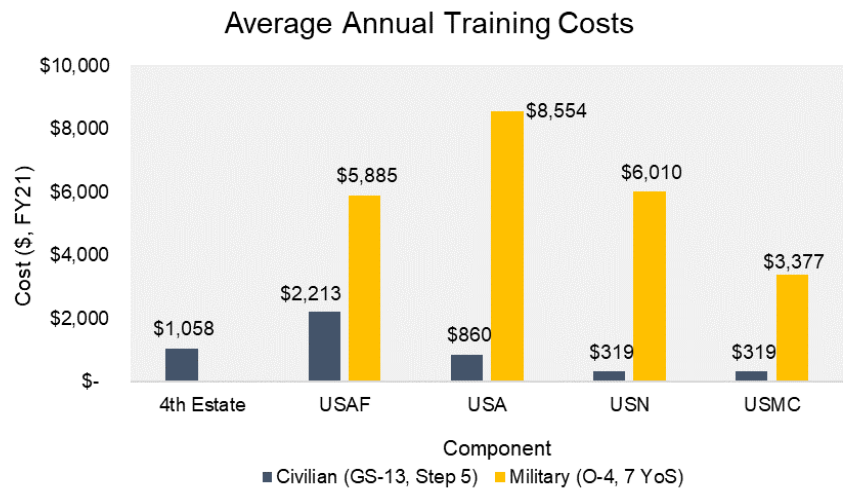
weaknesses, and kryptonite. Strengths are something to continue building, weaknesses are potentially worth investing in to make the strengths shine even more, and kryptonites are areas where it should not be a goal to improve in. Palantir believes the key is getting employees to be honest and pragmatic about skillsets and what makes sense to pursue in terms of skill development for the individual, the team, and the mission: the goal for the employee is not to be well-rounded but rather to find a few things they are great at and work with a team to apply those to a mission outcome.

Given all those things, the employee and lead can plan together and create connective tissue for that employee’s career path, serving as a mentor and facilitating that growth.

Another way to increase employee mobility is by creating employee career pathways that utilize adjacent skillsets or occupy adjacent work functions to form a talent pipeline, such as computer information support personnel moving into cybersecurity positions. There might be many people in an organization who have similar skills to a position being hired for, even if they are not on that specific career ladder, and providing minimal training to close the small skills gap can allow them to move into that critical role. Platforms such as eightfold.ai, previously discussed, can recommend jobs adjacent to an employee’s current position and recommend trainings to complete or people in the same field to talk with, essentially becoming a development planning tool for the future.

Opportunities are limited, upskill programs are insufficient

But these ideas are still not the norm in the DoD. As one senior official said, “We’re still stuck with industrial-age rules concerning civil service. We do a really good job of grooming and vectoring our military, but on the civil service side, if a person doesn’t upskill on their own dime, we replace them with someone with the capability we need.” If that skill is difficult to find to fill a civil service billet, then the tendency has been to just contract it out. To illustrate this point, look no further than the wide disparity between training dollars spent on civil servants versus their active-duty counterparts. Developmental opportunities are disproportionate as well. While development opportunities exist, they are not voluminous. Only 500 civilians will graduate from the Department’s Civilian Leader Development Programs in any given year. We could not find a talent exchange program that averaged higher than 20 civilian participants a year. In Academic Year 2023, the Air Force will send just 2% of all its GS-09-15 civilians (just over 1,500) through professional military education and leadership seminars.



<https://fcom.cape.osd.mil/user/default.aspx>

This isn't to say the Services are getting civilian talent development all wrong. There are pockets of excellence that turned up in an information request performed for this study. The Air Force is providing learning management systems, such as SkillsSoft, Red Vector, and Digital University, to its workforce to provide relevant

material to build and upskill the force. The SkillsSoft site has seen 40,622 unique civilian employee hits from Jan 2017 to Dec 2021 with 181K courses completed and 444K accessed. The Navy is providing “digital coaching” tools to enable increased education in the flow of work. The Space Force has developed basic and advanced digital fluency models for all their personnel. As mentioned before, however, these are intra-service cultural ethos—not commonly shared for the enlightenment of all. DoD needs a champion to drive standardization where possible and integrate HR best practices across the Department as their primary function.

To enhance public-private talent partnerships, the Department could improve its shortfalls in real-world learning, as suggested by many private sector experts we interviewed. DCPAS supports the Acquisition and Sustainment Public-Private Talent Exchange and the Cyber Information Talent Exchange Program, but these are not large enough programs to support the needs of the Department.

Exchanges serve two purposes: technology will be a ubiquitous component of the modern DoD workforce, and employees from across the Department should have access to, and participate in, exchanges. But exchanges should also facilitate term or part-time employment in the DoD, which would build an understanding of the Department’s needs and upskill colleagues by bringing in their expertise.

For the technological skills of the future, the knowledge employees need to succeed is not necessarily found at DoD, or accessible during their day-to-day activities. Multiple times in interviews, we heard that DoD has some of the smartest people in the country—but for a world that no longer exists. The private sector now owns some of the best and newest technology needed for wars—not DoD. Talent in the Department thus needs to be more connected with the leading edge of the commercial world: this can be done by bringing private sector people inside the government at scale, through an internship or other rotation programs in existing agencies, and by circulating DoD employees inside of commercial companies to expose them to what is happening outside of the government and close the massive disconnect between STEM expertise inside and outside of the Department.

The Department must make greater use of exchange programs to ensure multi-skilled talent that can bring practices into the components. This talent can come from the private sector or other parts of DoD or the Interagency but is crucial for talent development. While private sector leaders and academics were enthusiastic about the promise of talent exchanges, we also heard reservations about talent exchanges in practice. We heard from one public-service-focused NGO that should the DoD choose to expand these programs; it should do so in a way that preserves ethics and legal standards for financial disclosure.

“I built one of these programs—put 10,000 people through it in the last seven years. They built amazing solutions but when they went back to their old organization, their bosses said ‘not on my budget or schedule, get back to work.’ So it all died. It was a failure in my eyes. You have to solve the toughest organizational problems upfront: these people come back having learned and created all this stuff. Now, what do we do with them? Otherwise, people will leave for the private sector!”

– Steve Blank

Incentives fail to move the needle

The allure of any opportunity to upskill can often come down to the incentives associated with participation. The

private sector parties interviewed by this subcommittee identified many of the same incentives available to the DoD to compel their employees to upskill: increased salary, greater purpose, tuition reimbursement, career broadening, greater marketability, mental health services, flexible work schedules, relocation assistance, tax-free incentives, promotion, and respect.

Our DoD information request asked about the availability of incentives focused on upskill programs. The results did not indicate an overwhelming linkage, with only 6 in 15 answering that they offered some form of financial assistance, student loan repayment, or tuition assistance, and over a third of the respondents citing no incentive program at all. One agency told us that managers and supervisors were actually disincentivized to pursue upskilling programs for their employees citing the increased risk of mission failure while employees were off training. The Air Force offered that the civilian tuition assistance program is incredibly successful at supporting workforce efforts and education. This correlated with several private sector firms who also identified that tuition assistance was a top motivator as well.

One global logistics firm we spoke with had success with a tuition assistance program through Guild Education. Guild is an upskilling platform that provides workers with curated learning experiences by connecting them to one of the over 1,600 universities it has a partnership with. The Guild tuition assistance model is atypical because it doesn't

	INCENTIVES	RESKILL/UPSKILL
PRIVATE SECTOR	<ul style="list-style-type: none"> Private sector companies generally offer centrally-managed, homogenous set of incentives across the company that are available to all who participate in reskilling or upskilling programs. Pay increase for completing programs was commonly mentioned as an incentive. 	<ul style="list-style-type: none"> Private sector companies generally described formalized reskill/upskill programs tied to the strategic goals in their Human Capital Management Plans (HCOPs). Most programs mentioned focused on helping employees meet current and future technological skill needs, and had curated options for reskilling or upskilling based on the employee's base skill level.
DoD	<ul style="list-style-type: none"> DoD programs are disparate, based on unit funding priorities and resources. Only 6 out of 15 agencies identified financial incentive programs for upskilling, but those included tuition assistance and other forms of payment for training, not a pay increase at the employee's current job. resources. 	<ul style="list-style-type: none"> Only one organization mentioned linking upskilling to a strategic business plan, and one organization said it did not conduct analysis at all. 11 out of 15 agencies identified a reskilling/upskilling plan based on changing technology. DoD agencies reported many different methods for identifying the need to reskill or upskill.

require payment upfront. This way, it doesn't exclude those without savings or who may not want to take on costly debt. The student does not pay an upfront cost, and Guild is only paid at degree completion. All financing is handled between the Guild and the university. The logistics firm found that once they switched to this method administered by Guild, participation in their TA program increased from 6 to 20%. When the employee/supervisor had an easier time accessing the incentive, participation increased.⁵

Interestingly enough, upskilling itself is seen as an incentive in today's workforce. A 2021 Gallup poll of more than 15,000 U.S. adults found that when it came to upskilling, 57% of workers characterized themselves as "extremely interested." The number one motivation cited for participating in upskilling programs was the potential for career advancement (59% of respondents). The data supports their perception; three in four survey participants reported some type of advancement in their career post upskill.

The availability of upskilling is especially important to young adults entering the workforce for the first time. They

⁵ <https://www.guilededucation.com/about-us/faqs/>

want to know that their chosen place of business has a path to develop them in their careers. In fact, Gallup found that for young adults aged 18-24, “upskilling was named as the third most important benefit when evaluating a new job, behind only health insurance and disability and ahead of retirement, life insurance, sick leave, parental leave, and vacation.”⁶

Civilians are seen as agency/service assets, not DoD assets (Parochialism)

Parochialism is a barrier within DoD civilian culture as well, both at the Service and Department levels. At the Service, the perspective is often that “this is my talent” not the “DoD’s talent.” One DoD official illustrated this blind spot stating, “We continue to say only Air Force people can do this program—but really the skills are needed in the Navy too...we need a library of opportunity and allow individuals to take them.” Parochialism could keep the DoD from realizing its true potential in the competition for advanced skills. At the Department, the perspective is often that the nature of DoD work is too specialized to look across the full spectrum of Federal talent as a potential pool of skills.

**Pockets of Excellence:
Air Force Materiel Command**

AFMC has had some difficulty as of late bringing people into the SES ranks. To increase diversity in the candidate pool, they’ve made cross-component announcements to broaden and deepen the bench. This came as a shock to all leaders. Why were they looking outside the Air Force? But AFMC knew they needed the breadth and depth. By opening the aperture, they are exposing senior positions to a wider array of skills and experience.

One researcher we talked to described a long list of companies failing to make headway for this exact reason. Too often, companies would assume that their company’s skills were unique when most skills were common across industries. There is reason to suspect that Services and components similarly see their skill requirements and employee experiences as more unique than they are.

We heard from one interview with a senior DoD HR expert that personnel systems were incapable of sharing data at all – adding to the complexity of transfers inside the Department. In eighteen months, DCHRMS, mentioned previously, will begin subsuming pay, grade, and series information into one database, the first time the Department will have an integrated personnel system. However, this new tool is not a panacea for talent permeability across the Department. Once it is in place the DoD still will not have the ability to track skills and competencies. The MilDeps and DAFAs need to see the value of developing people for the good of the enterprise, even if that means the movement of workers across department lines. DoD leaders need to favor attrition internal to the Department versus external losses, especially for those with critical skills.

Civilians aren’t seen as mobile (Relocation)

The committee talked to several individuals about a myth perpetrated on civil servants that upskilling is difficult because they are resistant to relocating to achieve career progression or ambivalent to upward mobility in general. They are happy doing what they are doing and want to stay where they are at. One interviewee said that most civilians are happy in the job they are in and they’re willing to do it until retirement. Only a small percentage are willing to be mobile or to take on a new challenge. Is this true? Without an enterprise system

⁶The American Upskilling Study: Empowering Workers for the Jobs of Tomorrow, Gallup Inc, <https://www.google.com/url?q=https://www.gallup.com/analytics/354374/the-american-upskilling-study.aspx&sa=D&source=docs&ust=1649475357619481&usg=AOvVaw0z3YCdiiZdtuEXCpDI1W65>

that provides a complete picture of development and job opportunities within the Department (not just the Service), in the context of a career pathway, the answer is incomplete. Another interviewee was also quick to point out that staying in one job for a long time is not always a bad thing, provided that employee remains qualified for the role they are in and continues to perform acceptable work. When they remain qualified and provide acceptable work, Civilians can provide consistency, history, and continuity to an organization—their skills remain in the job year after year.

Proponents of “static civil servants” at least agree that options for mobility and development should be available to those who desire them. They also admit that for some career fields like emerging STEM, growth is necessary given the pace of change. However, minimal training investment, no Department-wide opportunity bulletin boards, and minuscule program bandwidth doesn’t send the right message to our civilian force that development is valued. The Department needs to do more to change the culture to be able to identify and match its full workforce to the skills of the future.

Managers haven’t been the best advocates of upskilling or development

A lot of talent development across the Department comes down to two individuals: managers and their direct reports. But managers may be unaware, uninterested, or unable to ensure all of their employees reach their development potential. Thus, employee knowledge and access to career development will inevitably vary, based on supervisor interest and capability. This is problematic. One expert in talent education warned us, “People managers are a facilitation of discriminatory practices. When a manager has the ability, with bias, to decide who gets access to opportunities and who doesn’t, there is bias in the system.”

There are great supervisors in the field, but they all have their own biases and self-interests, often well-intentioned and derived from a focus on the mission. *How will I generate enough aircraft to meet the flying schedule if all my people are off at training? I can’t let my logistician go to a project management course, our standards inspection is next week!* This dilemma can be especially true with education with industry programs. Managers can be reluctant to release employees for these opportunities because they cannot backfill the position left vacant, even if they wanted to. In these cases, career-broadening comes at the expense of a higher burden on the rest of the organization to perform the mission; in the short term. In the long run, participants in career-broadening programs, like the CIO’s Cyber Information Talent Exchange, gain best practices and bring them back to the DoD; its short-term loss for long-term gain. But front-line managers may not have the strategic view needed to see the return on investment from an organizational perspective.

This nearsighted view has pervaded the workplaces of touch labor employees, many of whom are on the wage grade pay scale. Several depot and arsenal workers we talked to doubted their leadership had ever heard of upskilling unless there was a significant change in their work. Only one of the seven we interviewed had a conversation on the subject. We also heard stories about mentorship programs that were never advertised by first-line supervisors for fear they would lose their people to other opportunities.

My chief civilian told me, “I’m not running a training factory, I’m working a bomb factory.” The concern is more about the widgets and making the numbers than for safety, than upward mobility, or development.

– Depot employee, on talent development perceptions at their base

Private sector managers also struggle with upskilling. Supervisory problems were a key finding of a West Monroe study of 432 HR professionals and 1,000 U.S. workers on why upskilling programs in the private sector fall short. Their research found that 65% of those in managerial positions needed development themselves—only 59% with one or two direct reports had attended a supervisor training course. The study found management support and enablement in upskill/reskill critical to its adopting and accepting that by and large, companies weren't setting their managers up to have productive discussions on this subject. An overwhelming 63% of survey respondents said their organization has not equipped its managers with proper resources. “Managers need to have the time and tools to encourage and mentor their employees in upskilling efforts,” the West Monroe report said.⁷

A major cloud computing firm we talked to, with over 1 million employees internationally, understands the challenging dynamic of the employee-supervisor relationship and does its best to assert corporate values over managerial bias. First, it promotes a culture of learning and “career entrepreneurship.” It encourages its people to move around the company to gain different experiences and goes to great extremes to reduce internal barriers to make it happen. For instance, an employee at this company can search and apply for dozens of other jobs without ever telling their manager. They encourage professional courtesy, but manager approval is not needed to search or apply; employees don't need to say a word until they get a job offer. In the emerging tech sector, competencies and proficiency are king. A manager may lose an employee today, but the collective talent pool is richer and has the skills needed for tomorrow. This company is helping the manager get out of their own way.

Individual Development Plans

Individual Development Plans (IDPs) are the recommended aid for the employee-supervisor journey for career guidance in the DoD today. The problem is, they are only as good as the amount of time that both sides put into them. DoDI 1400.25 V410 requires IDPs for all civilians and annual reviews “if practical.” For employees in grades less than executive service, the value and utility vary. As one senior DoD official put it, “If a supervisor isn't bought in or isn't fighting for the resources to get our people to schools or to training courses or whatever is in that development plan—if that person isn't motivated as a leader to do that—or if the individuals aren't motivated to learn themselves, it's not going to happen.”

Roadblocks in development can end up hurting civilian opportunities for promotion. Education, certification, and training opportunities that are limited in throughput but required for higher grades, sometimes unnecessarily, can become a hindrance for employees.

Should the DoD move to proficiencies versus certifications and degrees? The cloud computing company thinks so. In recent years they've started to wake up to training programs that can provide employees with the proficiency needed in a particular skill even if short of a degree or certification. This gives flexibility to the manager and employee. The manager gets the skills they need on the team and the employee isn't limited by a degree or certificate completion.

⁷ The Upskilling Crisis: Effectively Enabling and Retraining Employees for the Future, West Monroe, <https://www.westmonroe.com/perspectives/signature-research/the-upskilling-crisis-effectively-enabling-and-retraining-employees-for-the-future>

Case Study: When a Major Airline Looked to Learning Councils For Future Skills

Like other global companies, United Airlines has been developing the best ways to identify skills needed for the future, and employees who possess those skills. As one way to do this, United worked over the past year with the various groups inside their digital technologies business unit and created a learning council that works with the Global Learning corporate team and has representation from each group. Importantly, there is executive level representation from Vice Presidents, so the learning council has leadership buy-in and support.

The learning council works to identify the current skill base as well as the skills needed for the future, and determined that the top five most important skills for the digital technologies group are cybersecurity, analytics, innovation skills, program management, and cloud computing.

Based on the learning council's findings, United then looks at internal and external solutions to train and develop employees in those key skills. Through United's partnership with Cornerstone on Demand, tens of thousands of training courses are available to employees, and the company is looking to further develop curated learning journeys both internally and externally through programs like eCornell. While there aren't formal learning councils for each business unit, United is working to make it more broadly available to other groups.

Leveling the Playing Field with Automated HR Tools

The private sector wrestles with these challenges as well, not always successfully. One global professional services company we spoke to has made progress by moving to a system of "democratized learning." By creating digital classrooms—virtual offerings either recorded or taught in real time—they opened opportunities to everyone. Training and development programs were no longer "invite only," subject to boards and manager approval. The same company employed HR data analytics tools to identify what percentage of their job would be going away in the next three years. In addition to this information were suggestions on what adjacent skills would be smart to obtain along with associated course offerings. The employees could also look at the development offerings and training courses the CEO was participating in, both a form of mentoring and developmental advocacy.

In this system, employees are able to take control of their own development. The tool effectively provides early notice along with options for employees to use to chart their future. The company found that employees who were given suggested training with a link to new opportunities participated in that training 90% of the time, even at home if necessary. Despite this enthusiasm, the company went a step further and allowed employees to allocate a portion of their week to training on company time; they made future skills a priority by providing the "white space" in which to do it.

Case Study: When a Global Consulting Firm Chose to "Go Big on Our Own People"

In 2015, Accenture's former CEO changed the company's business strategy to become the leading provider of digital-related services. Accenture didn't have the talent, so they had a choice to make: fire existing employees without relevant skills and try to hire new employees that did have the skills, or "go big" on their own people. Accenture chose the latter option and started investing \$900 million a year in the training and development of their employees, transforming the training model from the "one size fits all" model they had used for decades to

a “one size fits one” model.

To do so, Accenture created Accenture Connected Learning which democratized their learning opportunities. Instead of employees having to be invited to an in-person training week for their specific curriculum, Accenture Connected Learning allowed them to attend “digital classrooms” and learn from experts around the world. For example, instead of flying 25 employees to the Massachusetts Institute of Technology (MIT) to take an artificial intelligence course from a professor, that same MIT professor could teach an AI class online and reach hundreds of employees.

This infrastructure investment in a global digital campus matched Accenture’s new culture around learning. Online classes and training allowed employees to learn on their own time and learn more frequently, with courses available on their phones, iPads, and computers. Each employee also has their own digital learning boards as part of Accenture Connected Learning to curate their own content and can follow the learning boards of anyone else in the company, including the current CEO, Julie Sweet.

Unlike this company, the DoD doesn’t have an enterprise-wide system to aid the employee/supervisor in the discussion about career development. There is nothing to scroll through to identify all available course offerings to participate in or career-broadening job openings. There are no automated tools to make suggestions. The acquisition community’s Defense Acquisition University (DAU) is one bright spot and may be a model to turn to, at least from a training perspective.

DAU offers a wide range of online classes and continuous learning modules across a suite of disciplines (e.g. program management, finance, contracting, logistics), with training plans and career models to identify which classes lead down a path to certification—and positions at a higher grade. Through DAU’s online portal, a DCMA auditor and Navy systems engineer can be engaged in a course about agile software development from two duty stations across the country at the same time. This scenario is not possible for every functional community. However, by centralizing offerings and eliminating career program silos for the same sets of skills wherever possible, DoD could help supervisors be more effective talent developers—and view themselves that way as well.

Case Study: When a global technology company invested big in upskilling its workforce

In the current labor shortage and subsequent competition for tech talent, upskilling is fast becoming a key way to attract and retain employees. A 2021 Gallup poll found that 48 percent of American workers would switch to a new job if offered skills training opportunities and 47 percent of workers cite upskilling as an important factor in staying at their current job—65 percent for workers who have been impacted by the Covid-19 pandemic.⁸

Amazon has responded to this challenge by investing heavily in upskilling and reskilling programs for its workers. In total, Amazon plans to spend \$1.2 billion dollars on the combined efforts. Initially, in July 2019, Amazon announced a \$700 million investment to retrain one-third of its 1.1 million US-based workforce, with the

⁸The American Upskilling Study: Empowering Workers for the Jobs of Tomorrow, Gallup Inc,

goal of helping employees in non-technical roles, such as warehouse associates, to move into more technical IT roles.⁹ Then, in 2021 the company announced several new training and educational initiatives:

First, Amazon offered fully funded college tuition, GED, and ESL support for 750,000 operational employees, such as warehouse workers. This was available for people who had worked as few as three months for the company and were part of its Career Choice program. Amazon workers who participate in the program are rewarded with an immediate pay bump and see longer-term benefits in both earnings and career mobility.¹⁰

Second, Amazon expanded its Upskilling 2025 goal from 100,000 to 300,000 employees. Some programs, including Amazon Technical Academy, Associate2Tech, and Machine Learning University, targeted the development of technical skills for in-demand jobs, helping workers keep current in the theory and application of emerging technologies.¹¹

Finally, Amazon added three upskilling initiatives to its existing, no-cost employee training initiatives. The new programs were AWS Grow Our Own Talent, Surge2IT, and the User Experience Design and Research Apprenticeship, all of which were targeted for technology skills.¹²

2. The organizational structure is not postured to effectively manage talent

A common question to kickoff many of our interviews was, “Who’s in charge of talent management in the DoD?” Based on the myriad of answers we received, the clear answer is truly, “no one.” This is not a slight to any organization in the sphere of civilian HR, but a commentary on the ineffective structure of the system that fragments and fails to empower anyone to maximize the value of a civilian workforce of nearly 800,000 people.

The current governance structure is inadequate to properly execute the enormous task of talent management for the DoD Civilian workforce. Simply put, the DoD is not organized effectively. The current structure is a byzantine puzzle of nested organizations, with some responsibilities within all, but no one responsible for all. The current structure prevents effective accountability and empowerment. Lines of authority and control are fragmented, leaving the Services and OSD offices frustrated, pointing fingers at each other, and left to do “their own thing.” Everyone believes it is someone else’s fault and a problem to fix.

Our study has found the following issues with the way DoD is organized to manage talent:

- The OUSD(P&R) scope of responsibility is too large to provide the focus & attention talent management needs
- Decentralized execution of talent management has left the enterprise without a conduit or leader to communicate enterprise best practices or eliminate common barriers

The OUSD(P&R) scope of responsibility is too large to provide the focus & attention talent management needs

The senior-most official overseeing civilian personnel policy is the Under Secretary of Defense for Personnel and Readiness, USD(P&R). The office is responsible for a broad array of functions spanning 3 million service

⁹“The New Minimum Wage: Amazon and Intel Offer Employees Access to Training, Reskilling,” USA Today, <https://www.usatoday.com/story/tech/columnist/2021/09/09/amazon-intel-among-companies-offer-employees-free-education-training/5764038001/>

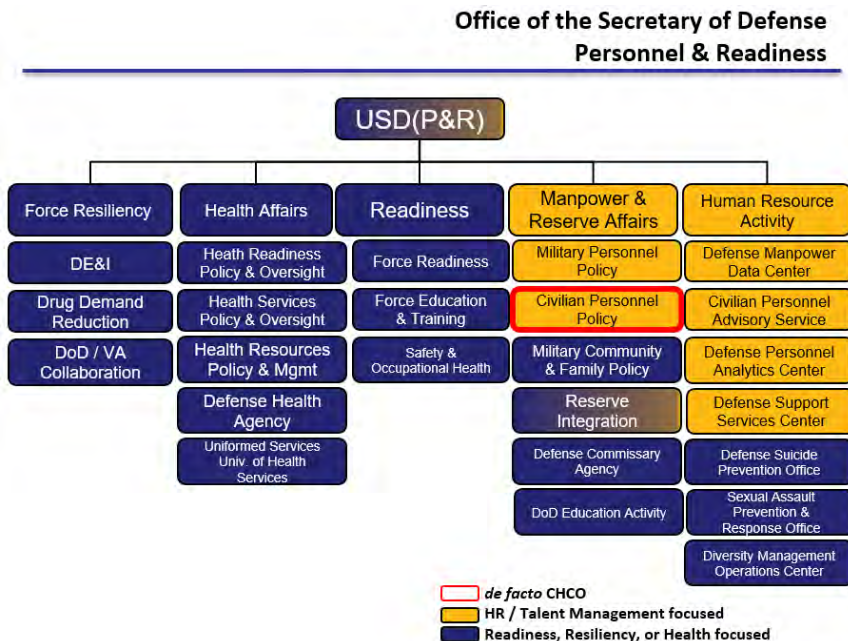
¹⁰ The New Minimum Wage

¹¹ The New Minimum Wage

¹² The New Minimum Wage

members, civil servants, contractors, retirees, veterans, and dependents. The 800,000 civilian workforce is just a slice of this pie. As described in statute, the P&R is responsible for military readiness; total force management; personnel requirements and training; family matters; exchange, commissary, and non-appropriated fund activities; personnel requirements for weapons support; National Guard and reserve components; and health affairs (10 U.S. Code §136). The office is also responsible for policy and oversight of some of the Department’s greatest challenges: suicide and sexual assault.¹³

Per DoD Directive 5124.02, P&R serves as the Chief Human Capital Officer (CHCO). The Office oversees five directorates with close to 25 subordinate staff elements, field activities, and defense agencies across the spectrum of personnel health, readiness, and human resource activities. Within OUSD(P&R), there are primarily two directorates operating in the HR space.



One of the principal directorates within P&R is the Office of the Assistant Secretary for Manpower & Reserve Affairs, ASD(M&RA), with the Deputy Assistant Secretary of Defense for Civilian Personnel Policy, DASD(CPP) as a direct report. CPP is the DoD’s worldwide human resource policy office, responsible for plans, policies, and programs that affect the civilian DoD workforce. Although not formally recognized with the title, DASD(CPP) effectively executes the DoD’s Chief Human Capital Officer (CHCO) duties and represents DoD at the interagency Chief Human Capital Officer Council.

With connective tissue to OPM, several offices we interviewed referred to CPP as the “de facto CHCO” within the Department. As such, the DASD(CPP) signs the DoD Human Capital Operating Plan (HCOP), which lays out the strategies, initiatives, and necessary measures to support the goals and objectives of the National Defense Strategy.

The committee observes and appreciates the arduous task of USD(P&R) to oversee an organization of ~25 subordinate organizations with diverse and distinct problem sets. Delegation of responsibility is understandable given the basket of HR and readiness functions to oversee, from voting, to health care, to language training, to the commissaries. However, that delegation has left the de facto CHCO too junior to participate in the DepSecDef’s corporate decision-making forums. In the private sector, the CHCO always has a seat at the CEO’s table.

¹³

<https://nap.nationalacademies.org/catalog/23670/strengthening-data-science-methods-for-department-of-defense-personnel-and-readiness-missions>

Turnover and vacancies at the most senior levels of P&R have also exacerbated the challenge of affecting change within an organization so large. One interviewee told us there have been 20 P&Rs in the last twelve years and the Deputy position hasn't seen a Presidentially-appointed, Senate-confirmed leader since the Obama Administration. "How can you truly have change when people don't have the job?"

The expansive workload also has contributed to talent management topics fighting for priority for senior leader attention. The standup of the Deputy's Workforce Council (DWC), chaired by the DepSecDef, has the potential to be the forum talent management needs to apply proper focus. However, many other competing priorities (e.g. extremism, diversity & inclusion, suicide prevention) have dominated the topic slate. We heard from one DoD official that since its inception in March 2021, the DWC has held discussions on the innovation workforce just four times and has made little progress.

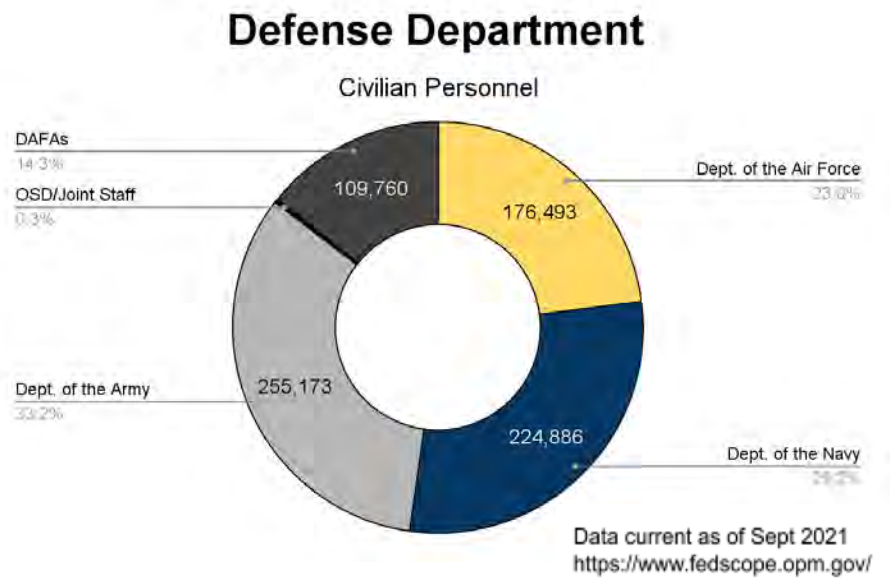
Fragmentation has left the enterprise without a conduit to share best practices or eliminate common barriers

Military Departments (MilDeps) -

Outside of the Office of the Secretary of Defense and reporting directly to the SECDEF are the military departments, as directed by Title 10 USC, and the five services within. The civilian workforce in the MilDeps makes up nearly 85% of the entire civilian population within the DoD.

Although structured and organized differently, within each service are a series of staffs, centers, elements, and agencies to execute the business of human capital management within their

Department civilian populations, typically reporting up through an Assistant Secretary and Deputy Service Chief.



Each service issues guidance to these HR groups in accordance with USD(P&R) and OPM regulations, but through the lens of their organizations, supplementing where they see fit. By the time front-line managers and employees receive OPM policy, it may have gone through a half dozen or more layers of command. While the study did not examine all additional layers of policy, the Department and Service instructions we did review did not appear overly restrictive or inhibitive. Additionally, we also found that Title 5 may be unduly maligned with respect to talent management. Despite several generalizations made as part of our interviews, we did not identify a specific portion of Title 5 that inhibits DoD from achieving any of its hiring or talent management goals. In fact, strict adherence to these laws may help, not hurt, the ability of DoD to fulfill future needs.

Defense Agencies and Field Activities (DAFAs) - Also subordinate to the Secretary of Defense are several dozen agencies and field activities, each with a separate mission in support of the strategy of the department. They are sometimes referred to as the 4th estate. Civilians in the DAFAs make up approximately 14% of all civilians in the

DoD. Like the military departments, the DAFAs have their own HR supporting elements to serve the personnel within each agency and activity. Their HR personnel data systems are not linked to the MilDeps, or each other. One civilian leader we talked to served in one of the MilDeps for almost 30 years. On his first day at a job with the 4th estate, he was asked to provide his DD Form 214 to prove he had been discharged from military service. Despite a smaller population of civilian workers than the MilDeps, the DAFAs are limited in their HR budget, with approximately 50% of the agencies that returned our survey citing decision-making as their top challenge.

Functional Communities (FCs) - While not formal organizations within the block and line organizational chart, functional communities exist uniquely within DoD and play a part in the HR ecosystem. Functional communities were developed in the late 2010s in response to a GAO study that found that DoD was not doing an effective job of civilian human capital management. These 22 functional communities (e.g., Financial Management, Contracting, Cyber, Intel, Law Enforcement, etc) are groupings of occupational series assigned to an OSD-level manager who has some defined responsibilities for the care and oversight of their group.

Functional community managers do not hold lines of programming which in some ways, an expert told us, prevents them from doing meaningful things in terms of human capital management. Additionally, the functional community manager is an additional duty with no staff with HR expertise. The position is often vacant based on the visibility (and regulatory requirements levied) on a particular group. Managers meet quarterly to discuss common interests, but while managing a workforce that is only “functionally aligned,” they have no real power to compel action.



The OSD organizations do their best to provide and implement talent management policies to unify the enterprise. There are great and passionate leaders at these organizations. However, without direct command authority over the Services, lines, or programming, and in a system of federated power, implementation and oversight is a “coalition of the willing.” “Aside from routine data calls associated with certain authorities, the Services don’t owe them anything,” one official bemoaned, “the MilDeps have the authority.”

While 13 of 15 organizations that responded to the DBB’s DoD questionnaire answered that they had some level of communication with other DoD organizations to take advantage of best practices, the data indicates that these exchanges have not always signaled action or progress. One of the more candid responses received put it this way, *“We’re engaged at all levels and remain willing to partner with anyone to move the ball forward. So far, the majority of stakeholders (especially OPM) continue to admire the problem and do as little as possible. Look at all the initiatives for the past decade across the Department and the Federal Government – can we name one that has actually had a substantive impact on the challenges faced by the innovation workforce? We continue to look to the same organizations doing the same thing over and over again expecting different results – the outcome should come as no surprise to anyone.”* However, the lack of a top-down, fully integrated HR structure leaves these forums both incomplete and unaccountable. This leaves pockets of the DoD struggling in the dark

while the answer may lie just one component away. These organizations operate their HR systems more or less autonomously, checking in with OSD periodically or as a stop on the way to OPM.

Through our interviews, when asked what they would change if they were “SECDEF for a day,” one senior official summed up the sentiment from OSD’s perspective, stating, “I just want someone to listen to me. We need leadership and the services to respect our office.” This was not a slam against DoD leadership—rather, it was an acknowledgment that without strong support from the top, nothing was likely to change—but everyone understood senior leaders have large issues on their plates.

Case Study: Modernizing Human Resource Organization Structures

Large private sector organizations no longer have a monolithic human resources executive structure. Companies increasingly find value in differentiating the executive functions that were traditionally housed under “Human Resources.” We heard this in our interviews – that planning and managing talent should be different from the idea of personnel management. However, from literature and our interviews, there does not appear to be a consensus on how to allocate functions between various roles.

The Society for Human Resources credits technology and automation as freeing HR leaders from the more administrative and process-related work found in traditional HR departments, thereby “powering the Chief People Officer’s role to guide the organization in implementing talent strategies and work options needed to fuel future business growth.”¹⁴

Companies are continuing to divide the traditional HR functions into new executive roles, including Chief People Officer, Chief Talent Officer, Chief Human Resources Officer, Chief Administrative Officer, and VP for Recruiting.

While there may be some variation in the title and number of different HR leaders, we found one consistent theme throughout our discussions with industry—they all have direct access to the Chief Executive.

3. Talent data is a strategic asset. The way the Department collects it and uses it to plan is flawed.

How many artificial intelligence engineers will we need in 2032? How many do we have today? How many vacancies do we have for AI engineers? Will we meet our fill-rate goal? Who do we have with project management experience and a logistics and machine-learning background? Does anyone have similar skills that we should target for opportunities to develop? How are we ensuring a steady supply of employees ready to lead our toughest positions? What impact would result from an increase in budget allocations to programs that incentivize participation in upskilling?

These Talent Management questions are impossible to answer right now on behalf of the Department.

Our study has found that the DoD is unable to answer these questions because:

- The DoD needs a better way to determine the skills it needs for the future

¹⁴ Society of Human Resource Management, “The Future Chief People Officer: Imagine. Invent. Ignite.,”

- The DoD is planning the workforce by antiquated occupational series codes, not by skills—an approach that is not working
- Talent data is a strategic asset and it is not integrated across the DoD

The DoD needs a better way to determine the skills it needs for the future

Commercial companies have a straightforward path in connecting their future work to new acquisitions and initiatives but they also link competency growth areas to overall corporate strategy. The Department's workforce planning process cannot link its data as close to the Department's strategy as it should be. Unlike industry, the Department does not seem to tightly link initiatives in its Human Capital Operating Plan to the National Defense Strategy, which should discuss where workforce *changes* are necessary.

Our DoD Questionnaire revealed that only 10 of 15 DoD Agencies had methods to determine the future workforce needs. Among the five that responded negatively was one of the three Military Departments. Of the 10 that answered in the affirmative, only 4 mentioned a means of doing so that included competencies or skills, a method many major private sector firms are adopting.

By mapping competencies, organizations can go further by conducting skills mapping – associating desired skills with specific competencies to drive recruiting and professional development. In the Department, this process is owned by Functional Community managers. However, competency frameworks do not exist across all the Department's workforces, and they are currently organized by occupational series, not work functions.

As mentioned, private sector organizations are making this shift too, though not all successfully. Not every organization that makes the attempt figures out how to track individual and team activities, tie those activities to functions, aggregate those activities and functions, map them to corporate capabilities, compare those capabilities against perceived or actual organizational needs, and link them to the organization's strategy. The private sector firms that have succeeded here boasted to us about the merits.

We heard a consensus view from experts we interviewed that mapping *all* skills at once is too much. A talent development agency leader told of private-sector organizations that had tried to map all competencies and skills simultaneously, only to have the effort collapse under the weight of attempting to catalog tens of thousands of skills – akin to boiling the ocean.

What is working better in some companies is focusing on strategic areas of growth, where skills need to be refined, and starting there. Experience in that domain can be expanded to other areas. Additionally, one talent development agency shared that most skills were common across organizations, even those of different sectors, with only a small portion being organization specific. This suggests that components across the Department could adopt skill taxonomies from other components or outside of DoD entirely. Many companies are turning to third-party organizations to help identify and validate skills, providing assessments and credentials that employees can take with them when they move between organizations.

Case Study: Private Sector Approaches to Future Employee Skills

While private sector experts are planning for the future the best they can, most underlined the challenge in predicting future talent needs. Without that ability, hiring employees with a baseline of easily adaptable skills becomes increasingly important. The skill map for a world where the future can't be known is agility, adaptability, and creativity: foundational skills that travel across domains quickly. Space Force is already leaning this direction, focusing on traits like drive, openness, and flexibility that serve employees well no matter what they're doing and form the basis for broadening in the future. We also saw this frequently in interviews with the private sector: Accenture requires applicants to demonstrate "learning agility," believing if someone desires to learn and continue learning, Accenture can train them to do almost anything in the company.

This leads to an educational question—how do you teach agility and adaptability? Private-sector experts told us that the best way to do that is to give people real problems in real-time learning environments, rather than the simulation world we're often used to. In other words, give them actual projects in areas outside their comfort zone and let them work through the challenges. While acquiring core skills in a passive learning environment like a technology bootcamp is an important start, it's crucial to give people a chance to use what they learned. This is key, since the biggest challenge to continuous learning is that skills are perishable if not used in daily work. Employees who don't have the opportunity to apply the skills they learned in a course or bootcamp will not be as effective in maintaining those skills.

Ultimately, as management consulting company McKinsey noted, as modern technologies transform workplaces, employees must: "add value beyond what can be done by automated systems and intelligent machines, operate in a digital environment, and continually adapt to new ways of working and new technologies."¹⁵

The DoD is planning the workforce by occupational series codes, not by skills—a practice that is not producing the desired results

The system for sorting federal jobs stems from legislation created over 70 years ago when Congress sought to classify jobs to form a meaningful comparison between jobs across the government and thereby ensure equal pay for equal work.¹⁶ When first codified, this system of classification, which gives OPM the authority to prepare standards for placing positions in classes and grades, was transformative. Classification is the process of analyzing and assigning positions to a particular category of work or a family of related positions. Grades identify the level of difficulty and responsibility. The resulting occupational series codes are linked to position descriptions for hiring, placement, and pay and are commonly used to track jobs in most federal HR systems.

The number of these occupational series has grown over time, either by Agency request or Congressional

¹⁵ Marco Dondi, Julia Klier, Frédéric Panier, and Jörg Schubert, "Future-Citizen Skills," McKinsey & Company, June 25, 2021, <https://www.mckinsey.com/industries/public-and-social-sector/our-insights/defining-the-skills-citizens-will-need-in-the-future-world-of-work>

¹⁶ Office of Personnel Management, "Introduction to the Position Classification Standards," August 2009, <https://www.opm.gov/policy-data-oversight/classification-qualifications/classifying-general-schedule-positions/positionclassificationintro.pdf>

direction. We heard from one Defense expert that the Department uses over 600 occupational series.¹⁷ Each of these positions must include qualification standards for each classified occupational series at various levels of seniority, and the system constitutes an immense administrative burden on HR departments. The Department’s HR organizations maintain component-specific qualification standards, enforce these standards in setting position descriptions used in vacancy announcements and oversee their implementation for promotions and the over 100,000 annual hiring actions Department-wide.

Paradoxically, the occupational series are designed to be broad enough to apply across multiple federal departments, and specific enough to drive meaningful management processes such as setting skills, competencies, training curricula, vacancy announcements, and recruiting efforts/incentives. Neither goal is achieved. OPM also acknowledges that the number of occupational series has limited their ability to effectively update classification standards to relate to the work done today. Some standards have been sitting untouched since the 1960s.

The administrative burden and slowly evolving classification standards have channeled agency HR directors to seek flexible positions. In the Department’s case, the single largest family of occupational series is miscellaneous, and the largest single occupational series in the Department of Defense is “0301 - Miscellaneous Administration and Program Management.”¹⁸ According to OPM, this series is for positions that are, “Too few of a kind to have been recognized as separate lines of work. Some positions involve new or emerging work or, more rarely, mixtures of work that cannot be identified with an established series.”¹⁹ DoD’s extensive use of miscellaneous categories hampers its efforts to aggregate workforce data. **When the single largest category in a system is “miscellaneous,” it is time for a refresh.**

However, we also found that the reliance on occupational series as a primary tracking mechanism to manage employees has proved problematic for DoD, and classification alone is insufficient for building robust workforce strategies. Modern talent management also requires more information about the work employees carry out in positions than the classification system alone can provide – which also calls into question the use of Mission Critical Occupations (MCOs) as a means of accurately designating high-demand jobs.

What's a Competency ?		
Term	Meaning	Military Example
Occupational Series (Position-based)	The duties and responsibilities of the role.	Fighter pilot
Occupational Family	Associated roles	Aviators
Function	The work unit's	Instruction, Operations
Skill	Discrete ability to complete a specialized	Rated to fly the F-35
Competency	Combination of knowledge, skills, and experience	Battlespace

¹⁷ For a list of federal occupational series, see OPM, “Handbook of Occupational Groups and Families,” December 2018, <https://www.opm.gov/policy-data-oversight/classification-qualifications/classifying-general-schedule-positions/occupational-handbook.pdf>

¹⁸ Office of Personnel Management, “FedScope: Federal Workforce Data, Employment Status,” Data is from September 2021, Accessed 3/16/2022. <https://www.fedscope.opm.gov/employment.asp>

¹⁹ Office of Personnel Management, “Position Classification Flysheet for Miscellaneous Administration and Program Management Series, 0301,” January 1979, accessed March 22, 2022, <https://www.opm.gov/policy-data-oversight/classification-qualifications/classifying-general-schedule-positions/standards/0300/gso301.pdf>

The use of occupational series alone does not convey an employee's skill level or allow workforce planning for multi-role employees. Workforces increasingly include employees with more than one skill or competency, performing more than one function. Components and private sector organizations have different names for this evolution in workforce planning and tracking: which we refer to as competency-based workforce planning.

For the reasons outlined above, experts across DoD, OPM, and the private sector told us that competency-based workforce management is the path forward. The GAO touched on this issue in a March 2019 report titled, "Key Talent Management Strategies for Agencies to Better Meet Their Missions." They concluded that agencies might be better able to assess gaps in talent by defining, developing, and deploying workers based on skills and competencies, not by occupational series. This is widely acknowledged: as a senior OPM official said, "We're looking at competencies because we know that's the direction we need to go in."

The good news here is that the answer to finding the skill gaps is within DoD's power to implement. There were a couple organizations we talked to already building models to describe work in a modern way (DCPAS, Space Force). Some Department components have instituted a process of coding individual billets to include data about work functions, a layer of information that complements the occupational series but can make distinctions between the more generic series.

Competency frameworks are not new to the Department. There are several well-defined competency-based models for some of the Department's functional communities, such as financial management, acquisition, and cybersecurity. The Department has also been using competency-based approaches for leadership across the Department. The leadership development competency model is also an example of the challenge: updating the competencies is a year-long process that involves multiple panels of subject-matter experts and senior executives, usually conducted once every five years, with the aim of looking five years ahead. This is not sufficient. Like continuous vetting for security clearances, competency models must continue to be monitored, evolve and not remain static until the next check up.

Commercial companies have shifted to tracking skills and competencies. One international business services firm we interviewed recently shifted from a role-based company to a skills-based company. By encouraging their employees to log their experiences in an online database, supplemented by a powerful AI tool that distills past position data into skills and levels of proficiency, the company has built a global framework of over 8,000 unique skills. The platform allows the company to leverage data from a workforce of 700,000 people for the gambit of talent planning decisions. Skills data can be used to understand current capability, to analyze gaps, or for future projections. Algorithms can look for patterns and suggest employees with adjacent skills that may have the easiest path to upskilling to fill gaps. The shift has been a game-changer.

Case Study: GAO says the Federal Government should use skills and competencies to plan their workforce

In May 2014, the GAO conducted a study into the human capital challenges federal agencies face within highly constrained fiscal environments. GAO was concerned that without efficient workforce planning methods, lean fiscal realities would degrade mission execution over time. The investigation included interviews with 25 of the 27 agency members of the Chief Human Capital Officer (CHCO) Council.

The results of these talks revealed that the CHCOs had difficulty identifying the range of skills within their existing workforces. According to the CHCOs, “Most federal human resources systems do not identify employee skills in any detail below their occupational series, title, and grade.” This made it very difficult to effectively leverage existing skills, keep individuals with certain skills from leaving, or where to target training opportunities.

To combat this shortfall, the Department of Agriculture moved out on the development of its own searchable internet tool that allows employees to curate their own skills in a common database. The tool enabled department officials to learn more about employee competencies—like language aptitude or technical certificates—to better match workers to unique projects. The Environmental Protection Agency and Food and Drug Administration had plans to develop similar tools.

At the study’s conclusion, GAO found that the talent management tools employed by the Federal Government lacked two main ingredients: (1) the ability to identify the skills available in their existing workforce and (2) the inability to move people with specific skills to address emerging needs. GAO recommended OPM review the extent to which new capabilities were needed to assist with both.

OPM concurred with the recommendation and pointed to “GovConnect,” a new tool it was developing to enable a more modern exchange of talent. However, as of our latest research, the tool is still in the pilot stage. The DoD continues to lean on occupational series and the expertise of its functional managers as its primary source of skill and competency management.²⁰

Talent data is a strategic asset and is not integrated across the DoD

The Department does not appear to have a robust database for talent management. Over and over, we heard there is no IT system that allows leaders to identify and track the skills of the DoD workforce. The Department does not have a single personnel system – or a network of personnel systems that are able to relay workforce planning data between them live. There is also no way to make a one-to-one comparison (faces to spaces) between Department personnel and their associated competencies and authorized or planned manpower data at the Enterprise level, which is essential for identifying skills gaps caused by vacancies.

We learned that the Department is making a vital step toward modernizing human resource information systems (HRIS) by deploying the Defense Civilian Human Resources Management System (DCHRMS) within the next 18 months, consolidating many HRIS functions to create a single employee profile for DoD. But as envisioned, DCHRMS will not go far enough to enable enterprise workforce planning because it will not include manpower data – information about how workforce billets are structured.

The Department needs a fundamental shift in its business process for how it measures and applies workforce resources to align workforce capabilities with strategic goals. The Department must have a data plan to realize enterprise-wide awareness and understanding of its skill gaps and civilian workforce readiness – and at its root, that system must be able to accurately relay the functions and capabilities of the workforce.

Private-sector organizations are also turning to machine learning systems to deliver insights into their workforce. Using software to capture and aggregate details about individual capabilities is beginning to pay dividends.

²⁰ <https://www.gao.gov/assets/gao-14-168.pdf>

Organizations are looking for alternative means of discovering and estimating work activities to gain insight into what their people are actually doing to potentially redeploy existing resources. We heard from some companies that they could use “talent intelligence systems” to estimate skills and competencies using resumes, professional social media, performance assessments, and job descriptions. Organizations varied on the degree of autonomy afforded to artificial intelligence programs compiling this data but almost universally allowed employees to either self-nominate or intervene if they believed an AI program had made an error in building their profile.

Leading organizations also use machine learning tools to determine the best pathways to develop and upskill portions of their workforce for critical roles. This requires a level of granularity in foundational human resources information technology systems and the ability to bring together these disparate data sets, but this is starting to happen as systems become more robust and the ability to differentiate activities and functions in daily work becomes more critical. Talent intelligence systems can now compare training, credentials, and competencies across different job categories and suggest merges, forming new job categories, or form estimates of “what it would take to train 500 people” to a given skill level.

Case Study: When a Global Investment Banking Company Went Digital

When BNY Mellon needed to refresh employees’ skills, it faced three challenges that it addressed by going digital. The first challenge was skills: after struggling to buy new talent and skills, BNY Mellon shifted to developing existing talent. The company utilized two online systems to help assess underlying skills and offer training opportunities. Pluralsight, a skills-based training company, assessed employees’ technical skills and stratified them by thirds into “novice,” “intermediate,” and “expert” to allow for more effective individualized training. BNY Mellon also utilized the software system eightfold.ai to merge resumes, LinkedIn profiles, assessments, and job descriptions to identify skills, including “hidden skills” individuals possessed that were not directly related to their work role allow the company to organize job and skill families.

Eightfold.ai also helped BNY Mellon address the second challenge: talent. The system helped employees determine their next steps by recommending new training courses, identifying mentors based on skills or training matches, and incorporating side work (“gig”) on top of day-to-day work.

Finally, eightfold.ai facilitated BNY Mellon’s solution to its third challenge of internal recruiting and mobility by comparing training and credentials from different job categories and recommending new job opportunities that are similar to one the employee currently holds. This proactive suggestion of new jobs helps reduce attrition, as BNY Mellon found that the primary cause of attrition was the length of time working for the same manager in the same job.

FULL RECOMMENDATIONS and PRIORITIES

To compete for talent and meet the demands of an increasingly digital world in a fiercely competitive talent marketplace, the Department must invest in developing existing talent for the skills and jobs of the future. That includes upskilling, training and education incentives, vocational training, and systems for identifying, categorizing, tracking and improving employee skill sets. While pockets of DoD have embraced innovative talent management methods and processes, these best practices are not widely implemented.

Unless the DoD as an enterprise shows that civilian workforce mobility and development is a priority worth reinforcing *and measuring*, it won't create those opportunities for its employees. Managers need to understand: **"This is not your talent. It's the DoD's talent."** As part of that cultural shift, components and the Department should empower managers with better resources and tools. Once developed, software tools and HRIS capabilities would help the Department conduct development activities at scale and provide better support to supervisors and employees trying to navigate career paths and Department-wide opportunities. A new pool of talent would be unlocked.

The demand for HR offices to keep pace with what it takes to be a leading element in keeping organizations competitive has grown. **The Department can no longer afford for talent management to be a "coalition of the willing."** The CHCO, not their delegate, must have their responsibilities streamlined to afford the time, resources, and position to invest in and advocate on behalf of talent management across *all* components. A workforce of almost 800,000 employees should have one person exclusively dedicated to driving talent management across the Department.

The Department needs to shift from managing the *position* to managing the *person*. Simply repeating business as usual approaches, such as grinding through the establishment of more occupational series, is not the path forward for the Department. As one senior DoD HR expert put it, "We have gone well beyond the capability of capturing work functions by occupational series." For instance, employees engaged in data science, AI, and software functions come from various positions. Even if the occupational series kept pace, there would still be occupational series involved in the acquisition and use of AI tools that would fall outside of a defined occupational series or family.²¹ But shifting to management by skills, competencies, and workforce functions would set the Department on a path of understanding its workforce skills gaps.

After identifying skill gaps, multiple industry partners emphasized: **that the Department cannot simply buy talent.** Nor can it launch isolated training courses or minuscule fellowship cohorts and expect to transform the workforce's technological capabilities. But, **DoD components can create a supply chain for emerging work requirements and their most difficult roles.**

To ensure a steady stream of talent, components need to create a workforce development pipeline using the right workforce planning process, backed by the right HRIS, primed by talent development programs. Through the recommendations offered below, we hope that the Department will be able to one day answer the strategic questions about its future workforce it cannot answer today.

It is Fiscal Year 2024. The DepSecDef turns to the CHCO and asks about the progress towards mitigating the gap in data architects. Over the past 24 months, the CHCO, with a personal focus on talent management, has just completed a major transformation within their enterprise, down to the front-line workers of each MilDep and DAFA. Personnel records are populated with skills and competencies. Some are self-identified, but most are auto-populated with the assistance of an AI tool that has scanned their position descriptions, degree programs, certifications, and completed training. Gone are the practices of trying to manage General Management Analysts

²¹ See for instance: Diana Gehlhaus, Ron Hodge, Luke Koslosky, Kayla Goode and Jonathan Rotner, "The DOD's Hidden Artificial Intelligence Workforce" (Center for Security and Emerging Technology, September 2021). <https://doi.org/10.51593/20210013>

through a Miscellaneous functional community; employees are now linked to a work function that more aptly fits their organization's work.

The CHCO turns to ADVANA and a summary view of People Analytics. With a few clicks, the current fill rates of billets with primary and secondary Data functions appear with projections against targets for each year through the Fiscal Years Defense Program, all rooted in the 2022 NDS. The visualization is the merger of HR and Manpower data, built on live database feeds from components on the backend.

The CHCO knows the number of analysts behind the target and the plan to get well. Their team, assisted with AI tools, has been working to identify the employees with the most adjacent skills to advertise the right upskilling opportunities. The tool understands the civilian relocation preferences and targets opportunities by location to those less likely to move. The tool also points to jobs open within localities, but across components. Workers from Tinker Air Force Base in Oklahoma City might soon be making the commute over to the Army Corp of Engineers post in Tulsa. They were notified of a pathway to a permanent General Schedule job, an incentive away from their current Wage Grade temporary employment. The news was timely, as the system had identified their WG position was at high risk for automation, but the experience they brought was a boon to the Corps of Engineers.

With the help of the right integrated data and metrics, organizational changes, and shifting cultural norms, the CHCO's team is well on its way to answering the critical question they once could only do via extensive, manual processes, or not at all. Conversations can be had about focusing resources on specific upskilling and incentive programs, based on metrics indicating sub-optimal usage or outcomes. Leadership can now prepare the entire workforce for the 4th Industrial Revolution, not just those primarily involved in technology.

The DoD is now a center of sustainable talent.

Key Recommendations for Improvement

The Subcommittee believes the key recommendations below would have the greatest impact on improving the effectiveness of DoD's civilian Talent Management. Recommend the DepSecDef direct the Deputy's Workforce Council to track the proposals approved from this report on a quarterly basis.

1. Transform civilian culture to prioritize talent management. Based on private sector best practices, the Department can transform the culture through a number of initiatives. This change should start with a DepSecDef memo to the field summarizing the Department's plans, further delineated below.

1.1 Increase training opportunities & improve incentives. The CHCO will:

1.1.1. Review all component civilian training budgets and set benchmarks to ensure dollars spent per employee annually are on par with the average private sector annual expenditure for a large corporation.

1.1.2. Review the DoD's Civilian Leader Development Programs facilitated by DCPAS and develop an initiative to increase the annual bandwidth from 500 personnel a year by using virtual options.

1.1.3. Review and align development incentives to show that the Department is serious about growing talent. Direct Components to conduct a review for skills associated with the functions identified by the CHCO as hard-to-fill and report on the feasibility of providing:

1.1.3.1 Tuition reimbursement incentives, like those offered by the Air Force, across the Department with specific, identified institutions to ensure it is cost efficient.

1.2.3.2 New incentives for validated, high-demand skills, such as those in place for foreign language proficiency pay.

1.2 **Ensure civilian training budgets are not re-purposed.** The CHCO should institute guidance that fences civilian training budgets from re-allocation for other uses. It should be DoD policy that civilian training dollars are to be used on civilian training and development *only*.

1.3. **Expand talent exchanges.** Components will expand existing Public-Private Talent Exchanges between the Department, companies, and universities. This capability exists in limited form, including in the acquisition and cyber workforces. It needs to be much broader. Assign P&R to provide a report on the impact of compensation restrictions on the performance of talent exchanges and provide alternatives. Ensure participants from organizations external to the Government follow statutory requirements for financial disclosure to ensure ethics and transparency.

1.4. **Adopt new ways to validate competencies.** The CHCO should formulate Department policy to increase the use of assessments and credentialing to validate skills and competencies in addition to and/or in lieu of traditional degrees and certification requirements. Assessment and credentialing should apply to job functions across the Department.

1.4.1. Incorporate assessments to validate employee skills in Talent Acquisition and Development.

1.4.2. Form a partnership with private-sector credentialing organizations to establish a mechanism for evaluating candidates holistically across education, experience, certifications, certificates, and credentials.

1.5. **Deliver modern tools and guidance for supervisors and employees to assist in the conversation about development and retention.**

1.5.1. Components should use retention data to analyze when civilian employees are at the highest risk of leaving the Department. Within business practices set by the CHCO, send notifications for vacancies internal to the Department, but beyond employees' current component, and recommend adjacent jobs or relevant training opportunities.

1.5.2. Components should support career-broadening assignments: set aside a training account, ability to flex positions, or consider different options for permeability (such as different DoD components) on a project that's not of value to the DoD but to the employee professionally.

1.5.3. Components should institute practices to immediately reintegrate those who are returning from career-broadening or upskilling assignments, and to utilize the skills they gained in the job they've returned to.

1.5.4. The CHCO should provide an electronic library of opportunities for supervisors to develop their employees, that reaches Department-wide, to ensure employees have the complete picture of the opportunities available to them matched with their skills. The library could be an extension of the dodciviliancareers.com application, with open developmental, technical, and incentive opportunities, in addition to open jobs.

1.5.5. All Department leaders should reinforce the imperative for there to be Individual Development Plans at all levels, ideally using AI to assist employees in determining their IDP and suggesting development opportunities. Senior leaders should share their IDPs with their workforce.

1.5.6. Components should provide more dedicated time for employees to focus on white space – such as strategy development, skills enhancement, or taking a training course. Components should provide at least the industry standard of 40 training hours a year. Document the baseline policy in DoDi 1400.25, Volume 410.

1.6. ***Make managers proponents of development and hold them accountable for it.*** The CHCO should:

1.6.1. Build talent acquisition and talent management into performance objectives – at all levels. This could include performance targets for the percentage of people on their team participating in continuous learning, or even better, the number of people on their team participating in stretch or growth assignments, and/or promoted/transferred into high priority roles. (Revise DoDi 1400.25 Volumes 430 & 920 to make edits conforming with this policy).

1.6.2. Enhance skilling at higher graded positions: require leaders to have a “minor” in something related but not directly in their field to ensure cross-service and cross-functional experience in leadership. Formalize the requirement in policy similar to DoDi 1400.36 but for civilian workforce at large.

1.6.3. Review OPM supervisory course and ask the leadership to exercise some priority in enforcing the requirement. Within 180 days, components should identify the backlog of required supervisory and training courses and present a “get well” plan to close those gaps.

1.6.4. Conduct an annual, one day, talent management leadership forum for all leaders. It should be led by SecDef or Deputy. All attendees must brief their deputies within 48 hours.

1.6.5. Mandate selection boards/panels for senior grades (GS-15/SES) be diverse. Codify in DoDi 1402.03, Volume 3, paragraph 6.i.

1.6.6. Create and include training metrics (to include percentage of civilians participating in technical upskilling and professional development courses, as well as incentive programs) as an automated/recurring component of enterprise-wide people analytics.

1.6.7. Develop goals and metrics for people development that will cascade throughout the organization. Consider incentivizing leaders to develop talent similar to how some companies link compensation to meeting diversity, equity, and inclusion goals in their companies.

1.7. ***Bridge differences between civilian and military populations.*** The CHCO should foster greater collaboration between military and civilian HR and provide a Total Force approach to Talent Management functions such as workforce planning, recruiting, training, and development, to share best practices, lessons learned, and means of strengthening the Total Force.

1.7.1. The CHCO should look at the differences in civilian training investments across the Department and work with the Services to identify and share best practices, benchmarks and goals for improvement.

1.8. ***New marketing and messaging on the civilian workforce.*** The Department should develop a new marketing campaign around why workers should choose a DoD civilian career in an environment that’s more competitive for talent than we’ve ever seen before. Promote candidate interest in the Department’s workforce by raising awareness of the types of challenges Department personnel face.

1.8.1. To complete its review of Talent Management practices, the Department should formally review civilian Talent Acquisition policies and programs, to include recruiting, marketing, use of hiring authorities, and talent acquisition pipelines as compared to best private sector practices.

1.9. **Budget to support the transformation.** The CHCO should work with the Comptroller and Components to ensure resources are requested in the President’s Budget to execute the recommended changes needed to modernize talent management in the Department.

2. Prioritize and elevate Talent Management within the organization. Separate the talent management components of the Total Force from USD(P&R), currently the named CHCO, by breaking out civilian personnel and military personnel from readiness, resiliency, and health thereby establishing a dedicated CHCO for the Total Force.

2.1. Promote the CHCO’s role by separating talent management/human resources functions within P&R from readiness, resiliency, and health. The reorganized office would be led by a new Under Secretary of Defense for Talent Management, who would perform duties as the Chief Talent Officer as well as those defined in 5 U.S.C. § 1402 as the CHCO for the Total Force. The offices recommended for migration to the new OUSD(TM) would include: Military Personnel Policy, Civilian Personnel Policy, and the requisite portions of Reserve Integration from M&RA and Defense Manpower Data Center, Civilian Personnel Advisory Service, Defense Personnel Analytics Center, and Defense Support Center from the Defense Human Resource Activity.

2.1.1. Task USD(P&R) with drafting a legislative proposal to revise 10 U.S.C. §136 to authorize a separation of the existing OUSD(P&R) into two offices: one led by USD(TM), and another led by a new Under Secretary of Defense for Readiness, Resiliency, and Health (USD(RR&H)). Included in the proposed language would be a requirement for the appointee to USD(TM) to have experience working in talent management in a large organization for over 10 years. In parallel, USD(P&R) should update DoDi 5124.02 to identify the resultant USD(TM) as the CHCO with duties and responsibilities unencumbered by non-talent management issues.²²

2.1.2. To bridge the gap between the current and “to-be” organization, the DepSecDef should hire an HR expert with a two to three-year term with a performance contract clause to develop a plan to share current DoD best practices across the enterprise, and prioritize a handful of key initiatives to improve performance, to include execution of the DepSecDef-approved recommendations from this report. This person may be a former CHCO from a large global company as a Senior Advisor reporting directly to the Deputy to provide independent, enterprise HR solutions to the CHCO and assist with the split and reorganization of P&R.

2.1.3. The Advisor should review HR department workloads and structure to confirm that they align with industry and government staffing best practices. Several of the DAFAs noted that they are under-resourced and claimed they lacked HR capacity to conduct talent management. Recommend alternatives and corrective actions for consideration at the DWC.

2.1.4. Require the new CHCO and Advisor to conduct a “listening tour” across the workforce to help identify component-level Talent Management solutions & determine if and where “toxic” leadership cultures exist. There should be a special focus on Wage Grade employees within the depots and arsenals.

2.1.5 The new CHCO will drive standardization and execution through the HCOP and monitor progress and share best practices as chair of the DoD Civilian Personnel Council. The HCOP will be developed under the oversight of the CHCO and approved by USD for Talent Management to, among other initiatives, set standard performance metrics for enterprise talent management

²² Currently, the P&R is assigned by the Department to serve as the CHCO, per DoDI 5124.02

informed by industry best practices, set data standards, and create common business practices where possible. Quarterly, the CHCO will report status on the HCOP and set the agenda for the DWC to discuss high priority talent management topics and to share best practices.

3. Modernize the Department's workforce planning and data. Track different workforce data, refine processes to track workforce functions and skills, and use modern tools to make hidden talent available to the enterprise. Modify DoDi 1400.25, volume 250 to incorporate the necessary policy directives pertinent to the steps below.

3.1. The CHCO should direct all human resources elements in the Department to code their workforces by function in addition to occupational series, in a manner consistent with standards issued by DCPAS. This should be an iterative process. For instance, instead of tracking a generic 0343 Management & Program Analyst as part of a Miscellaneous Functional Community, assign & track the position to the functional work area that the billet performs.

3.1.1. Begin immediately with five hard-to-fill functions, and five functions at high risk of being overtaken by automation, as approved by the CHCO. This should include roles beyond the traditional STEM workforce of today.

3.1.2. Functions should include secondary and tertiary roles to capture greater fidelity.

3.1.3. The conversion process should be completed by the end of Fiscal Year 2023.

3.2. The CHCO should also direct all human resource elements to transition to tracking talent based on their available skills in addition to occupational series to enable the Department to identify competency/skills gaps *and* provide solutions to fill those gaps. To that end:

3.2.1. Determine and establish a skills taxonomy that allows for commonality between other federal/department systems, but with the flexibility to allow organizations to further define their taxonomies. Where possible, the Department should adopt established function, competency and skill frameworks, such as the National Institute of Standards and Technology's (NIST's) National Initiative for Cybersecurity Education (NICE) framework, across all workforce functions.

3.2.2. All employees should be required to self-report Knowledge, Skills, and Abilities (KSAs) not associated with their occupational specialty within the Human Resource Information System (HRIS).

3.2.3. In addition to self-reporting, the Department should deploy a software tool or data gathering/analysis system like Eightfold AI to decompose position descriptions to determine KSAs held by employees based on current/prior positions for inclusion in the HRIS.

3.3. The CHCO should establish a data lake with the Department's HR personnel and manpower data, based on functions and skills as described above, on an automated and recurring basis beyond the summary level. Currently, neither DCHRMS nor ADVANA support this. This isn't necessarily modifying core HR systems, but could be a new initiative that would bring existing data into context based on what skills the Department has versus those needed in the future. This would enable an analysis of skill gaps. The Department should use graph databases that can scale easily and adapt to emerging skills with minimal disruptions to preserve flexibility in the model and to draw insights from connected relationships.

3.3.1. The repository should leverage a common data dictionary to standardize the information between the services.

3.3.2. The outcome should enable the automated comparison of manpower and personnel data to identify vacant billets, and the function of those billets, to drive the Department’s understanding of vacancy-based skills gaps.

3.3.3. The CHCO should identify Key Metrics for skills needed by the future force, push necessary data to ADVANA, develop plan with milestones, and report progress at DWC meetings focused on civilian personnel on a quarterly basis.

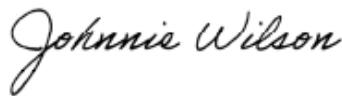
CONCLUSION

An effective and future skills-oriented talent management process is about much more than human resources. The future of the United States’ defense and our ability to maintain military superiority over our adversaries will rely on advanced technologies such as AI, cyber, quantum, robotics, directed energy, hypersonic systems, and others. These technologies require new levels of STEM knowledge and expertise in their design, production, and use, and without a trained workforce in each, we will face technology shortfalls that will affect our ability to win wars in the coming decades.

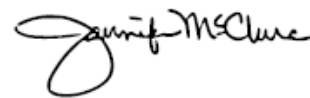
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APPENDICES

TAB A: Terms of Reference

TAB B: DBB Presentation, May 12, 2022

TAB C: Methodology

TAB D: List of Interviewees

TAB E: Defense Department Functional Community Construct

TAB F: Policies identified for change

TAB G: Subcommittee member bios

TAB H: Acronyms

TAB I: Public Comments

TAB J: References



Defense Business Board

TAB A

TERMS OF REFERENCE



DEPUTY SECRETARY OF DEFENSE
1010 DEFENSE PENTAGON
WASHINGTON, DC 20301-1010

NOV 12 2021

MEMORANDUM FOR THE DEFENSE BUSINESS BOARD

SUBJECT: Terms of Reference – Reskilling/Upskilling Career DoD Civilians in New and Emerging Technologies

The world is entering the beginning of a 4th Industrial Revolution (or Industry 4.0), as a coming wave of disruptive technology in fields such as artificial intelligence (AI), machine learning (ML), the mobile Internet, and 3-D printing remakes entire industries and opens up untold possibilities in the workplace and marketplace. Industry 4.0 depends on technological innovations such as AI, ML, big data, virtual reality, block-chains, and more.

The Department of Defense (DoD or “the Department”) has difficulty attracting, recruiting, and hiring for critical skill sets in emerging technologies. Compounding this challenge, the DoD struggles to identify and track the skill sets that it already has in its civilian workforce and to match them to the appropriate jobs. In order to be ready as the nature of conflict changes rapidly, the Department must improve its ability to identify and optimize its current talent and, where talent shortages persist, reskill and upskill its existing civilian workforce.

Therefore, I direct the Defense Business Board (“the Board”), through its Talent Management, Culture, & Diversity Advisory Subcommittee (“the Subcommittee”), to examine from a private industry perspective the methodologies and approaches used to identify talent and match it to jobs, as well as reskilling/upskilling its civilian workforce. Specifically, the Subcommittee will:

- Provide case studies and distill best practices from relevant private sector companies on how private industry projects forward the number and types of skills they will need in the future;
- Review the Department’s current civilian workforce planning methods, identify gaps in best practices, and recommend changes leveraging on private sector practice;
- Review the Department’s existing approaches to identifying and categorizing worker skill sets and tracking them over time. Provide comparison examples of best practices from private industry or other public entities, and identify the laws, policies, or practices that inhibit implementation within the Department;
- Review the Department’s approach to matching worker skill sets to the needs of particular jobs or career fields and identify practices that impede effective matching of employee skills to jobs. Drawing on best practices from private industry, identify how the Department could better facilitate this matching and recommend actionable



changes to existing Departmental policy or current Department practice to improve implementation within the Department;

- Assess and recommend changes to statutory requirements that inhibit the Department's ability to reskill its civilian workforce;
- Assess and provide germane case studies of large companies that structured successful reskilling/upskilling programs either enterprise-wide or within a major sector. Examine current Federal career civilian reskilling/upskilling efforts, to include incentives, within the Office of the Secretary of Defense and the Military Departments and compare them to the private sector case studies provided;
- Provide actionable recommendations for changes to Department policy, current practice, or applicable law to improve reskilling/upskilling efforts for career DoD civilian employees;
- Any other related matters the Board determines relevant to this task.

I direct the Subcommittee to submit its independent assessment and recommendations for attracting, retaining, and upskilling career DoD civilians to the full Board for its thorough consideration and deliberation at a properly noticed public meeting. The Board shall submit its final, approved assessment and recommendations to me not later than June 30, 2022.

In conducting its work, the Board has my full support to meet with Department leaders and all requests for data or information shall be honored that may be relevant to its fact-finding and research under these Terms of Reference. As such, the Office of the Secretary of Defense and DoD Component Heads shall cooperate and promptly facilitate requests by Board staff regarding access to relevant personnel and information deemed necessary, as directed by paragraphs 5.1.8. and 5.3.4. of DoD Instruction 5105.04, "Department of Defense Federal Advisory Committee Management Program," August 6, 2007, and in conformance with applicable security classifications. Components should respond to requests for data/information from the Board within five business days. Material provided to the Board becomes a permanent part of its record.

Components are reminded that all data/information provided is subject to public inspection unless the originating Component office properly marks the data/information with the appropriate classification and Freedom of Information Act exemption categories before the data/information is released to the Board. The Board has physical storage capability and electronic storage and communications capability on both the unclassified and classified networks to support receipt of material up to the Secret level. Each Component is advised that Board members, as special government employee members of a DoD Federal Advisory Committee, will not be given any access to the DoD network, to include the DoD email systems.

The Subcommittee shall not work independently of the Board's charter. The Board and the Subcommittee will operate in conformity with and pursuant to the Federal Advisory Committee Act, the Government in the Sunshine Act, and other applicable Federal statutes and

regulations. The Subcommittee and individual Board members do not have the authority to make decisions or provide recommendations on behalf of the Board, nor report directly to any Federal representative. The members of the Subcommittee and the Board are subject to certain Federal ethics laws, including 18 U.S. Code § 208, governing conflicts of interest, and the Standards of Ethical Conduct regulations in 5 C.F.R., Part 2635.

Thank you in advance for your cooperation and support to this critical undertaking to inform subsequent decisions on how the Department addresses national security challenges in the coming decades. My points of contact for this effort are Web Bridge, DBB Staff Task Group support at (703) 774-7407 or webster.e.bridges.civ@mail.mil, and Ms. Jennifer Hill, Executive Director/Designated Federal Officer, DBB, at (571) 342-0070 or jennifer.s.hill4.civ@mail.mil.

A handwritten signature in black ink, appearing to read "Robert H. Hill". The signature is written in a cursive, flowing style.

cc:
Senior Pentagon Leadership
Directors of Defense Agencies
Directors of DoD Field Activities
Advisory Committee Management Officer, DA&M



Defense Business Board

TAB B

Defense Business Board Presentation, May 12, 2022
Upgrading DoD Civilian Talent Management

DEFENSE BUSINESS BOARD



Strengthening Defense Department Civilian Talent Management

May 12, 2022

Task

November 12, 2021 Deputy Secretary of Defense (DepSecDef) directed the Talent Management, Culture, & Diversity Advisory Subcommittee to examine from a private industry perspective the methodologies and approaches used to identify talent and match it to jobs, as well as reskilling/upskilling its civilian workforce.

This report shall include:

- How private industry **projects** the number and types of skills they will need in the **future**;
- The Department's current civilian workforce **planning methods**;
- The Department's existing approaches to **identifying** and **categorizing** worker skill sets and **tracking** them over time, and identifying the laws, policies, or practices that inhibit implementation within the Department;
- The Department's approach to **matching** worker skill sets to the needs of particular jobs or career fields and identify practices that impede effective matching of employee skills to jobs;
- Changes to **statutory requirements** that inhibit the Department's ability to reskill its civilian workforce;
- **Case studies** of large companies that structured successful reskilling/upskilling programs either enterprise wide or within a major sector.
- Any **other related matters** the DBB determines are relevant to this task.

Subcommittee

DBB Members

Gen Larry Spencer (Ret) (Study Chair)

Gen Johnnie Wilson (Ret)

Cheryl Eliano

Dr. Christopher Gopal

Jennifer McClure

DBB Staff

Jennifer Hill, Executive Director

Lt Col Kyle Harrington, USAF

Judson Crane, DIB Augment

Emma Vitale, DIB Augment

Process and Methodology

24 weeks of study and analysis:

- **Interviews:** Conducted interviews with 59 individuals:
 - DoD federal employees
 - Office of Personnel & Management (OPM)
 - Private industry human resource leaders
 - Academic experts
- **Questionnaires:** Prepared and analyzed responses to questionnaires from 12 Defense Agencies and Field Activities (DAFAs) and all 3 Military Departments
- **Prior Studies:** Reviewed 40+ publications, policies, plans, prior studies, and other literary items on talent management

Strategic Imperative

- Successful adoption of **emerging technologies** is **key** to maintaining military advantage—they will transform the future of war and work
- While **pace** of technological development is **advancing**, the **domestic supply** of STEM workers has **not kept up**
- Department leaders must **ensure** the DoD has a workforce with the **skills** to harness and drive that technological change—Civil Servants are a critical piece
 - Can **no longer** rely on **outsourced** talent, must **upskill**
 - Upskill will fail without **effective talent management**

“Building enduring advantages for the future Joint Force involves undertaking reforms to accelerate force development, getting the technology we need more quickly, and making investments in the extraordinary people of the Department, who remain our most valuable resource.”

FACT SHEET: 2022 NATIONAL DEFENSE STRATEGY

In terms of Talent Management, DoD is standing on a “capability burning platform”

Talent management (definition): The anticipation of required human capital for an organization and the planning to meet those needs. Talent management activities include workforce planning, talent acquisition, talent development, performance management, succession planning, and retention.

Summary

Talent Management is a complex endeavor for workforce of 800K

Study focused on planning & upskilling; reskill is rare in DoD

- Planning includes identification, tracking, managing, and matching skills in the workforce

Research indicates three major focus areas for improvement

1. Cultural barriers
2. Organization
3. Workforce data

Despite challenges, we found *“pockets of excellence”*

Space Force digital fluency models, adaptability traits for the future workforce

AF Materiel Command manager mobility programs, cross component hiring

Army Career Management Activity shift towards competencies

Private industry lessons have DoD applicability as well

Good news on the Department's talent management challenges: Much of the answer lies within

Observations

Observation #1

Civilian development is not seen as a priority in DoD culture.

DoD Current View

- Hired for 1 job, not deliberately trained
- Development programs are limited & incentives fail to move the needle
- Large delta in civilian vs. military training \$

- Civilians are service assets, not DoD assets
- “Its a Title 5 problem, not a DoD problem”

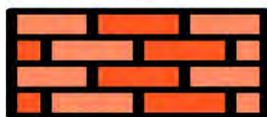
- Managers haven’t been the best advocates of upskilling or development

- Civilians aren’t seen as mobile

Development



Parochialism



Managers



Relocation

Private Sector Best Practice

- Hired for learning/agility
- All employees encouraged to develop & allowed to try other projects
- Incentives are accessible and standardized

- Put a premium on skill growth, even if employee lost by current team. Favor internal to external attrition.

- Arm managers with automated tools to discern full spectrum of opportunities for mentees

- Provide career progression paths to help employees understand how relocation could factor into developing skills/achieving goals

Observation #2

The organizational structure is not postured to effectively manage talent.

“Who’s in charge of talent management in the DoD?”

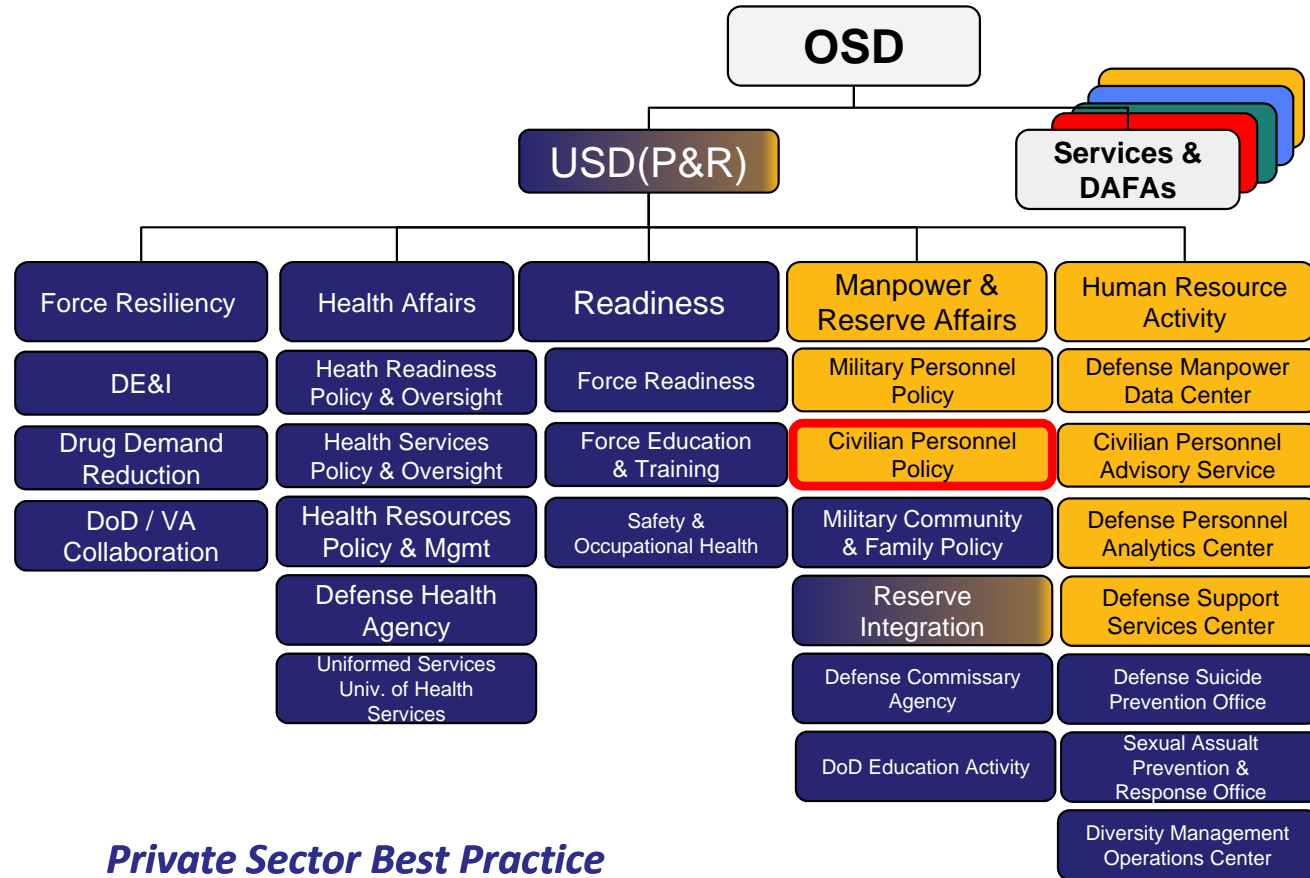
P&R scope spans multiple high priority efforts

DASD(CPP) has become the *de facto* Chief Human Capital Officer (CHCO)

Structured to be decentralized (requires strong leadership)

P&R Competing Priorities

Healthcare
 Extremism
 Talent Management
 Sexual Assault Prevention
 Military Readiness
 DE&I
 Global Pandemic
 Suicide Prevention
 Innovation Workforce



Private Sector Best Practice

CHCO reports to the CEO

 de facto CHCO
 HR / Talent Management focused
 Readiness, Resiliency, or Health focused

Span of control, delegation, and prioritization issues have left talent management at a disadvantage

Observation #3

Talent data is a strategic asset. The way it's collected and used to plan is flawed.

DoD Current View

◦ Methods to predict future workforce needs are not standardized

◦ Occupational series codes to describe positions & people not effective

◦ Talent data is not integrated or accessible across the Department

Predicting
Future Skills



Data Elements



Data Accessibility



Private Sector Best Practice

◦ Ensure predictions are based on competencies & tied clearly to strategy
◦ Develop agility & adaptability skills for flexibility

◦ Track positions by the work function
◦ Track employees by skills and competencies

◦ Single data lake with people & position data
◦ AI tools to assist with decision analysis

Key Recommendations for Improvement

Talent management in DoD, specifically the ability to identify, plan, track, match, and upskill the Civilian workforce has been hampered by the observations summarized below, with recommendations to address such challenges explained in greater detail in subsequent charts.

<i>Focus Area</i>	<i>Observation</i>	<i>Recommendation</i>
Culture	<i>1. Civilian development is not seen as a priority in DoD culture.</i>	<i>1. Transform civilian culture to prioritize talent management.</i>
Organization	<i>2. The organizational structure is not postured to effectively manage talent.</i>	<i>2. Prioritize and elevate Talent Management within the organization.</i>
Data	<i>3. Talent data is a strategic asset. The way the Department collects it and uses it to plan is flawed.</i>	<i>3. Modernize the Department's workforce planning and data.</i>

Recommendation #1

Transform civilian culture to prioritize talent management.

DepSecDef should issue a memo announcing the following:

1. Increased training opportunities (both technical & professional development), with incentives available to all.
2. Civilian training funding must be executed annually for civilian training.
3. Expansion of talent exchanges within DoD, industry, and academia.
4. Intent to adopt new ways to validate competencies (non traditional credentials).
5. Modern tools and guidance for supervisors and employees to assist in development & retention.
6. New performance evaluation criteria for managers tied to employee development metrics.
7. Greater collaboration between military and civilian talent management leaders to share best practices and reduce disparities.
8. New messaging and marketing highlighting the DoD civilian—a valued, critical, essential part of the mission and Total Force.

Recommendation #2

Prioritize and elevate Talent Management within the organization.

- Separate the talent management components of the Total Force from USD(P&R), currently the named CHCO, by breaking out civilian personnel and military personnel from readiness, resiliency, and health.

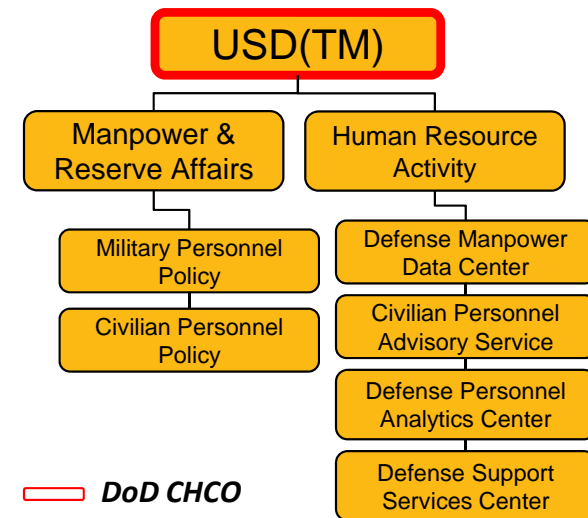
The resultant office would be led by a new Under Secretary of Defense for Talent Management (USD(TM)) who:

- Is required by law to be experienced in talent management
- Leads a focused organization, unencumbered by non talent management issues

Among other duties, the new CHCO will:

- Drive standardization and execution through the Human Capital Operating Plan (HCOP)
- Monitor progress and share best practices as chair of the DoD Civilian Personnel Policy Council

In the interim period while awaiting new Title 10 authorities, hire a senior external HR expert with extensive private sector experience on a fixed term to assist with the standup of the new organization and inject new ideas.



The Civilian workforce deserves a CHCO with the authority and focus to affect change



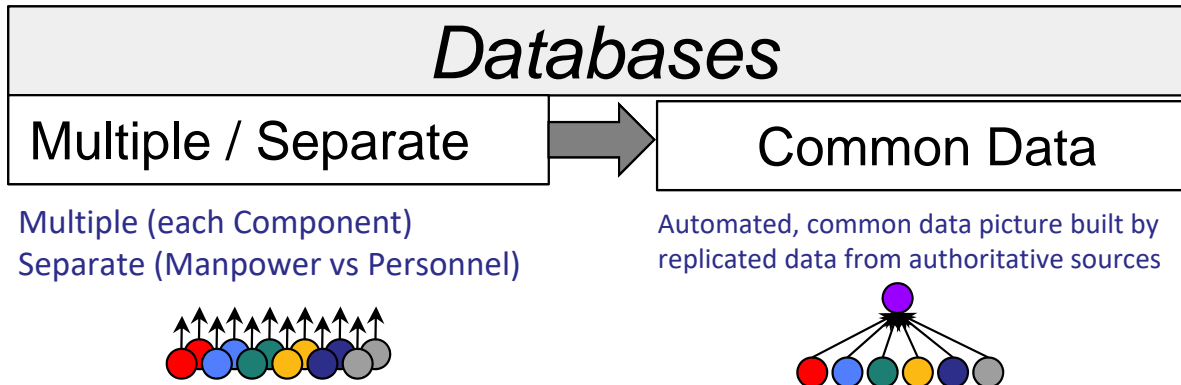
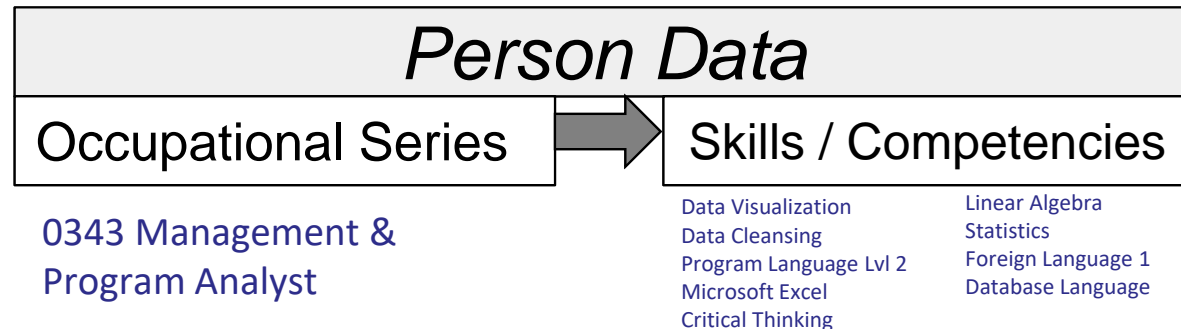
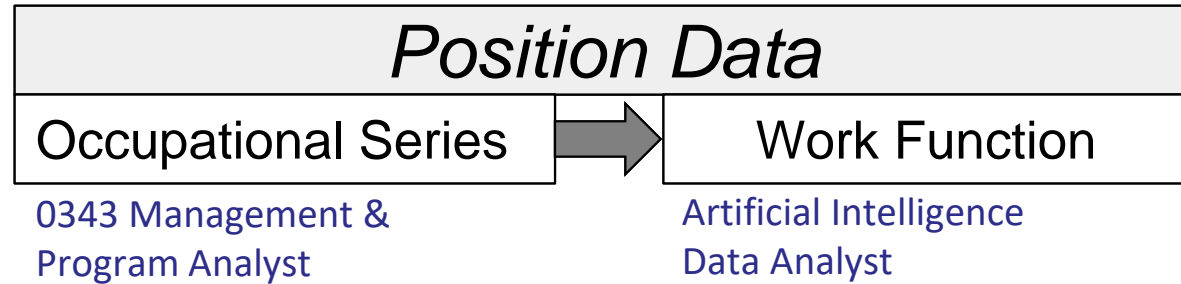
Recommendation #3

Modernize the Department's workforce planning and data.

The CHCO should direct all human resources elements in the Department to code their workforces by function

The CHCO should direct all human resource elements to transition to tracking talent based on their available skills

The CHCO should make the Department's HR personnel and manpower data accessible to the enterprise...on an automated and recurring basis beyond the summary level to leverage insights.



Track jobs by function, people by skills, and sync up “faces and spaces” data in a common data lake



Conclusion

- **Strategic Imperative:** DoD Talent Management needs to correct course to keep pace in the 4th Industrial Revolution.
- **Bright spots exist:** Despite challenges, there are pockets of excellence within the DoD—great people leaning forward on new ideas. Private industry practices are applicable too.
- **Recommendations:** By improving its culture, organizational construct, and workforce planning data, DoD talent can thrive.

Act now on Talent Management! Yesterday's workforce can't compete in tomorrow's war

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Backup

Findings from Private Sector Case Studies

Finding Area	DoD Pitfalls	Private Sector Best Practice
Method of workforce tracking	Workforce planning by occupational series codes	Workforce planning by skills and competencies
Data staging and tools	No robust database for talent management that allows leaders to identify and track workforce skills or develop talent for upskilled roles	HR data for entire organization accessible in one authoritative database Use of AI tools to identify adjacent skills and to target existing employees with comparable competencies for upskilling
Organization & Leadership	CHCO responsibilities delegated within the organization	CHCO reports directly to CEO and always has a seat at the table
Career Planning & Development	Lack of mobility for civilian hires Competency maps and career progression plans not universal	Create employee career pathways by forming talent pipelines of roles with similar work functions or skill sets
Approach to upskilling	Upskilling done on an as needed basis, driven by outside technology needs	Upskilling needs and training plans based on the future skill requirements determined by business unit learning councils that have executive leadership involvement
Employee/Supervisor Relationship	Supervisors authorize training No enterprise wide system to help employees and supervisors in the career development discussion	Democratize learning opportunities through an automated HR tool that identifies available course offerings or job openings and makes suggestions
Approach to filling talent gaps	<ul style="list-style-type: none"> Looking external: Responding to talent needs by buying talent 	<ul style="list-style-type: none"> Looking within: developing internal talent by investing in a variety of formal upskilling and training programs



Defense Business Board

TAB C

METHODOLOGY

Subcommittee members conducted the study and assessment over a period of roughly five months, researching and analyzing documents and literature, as well as interviewing subject matter experts (**TAB D**). The interviews were structured dialogues under the Chatham House Rule, with 59 DoD and OPM leaders, private industry principals, academic, and non-profit experts. Private sector interviews were structured to include leaders from a diverse range of backgrounds, and included 5 companies with workforces in excess of 100,000; leading skills and HR consulting firms, and companies that considered themselves to have made a “digital transformation.” The subcommittee also interviewed an “employee roundtable” – civilian Department employees who work in the field.

Company	Employees
Accenture	699,000
UPS	543,000
Home Depot	415,000
Ernst & Young, LLP	312,250
Amazon Web Services	Undisclosed

The Subcommittee reviewed over 42 sources related to private sector talent management practices and previous federal studies. The Subcommittee also developed questionnaires to accompany interviews and tasked the following questionnaire to 30 DoD components:

**DEFENSE BUSINESS BOARD REQUEST FOR INFORMATION
DoD Civilian Upskilling and Reskilling**

All recipients:

1. Does your organization conduct career field management or define career paths across your civilian workforce? Please provide details on your organization’s approach to civilian workforce planning as it relates to talent management.
 - a. How does your organization identify workforce skills that will be necessary for the future?
 - b. What baseline skills does your workforce require?
 - c. How are standards for skills determined?
 - d. How do you structure diverse skill sets and experiences in your workforce planning?
2. How does your organization plan, execute, track, and evaluate civilian workforce performance?
 - a. Are you able to identify gaps in your workforce’s skills at the Enterprise level?
 - b. If so, could you please characterize your organization’s need for upskilling or reskilling your workforce?
3. How do you track worker skill sets over time and use the data to make changes?

- a. What data do you capture, and what are the limitations of this data?
4. How do you match members of your workforce with specific high-demand skill sets to the jobs where they're most needed?
 - a. How do you ensure a good fit between personnel and a particular job or career field?
5. Does your organization use competency frameworks? How do they fit into internal training?
6. How do you identify workforce segments that are opportunities for upskilling? Have you identified legacy workforce segments in need of transition or technologies that transformed your workforce's core responsibilities?
7. What programs exist focused on reskilling or upskilling civilian personnel?
 - a. What, if any, incentives are offered for participating in these programs?
 - b. Is reskilling/upskilling part of performance management for supervisors and employees?
 - c. Is time off of work provided for employees to reskill/upskill?
8. What are the challenges (bureaucratic, financial, or otherwise) to implementing existing or future reskilling programs or incentives?

Army-Specific:

1. Is there a plan for a follow-on to the Army Talent Management Task Force to cover Army civilians?
2. One major reskilling program the Army has begun implementing is Quantum Leap. Can you talk more about that?
3. What other programs or incentives for reskilling does the Army have? How successful have they been?

Navy-Specific:

1. How successful have Navy e-learning and the Total Workforce Management system been for helping reskill/upskill Navy civilians?
2. What other programs or incentives for reskilling does the Navy have?

Marine Corps-Specific:

1. You have an academic degree and certification programs, along with a "Community of Interest Program" that utilizes LinkedIn Learning for technical training. How and to what extent are these utilized and prioritized for reskilling in the Marine Corps?
2. Are there other programs or incentives that the Marine Corps has for reskilling/upskilling?

Air Force-Specific:

1. What has been the Air Force experience with civilian career fields and career field management? Can you characterize the outcomes from transitioning to this approach to civilian talent management?
 - a. How did the USAF develop educational and training programs/incentives for reskilling and upskilling?

2. Which programs or incentives have been most successful? Why?

In response to our request for information, the Defense Business Board received written responses from the following DoD organizations:

- The Department of the Army
- The Department of the Navy
- The Department of the Air Force
- The Deputy Assistant Secretary of Defense for Civilian Personnel Policy
- Department of Defense Chief Information Officer
- Defense Threat Reduction Agency
- Missile Defense Agency
- Defense Advanced Research Projects Agency
- Defense Contract Audit Agency
- Defense Logistics Agency
- Defense Health Agency
- National Security Agency
- Defense Technical Information Center
- Washington Headquarters Service
- Pentagon Force Protection Agency
- Defense Media Activity



Defense Business Board

TAB D

List of Interviewees

The Defense Business Board would like to thank the following for volunteering their time and perspectives while interviewing with the members of the Defense Business Board – which greatly contributed to the success of this study.

The following individuals were interviewed:

Ms. Alyssa Alfrejd, Workforce Manager, Office of the Deputy Assistant Secretary of Defense for Product Support

Mr. Alexander Alonso, Chief Knowledge Officer, Society for Human Resource Management (SHRM)

Charles Barclay, Employee, Anniston Army Depot

Mr. Jason Barke, Group Manager for Forecasting and Methods, OPM

Mr. Steve Blank, founding faculty at the Gordian Knot Center, Adjunct Professor, Stanford and Senior Fellow for Innovation, Columbia University

Ms. Jamai Blivin, CEO, Innovate+Educate

Mr. Josh Bersin, Global Industry Analyst, CEO of The Josh Bersin Company, Dean of Josh Bersin Academy

Mr. William H. Booth, Director, Defense Human Resources Activity

Mr. James Buchman, Chief Learning Officer, Defense Civilian Personnel Advisory Service

General Arnold Bunch, Commander, Air Force Materiel Command

Caleria Cameron, Employee, Anniston Army Depot

Carl Dahms, Employee, Tinker Air Force Base

Mr. Matthew Daniel, Principal at Guild Education

Ms. Rita Dixon, Chief of Staff, Office of the Deputy Assistant Secretary of Defense for Product Support

Dr. Valerie DeVries, Deputy Chief of Staff, Human Capital (G1), U.S. Army Tank-automotive and Armaments Command (TACOM)

Dr. Gina Eckles, Associate Director, Human Resources Functional Community, Defense Civilian Personnel Advisory Service

Mr. Todd Fore, Deputy Assistant Secretary of the Army (Civilian Personnel)

Dean Geoff Garrett, University of Southern California Marshall School of Business

Dr. Adam Grant, The Saul P. Steinberg Professor of Management, Professor of Psychology, Wharton, University of Pennsylvania; Best-Selling Author,

Mr. John B. Goodman, Chief Executive of Accenture Federal Services

Dr. Warren Hatch, CEO, Good Judgment

Robert Harrison, Employee, District 9 President, American Federation of Government Employees

Mr. Thomas Hessel, Director -- Studies, Analysis, & Decision Support, USD(P&R)

Mr. Daniel Hester, Director, Defense Civilian Personnel Advisory Service

Ms. Veronica Hinton, former Deputy Assistant Secretary of Defense for Civilian Personnel Policy

Ms. Kimberly Holden, Deputy Associate Director of Talent Acquisition Classification & Veterans Programs, OPM

Mr. Daniel Hopkins, Vice President, Public Sector, eightfold.ai

Mr. Tim Hourigan, EVP Human Resources, Home Depot

Dr. Eleftherios Iakovou, Professor (Industrial Distribution), Director of Manufacturing and Logistics Innovation Initiatives at the Texas A&M Engineering Experiment Station

Mr. Matt Isnor, Program Lead, Cyber Workforce Management Directorate, DoD Chief Information Officer

Mr. Akash Jain, President, Palantir USG

Mr. Patrick Johnson, Deputy Director, Cyber Workforce Management Directorate, DoD Chief Information Officer

Mr. Frank Jones, Chief of Staff, Defense Human Resources Activity

Dr. Laura Junor, Fellow, National Defense University

Mr. Marc Koehler, Senior Vice President, Good Judgment

Mr. Kirk Limacher, Vice President, Human Resources Services, United

Mr. Stuart Logan, Managing Director, Head of Human Resources for Global Operations & Technology, BNY Mellon

Mr. Noel Massie, Former VP U.S. Operations, UPS (retired)

Abner Merriweather, Employee, Redstone Arsenal

Denise Nemeth-Greenleaf, Employee, Portsmouth Naval Base

Ms. Chris Parrett, Director of Civilian Personnel Policy, U.S. Space Force

Mr. Jeffrey (Jeff) Register, Deputy Director, Defense Human Resources Activity

Dr. Steven Rosen, Provost & Chief Scientific Officer, City of Hope Comprehensive Cancer Center

Mr. Jason Parman, Deputy Associate Director (Acting), HR Strategy & Evaluation Solutions, OPM

ADM (Ret) John Polowczyk, Managing Director, Government and Public Sector, Ernst & Young, LLP

Ms. Bobbie Sanders, Director, Cyber Workforce Management Directorate, DoD Chief Information Officer

Ms. Ellyn Shook, Chief Leadership & Human Resources Officer, Accenture

Ms. Lisa Smith, Deputy Assistant Secretary of Defense for Product Support and Functional Community Manager for Acquisition and Logistics

Mr. John Snodgrass, SES, Air Force Materiel Command/A1

Mr. Walt Spears, Senior Cyber Human Capital Strategist, Cyber Workforce Management Directorate, DoD Chief Information Officer

Ms. Nancy Speight, Deputy Assistant Secretary of Defense for Civilian Personnel Policy

Ms. Maria Taylor, Chief Learning Officer, United

Ms. Jimmie Vaughn, Associate Director, Talent Development, Defense Civilian Personnel Advisory Service

Mr. Darby Wiler, Director of Workforce Planning, Defense Civilian Personnel Advisory Service

Mr. Max Wyche, Deputy Chief of Staff, Army Materiel Command

Ms. Trish Young, Executive Director, Air Force Materiel Command Headquarters



Defense Business Board

TAB E

The Defense Department's Personnel
Organizational & Functional Community Construct

OUSD(P&R)

The senior-most official overseeing civilian personnel policy is the Undersecretary of Defense for Personnel and Readiness, USD(P&R), whose mission is to, “Meet National Defense Strategy imperatives through effective policy, guidance, and oversight to enhance the readiness of the Department of Defense, and optimize talent management and personnel programs, relevant training and education, world-class health care, quality family support, and force resilience through diversity, inclusion, and equal opportunity.”

Per DoD Directive 5124.02, USD(P&R) serves as the Chief Human Capital Officer (CHCO). The Office oversees five directorates with close to 25 subordinate staff elements, field activities, and defense agencies across the spectrum of personnel health, readiness, and human resource activities. Within OUSD(P&R), there are primarily two directorates operating in the HR space.

ASD(M&RA) and DASD(CPP)

One of the principal directorates within OUSD(P&R) is the Office of the Assistant Secretary for Manpower & Reserve Affairs, ASD(M&RA), who is charged with “Directing the overall policies and procedures of our Total Force manpower, personnel and reserve affairs.” They routinely engage Congress on a variety of issues impacting the Manpower and Reserve Affairs portfolio.

Subordinate to ASD(M&RA) is the Deputy Assistant Secretary of Defense for Civilian Personnel Policy, DASD(CPP). CPP is the DoD’s worldwide human resource policy office. Plans, policies, and programs that affect the civilian DoD workforce are created and managed by this office. CPP and Defense Civilian Personnel Advisory Service (DCPAS) support all the military departments, defense agencies, the foreign national employment program and non-appropriated-funded employees with policy leadership and personnel services. Although not formally recognized with this title, DASD(CPP) effectively executes the duties as the DoD’s Chief Human Capital Officer (CHCO). With connective tissue to OPM, several offices we interviewed referred to CPP as essentially the de facto CHCO within the Department. As the de facto CHCO, DASD(CPP) signs the DoD Human Capital Operating Plan (HCOP) which lays out the strategies, initiatives, and measures that are necessary to support execution of the goals and objectives of the National Defense Strategy.

DoDHRA and DCPAS

The other major Directorate within OUSD(P&R) is the DoD Human Resource Activity (DHRA). DHRA endeavors to provide centralized and comprehensive personnel data management and analysis for the entire DoD. It manages enterprise-wide mission programs ranging from travel management, language and culture, to civilian human resource advisory services; and ensures service members and their families receive the care and support they are entitled to. Within DHRA is DCPAS.

DCPAS’s stated mission is that it be “DoD’s enterprise leader in the development and delivery of civilian personnel policies and Human Resource solutions that strengthen mission readiness.” DCPAS works in partnership with the DASD(CPP) and in some aspects reports both to DHRA and the DASD(CPP). In practice, DASD(CPP) creates policy and DCPAS implements it.

Military Departments (MilDepts)

Outside of the Office of the Secretary of Defense and reporting directly to the SECDEF are the military departments, as directed by Title 10 USC, and the five services within. The civilian workforce in the MilDepts

makes up nearly 85% of the entire civilian population within the DoD. Within each service, although structured and organized differently, are a series of staffs, centers, elements, and agencies to execute the business of human capital management within their Department civilian populations, typically reporting up through an Assistant Secretary and Deputy Service Chief. Each service issues guidance to these HR groups in accordance with USD(P&R) and OPM regulations, but through the lens of their own organizations, supplementing where they see fit. By the time OPM policy is received by front line managers and employees, it may have been passed down through a half dozen or more layers of command.

Defense Agencies and Field Activities (DAFAs)

Also subordinate to the Secretary of Defense are a couple dozen agencies and field activities, each with a separate mission in support of the strategy of the department. They are sometimes referred to as the 4th estate. Civilians in the DAFAs make up approximately 14% of all civilians in the DoD. Like the military departments, the DAFAs have their own HR supporting elements to serve the personnel within each agency and activity. Their HR personnel data systems are not linked to the MilDeps, or each other. One civilian leader we talked to served in one of the MilDeps for almost 30 years. On his first day at a job with the 4th estate, was asked to provide his DD Form 214 to prove he had been discharged from military service. Despite a smaller population of civilian workers as compared to the MilDeps, the DAFAs are limited in their HR budget, with approximately 50% of the agencies that returned our survey citing resource issues as their top challenge.

Office of Personnel & Management (OPM)

External to the DoD, but a critical piece of the puzzle, is the Office of Personnel and Management (OPM). As the chief human resources agency and personnel policy manager for the Federal Government, OPM directs human resources and employee management services, administers retirement benefits, manages healthcare and insurance programs, oversees merit-based and inclusive hiring into the civil service, and provides a secure employment process.

Functional Communities

Based on the statutes, OPM developed an occupational structure and classification system for the position roles included in the General Schedule. Associated or related occupations were placed in *Occupational Groups*, which in turn are further subdivided into *Occupational Series*, positions with a specialized line of work and qualification requirements.

As an effort to manage its massive employee force across more than 420 occupational series,²³ the DoD has implemented the concept of grouping related occupational series under functional communities. Department of Defense Instruction (DoDI) 1400.25, Volume 250, dated June 7, 2016 defines a Functional Community as: “A group of one or more occupational series or specialties with common functions, competencies, and career paths to accomplish a specific part of the DoD mission. Functional communities engage in workforce planning to ensure mission accomplishment by preparing for emerging missions and changing work requirements; developing competency models, assessing workforce competencies, and identifying mission-critical workforce gaps; identifying recruitment,

²³ As of March 7, 2022, the Department of Defense had job advertisements for over 420 occupational series. Source: USAJobs, <https://www.usajobs.gov/>

development, and retention strategies to fill workforce gaps; providing career roadmaps with a “line of sight” for employee career development; and advocating individual competency assessments and development plans to help employees progress and meet professional standards.”

Currently, DoD manages 22 functional communities, each containing anywhere from two to over a hundred unique occupational series titles and numbers from the OPM classification standard. A consolidated listing of the 22 function communities is depicted here, with the Cyber functional community expanded to show the groupings of occupational series contained within.

Functional communities are managed by OSD Functional Community Managers (OFCMs) and DoD Component functional community managers (DoD CFCMs) who are responsible for Strategic Human Capital Planning (SHCP) for assigned occupations within the civilian workforce.

OFCMs are also charged with monitoring the integration of competency-based SHCP into the full spectrum of life-cycle management of employees, monitoring current and projected mission requirements, environmental influences, recruitment, attrition and retirement trends, and workload forecasts to identify current and future functional community manpower requirements. Additionally, OFCMs are responsible for facilitating the development and assessment of DoD-wide competencies for employees within their functional communities against those needed for the mission, developing and implementing strategies to mitigate workforce and competency gaps, assessing the effectiveness of strategies to reduce gaps, monitoring and reporting the status of the application of competency-based SHCP within the DoD Components, reviewing and providing input to the strategic workforce planning requirements, and reviewing DoD component SHCP solutions to ensure alignment with budget planning.²⁴

²⁴ DoDi 1400.25 Volume 250, June 7, 2016



Defense Business Board

TAB F

Policies Identified for Change

The following DoD policies or statutory requirements would need revision to fully implement the recommendations cited within this study to improve the Talent Management process within the Department.

The number of additional Component-level instructions and manuals that reference these policies and would also require revision is unknown.

Policy or Statute	Recommendation Number
DoDi 1400.25, Volume 410	1.5.6
DoDi 1400.25, Volume 430	1.6.1
DoDi 1400.25, Volume 920	1.6.1
DoDi 1402.03, Volume 3, para 6.i	1.6.4
10 U.S.C. § 136	2.1
DoDi 5124.02	2.1.1
DoDi 1400.25, Volume 250	3.0



Defense Business Board

TAB G

Subcommittee Member Bios



General Larry Spencer

US Air Force (Retired)

President, Armed Forces Benefit Association/5Star Life Insurance Company

General Larry Spencer was appointed a director of Whirlpool Corporation in August 2016. He is a member of the finance committee and the corporate governance & nominating committee of the board of directors.

General Spencer is the President of the Armed Forces Benefit Association and 5Star Life Insurance Company, a position he has held since March 2020. He served until March 2019 as President of the United States Air Force Association, a position he held since his retirement as a four-star general in 2015 after serving 44 years with the United States Air Force.

Spencer enlisted in 1971, and rose to Vice Chief of Staff, the second highest-ranking military member in the Air Force. He also was the first Air Force officer to serve as the Assistant Chief of Staff in the White House Military Office. He served as the Chief Financial Officer and then Director of Mission Support as a major command, and he held positions within the Air Staff and Secretariat. General Spencer participated in contingency Operations Desert Shield/Storm, Desert Thunder, Desert Fox, Allied Force and Iraqi Freedom.

He received the Defense Distinguished Service Medal, Air Force Distinguished Medal And Defense Superior Service Medal Legion of Merit. He has two named awards: The Air Force General Larry Spencer Innovation Award and the Air Force General Larry Spencer Special Acts and Services Award. Spencer received his Bachelor of Science degree in industrial engineering technology from Southern Illinois University, Carbondale; a Master of Science degree in business management from Webster College; and a Master of Science degree in industrial resource strategy from the National Defense University. He is a Distinguished Senior Fellow of Fels Institute of Government, University of Pennsylvania.

Spencer is also a director of the Triumph Group, Inc., and Haynes International, Inc. He is on the Advisory Board of the Air Force Association's CyberPatriot, the nation's largest youth cyber education program and AFA's flagship science, technology, engineering and mathematics program dedicated to strengthening cyber skills among American youth. The program features the National Youth Cyber Defense Competition for high school and middle school students, AFA CyberCamps, an Elementary School Cyber Education Initiative and Literature Series, as well as a CyberGenerations program designed to teach senior citizens to protect themselves from cyber exploitation.

General Spencer is the author of the book, *The Green Eyeshades of War*, a historical review of financial management during war, published in 2016.

He also authored the book, *Dark Horse - General Larry O. Spencer and His Journey from the Horseshoe to the Pentagon*, published in November 2021, US Naval Institute.

DEFENSE BUSINESS BOARD

Editorial Review - “Larry Spencer’s Dark Horse chronicles the improbable journey of a Black kid from the ‘hood’ who grew up to be one of the most senior four-star generals in the U.S. Air Force. Though he began life with low self-esteem on a playing field tilted against African Americans, Spencer shares experiences and lessons learned that helped him to overcome setbacks and achieve greatness.

“Inspirational, practical, and uplifting—everyone can learn valuable life lessons from this man of many firsts.” ~ Deborah Lee James, 23rd Secretary of the Air Force





Cheryl Eliano

National VP, District 10, American Federation of Government Employees

Cheryl Eliano is District 10 National Vice President of the American Federation of Government Employees, representing more than 40,000 federal workers in Texas, New Mexico, Louisiana, Mississippi, and Panama. Eliano was first elected the position in May 2014 and she was re-elected to another three-year term in 2017.

Eliano's mission for District 10 is to provide exceptional leadership and service at all levels and locations within Texas, New Mexico, Louisiana, Mississippi, and Panama.

Eliano began working for the federal government in 1979 as a commissary cashier in Munich, Germany. After a brief break in service, she returned to federal employment in the mid-80s and retired in 2014 to serve as national vice president.

Prior to being elected as the AFGE District 10 national vice president, Eliano served as president of AFGE Local 1920 for more than 10 years. She made history by becoming the first female elected to serve a full term as president of the local. She also was the first person to serve in three major functions of the local: secretary/treasurer, chief steward, and president.

Eliano scored numerous achievements during her time leading AFGE Local 1920, which represents Army civilians at Fort Hood, Texas. She helped organize and lead employee rallies to oppose the Department of Defense's National Security Personnel System and fought the contracting out of civilian positions on base. She helped create a labor-management forum to address workplace issues proactively, helping to avoid costly and disruptive disciplinary actions, and also created a program to train employees and managers on workplace discrimination, employee assistance programs, and other personnel issues. She also was instrumental in implementing alternative work schedules for Fort Hood employees.

She sits on the executive boards of the Texas Workforce Commission, the Texas AFL-CIO, the Texas Gulf Coast Area Labor Federation, and the Texas Labor-Management Conference. She is a member of the Killeen Chamber of Commerce and currently serves as chair of the AFGE National Executive Council's retiree committee. Eliano is also a licensed Evangelist Missionary at her church in Copperas Cove, Texas.

Eliano is the proud recipient of numerous awards honoring her commitment to the labor movement, including several leadership awards for maintaining labor-management partnerships at Fort Hood and several certificates of achievements for conducting labor-management training at Fort Hood. She also received a humanitarian award from the NAACP.

A native of Brooklyn, New York, Eliano received a nursing degree from the New York City College of New York. She also holds degrees and certifications from the University of Maryland, New Mexico State University, and Central Texas College of Killeen, Texas.

grandchildren.

DEFENSE BUSINESS BOARD

Eliano lives in Harker Heights, Texas, with her husband Perry. They have five children and three grandchildren.



Christopher S. Gopal, Ph.D. **Strategic Solutions Advisor, OCX Cognition**

Dr. Gopal has over 35 years of experience in global supply chain and operations strategy, execution, and technology in a career that has encompassed industry executive management and consulting. His experience has focused on innovating, structuring, improving, and managing supply chain operations, business processes, services, and technology use for leading global companies.

For products companies, this has included developing innovative supply chain, customer life cycle experience and information strategies on a global basis, cost reduction, risk mitigation, stabilizing and improving operational efficiency, and executing for world-class results.

In the services arena, Dr. Gopal has built and run world-class professional services and consulting practices for major companies, consulted in supply chain strategy, management and technology with leading global companies, and has developed technology solutions, innovative new services in accelerated strategy and process design, and executive education programs for both large global and small companies.

Dr. Gopal has held executive positions at several leading companies, including VP, World Wide Operations and Services at Overland Storage, VP in World-Wide Operations at Dell Computer, Partner & Director of Global Supply Chain & Operations services at Ernst & Young Consulting, as well as executive VP positions at Unisys and SAIC. His consulting clients have included prominent global companies across a range of industries, and he has served as an executive and consultant for several major companies and consultancies.

Dr. Gopal is a recognized thought leader in the field of global supply chain & operations. He is the co-author of three books, the latest being "Supercharging Supply Chains: Creating Shareholder Value through Operations Excellence" John Wiley & Sons; (Now published in Japanese), has authored several articles and is an invited speaker at numerous international business conferences for Business Week, Defense Logistics Agency, the Harvard Business Review, the Milken Institute Global Forum and the Council for Supply Chain Management Professionals, among others. He has been nominated to the SC Digest 2020 "Supply Chain Gurus" panel, and was also a member of the 2015-2019 panels. He has served as an advisor and board member to leading-edge technology companies, including a leading corporate social responsibility platform company, and has assisted in several startups. Dr. Gopal served as an advisor to a prominent think tank project in Washington on Industrial Competitiveness, and recently served on a White House sub-committee on Manufacturing Technologies.

Dr. Gopal currently is a strategic advisor to OCX Cognition, a company that consults and develops software to integrate and organize the Integrated Supply Chain and Customer Life Cycle Experience. Chris consults with companies in supply chain & operations, risk mitigation, e-business, technology and solutions development. He teaches at the University of California

DEFENSE BUSINESS BOARD

San Diego and the University of Southern California. Chris serves on the Advisory Board of the Global Supply Chain Management Center at the University of Southern California.

Mr. Gopal holds a Ph.D. in Business from the University of Southern California, an MBA from the Cranfield School of Management, UK, and a B.Sc. in Physics, Science and Mathematics from Bangalore University, India.





The Honorable Deborah Lee James

Chair, Defense Business Board

From December 2013 through January 2017, Deborah served as the 23rd Secretary of the United States Air Force with responsibility for 660,000 military and civilian personnel and a budget of nearly \$140 billion. She was the second woman to ever lead a military service in the United States. Prior to this role, she served as President of SAIC's Technical and Engineering sector, a \$2 billion, 8,700-person enterprise. Earlier in her career, Deborah held other P&L positions, and worked in the legislative branch of government and the Department of Defense.

Deborah has deep expertise in strategic planning, risk management, public policy, cyber security, space, logistics and innovation. Deborah is an accomplished speaker on business and government topics including issues in national security and world affairs, politics in Washington, business transformation leadership, mergers and acquisitions, cost reduction strategies, and diversity and inclusion. Deborah is the author of the new book [Aim High: Chart Your Course and Find Success](#), and she periodically appears on MSNBC, CBS, and other national news programs.

Previous Experience

- 23rd Secretary of the United States Air Force
- SAIC, President, Technical and Engineering Sector
- SAIC, Executive Vice President, Communications and Government Affairs
- SAIC, General Manager, Command and Control Business Unit
- Business Executives for National Security (BENS), Executive Vice President and Chief Operating Officer
- Assistant Secretary of Defense, Reserve Affairs, DOD
- Vice President, United Technologies, International Operations and Marketing
- Armed Services Committee, US House of Representatives

Education

- Columbia University, School of International & Public Affairs - MIA, International Affairs
- Duke University - AB, Comparative Area Studies

Today's Affiliations

- Member, Board of Directors: Textron, Unisys, Noblis, Systems & Technology Research, Firefly Aerospace, Atlantic Council, Locator X, Penfed Foundation, Improbable LLC
- Advisor: Beacon Global Strategies LLC, LeanIn.org, Massachusetts Institute of Technology, Lincoln Laboratory, Ursa Major Tech, SOSi
- Executive Mentor, Merryck & Company
- Senior Advisor, Center for Strategic and International Studies
- Special Advisor, Bain & Company
- Special Advisor, Avascent

DEFENSE BUSINESS BOARD

Deborah Lee James is the 23rd Secretary of the Air Force, former President at Government contractor SAIC, and an accomplished author, speaker, and advisor. Drawing upon 3 decades of leadership experience in both the public and private sectors, Deborah helps organizations navigate through complex strategic and tactical challenges to achieve their goals, enhance performance and transform their businesses.

Deborah provides advice on team building, organizational change management, relations with the Federal Government, cyber security, space, and transformational technology. She is an accomplished keynote speaker and enjoys working one-on-one as an Executive Mentor with C-suite level professionals. Finally, Deborah serves on various for profit and non-profit Boards of Director.

Deborah became a member and Chair of the Defense Business Board upon her appointment in September 2021.



Jennifer McClure

Founder & CEO, Unbridled Talent, LLC

Jennifer McClure is the Founder and Chief Executive Officer of Unbridled Talent, LLC providing education, coaching and strategy consulting services for businesses and business leaders looking for guidance in the areas of leadership, executive communication skills and talent strategy.

Ms. McClure is also the Chief Executive Officer of DisruptHR LLC an information exchange designed to energize, inform and empower HR leaders, business professionals, and community leaders who are interested in disruptive ideas, and moving our collective thinking forward when it comes to talent in the workplace.

She previously served in Centennial, Inc. as the Business Development & Talent Strategist (March 2010 - January 2014) and Vice President - Executive Recruiter & Executive Coach (February 2006 - March 2010).

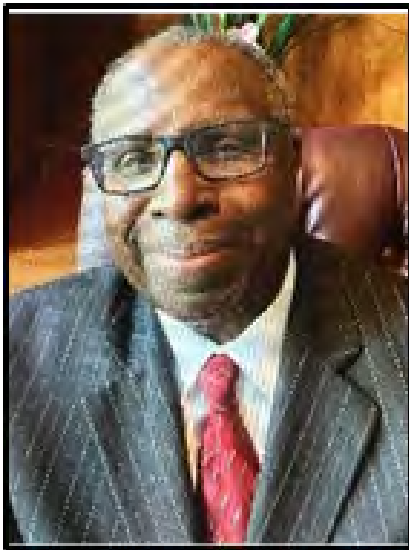
She was the Vice President - Human Resources of the United States Playing Card Company, Human Resources Manager with ADVICS Manufacturing Ohio (formerly SEI Brakes, Inc.), and Human resources Manager at Kroger (Tara Foods - Manufacturing Division).

Jennifer McClure is a sought after Speaker and Coach who combines her experiences as a Business Leader, Human Resources Executive, Executive Recruiter and Executive Coach with an educational, entertaining and informative style in order to Educate, Empower and Encourage audience members and clients to unleash their individual potential and enhance their skills as Leaders of People.

Consistently rated as a top Speaker at major events and conferences, Ms. McClure's engaging and relatable style is a mix of inspiration, "how-to", sharing of best practices and strategic discussion based upon her over 25 years of experience leading human resources and talent acquisition efforts, studying of industry Best Practices and partnering with senior executives to improve their skills and increase their impact.

She has spoken at over 200 industry-related conferences and events, where she has delivered keynote presentations and provided workshops or training in the areas of leadership, executive development, presentation and communications skills and talent acquisition strategies.

Ms. McClure has a BBA in Management from Middle Tennessee State University (1986).



General Johnnie Wilson

US Army (Retired)

Former President & Chief Operating Officer, Dimensions International, Inc.

Johnnie Wilson is a retired Four-Star United States Army General. His generous service to the Ordnance Corps led to him being inducted into the Ordnance Corps Hall of Fame. Wilson was born on February 4, 1944 in Baton Rouge, Louisiana. His father worked in a steel mill and his mother worked part-time at a movie theater. Wilson is the second oldest of 12 kids. He is married to Helen McGhee and the couple have three children: Johnnie, Jr., Charlene, and Scott.

Wilson entered the Army in 1961 as an enlisted soldier and rose to the rank of Staff Sergeant. He served 2 years in the 7th Special Forces Group prior to attending Officer Candidate School (OCS). Upon his completion of OCS in 1967, he became a Second Lieutenant in the Ordnance Corps. The following year he was promoted to First Lieutenant and the year after that, Captain.

From 1969 to 1970, Wilson spent a year in South Vietnam where he served as Commander of Company C, 173rd Support Battalion (Airborne). In 1971, he studied at the United States Army Ordnance School at Aberdeen Proving Ground in Maryland. He then obtained his Bachelor of Science in Business Administration from the University of Nebraska at Omaha in 1973. While in Omaha, Wilson became very involved with his community by becoming the president of university's Pen and Sword Society representing veterans on the campus. Further, he served as a student representative on the campus legislature. Wilson also earned his Master of Science in Logistics Management from the Florida Institute of Technology in 1977.

In 1988 when Wilson was still a Colonel, he was assigned to serve as the interim Deputy Commanding General, 21st TAACOM, the most diverse logistics unit in the Army. The acronym stands for Theater Army Area Command and this unit was responsible for preparing for war with the Soviet Union and supporting major operations in neighboring theaters. In 1989, Wilson was promoted to Brigadier General and in 1994 he became a Lieutenant General. From 1994 to 1996, Wilson was the Deputy Chief of Staff for Logistics for the U.S. Army in Washington D.C. In 1996, he was promoted to Four-Star General. Because of his success, Wilson was quickly promoted to Commanding General of the United States Army Materiel Command. With this position, Wilson was in charge of 68,000 people (most of whom were civilians) in 350 different locations around the world. During his service he served five overseas tours: Germany (3), France, and Vietnam.

General Wilson retired from the military in 1999 after 39 years of service. The awards and decorations Wilson received in the military include the Distinguished Service Medal (with oak leaf cluster), the Legion of Merit (with oak leaf cluster), the Bronze Star (with two oak leaf clusters), the Meritorious Service Medal (with two oak leaf clusters), the Army Commendation Medal, Master Parachutist Badge, Special Forces Tab, Army Staff badge, and the Army Good Conduct Medal.

DEFENSE BUSINESS BOARD

Following his retirement from 1999 to 2007, Wilson became the President and Chief Operating Officer of Dimensions International, Inc., a firm that provides aviation-related products to analyze and process information coming from radar systems, air traffic control computers, and communication systems.

Dimensions provided logistics around the world. As a result of Dimensions success it was acquired by Honeywell Corp. Wilson remained with Honeywell thru the fall of 2009.

Since retirement, he has served with the following entities Morgan State Board of Regents, Washington First Bank Board of Directors, ROCKS Intl, Career Communications Group, Alpha Phi Alpha, and Sigma Pi Phi. He was also nominated by U.S. Secretary of State Colin Powell to serve on the board of the Truman Library Institute. Wilson also received the Meritorious Service Award from the NAACP and the Lifetime Achievement Award from U.S. Black Engineer magazine. General Johnnie Wilson Middle School in Lorain, Ohio was named after General Wilson.





Defense Business Board

TAB H

Acronyms

AI Artificial Intelligence

CFR Code of Federal Regulations

CIO Chief Information Officer

CDAO Chief Digital and Artificial Intelligence Officer

CFCM Component Functional Community Managers

CHCO Chief Human Capital Officer

DASD Deputy Assistant Secretary of Defense

DCPAS Defense Civilian Personnel Advisory Service

DepSecDef Deputy Secretary of Defense

DAFA Defense Agencies and Field Activities

DoD Department of Defense

DoDI Department of Defense Instruction

DWC Deputy's Workforce Council

FACA Federal Advisory Committee Act

FCM Functional Community Manager

GS General Schedule (Salaried civilian pay system)

HR Human Resources

NDAA National Defense Authorization Act

NDS National Defense Strategy

OFCM OSD Functional Community Managers

OSD Office of the Secretary of Defense

OPM Office of Personnel Management

PAS Presidentially Appointed, Senate-Confirmed

Pub. L. Public Law

RPA Robotic Process Automation
SecDef Secretary of Defense
SHCP Strategic Human Capital Plan
ToR Terms of Reference
U.S. United States
U.S.C. United States Code
WG Wage Grade (Hourly civilian pay system)



Defense Business Board

TAB I

Public Comments

PUBLIC COMMENTS

At the May 12, 2022 public meeting, Ms. Angela Rey, a private citizen, stated:

“The Government Accountability Office (GAO) recently released a report with similar recommendations for the entire Executive Branch of Government. Recommend the subcommittee review their findings.”



Defense Business Board

TAB J

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