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WINTER 2024

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Army AL&T magazine (ISSN 0892-8657) is published quarterly by the ASA(ALT). Articles reflect the views of the authors and not necessarily official opinion of the Department of the Army. Articles of the Army may be reprinted if credit is given to Army AL&T magazine and the author.

Private subscriptions and rates are available from:  
Superintendent of Documents,  
U.S. Government Printing Office,  
Washington, DC 20402  
202-512-1800

Periodicals official postage paid at  
Fort Belvoir, VA, and additional post offices.

POSTMASTER:  
Send address changes to:  
DEPARTMENT OF THE ARMY  
ARMY AL&T  
9900 BELVOIR ROAD  
FORT BELVOIR, VA 22060-5567

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# ARMY AL&T

WINTER 2024

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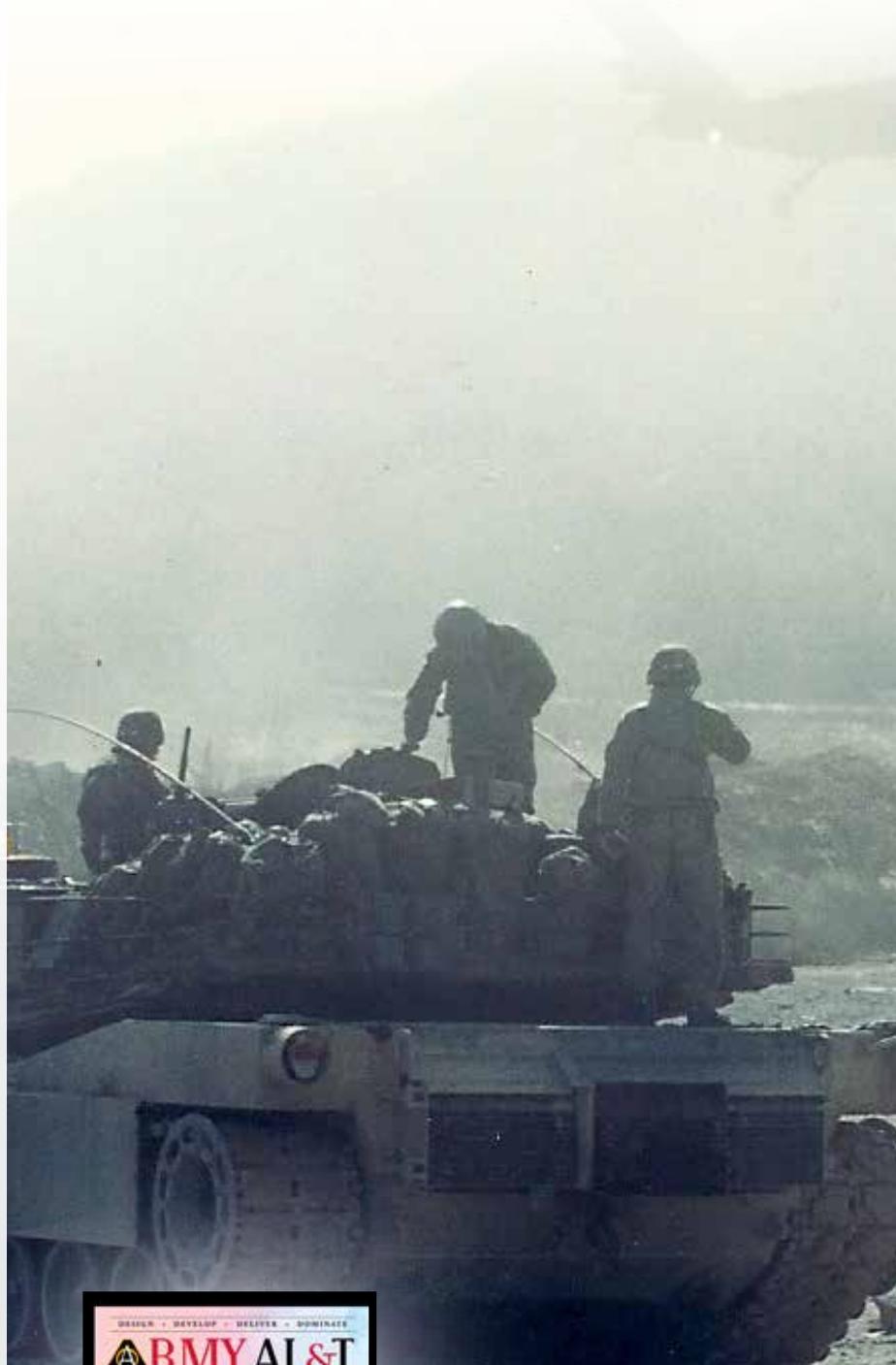
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## From the Editor-in-Chief

**R**ipped from recent defense headlines as I write this column, are some amazing stories. “U.S. Army tags electronic warfare, deep sensing as top priorities.” “Army issues new RFIs for Project Linchpin artificial intelligence initiative.” “General stresses importance of laser weapons alongside missile deployments.” “Army gets first high-power microwave prototype to counter drone swarms.” “New Army unit generates artillery targets from electromagnetic spectrum, track satellites.”

This is complicated stuff—bordering on science fiction only a few short years ago. So, what do all these stories, and many more since then, have in common? It takes an incredibly talented team of Army Acquisition Workforce (AAW) members, in conjunction with their industry partners, to create these modern-day systems and platforms. That talented team I mentioned is no accident, but the result of direction by Army Acquisition Executive Douglas R. Bush and the talent management of the more than 32,000-strong AAW members by the U.S. Army Acquisition Support Center, or USAASC. A small but robust operation, USAASC is a direct reporting unit created by the assistant secretary of the Army for acquisition, logistics and technology in 2006. The director of USAASC also serves as the director of acquisition career management (DACM). The DACM Office’s primary mission is to “develop a professional acquisition workforce ... responsible for the oversight of the education, training and career development of acquisition professionals.”

As I mentioned at the beginning, the AAW is a talented bunch, and to keep it that way depends on the USAASC accessing the right talent (engineers, program and project managers, contracting experts, etc.), forecasting future needs, identifying needed training and certifications, and creating the policies and regulations necessary to administer the programs. In addition to required Defense Acquisition Workforce Improvement Act certification training, USAASC offers a plethora of other training opportunities to help AAW members advance in their chosen fields, gain knowledge on emerging technologies and realize their leadership potential. Talent management programs such as Senior Enterprise Talent Management and Enterprise Talent Management increase enterprise perspective, while the Naval Postgraduate School’s Systems and Program Management nonresident program provides an opportunity to obtain a master’s degree. Other programs, such as the Leadership Excellence and Acquisition Development, Inspiring and Developing Excellence in Acquisition Leaders and the Defense

Acquisition University Senior Service College Fellowship build the skills required for positions of greater responsibility. Unique opportunities to garner industry best practices exist in the DOD Public Private Talent Experience program, currently being used to expose acquisition civilians to companies that specialize in digital engineering. Through the Data Driven Leadership certificate course, senior acquisition leaders are trained on the latest in enterprise data management and data science to improve decision-making.

The AAW is not just civilians! USAASC also runs the Army Acquisition Center of Excellence schoolhouse in Huntsville, Alabama, focused on courses for the Army acquisition officers—Functional Area (FA) 51 either A (Program Management) or C (Contracting), and noncommissioned officers, FA 51 C (Contracting). While they make up just 5% of the AAW, commissioned and noncommissioned officers are a critical asset for active Army, Guard and Reserve.

This issue, Army AL&T examines some of the vital functions the AAW performs, and the skills and professionalism needed to take a requirement from an idea to reality. First up, learn how the Army is reaching out to colleges to find needed talent to build its future workforce in “Building the Bench of Acquisition Talent,” Page 24. Next, building the needed workforce is not guesswork, but science. On Page 32, read up on how the Army is partnering with George Mason University to use machine learning to forecast future workforce trends and requirements in “Workforce Forecast.” Finally, once you develop a workforce, you want to keep them. To attract and retain a diverse and talented civilian workforce the Army is investing time and resources into creating a culture of flexibility, support and well-being for its civilian employees. Read how in “A Flexible Future,” Page 86.

These and many other interesting stories about Army acquisition awaits you in this issue. I hope you enjoy. As always, if you have an idea for a story, comments, critiques, or a story you hope to publish in the magazine, we look forward to hearing from you at [armyalt@army.mil](mailto:armyalt@army.mil).



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*Editor-in-Chief*



### DIGITAL FITNESS

The Army is researching how artificial intelligence and machine learning can be used to automate and simplify time-consuming and routine tasks, and those skills will require more education and training for the workforce. (Photo by Spc. Andrew Mendoza, 343rd Mobile Public Affairs Detachment)



# NEEDED: NEW DIGITAL SKILLS

**W**hile some observers have opined that the development and employment of artificial intelligence (AI) and machine learning (ML) will make people less important to the Army, the opposite is true. Developing and employing this technology to get the maximum potential from its use requires higher skill levels and abilities from the Army's military and civilian workforce. This vindicates the Army's Soldier- and people-centered philosophy and makes it more important than ever to invest in upgrading the skills and knowledge of the Army's workforce.

Some may question why the Army is engaged in the development of AI and ML technology. The answer is not that it can replace the Soldier. The answer is that it helps the Soldier be all he, or she, can be. It can speed up operations and reduce some of the cognitive load on military and civilian personnel. This frees them up to concentrate on doing their jobs to the best of their abilities. Experimentation is underway to discover how AI and ML can be employed to automate and simplify many time-consuming routine tasks. This provides important battlefield advantages to the U.S. Army.

## **ENHANCES MOBILITY FOR GREATER SURVIVABILITY**

As we are seeing in Ukraine, the growing use of drones, satellites and other sensor systems has made the modern battlefield increasingly transparent. This allows adversaries to find—and launch strikes at—company command posts, logistics centers and artillery emplacements. To avoid detection and attack, these assets need to move frequently and operate in a dispersed fashion to make them harder to detect, and harder to attack. The downside to this is that taking down, moving and re-setting up these positions is time and labor intensive and can reduce their ability to function while on the move.

In addition to the expected challenges of physically loading, shipping and unloading equipment, these unit moves require Soldiers to constantly tear down and then set up their communications and data networks. This involves a myriad of tasks, such as reestablishing secure radio and wire communications, checking and calibrating equipment

and managing the radio spectrum, including using different waveforms as well as selected radio frequencies. AI and ML can automate many of these tasks, which speeds up the moves, reduces the chance for errors and reduces the number of personnel needed to do the job.

Decreasing the number of personnel required to conduct these operations yields two different benefits. First, using fewer people reduces the logistical train of food, energy, housing and transportation needed by the unit conducting these moves. Second, this reduces the physical size of the unit and minimizes its heat and electronic footprint, which makes it harder for the enemy to locate and attack it.

But the real benefit of AI and ML technology is that it helps Soldiers tear down, move and set up much faster and lets them concentrate on higher level decisions, such

as where different elements should be placed and what the unit will be doing to help with the fight.

### PROVIDING DECISION DOMINANCE

AI and ML can collect the vast amount of information now available on the battlefield, process it and quickly make it usable by leadership. For example, a forward observer on a battlefield may spot, using a thermal sensor, an unfamiliar vehicle. The battlefield operational awareness provided by smart technology alerts the Soldier if the unknown vehicle is likely to be friendly or a threat. The digital image of the vehicle, transmitted by the network, is also processed using AI to quickly identify the type of vehicle, assess what kind of threat it may pose and, if there are markings on the machine, it can even determine which unit it belongs to, which is a valuable piece of information.

At the same time, AI can determine what friendly artillery assets may be available to engage the vehicle, and then if leadership approves, rapidly process a call for fire and provide the target coordinates.

These are all ways AI and ML can lighten what is known as the “cognitive load” on Soldiers, so they can concentrate on the most important task of all: Winning the fight.

But there are tradeoffs involved in the use of AI and ML. While it allows the use of fewer personnel, it does require personnel who have the digital knowledge and skills to get the most out of it. In other words, using AI and ML technology means the Army must invest in upgrading its workforce’s digital skills.

This is especially true for the acquisition workforce.



### CRITICAL STEM

Kekeli Woyome practices dissecting mosquitoes in an entomology lab for her High School Apprenticeship program with AEOP, a program that reaches over 28,000 students. (Photo by Amy Blencowe, Walter Reed Army Institute of Research)



To play their vital role in the modernization of the Army, acquisition professionals are already working to become more familiar with digital technology—what it is, what it does, what its potential can be and what its limitations are. While Army Acquisition Workforce (AAW) professionals do not need to be actual computer scientists or know how to code, they do have to understand digital technology, software, and how the continuous pace of software development and acquisition differs from the more traditional acquisition process for hardware.

The expertise required for AI and ML acquisition requires even more expertise. In addition to the computer science and digital engineering expertise required for standard smart technology, AI and ML systems must be developed and operated, particularly in early stages, by specialists who can “teach” the systems how to autonomously categorize, handle and process different types of knowledge. Across the AAW, we must have data scientists, data labeling experts and other experts who can help determine what types of data are important to do the tasks that new AI-ML systems will tackle.

For example, if the AI system is working with setting up radio networks, the Army needs to have a skilled professional who is an expert on radio waveforms, frequencies and other technical issues. This person will have the expertise to share with the programmers who will “teach” the AI what data will be needed to decide, depending upon local conditions, which waveform and frequency should be used, and what factors should be considered that might affect that decision. Which waveform or frequency is harder to detect, or jam? Which type of signal and what types of antennas can be used to transmit further without distortion and

## DIGITAL LITERACY

The Army Artificial Intelligence Integration Center is coordinating with Carnegie Mellon University and industry to provide advanced learning opportunities, cloud certification and leadership courses for the Army workforce. In addition, members of the workforce can upgrade their knowledge and skills through online courses available through Udeemy. (Photo by Miguel Á. Padriñán, Pexels)

can function in the particular terrain where the unit is currently operating? Which types of signals can be handled by the equipment at hand?

Weighing all these factors is complicated enough. Teaching the AI-ML system how to make the best decision, and then learn from how the system performs so it can improve its decision-making is an even more difficult proposition. But solving this problem is key to the successful development and implementation of AI-ML technology.

## INVESTING IN DIGITAL LITERACY

Army acquisition leaders have always supported the development of the skills and knowledge of the entire 33,000 civilian and military-member acquisition workforce. The AAW is a diverse group of professionals and is comprised of six functional areas: program management (11.0%); contracting (28.1%); engineering and technical management (37.5%); life cycle logistics (13.5%); test and evaluation (6.5%); and business-financial management and business-cost estimating (3.4%). Of those 33,000 workforce members, 55.1% hold a bachelor’s degree in a science, technology, engineering and math (STEM) field; 41.5% hold a master’s degree or higher in a STEM field. Within the engineering and technical management functional area specifically, 43.4% hold a master’s degree or higher in STEM.

The investments are addressing the need for digital skills in two ways: It helps existing members of the workforce to improve their skills and add to their knowledge, and it is recruiting people with more of these skills.

One important effort is the Army Artificial Intelligence Integration Center (AI2C), located at Carnegie Mellon University, a nationally recognized center for AI, ML and autonomous technologies. The Pittsburgh-based center leads and integrates Army AI strategy and implementation and coordinates with Carnegie Mellon and industry to provide advanced learning opportunities, cloud certification and leadership courses for the Army workforce.

## Using AI and ML technology means the Army must invest in upgrading its workforce's digital skills.

Another avenue for members of the workforce to upgrade their digital knowledge and skills is to take advantage of online courses made available through Udemy. The Army is encouraging the workforce to take these courses and will cover the cost for both military and civilian members. Online courses are provided through Udemy (a combination of the words “you” and “academy”). The Army Civilian Career Management Activity, or ACCMA, provides free licenses for Udemy, which the Director of Acquisition Career Management Office has utilized allowing both civilian and military personnel to take these courses to upgrade their skills and knowledge.

Since the implementation of Udemy training in March 2023, 14,628 AAW members have registered and taken free courses from Udemy on digital transformation, data science, agile software development, AI/ML, DevSecOps, design thinking, human centered design and cloud computing.

Personnel who want to find out more about Udemy classes, and how they can participate in this continuing education, can visit the Digital Transformation page on the U.S. Army Acquisition Support Center website at <https://asc.army.mil/web/digital-transformation>.

The Army laboratories also have a variety of programs to bring in students to work at the laboratories as they pursue their degrees, and other programs to expose the next generation of Army personnel (students in K-12) who may want to pursue careers in science and technology. These programs include the Army Educational Outreach Program (AEOP) and the Science Mathematics and Research for Transformation (SMART) Scholarship for Service Program.

Annually, AEOP reaches over 28,000 students and educators through STEM enrichment activities, STEM competitions, and apprenticeships and fellowships. AEOP's eCYBERMISSION competition is one of the best-known competitions. This free virtual STEM competition is designed for 6th- through 9th-grade students and promotes teamwork, self-discovery and

the real-life applications of STEM. These students form teams of two to four youngsters, who are led by an adult team adviser. They then select a problem in their community to investigate with science or solve with engineering.

AEOP's Undergraduate Apprenticeship Program exposes college students to cutting-edge research that's happening in top university labs and U.S. Army research laboratories and centers. These students work under the mentorship of a professional scientist or engineer. The SMART program aims to bring more highly skilled STEM professionals into the DOD civilian workforce. This competitive scholarship sponsors students in one of 24 national security-critical STEM fields. Selected students are matched with a relevant Army facility and awarded a full-tuition scholarship. Each summer, they intern at that Army facility. Upon graduation, they work at this Army facility for a period commensurate to their scholarship: One year of scholarship is one year of paid service. In 2023, the Army awarded 128 SMART scholarships.

Many of the program executive offices (PEOs) have launched efforts to strengthen our workforce. They hire interns who work with and learn from the PEOs. These programs are not limited to building technical skills. Some also add new experiences and points of view that add to workforce effectiveness. For example, in fiscal year 2023, the Program Executive Office for Intelligence, Electronic Warfare and Sensors kicked off a pilot program to partner with local Historically Black Colleges and Universities in the Washington, D.C., Maryland, Virginia and Delaware region.

### CONCLUSION

The development and implementation of AI and ML technology is leading the Army to pursue two different but related acquisition efforts at the same time. First, we are determined to acquire the AI and ML technology itself. But to do that, our workforce must concurrently develop and acquire the necessary digital skills and knowledge it needs to understand and work with AI and ML technology.

The Army acquisition community is making good progress in both these development and acquisition efforts, which will pay off by ensuring the Army of 2030 and the Army of 2040 will be equipped with the advanced digital technology it will need to fight and win on the battlefield of the future. 

# LEADER DEVELOPMENT OPPORTUNITIES

Make a difference by being the change you want to see!



The Acquisition Leadership Challenge Program (ALCP) harnesses self-awareness as the tool for enhancing leadership, innovation and diversity development by demonstrating how individual preferences and behaviors affect the ways we interact with co-workers and are viewed by others. Program offerings help participants understand how accepting individual differences can produce a stronger group and a leadership corps that's capable, collaborative and creative. ALCP B is for beginners (GS-7 through GS-11), ALCP I is for GS-12/13, and ALCP II and ALCP III is for GS-14/15. For more information, visit <https://asc.army.mil/web/career-development/programs/acquisition-leadership-challenge-program/>.



The Defense Civilian Emerging Leaders Program (DCELP) is a DOD program that offers a unique opportunity for participants to network with students from across DOD. DCELP focuses on developing emerging leaders in the acquisition, financial management, and human resources communities. Open to permanent Army Acquisition civilians, GS-7 through GS-12, participants are immersed in a variety of activities that promote self-awareness, enhance oral and written communication skills, share proven team building strategies, and strengthen overall leadership capabilities. For more information, visit <https://asc.army.mil/web/career-development/programs/dcelp/>.

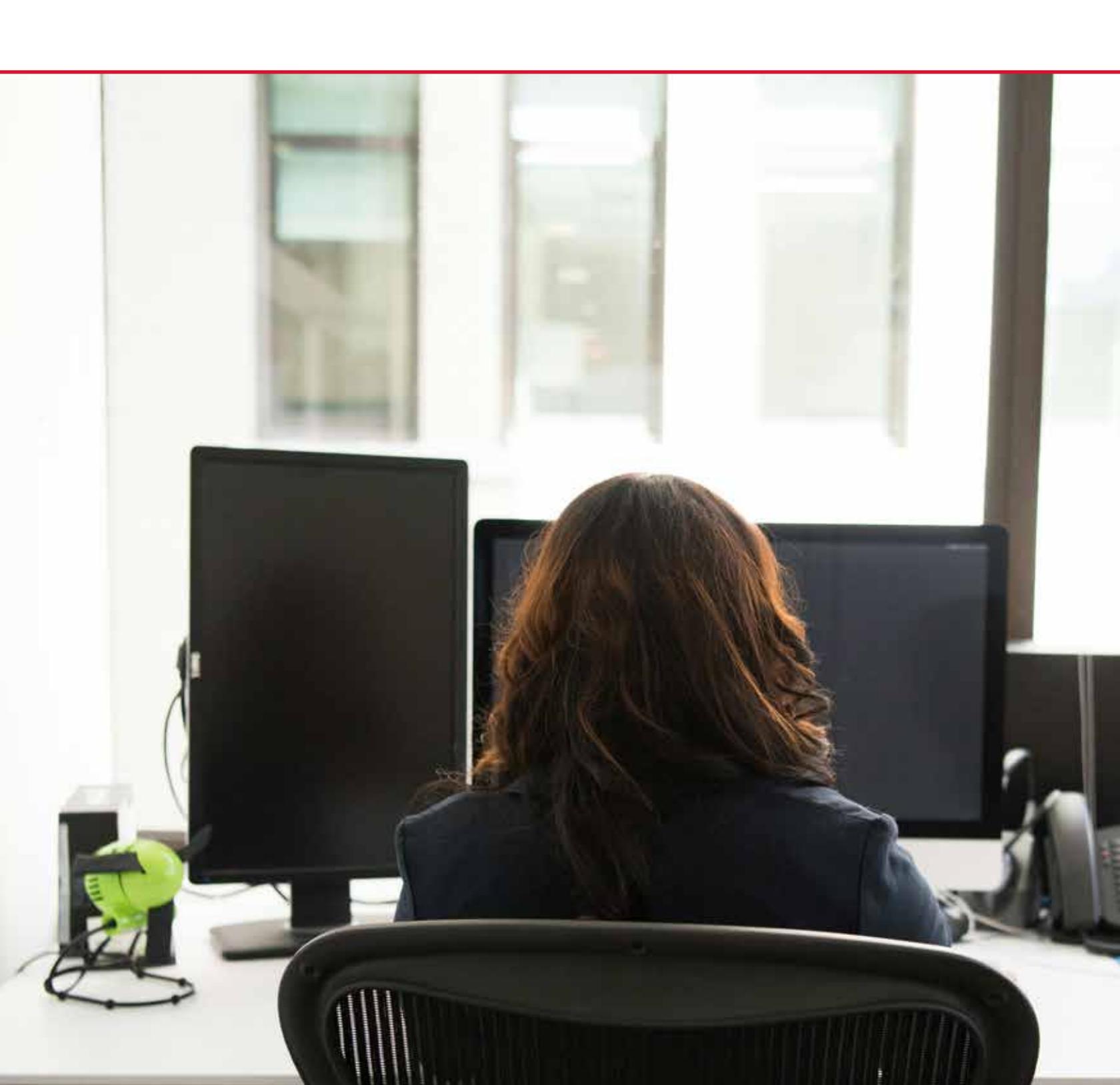


Inspiring and Developing Excellence in Acquisition Leaders (iDEAL) is a leader development program for new and emerging Army Acquisition Workforce supervisors. Three one-week sessions over a period of approximately five months. Applicants must be GS-12/13, or broadband equivalent and DAWIA certified in current position or within certification grace period. Completion of Acquisition Leadership Challenge Program – I (ALCP-I) is strongly recommended prior to attending iDEAL. For more information, visit <https://asc.army.mil/web/career-development/programs/inspiring-and-developing-excellence-in-acquisition-leaders-ideal/>.



Leadership Excellence and Acquisition Development (LEAD), the re-designed competitive Development Group/Army Acquisition Fellowship (CDG/AAF) program, is the premier 24 month leadership development program offering expanded training through a series of education, leader development and broadening assignments to build skills required for positions of greater responsibility. The program focus is to develop high performing and high leadership potential personnel toward attaining a future acquisition position in Program Management. Participants are provided centrally funded leadership training and developmental assignments within the acquisition community. Applicants must be a GS-13, or high performing GS-12, or broadband equivalent. For more information, visit <https://asc.army.mil/web/career-development/programs/lead/>.





### **BUSINESS AS (UN)USUAL**

The White House Office of Management and Budget re-entry plan includes a substantial return to in-person work. The plan seeks to “strengthen and empower the federal workforce, deliver exceptional federal services and customer experiences, and manage government business.”  
(Photo by Christina Morillo, Pexels)

# A NEW NORMAL

Updated return-to-work guidance is issued but, for Army agencies, embracing new norms is not one-size-fits-all.

*by Cheryl Marino*

*Editor's Note: This article is based on the latest guidance, released in April 2023, from the U.S. Office of Personnel Management and the White House Office of Management and Budget.*

**F**or years, private industry has been luring top talent with starting bonuses, flexible work hours and, more recently, remote work. The federal government—while promoting job security and hands-on training—has shown hesitancy to accommodate remote, telework or flex-time options unless absolutely necessary and under specific conditions.

Then the COVID-19 pandemic hit, and most federal employees were sent home to work. Times are changing, and so is workplace policy.

The U.S. Office of Personnel Management (OPM) got the ball rolling in 2021 with its updated “Guide to Telework and Remote Work in the Federal Government,” encouraging federal agencies to strategically leverage workplace flexibilities like remote work, telework and flexible work schedules as tools to help attract, recruit and retain the best possible workforce. A memorandum followed in March 2023, outlining a “vision for the future of the workforce that is inclusive, agile and engaged with the right skills to enable mission delivery,” and new remote and telework data elements (codes and data files) for agencies to gather enhanced data on employees to further provide them with insight.

With the global pandemic now in the rearview mirror, and new guidelines for remote work and telework in place, the White House Office of Management and Budget (OMB), in April 2023, issued a “consistent plan” for a return to the office.

“Because the federal government is a vast organization, there is no one-size-fits-all approach,” OMB Deputy Director Jason Miller said in an April blog post. “However, as a whole it is important to establish overarching goals and benchmarks for consistency.” According to Miller, private sector employers across the country are undertaking the same type of assessments using lessons learned from the pandemic to improve their companies’ health and performance.

After three years of primarily communicating via electronic means, the workforce has grown used to what they’ve adapted as a new normal. Now, the federal government and its agencies are looking to settle into their version of a workplace new normal. But what will that look like?

OMB outlined in an April 13, 2023, memorandum that it would look like a substantial return to in-person work with new considerations for remote and telework. The plan seeks to “strengthen and empower the federal workforce, deliver exceptional federal services and customer experiences, and manage government business.”

In the memorandum, agencies are directed to develop updated “work environment plans” that describe current operational policies critical to improving organizational health and performance, while also conducting regular assessments to determine what is working well, what is not and what can be improved.

While that generally means a return to the traditional office for most, OMB also maintains that workplace flexibilities like remote work and telework will remain important tools for ensuring agencies can retain and compete for top talent in the marketplace, according to the new guidance.

### PRE-PANDEMIC RULES, POST-PANDEMIC WORLD

Though telework has existed in the federal government since the 1992 Interagency Telecommuting Pilot Project, and more officially since the Telework Enhancement Act of 2010 became law, it has not been widely incorporated as standard work procedure or used as an enticing accommodation during the hiring process. But, rather, it was used with a telework agreement as an alternative option for extenuating circumstances like severe weather events, travel, medical conditions or when an employee is still able to perform their duties but unable to report to their regular workstation.

As a consequence of COVID-19, the Army, like many private industry employers, had no choice but to turn to telework, forcing wider adoption and driving home the importance of a more robust telework program. But now in a post-pandemic world, most Army organizations, following the OPM guidelines, are looking at a return to the traditional workplace in some capacity—full time or hybrid—for civilians and Soldiers, regardless of their role.

“I think it’s case by case, and that is something that I’ve embraced, fought for and championed in meetings,” said Frank Gonzalez, director of the U.S. Army Acquisition Support Center’s (USAASC) Inclusion, Diversity, Equity and Accessibility Office. “And I think most of the leadership has kind of embraced that as the best balance: Look at our mission needs and then make decisions.”

Gonzalez believes whether it’s telework, remote or in-person work, a happy workforce comes up with better solution sets, and will actually work harder. “If this was in private sector, that essentially becomes more profitable for you,” he said. “We’re

public sector, so we don’t look for profit as a federal government, but guess what? That happy workforce is looking to make things more efficient. They look for ideas to improve the workplace. That gives us value, and the more value we create, the more efficient we become.”

He said OPM’s latest guidance just reemphasizes the policies that existed pre-COVID, which defined telework as being present in the office twice per pay period, (once a week) and remote as not in the office. “That is what existed back when I joined the federal government as a civilian back in 2008, and that policy hasn’t really changed, because it boils down to the local agencies’ guidance,” Gonzalez said.

For example, he said, “the Army could make the formal declaration of no more than one day [in the office] per week with telework, which is within the scope of OPM’s guidelines.” But the Army hasn’t done that. Instead, it is leaving it to the discretion of each organization, and division or unit within each organization, to determine what will work best for each. “There’s no Army guidance or direction beyond the OPM standard. It is up to the supervisor and it’s based on your mission needs,” Gonzalez said.

Gonzalez, who works a hybrid schedule—in the office once a week—said he is definitely more productive working from home. “My customers are spread out. So working from my home office versus my [Fort Belvoir, Virginia] office, you know, quite honestly, it’s better.” Since he would have to use Microsoft Teams to communicate with those customers anyway, he said, there’s really no difference whether he’s working from home or the office. Except for maybe one thing. “My home office has a better internet connection, so I don’t have to deal with intermittent



**LIFE-CHANGING OPPORTUNITY**

Installations try to provide resources to help spouses find employment locally, but these positions typically do not develop into long-term careers. Telework has proved to be a valuable tool and a “life-changing opportunity” for employees who are military spouses or those with disabilities. (Photo by Scott Wakefield, U.S. Army Tank-automotive and Armaments Command)

connectivity issues, especially if we’re using video,” he said. “On my team, there is one other member on a hybrid telework schedule in the Fort Belvoir area, and one working remotely in Florida. And, when I hire for my next position, I am open to either option for a good candidate.”

The hybrid arrangement works for him, he said, but it may not work for everyone. Especially those who live in very rural areas, or who don’t have a strong internet connection.

“Most divisions or branches have found that one day a week having the whole team coming in allows them to have meetings in person and be more effective, and not worry about connectivity issues,” he said. Employees working remotely “could save you

some money on salary, but it doesn’t necessarily save you on travel costs. When you see them in person, you have to pay for that.”

Some leaders have the mentality that “they can see the person, therefore they must be working.” According to Gonzalez, this is not always the case. “I’ve been in offices where people are in the office, but they sure are not working.” He said there can be reduced productivity when workers are taking many breaks throughout the day, scrolling social media or stopping by someone else’s cubicle just to chat. Or, he said, the flip side of that is an increase in productivity if their organization requires routine in-person communication and meetings throughout the workweek.

So, he said, remote and telework versus in-person work depends on the person, their job and who they’re supporting. But “at the end of the day, the one day [in the office] per week is probably going to be common going forward based on mission needs as it provides that nice balance for those who prefer to see people in person versus those who don’t care if they’re at home or at the office or those who would rather be at home all the time. It’s a middle ground, I think.”

**A LOOK AT THE DATA (ELEMENTS)**

OPM Director Kiran Ahuja said in a March 7 memorandum, “We have heard from the agencies, through ongoing re-entry [post-COVID-19 pandemic] support activities, that having more refined data related to telework and remote work will assist in evaluating how employee work arrangements are impacting key workforce considerations—such as productivity, recruitment and retention—that are critical to successful organizational performance.”

The refined data would be obtained using three new data elements (codes and datafiles) that agencies and shared service providers would be required to code for each employee for Enterprise Human Resources Integration (EHRI), which, according to the memorandum, will provide a deeper level of detail for understanding workforce characteristics. EHRI is one of five OPM-led e-government initiatives designed to leverage the benefits of information technology responsible for maintaining the integrity of the electronic official personnel folder, which protects the information rights, benefits and entitlements of federal workers.

Once applied, the new data elements would “improve government-wide reporting of federal employee participation in remote work, telework and mobile work, and will enable OPM to evaluate trends and determine how such work arrangements

## REMOTE VS. TELEWORK, WHAT'S THE DIFFERENCE?

Both terms have been used independently and interchangeably to explain flexible work hours away from the office, but technically, they're two different things, handled in different ways.

Based on OPM's guidance, telework refers to an arrangement where the employee is expected to report to work both at an agency worksite and an alternative worksite on a regular and recurring basis each pay period, while remote work does not involve an expectation that the employee regularly report to the agency worksite each pay period.

**Telework**, in practice, allows employees to have regularly scheduled days on which they telework and regularly scheduled days when they work at their agency worksite. This includes any arrangement where an employee conducts work activities during any regular, paid hours, from an alternative location mutually agreeable to the employee and the agency (i.e., telework site, home).

**Remote work** is an arrangement that an agency, at its discretion, may choose if that arrangement is consistent with the agency's needs and the duties of the given position. It may be initiated by the agency posting the position as one that will be performed remotely or by an employee requesting the privilege of working remotely. Requests would be granted on a case-by-case basis, as long as the remote work agreement accurately documents the employee's worksite (to determine locality pay). And given budget implications, equity considerations and other factors, remote work policies would need to clearly outline the approval required to implement such an arrangement.

OPM's guide and official Telework Hub provides agencies with resources and information to assist each in evaluating how to leverage these tools to meet mission-critical needs for their organizations and, at the same time, balance the needs of a changing workforce.

might advance the accomplishment of mission critical requirements and organizational effectiveness," according to the memorandum.

Some agencies and commands have already begun aligning with OPM's new guidelines in determining remote work and telework best practices for their organization and workforce, while others are still in the early stages of remote and telework policy analysis. Implementation won't be universal, as each agency weighs which jobs can be done remotely or on a flexible schedule and which cannot, and then assesses the best ways to complement current policy with updated revisions.

"The [OPM] data elements were developed mainly to cover existing gaps in our time-keeping and personnel databases that have become more evident as the definition of remote work changed [it used to be a form of telework] and more personnel are authorized to use it," said Joel Stringer, assistant deputy for civilian personnel, Office of the Deputy Assistant Secretary of the Army for Civilian Personnel.

Stringer, whose office advises senior leaders on all matters relating to human resources and life cycle management for the Army civilian workforce, said that the EHRI data element changes described in the March 7 OPM memo must be done at the

DOD level (not Army) as systems modifications to the Defense Civilian Personnel Data System and Defense Civilian Payroll System. "DOD components will be notified when the new remote work fields are available, along with instructions for how they are to be used."

According to Stringer, the current posture on remote work and telework is that Army commanders and heads of executive departments and agencies are still authorized and encouraged to use telework and remote work as workplace flexibilities to help employees maintain work-life balance, to the extent they can do so while meeting mission requirements.



### CHANGE MY MIND

Workplace flexibilities like remote work, telework and flex time ensure that employers stay competitive in a tight candidate market and put themselves in a position to attract talented professionals—who may actually reject job offers that don't allow a work-from-home option. (Image by USAASC)

### ATTRACT, RECRUIT, RETAIN

Today's military career looks a lot different than in generations past, as service members face location-based challenges like spousal unemployment, high cost of living and availability of child care. Although work opportunities for service members are now available that aren't location-based (see "The Army Goes Location Independent" in the Summer 2023 issue of Army AL&T) the Army still follows an outdated and arbitrary personnel system that does not accommodate the growing number of dual-income households, dual-military families, women in the workplace, and married men and women serving on active duty—norms that have

changed dramatically in the last 50-plus years, alongside a hiring and recruiting system that has not.

A DOD survey of active-duty spouses, conducted by DOD's Office of People Analytics in 2021 to quantify the impact of the COVID-19 pandemic on military spouses and families, showed that the percentage of spouses satisfied with the military way of life (citing reasons like unemployment, high cost of living and lack of affordable child care) has steadily declined since 2012. According to the survey, overall dissatisfaction with the military way of life increased the odds by seven and a half (nearly eight times) that a

spouse favored their husband or wife leaving active duty.

Telework has proved to be a valuable tool and a "life-changing opportunity" for employees who are military spouses or those with disabilities, according to OPM's guide. Military spouses often struggle to maintain a career because of frequent moves, but remote work has enabled some to support their military partners and keep up with family expenses.

Ahuja, the OPM director, said at a March 9 congressional hearing, "Telework and remote work flexibilities also enhance the federal government's ability to attract and consider a more diverse talent pool across the country, including military spouses, residents of rural areas and individuals with disabilities."

In assessing job announcements posted on the USAJobs portal between June and October 2022, Ahuja said remote job opportunity announcements received, on average, 17 times more applications than nonremote jobs, significantly more (approximately 25) military spouse applications for remote work positions compared to one or two for nonremote jobs—showing increased interest due to job portability. The assessment also showed a higher percentage of female and minority candidates as compared with nonremote postings and a greater geographic diversity, with applications from candidates in 37 different states, as compared with just seven states for nonremote postings.

Private industry has kept the pace with changing family and workplace norms and offers hiring incentives like higher wages, flexible work schedules, remote work and telework arrangements, and wellness reimbursements. The Army, meanwhile, has retained a culture of reliance on traditional time-tested approaches. Strategies

like increased enlisted bonuses, reduced entry requirements (high school diplomas and test scores), additional recruiters and new marketing approaches have all worked in the past, but as demonstrated in the last few years, relying on these approaches is insufficient for addressing current military and civilian recruiting challenges.

### REMOTELY POSSIBLE

Remote work may be a little bit newer to the Department of Defense and the Army, as they are still trying to figure out what that looks like and what types of jobs should be remote. Not every job can be done remotely, so, as Gonzalez said, it's really about determining what the best needs for each organization are.

COVID forced remote work and telework on a large scale, but once all the health protection conditions started going back to what they were before the pandemic, many government organizations tried to go back to the same work arrangements, soon realizing that the competition for talent acquisition had changed. So they needed to become a little bit more responsive in order to stay within the competition for that talent.

Army Contracting Command (ACC) is one organization where, pre-COVID, almost no one was remote. Post-pandemic, ACC Redstone Arsenal, Alabama, started using remote work as a way to attract better talent to the organization. ACC's established telework program, according to its website, "allows greater work-life integration, reduces transportation costs and vehicle wear and tear, helps the environment and saves time otherwise spent commuting." Positions with flexible work hours, aligned with OPM, are offered with core work hours designated to allow for flexible start and stop times as an alternative to the traditional 9-to-5, 40-hour workweek.

Another organization applying a more flexible "work from anywhere" approach is the U.S. Army Combat Capabilities Development Command (DEVCOM), which has been working under a different work model since March 2020. (See "The Future of Work—Living The Experiment," in the Spring 2023 issue of Army AL&T.)

According to DEVCOM's "Future of Work Concept," remote work and telework provide individuals with greater flexibility, increased opportunities, enhanced quality of life and improved financial posture. Organizations benefit from improved employee morale, productivity and engagement, access to a broader and more diverse talent pool, and reduced infrastructure and environmental footprint and costs.

DEVCOM's future objectives significantly contrast its past and current work models. Currently, the best (local) talent would work at an official duty location with locally defined "core hours" and discrete teams, operating within the constraints of the organization's boundaries. The future model evolves to one where the best talent, local or not, can work where they are most productive in agile, cross-competency/cross-organization teams rapidly formed to deliver integrated solutions. "To maximize our potential and impact, our command must embrace a future of work environment that is different from the past," DEVCOM's "Future of Work Concept" states. "Flexibility in implementation is essential."

### CONCLUSION

After settling into a three-year remote, telework and hybrid routine, a return to the office may not be the direction federal employees had hoped for. But with the new remote work and telework guidance and ongoing work environment plans and assessments, the workday in the "new normal" could vary from agency to agency, potentially offering more flexibility (than before) to accommodate Army commands and the workforce. It could also help leaders identify, attract and retain high-performing individuals to serve in both military and civilian career fields as new considerations to traditional hiring practices, societal norms and work-life balance are addressed.

*For more information, go to the U.S. Office of Personnel Management's official hub for the federal government's telework program at <https://www.opm.gov/telework>.*

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# NAVIGATING ELECTIVE LEARNING

How it's going two years  
after implementation of  
Back-to-Basics.

*by Scott Greene*

## CHOOSE YOUR TOOLS WISELY

The hard work of transitioning the workforce to the new Back-to-Basics model is over, but a lot more is still to come with regards to communication, navigation and training tools. (Photo by Katerina Holmes, Pexels)

**W**ith the implementation of Back-to-Basics in February 2022, the acquisition workforce development model moved from a one-size, train everyone within an acquisition functional area using the same standard, to a new model with less prescriptive training—putting the onus on individuals, supervisors and commands to determine which additional training is needed for each specific person. Enter the world of elective learning.

Back-to-Basics redefined the coded acquisition workforce by focusing on coded acquisition workforce positions that develop, acquire and sustain operational capability. One of the main goals of this initiative was to improve the defense acquisition workforce’s agility by streamlining the functional area framework and prioritizing limited training resources. The training, education and experiential requirements for certification were streamlined and supplemented by job-specific credentials and tailored continuous learning opportunities. A Defense Acquisition University (DAU) credential recognizes an individual’s knowledge, skills and abilities to perform a DOD acquisition-related function or set of tasks. Credentials developed and deployed by DAU equip DOD workforce members with required skills through completion of a learning pathway and an assessment to verify correct application of the skills in a DOD context. DAU credentials are essentially a bundle of online classes and a test brought together to improve the skills within an acquisition subject.

The intent of the Back-to-Basics change was to “train to a common set of competencies required across DOD in the certification courses. Reduce the amount of ‘scrap learning,’ which is information that individuals may not need for their current job,” said Aaron Hutson, who serves as the strategy and policy branch chief in the Army Director of Acquisition Career Management (DACM) Office.

**“Change can be hard, that's just human nature. But through upskilling and hiring, we are achieving digital transformation.”**

The dust has largely settled from the first major change to the Defense Acquisition Workforce Improvement Act (DAWIA) since its inception in the early 1990s. This strategic overhaul of acquisition workforce development really moved away from prescriptive one-size-fits-all training into a leaner, flexible training model. This new model changed many paradigms of DAWIA training, including career fields to functional areas; each career field having three levels of certification to each functional area having between one and two levels of certification, ranging from Foundational or Professional to Practitioner and Advanced; and a reduction in scrap learning—less prescriptive certification training.

The previous acquisition “career field” structure streamlined into six functional areas that represent the “basics” of acquisition: business financial management/cost estimating (BUS-FM/BUS-CE), contracting (CON), engineering and technical management (ETM), life cycle logistics (LCL), program management (PM), and test and evaluation (T&E). The major changes here were multiple prior career fields combining into engineering and technical management and contracting, respectively. With a smaller “bucket” of functional areas and less prescriptive training requirements, the idea was to promote and facilitate more training and assignments across functional areas.

**LEVELING UP**

Another paradigm shift was moving from the longstanding certification levels of I, II and III to a framework that depended on the acquisition functional areas of the workforce. Acquisition levels moved to Foundational, Professional, Practitioner or Advanced. Where the system previously was ripe for a cookie cutter approach to position certification level coding, now that no longer exists. Human resource professionals and supervisors must look at each position individually within the functional area and determine the appropriate certification level. The DACM Office transitioned or transferred achieved legacy certifications into the new framework for current Army Acquisition Workforce (AAW) members.

Each functional area has a functional integrated team that includes representatives from each of the services, Office of the Secretary of Defense (OSD) leaders, human capital initiatives, as well as the DAU, that not only decide on the functional area curriculum but also determine the levels appropriate for that specific functional area. The DACM Office played an active role in every functional integrated team, along with a functional Army lead, to sit at the table and provide a unified workforce development and functional expertise voice for the Army.



**JOINT EFFORT**

Employees and supervisors will work together on which courses or credentials the employee needs to pursue. (Graphic by Army DACM Office)

**EXTENDED GRACE PERIODS**

A third paradigm shift moved the certification grace period from a standard 24 months for every position to a certification grace period that directly aligns to the functional area tier assigned to that position, now a 3/5/4 model: Those coded as Foundational or Professional now have a three-year grace period; those coded as Practitioner have a five-year grace period; and those coded as Advanced have a four-year grace period. The extended grace periods were given to all current AAW members when Back-to-Basics was implemented, as well as to any new members after that date. The reason grace periods were extended was to facilitate more of a focus on experiential learning and to try to prevent individuals from feeling that they had to rush through training to get certified right away. The Army DACM, Ronald R. Richardson Jr., said that “the new emphasis on experience, and the right training at the right time, better supports our primary objective of providing an agile and adaptive workforce with

the acquisition acumen and critical thinking skills we need in support of the Army modernization enterprise.”

Given the new grace periods, the DACM Office changed the applicant criteria on many of its leadership and educational programs to allow those not yet certified, but still within the grace period, to apply for those programs. Additional information on DACM programs may be found on the DACM website at <https://asc.army.mil/web/career-development/programs/civilian/>.

**REDUCED SCRAP LEARNING**

Finally, the last paradigm shift is a reduction in scrap learning with a focus on less prescriptive certification training. Scrap learning is an educational term that essentially represents wasted training time—the learning content that will never be applied by the learner. The intent of this Back-to-Basics shift revolved around focusing more on a foundational level of learning. Anyone required to attend mandatory

training would be able to apply the content in their job and could expand on that base learning through just-in-time focused training (credentials). This reduction in training time would enable more time for on-the-job training (the experiential component of DAWIA certification) and dramatically increase the emphasis on the supervisor and employee relationship to determine training needs. This reduction in scrap learning resulted in significantly less required classroom time, enabling individuals to be present in their job more. It also enables individuals to seek out additional training specific to their job in the form of credentials.

The Army has transitioned military and civilian positions into the Back-to-Basics framework, reducing the AAW from over 40,000 members down to nearly 33,500 as it removed facilities engineering and adopted tighter restrictions on what constitutes financial management/cost estimating and life cycle logistics positions through its acquisition functional leaders.



**STREAMLINED**

Back-to-Basics streamlined the previous acquisition career fields into six functional areas and changed the certification levels to Foundational/Professional, Practitioner or Advanced. (Graphic by Army DACM Office)

Transitioning to the new framework presented the DACM Office with many administrative, talent management and communication challenges, to say the least. Especially given the new responsibility placed on individuals and supervisors to determine what training each person needed beyond the base foundation provided through DAU.

The deliberate reduction in the number of hours for certification training for the workforce should enable workforce members to spend more time learning on the job and earning specialized credentials that will help them be more effective. That was a primary goal from leadership in transitioning to Back-to-Basics. As of the end of October 2023 (20 months after initial implementation of this new framework), just over 4% of the AAW has completed a credential (or bundle of classes). Understanding and embracing the importance of credentials will continue to take some time.

It is especially important for new employees to navigate this along with their supervisors, given they will receive much less

base training than their predecessors. The need to supplement that base with specific targeted credentials relevant to their job is crucial. “Less training is required, and this could lead to a workforce that takes less training than in the previous framework,” Hutson said. “From a DACM Office, headquarters perspective, we are emphasizing the importance of elective learning and empowering the workforce in all our briefings and engagements. We are constantly thinking about products and tools that we can develop—or partner with DAU to develop—that will assist the workforce.”

**EXPLORE CREDENTIALS**

Senior leaders, especially direct supervisors, can and should emphasize to their workforce the importance of exploring the credentials that are currently available, in development, and in the initial planning stages. “As opposed to the previous ‘one-size-fits-all’ approach oriented on the lowest common denominator, this approach empowers the supervisors and employees to take full control of employee development,” Richardson said. “The jury is still out, but we think this will create better alignment of

THREE YEARS FOUNDATIONAL	FIVE YEARS PRACTITIONER	FOUR YEARS ADVANCED
CON Professional * (1 year CON Acquisition experience)	Engineering & Tech Management (4 years ETM Acquisition experience)	Life Cycle Logistics (5 years LCL Acquisition experience)
Engineering & Tech Management (1 year ETM Acquisition experience)	Project Management (4 years PM Acquisition experience)	Project Management (8 years PM Acquisition experience)
Life Cycle Logistics (2 years LCL Acquisition experience)	Test & Evaluation (4 years T&E Acquisition experience)	Business - FM ** (6 years BFM Acquisition experience)
Test & Evaluation (1 year T&E Acquisition experience)	Business - FM ** (4 years BFM Acquisition experience)	Business - CE *** (6 years BCE Acquisition experience)
	Business - CE *** (4 years BCE Acquisition experience)	

**NEW GRACE PERIODS WILL BE CODIFIED IN THE DODI 5000.66 UPDATE**

\* CONTRACTING PROFESSIONAL      \*\* BUSINESS - FINANCIAL MANAGEMENT      \*\*\* BUSINESS - COST ESTIMATING

**SAVING GRACE**

Certification grace periods were updated to directly align to the functional area tier assigned to each position. (Graphic by Army DACM Office)

employee skills and abilities and help ensure the right individual in the right job at the right time.” DAU maintains a running list of credentials, available at <https://asc.army.mil/web/dacm-office/functional-areas/#credentials>.

Supervisor engagement in training planning is critical in this new environment. Navigating the available credentials and determining the appropriate ones for an individual can be daunting given it is a new responsibility. Having both the supervisor and the individual do some research and then come together to determine what is needed is what the DACM Office recommends. “The biggest risk,” Richardson said, “is that the mid-level

supervisors—and to some degree, their employees—don’t embrace this new empowerment and don’t take advantage of employee counseling and especially the individual development plan [IDP] to do the career mapping and fully develop the training requirements near-, mid- and long-term.”

Various enhancements to the IDP were rolled out with Back-to-Basics to better enable this dialogue and planning. Previously, the IDP only allowed employees to enter courses into the plan and then request approval of the IDP by their supervisor. Now, both employees and supervisors may select various courses or credentials for the AAW member to take. The ideal world would have the

**More upskilling opportunities are out there and more will be offered for the workforce.**

employee select what they think is necessary and then the supervisor would approve the selected courses and add in anything they felt was missing. The two would then meet in person (or virtually) and have an actual conversation on the needed training and agree on an appropriate training timeline. The agreement would then be approved in the IDP by the supervisor.

The Army acquisition functional leader (AAFL) and functional adviser (AAFA) roles were reviewed and codified via memorandum by the principal military deputy to the assistant secretary of the Army for acquisition, logistics and technology (ASA(ALT)), who stressed that their involvement in the following areas was critical:

- Be the AAFA subject matter lead with the technical knowledge and insight on functional area-specific training requirements and competencies.
- Provide strategic vision, direction and advice in shaping, developing and retaining the AAW.
- Offer training, continuous learning and credential recommendations.
- Address mission-critical skill set gaps and other human capital challenges through strategic initiatives.
- Attend the OSD functional integrated team or working group meetings along with DACM Office representatives to represent the acquisition functional area (AFA).

**“We are constantly thinking about products and tools that we can develop that will assist the workforce.”**

A fiscal year 2023 highlight for the DACM Office was that each AAFL published a continuous learning memo that identified functional area-specific continuous learning focus areas including training and credentials. One additional and final IDP enhancement the DACM Office provided was to directly list the acquisition functional area-specific training recommendations. When an individual logs into their IDP, it will list (if they are in program management, for example) the courses suggested by

Richardson, the program management Army acquisition functional leader.

### DIGITAL UPSKILLING

Many Army acquisition functional leaders embraced the new, exciting and extremely important digital transformation initiative in their fiscal year 2023 memos—some were already published before the need for digital upskilling was realized. Young Bang, principal civilian deputy to the ASA(ALT), directed the DACM Office to “digitally upskill the workforce.” Bang said the digital upskilling “initiative is applicable to the entire acquisition workforce. They might not think they are touching software or data, but all our weapon and business systems have digital transformation components, so at a minimum, they need to have at least a basic understanding.”

Digital foundations training is intended to develop an understanding of topics such as digital transformation; agile software development; development, security and operations (DevSec-Ops); cloud foundations; data science; machine learning; human-centered design; artificial intelligence and cybersecurity to practically apply those tools as the AAW leads, develops, tests, fields and sustains Army modernization programs. To do this, a digital foundations training pathway with curated foundational-level content was developed through an existing Army partnership with Udemy Business. The digital foundations training pathway includes three courses (approximately 14 hours total): Digital Transformation Masterclass, The Agile Samurai Bootcamp, and Product Management for AI [artificial intelligence] & Data Science.

Digital training and upskilling do not end with the digital foundations training through Udemy. More upskilling opportunities are out there and more will be offered for the workforce. “Our workforce continues to be crucial and instrumental to the success of the multitude of initiatives focused on Army modernization,” said Rosie Bauer, deputy director for the Office of the Deputy Assistant Secretary of the Army for Data, Engineering and Software at ASA(ALT). “We have started laying the foundation of a series of training opportunities through Udemy, but we have more to do. The technology and solutions we are implementing exist, as do training material for those solutions. But a true transformation requires cultural change; an understanding that the way we operate, our processes and our tools, need to change and a desire to help lead the way. Change can be hard, that’s just human nature. But through upskilling and hiring, we are achieving digital transformation.”

## DAU credentials are essentially a bundle of online classes and a test brought together to improve the skills within an acquisition subject.

### CONCLUSION

The DACM Office has put significant effort into transforming the workforce from the legacy DAWIA system into the new model established by the Back-to-Basics initiative. The hard work of transitioning is over, but a lot more is still to come with regards to communication, navigation and training tools. According to Richardson, the DACM Office is “working with acquisition leadership to inculcate a culture of continuous learning in the workforce and leveraging relationships with providers to deliver increased point-of-need relevant training and credentials.”

Some of the upcoming initiatives and improvements include:

- An online AAW onboarding training module.
- Updated fiscal year 2024 AAFL continuous learning guidance.
- Establishing an acquisition functional area webpage.

The DACM Office will soon release an AAW onboarding virtual training for our civilians, officers and noncommissioned officers. The training will focus on acquisition as a profession, the requirements to be an acquisition professional and the tangible benefits such as education and leadership development opportunities. This will be accomplished through four learning objectives:

- Have a high-level understanding of the AAW.
- Know what your initial requirements are.
- Be able to use the appropriate career model to help plan your career.
- Know where to find and how to apply for the many career opportunities available to you through the DACM Office.

Expect to also see more tailored credential navigational tools from DAU in fiscal year 2024. The current, ever-evolving tools are located at <https://www.dau.edu/credentials>.

The DACM Office will include any pertinent developments in Hot Topics, which goes out monthly to the AAW.

Finally, the program management acquisition functional area is the first of the AFAs to release a DACM webpage: <https://asc.army.mil/web/dacm-office/functional-areas/program-management>. Expect to see the rest of the AFAs follow suit. This will be your one-stop shop for anything related to that functional area—continuous learning guidance, messages from the AAFL, career maps, policy, etc.

The Army DACM is counting on you as an AAW member to take ownership of your learning journey. As they say, with great power comes great responsibility. We’re counting on you to continually evaluate your IDP and seek out learning opportunities.

*For more information, go to <https://asc.army.mil/web/dacm-office/functional-areas>.*

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### ARMY ATC

The U.S. Army Aberdeen Test Center Automotive Directorate plans, conducts, analyzes and reports the results of developmental tests, production tests, and other tests specifically focused in the areas of ground and amphibious manned and unmanned vehicles, vehicular weapons and fire control systems. (Photo by Pvt. Joseph Burns, U.S. Army National Guard)



# BUILDING THE BENCH OF ACQUISITION TALENT

DOD summer internship program offers college students hands-on experience and a leg up to start their federal civilian career.

*by Holly DeCarlo-White*

**I**n support of the National Defense Strategy, developing programs with which DOD aims to “build the bench,” or gain fresh talent, has become an important focus to maintain critical acquisition positions supporting our warfighters and the nation. Since 2020, the DOD College Acquisition Internship Program (DCAIP) has been recruiting undergraduates, from any degree discipline, in universities across the U.S. to participate in paid summer internships within DOD offices, with a hiring opportunity upon graduation. The 10- to 12-week internship is one program of many centrally funded by the Human Capital Initiatives (HCI) Office.

“An internship with the Department of Defense isn’t your typical summer job,” said Kristine Faria, DCAIP program manager for the Army and acquisition education and training manager for the Army Director of Acquisition Career Management (DACM) Office. “DCAIP interns work for the United States, supporting the nation’s defense—they support America’s Soldiers and they also support the DOD acquisition mission. They have opportunities to participate in activities such as designing, testing and procuring weapon, transportation and [information technology] systems.”

Though all majors are eligible to apply for DCAIP, Faria said science, technology, engineering and mathematics (STEM) students and those studying digital areas are especially in demand and highly sought after. Last year, more than half of the Army DCAIP interns were studying digital fields focused on subjects such as artificial intelligence, machine learning, computer science, engineering, information technology, network architecture, crypto, cybersecurity, data science and analytics, robotics and more.

In January 2023, Ronald R. Richardson Jr., director of the U.S. Army Acquisition Support Center and the Army Director of Acquisition Career Management, said that accelerating the digital transformation of the workforce is a priority, and he encourages acquisition professionals to train early, and often.

“Acquisition is complex,” Faria said. “Being a DCAIP intern introduces the student to the world of Army acquisition and prepares them, after graduation, to step right into a permanent job in the acquisition workforce and make immediate contributions.”

### RECRUITING AND DIVERSITY

The HCI mission, under the Defense Acquisition University, supports DOD and defense acquisition workforce initiatives. The acquisition workforce leads essential support activities that support our warfighters, including maintaining critical equipment; acquiring and sustaining weapons; providing base support, logistics and engineering expertise; administering family support programs; conducting business operations; and providing medical care to ensure service members are trained and ready around the world.

“What DCAIP is about is not just thinking about the workforce the way it is today, but how should it be tomorrow, in 2030 and beyond?” said Elizabeth Bryant, director of the HCI.

The HCI team handles all recruitment outreach for DCAIP, and then fields applicants to the Departments of the Army, Navy and Air Force (which joined the program for the first time last year) and several Fourth Estate agencies. Fourth Estate agencies are DOD organizations not within a military department, such as the Defense Logistics Agency, the Defense Health Agency and the Missile Defense Agency, to name a few. HCI targets universities near locations where participating DOD organizations are seeking interns, as well as the top universities in the U.S., including Historically Black Colleges and Universities and Minority Serving Institutions and this year, outreach was increased to ensure Predominantly Black Institutions were engaged via their career services offices. HCI also runs social media campaigns (paid and organic) to help outreach efforts, they host virtual live information sessions, and have developed informational videos and participant spotlights for their website to raise awareness about the program.

Applications for the 2024 summer program closed in mid-October 2023 and the overall response “exceeded expectations,” Bryant said. HCI received 2,486 applications—of which 1,856

were qualified, meeting the application criteria. DCAIP applications are carefully reviewed and distributed to each branch’s services program manager (Faria for the Army), aiming to match applicant interests, locations and command needs.

### COMMAND OUTREACH

Each year, typically during the fourth quarter, Faria and the Army DACM Office reach out to the respective acquisition career management advocates (ACMAs) to solicit requests for DCAIP interns. However, “not all organizations have an ACMA,” she said, and organization requests must be coordinated through an ACMA, or ACMA designee.

The command organization has the final hire authority for an intern based on its mission and the individual applicant interview. There is no command requirement to have a full-time position available following the internship period and there is no service agreement for intern participation in DCAIP; it is treated like any other paid summer job and an opportunity for students to gain experience and insight into working within DOD.

In 2023, only 48 of the 55 DCAIP slots within Army organizations were filled for various reasons from students, time commitment, location, competing opportunity, etc. However, Katelyn Keegan, senior human capital manager for HCI, confirmed that no funding is “lost” when positions are not filled. HCI reallocates any unused funds to other program priorities, ensuring that funding is used to the fullest each year to benefit workforce initiatives.

### JOINING THE TEAM

HCI hosts a LinkedIn group for alumni so they can support each other and keep in touch. It is also an avenue for new interns to connect and ask questions of those who have been in their spot before.

“Knowledge sharing is very important when one considers entering the civil service,” Bryant said. “There is a myriad of ways between the services and the Fourth Estate so any opportunity to help someone with a lesson learned or share a contact that works for me, or why this path resonates with me, is always a great opportunity to help bring people into the acquisition workforce.”

After the student completes 10 weeks working as a DCAIP intern and graduates with a bachelor’s degree, they can be converted to a full-time entry-level position in the acquisition workforce with DOD.



**CAREER FAIR**

DOD organization participation in career fairs aids student awareness to civilian career path options. (Photo by Janecze Wright, Fort Hood Public Affairs)

“This is a big deal,” Faria said. “It means that the student doesn’t have to apply for a permanent position and compete against other applicants for the job.”

Yet only 20% of Army DCAIP participants (21 out of a total 111 interns) have taken advantage of federal civilian job placement available to those who have successfully completed the internship joining the Army Acquisition Workforce. HCI advised placement across all branches of service is about 25%, as federal service may not be for everyone—and that is the point. Internships like DCAIP provide an avenue for students to test the waters before graduation.

That experience was “absolutely worth it” and “life changing” for Aaron Feld, who was part of the first Army DCAIP iteration in summer 2020. Feld learned about the internship after a family member forwarded a posting from USAJobs. As a junior majoring in game design and development at Rochester Institute of Technology, the completion of two internships was a requirement, and DCAIP was a perfect fit. Feld said DOD was “on the

list” to apply for coding jobs following graduation as organizations such as the National Security Agency and Microsoft had attended his school’s career fairs.

During DCAIP, Feld was hired for the summer by the U.S. Army Aberdeen Test Center (ATC) within the Automotive Directorate’s Reliability, Availability, Maintainability/Integrated Logistics Support Branch, where he joined a project that focused mostly on front-end web design, something he already had experience with as part of his major.

“It was the first time I was able to put into practice everything I was learning in school, and I was able to get a feel for a real-life work environment,” he said.

At the end of the internship, Army ATC stayed in contact with Feld and asked if he was interested in accepting a job.

“That was an immediate plus,” Feld said in making the decision to join the Army civilian team. “But also, I liked the work that I



### A NEW OPPORTUNITY

Aaron Feld sits in his office at U.S. Army Aberdeen Test Center, where he is now a full-time federal civilian employee. Feld was part of the first Army DCAIP in summer 2020. (Photo by Deirdre S. Cascardo, U.S. Army Aberdeen Test Center Public Affairs)

was doing. It was meaningful and had an immediate impact, so when the opportunity presented itself, I took it.”

The decision of any college graduate to choose a career path is not without weight, especially for those with highly demanded digital skill sets. It’s a fact that the salary overall in federal service is significantly lower than industry in digital fields like coding, Feld said, and can be a factor for graduates, but “on the flip side, government provides a far stabler long-term investment both for job security and salary over time,” he said.

Another known factor for today’s graduates is job flexibility. DOD offices and military installations are not always easily accessible and due to the nature of the positions, they often require work in-person. Since COVID, although teleworking within DOD has improved, Feld said, at U.S. Army Test and Evaluation Command and other organizations there is still a two-day in-person requirement each pay period. “Within a rapidly shifting landscape where people want to be able to work from anywhere, having even two days over a two-week period that you need to be in person can be a turnoff for some because it is not completely remote.”

“Sometimes people look at immediate salaries and job placements but don’t necessarily consider, ‘where am I going to be

in five or 10 years’ when they are first graduating college,” he said, so ultimately, he decided that having something that was more of a long-term investment was the better path for him. Feld was hired by ATC through the two-year Army Fellows Program designed to hire and develop future leaders from college, and his role today as an information technology specialist is mostly the same as what he experienced during his internship.

“The Army has offered a lot of valuable experiences,” he said, as well as continuing opportunities for training and education to keep the pace with industry in a digital field.

### CONCLUSION

“The Army is focused on developing the digital acumen of its acquisition employees, and DCAIP is playing a role in that,” Faria said. “Entry-level employees, especially college students and recent graduates, are an essential part of the recruiting and hiring effort. This generation grew up using computers, mobile devices and social media. They quickly pick up the new technology that they’re likely to encounter when working in acquisition. DCAIP allows Army acquisition to bring members of this talented group into its workforce.”

“This is a time of great change,” Feld said of digital transformation in the Army. “I am excited to see where this is going.”

Each year, the DOD College Acquisition Internship Program application window opens from September to October and interviews are conducted through February. The internship period runs May/June through August.

For more information, go to <https://www.hci.mil> or email [DoDcollegeinternship@dau.edu](mailto:DoDcollegeinternship@dau.edu).

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*HOLLY DECARLO-WHITE provides contract support to the U.S. Army Acquisition Support Center at Fort Belvoir, Virginia, as a writer and editor for Army AL&T magazine for SAIC. Previously, she was a public affairs specialist at U.S. Army Garrison Stuttgart, Germany. She holds a B.S. in merchandising management from the Fashion Institute of Technology, State University of New York, and has more than a decade of communications and operations experience in the private sector.*

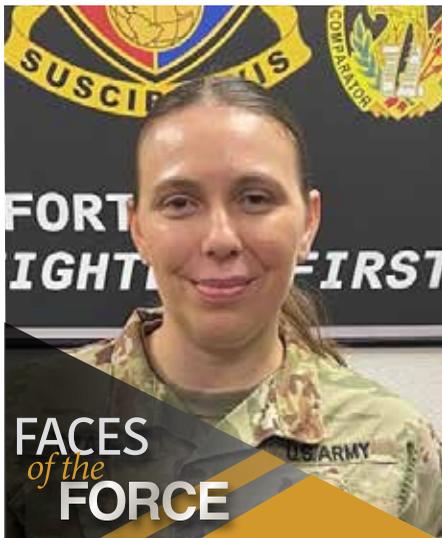
# INSPIRING CHANGE

BLACK  
HISTORY  
MONTH



FEBRUARY





## STAFF SGT. SARA CRAIG

**COMMAND/ORGANIZATION:** Mission and Installation Contracting Command, 418th Contract Support Brigade

**TITLE:** Theater Support Cell noncommissioned officer in charge

**YEARS OF SERVICE IN WORKFORCE:** 8

**YEARS OF MILITARY SERVICE:** 19

**DAWIA CERTIFICATIONS:** DOD contracting professional

**EDUCATION:** MBA in business administration, Columbia Southern University; Bachelor of Professional Studies in business and management, Excelsior College

**AWARDS:** Army Commendation Medal; Army Achievement Medal; Army Good Conduct Medal; Meritorious Unit Citation; National Defense Service Medal; Iraq Campaign Medal; Global War on Terrorism Expeditionary Medal; Global War on Terrorism Service Medal; Korea Defense Service Medal

# OPERATING OUTSIDE YOUR COMFORT ZONE

Whether it's on the job or in our personal lives, stepping outside your comfort zone and navigating something new or unfamiliar can seem intimidating, if not daunting. But for Staff Sgt. Sara Craig, who is with the 418th Contract Support Brigade, 51C, it's more about the challenge. According to her, there's no better way to realize your full potential unless you're at least willing to explore new territory.

"I became part of the Army Acquisition Workforce because I wanted a more active role in supporting the warfighter. I have always loved serving in the United States Army, but it was hard for me to see the results of my work in a meaningful way in my previous MOS [military occupational specialties]," she said. "As a 51C, I work directly with my Army requiring activity customers to facilitate the acquisition of goods and services [computers, computer hardware, latrine services, material handling equipment (MHE), chapel musicians, etc.] that are necessary for mission accomplishment and often improve the environment for fellow Soldiers. I am involved in this process from cradle to grave and can see the results of my labor."

In addition to interfacing with customers, Craig is responsible for mentoring and training contracting professionals and tracking contracting metrics—something else she did not get to do in previous positions. She said this is vital for the Army because it ensures the acquisition of necessary items when they cannot be sourced through other channels.

"By using PALT [Procurement Acquisition Lead Time], we educate and assist our customers with their requirement through each stage of the acquisition process," she said. The PALT system tracks the amount of time required to complete actions leading to a contract award and is used to effectively procure the service or supply the customer is requesting. "Effectively using this contracting acquisition process directly contributes to mission accomplishment across the force," she said about the PALT system and contracting process overall. "It is satisfying to see the end result of my work and the [whole] acquisition process."

Craig said her greatest satisfaction as part of the acquisition workforce is the opportunity to support Soldiers, but she noted the most important points in her career were the training and fellowship she gained over the years. "Training is important because it has prepared me to be a contracting professional able to handle a varied range of contracting complexities and given me the ability to hone my business acumen in my everyday professional encounters," she said. "As a more senior 51C, I can now pay that training forward. I have taken lead in developing training for six noncommissioned officers and four officers after identifying a deficiency in training opportunities that align with METL [Mission Essential Task Lists] tasks. My hope is that the program I am developing can aid the MICC [Mission and Installation Contracting Command] as the master gunner program is fleshed out. METL are the Headquarters, Department of the Army official listings of the fundamental tasks that units are designed to perform



**A CUT ABOVE**

Craig helps cut into a Valentine’s Day cake at the Drawsko Pomorski Training Area in Poland in February 2017. (Photo courtesy of Sara Craig)

in any operational environment. And the MICC is responsible for contracting throughout the United States and Puerto Rico.

“The fellowship I have gained is also an important point, because I have acquired lifelong mentors and comrades that have helped to build my network of contracting professionals that aid in both work assistance as well as workday morale,” she said. “Obtaining different perspectives on matters helps to find innovative solutions at times. Work is much more enjoyable when you enjoy working with your team members.”

Craig began her career in 92A as an automated logistics specialist, 89th Military Police Brigade at Fort Hood, Texas, where she was a Unit Level Logistics System – Ground (ULLS-G) and Standard Army Maintenance System – Enhanced (SAMS-E) clerk for the motor pool responsible for ordering and tracking parts, dispatching and tracking services for wheeled ground vehicles. ULLS-G and SAMS-E are computerized Army automation systems for logistics-related forms and tasks. After that she was an operations noncommissioned officer for the 194th Combat Sustainment Support Battalion for Headquarters and Headquarters Company

at Camp Humphreys, Korea, where she was responsible for an orderly room and daily operations. Just before 51C, she was an S-4 (logistics officer) clerk for the Army.

The most important lesson she’s learned through the course of her career is to step out of her comfort zone, research everything and take pride in becoming a technical expert. “When I had a requirement for material handling equipment and transportation it had come from our local support operations transportation office. They could not source this particular last-minute request and had requested it be procured via contract. After researching and verifying with local brigades and offices, the MHE transportation was able to be sourced through the local installation transportation office, saving the customer valuable time, effort and funding,” she said. “It is important to be well informed. I research every aspect of my work to ensure I am operating on the most timely and relevant information.”

And researching does not stop outside of her normal workday. Craig has been married for 17 years and has two young children, so there are always things to look up, verify and compare to find better ways of doing things. She and her husband also provide respite care for foster parents—temporarily caring for another family’s foster children, to give the original foster family some restorative time. “Respite care allows us to give back to the children in need in Texas, in a capacity that is more flexible with a military schedule than full fostering,” she said. Aside from that, she said she mostly enjoys reading and spending time with her family.

Craig said those who know her outside of work would say she is organized and reliable. “These traits are common in my work as well, since they are required to be successful in the acquisition career field.”

Her best advice for junior acquisition personnel is to strive to learn as much as they possibly can through self-development and by seeking out mentorship opportunities. “Don’t be afraid to take on challenges or to fail. Operating outside of your comfort zone will only make you a stronger acquisition professional.”

—**CHERYL MARINO**



### WHAT'S TRENDING

Data on personnel, skills, employee movements, workplace diversity, the effects of incentive programs and other factors are collected and analyzed to forecast future workforce trends and demands. (Image by Christopher Canada, Getty Images)

# WORKFORCE FORECAST

The Army is partnering with George Mason University to research how machine learning can predict future workforce trends and requirements.

*by Rebecca Wright*

Staffing shortages have become a frequent talking point since the COVID-19 pandemic triggered “The Great Resignation,” an economic trend wherein employees resigned from their jobs in large numbers. Although staffing shortages are nothing new, these recent changes in the economy are not only highlighting the importance of having sufficient staff on hand now, but also being prepared to have sufficient qualified staff on hand in the future—whether it is six months from now or in five years.

Perhaps you have walked into a busy restaurant or grocery store lately and noticed the business was understaffed. Or it was obvious that the employees were struggling to keep up with their workload. In these situations, insufficient staffing not only affects a company’s customers but also the current staff. If staff members are overwhelmed, the strain can lead to employee burnout and resignation.

If an organization waits until it becomes short-staffed before looking to hire, it can create adverse effects by creating disruptions in workflow, unmanageable workloads, missed deadlines, negative impacts on customer service and low employee morale. Therefore, the ability to predict having sufficient manpower is essential in being prepared to support mission requirements.

## COME UP WITH A PLAN

Workforce forecasting is a “process of estimating future demand and supply of human resources in an organization,” according to LinkedIn. “It helps managers plan ahead for staffing needs, optimize resource allocation and align workforce strategies with business goals.” From small businesses to large corporations and even government agencies, predicting future staffing requirements is a necessity. Predicting and preparing

for future requirements is about having the right people, in the right place, at the right time. This involves understanding the demand for specific skills, determining when and where they will be needed, identifying skill gaps and managing employee training, recruitment and retention. All of these elements should factor into an agency's overall strategic plan.

There are a variety of methods and steps that an organization can implement into a workforce forecasting plan. However, a successful plan starts with identifying the organization's goals and initiatives and establishing priorities. This is step one of the Office of Personnel Management's five-step workforce planning model. Once goals and initiatives have been identified, an organization can begin working on the next steps of the plan to effectively

achieve those goals. The next step is conducting an analysis of the workforce. This often entails analyzing the current workforce and how it is likely to evolve. It also includes analyzing employee turnover, anticipating and preparing to backfill retirement-eligible employees, identifying current and future skill gaps, and supply and demand. Step three is developing a workforce action plan. This is a plan that is created to address these potential situations—closing gaps in the workforce, reorganizing the workforce, recruiting new employees, providing training for current employees, etc. The fourth step is executing the workforce action plan and monitoring it throughout its life cycle. The improvement measures that were put in place should be monitored to ensure that milestones are being met. Step five is evaluating and revising the workforce action

plan, identifying areas of improvement and adjusting accordingly.

**SETTING GOALS**

The Army Director of Acquisition Career Management (DACM) Office requires accurate workforce forecasting to ensure mission needs are met. These forecasting capabilities need to include understanding the skills and abilities of current employees, identifying what skill gaps are present, identifying deficiencies in the hiring process and predicting employee migration.

The DACM Office established four goals under the Army Acquisition Workforce Human Capital Strategic Plan (HCSP); each goal serving a significant role in workforce development and forecasting. The first goal is workforce planning—devising a “comprehensive workforce plan that focuses on a strategic approach to talent acquisition to conduct competency identification and identify skill gaps to drive alignment, recruitment and retention of a diverse acquisition workforce.” The second goal is professional development, followed by leadership development and employee engagement.

Professional development aims to grow an experienced workforce that is prepared to adapt to a rapidly changing work environment. Leadership development seeks to build an acquisition leadership that can shape and guide expert teams. And employee engagement fosters initiatives that will enhance the Army Acquisition Workforce sense of purpose, dedication and commitment to the mission.

**DIGGING DEEPER WITH MACHINE LEARNING**

While some organizations' workforce forecasting standards may focus most on having enough knowledgeable manpower, the DACM office would like to dig



**ALL IN THE PLAN**

The Office of Personnel Management's five-step workforce planning model. (Graphic by OPM and USAASC)

deeper—such as understanding employee behavior, employee-related decision-making, characterizing employee movement, understanding factors that influence job changes, behavioral patterns and environmental effects.

In August 2020, the U.S. Army Acquisition Support Center entered into a partnership with George Mason University (GMU) to conduct research on workforce dynamics. This research effort, which will run through August 2025, has been established and funded via the U.S. Army Research Institute (ARI) for the Behavioral and Social Sciences—the Army’s lead agency for research, development and analyses for the improvement of Army readiness and performance. ARI’s mission is to drive scientific innovation to enable the Army to acquire, develop, employ and retain professional Soldiers and enhance personnel readiness.

Even though workforce forecasting strategies have been in use for decades and are utilized across a multitude of companies and organizations, predicting future workforce requirements is typically performed by data collecting and models. Currently, this data is collected and modeled manually. Through the GMU partnership, the DACM Office looks to develop reliable workforce forecasting capabilities and understand workforce and employee patterns with state-of-the-art big data processing and machine learning methods.

Machine learning is a type of artificial intelligence that involves the use of data to build computer systems that will learn from the data provided. Essentially, machine learning techniques use specially designed algorithms to discover patterns and relationships in data to be used for analysis and to make predictions. Through the GMU study, this is being accomplished with a high level of detail and with algorithms tailored to the acquisition workforce with the use of command structure, job description, geographical and environmental information.

GMU has developed several incremental proof-of-concept models—evidence that demonstrates a concept is achievable—that provide individual-level resolution of the Army Acquisition Workforce. These are based on conceptualizing the workforce in a multiscale, integrated network built with nearly a decade of the personnel and organizational micro-level data. The result is a high-resolution longitudinal picture of the workforce that has not been available. This is a flexible and scalable quantitative framework that is expected to provide answers to difficult questions about organizational effectiveness. Improvements to these initial prototypes will be tailored to proactively address specific leadership questions about individual-level career forecasting,

management and composition of teams, team performance and the effects of incentives and external influences on individual career decisions.

In the near future, the DACM Office expects this effort to improve our ability to understand personnel movements, workplace diversity, the effects of incentive programs and to build more effective teams in pursuit of the Army mission. By gaining a deeper understanding of these factors through machine learning, the Army will be able to make more informed decisions regarding training, recruitment and retention strategies.

## CONCLUSION

When the need arises, agencies will need to know if there will be enough trained personnel in the right place at the right time. Accurate workforce forecasting will be crucial for the Army to effectively manage and plan to support future mission requirements. Developing the workforce of tomorrow involves investing in education, skills training, preparing individuals for an evolving workforce and recruitment and retention. Implementing machine learning in workforce forecasting can aid the Army by more accurately predicting workforce trends and eventually assist in making more informed decisions and optimize its human resources. Machine learning technology can help plan for having the right number of trained personnel available, ultimately enhancing mission success.

Douglas R. Bush, assistant secretary of the Army for acquisition, logistics and technology, said in the Spring 2022 issue of Army AL&T, “We must ensure the appropriate processes and tools are in place—particularly in the areas of recruitment, development and retention—for effective talent management.” Taking proactive steps by investing in education, building stronger leadership and fostering a healthy work environment can result in a knowledgeable and devoted workforce of the future. We must start today to properly prepare the Army Acquisition Workforce of tomorrow.

*For more information, contact Daniel Stimpson, Ph.D., at [daniel.e.stimpson2.civ@army.mil](mailto:daniel.e.stimpson2.civ@army.mil).*

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*REBECCA WRIGHT is a writer and editor with Army AL&T and the U.S. Army Acquisition Support Center at Fort Belvoir, Virginia. She has over 14 years of experience writing and editing for the Department of Defense and the Department of Justice.*



### **KNOWLEDGE THROUGH INDUSTRY**

Through the PPTe program, participants will gain a better understanding how industry and government work together by promoting increased communication and the sharing of best practices. (Photo by Christina Morillo, Pexels)

# INDUSTRY EXPERIENCE

DOD's Public-Private Talent Experience participants spend up to six months with an industry partner.

*by Stefanie Pidgeon*

**T**he Army is successful in meeting its mission in many thanks to its industry partners. The Army relies on industry to be responsive to needs and to mobilize quickly. Industry also relies on its government partners to plan and be agile and open to creativity. This reliance requires a great understanding of how industry and government work.

Enter the Department of Defense's Public-Private Talent Experience (PPTE), a developmental program for civilian acquisition workforce professionals where selected participants spend up to six months with an industry partner performing an acquisition-related assignment.

"I think it is important for the [Army Acquisition Workforce] to have a greater understanding of the larger defense community and how topics go up to congressional leaders for their awareness," said Wai Kwan Chung, program manager with the Joint Program Executive Office for Chemical, Biological, Radiological and Nuclear Defense, who participated in the DOD PPTE in 2022. Chung spent three months with the National Defense Industrial Association (NDIA), one of several companies and organizations that participates in the program.

## **DOWN TO BUSINESS**

DOD PPTE participants are acquisition professionals with high leadership potential. They are considered experts in their respective functional areas because of their knowledge, skills and abilities. Applicants must be in grades GS-13 through GS-15 (or broadband equivalent), and Defense Acquisition Workforce Improvement Act certified (or within the grace period).

"PPTE promotes increased communication between government and industry, enables participants to gain a better understanding of industry's business operations and challenges, and facilitates the sharing of innovative best practices," said Kristine Faria, DOD PPTE program manager for the Army Director of Acquisition Career Management (DACM) Office. "If you're familiar with the Training With Industry (TWI) program for our military members, PPTE is similar, but for the civilian population."

The Defense Acquisition University's Office of Human Capital Initiatives (HCI) owns and manages the overall PPTE program; the Army DACM Office conducts the program for Army acquisition.

HCI is responsible for executing DOD-wide acquisition workforce governance, strategies, policies and talent management initiatives, supporting the National Defense Strategy and components as they equip a highly qualified workforce of professionals in developing, acquiring and sustaining world-class warfighting capabilities to Soldiers, Sailors, Airmen, Guardians and Marines. They do this through creating a high quality, high-performing, agile defense acquisition workforce, empowered to deliver the best possible acquisition outcomes in support of the warfighter. PPTE is one of the programs HCI leverages to meet this mission (For more about HCI programs, see "Building the Bench of Acquisition Talent" on Page 24).

"HCI identifies and recruits the companies that wish to host DOD employees for a professional work experience," said Faria. "A wide range of companies have participated in the program, including Accenture, Amazon, Ball Aerospace, Boeing, The Dcode Group, Deloitte, General Atomics, National Defense Industrial Association, National Industries for the Blind, Raytheon, SAP NS2, SAP Public Services and Sterling Foods."

Brian Raftery, project manager for Army Data and Analytics Platforms with the Program Executive Office for Enterprise Information Systems (PEO EIS), selected to work with Amazon Web Services (AWS). "I became aware of PPTE while I was developing my Enhanced Command Preparation Program prior to assuming responsibilities as project manager



**PUBLIC-PRIVATE TALENT EXPERIENCE**

The PPTE program offers an opportunity for selected civilian acquisition workforce professionals to spend up to six months with an industry partner performing an acquisition-related assignment. (Graphic by USAASC)

for Army Data and Analytics Platforms. "I became aware of PPTE while I was developing my Enhanced Command Preparation program prior to assuming responsibilities as project manager for Army Data and Analytics Platforms. PPTE was the industry exposure component of a targeted upskilling program and is the civilian equivalent of the military Training With Industry program, which has been in place for some time. Given the Army's ongoing migration to cloud services, I chose AWS, as they were the originators of cloud computing and remain both a segment leader and largest provider of cloud services," said Raftery.

Raftery learned more than just how Amazon develops and provides its web and cloud services. He was most impressed with the emphasis the company places on employee development. "AWS is very efficient in onboarding new employees

resulting in faster productivity. IT [information technology] resources arrive prior to your start day, and you are able to access all online resources from day one and a formal, individualized onboarding plan is developed for each new employee and is available online with tracking milestones," he said. "They also place a great deal of emphasis on continuous learning and have multiple online resources to help employees upskill, similar in some ways as the Army Acquisition Workforce."

While Chung was only with NDIA for a short time, she says she found the time spent invaluable. "[The work] was less program managing and more think tank and research, which was not what I expected. However, it was a pleasant surprise, and I enjoyed the work," said Chung, who worked with the NDIA's Emerging Technologies Institute and a research fellow during her time there. "I

## “If you’re familiar with the Training With Industry program for our military members, PPTE is similar, but for the civilian population.”

helped with research and writing white papers on defense-related topics such as supply chain issues, areas of new focus, etc.”

Ronald R. Richardson Jr., the Army DACM, said it’s not just the Army that benefits from an exchange program with industry. The individual benefits, too. “Having the opportunity to embed with an organization outside of government, and learn how they do business, helps our professionals grow their business acumen and leadership mindset,” he said.

This experience has been especially helpful to Raftery in his new position with PEO EIS. “Perhaps the biggest takeaway is a general understanding and awareness of cloud computing concepts and services. Parts of my current portfolio are in or moving to the Army cloud, part of which is in AWS. Familiarity with specific services and pricing principles is very useful,” he said.

What’s unique about the PPTE program is that there is also the opportunity for industry participants to perform an assignment with a DOD host, Faria said. “If an Army organization wishes to host an individual from industry, the organization can contact the DACM Office for further information,” she said.

### STRENGTH IN SUPPORT

Leadership and supervisor support is key to ensuring future Army acquisition leaders have the opportunity to participate in the program. While six months is a commitment not only for the individual but also for the participant’s organization, the experience provides a long-term benefit to the workforce and the Army.

“We need to strengthen and maintain our relationships with our industry partners,” said Richardson. “Our mission is to never put our Soldiers in a fair fight. While our Army is innovative and is more agile than ever, it’s industry, including small businesses

and nontraditional defense contractors, that are very forward-thinking and leveraging the latest and greatest in technological advancements. We need to optimize those relationships.”

Participants like Chung believe strong support from the organization and its leaders is all the more important in order for the participant to get the most out of the experience.

“Programs like [PPTE] expand our knowledge of the defense industry as a whole and reminds me why my work is important within the overall DOD perspective,” said Chung. “It was interesting for me to understand how issues, solutions and topics go to Congress for debates and eventually work itself into policy.”

### CONCLUSION

Applications for the DOD PPTE program open once per year, typically early fall. While assignment locations vary, assignments are often made based on the needs of the participant and the requirements of the industry partner. If a participant is not able to perform the assignment at the industry site because of travel or temporary duty requirements, there may be the opportunity to telework and perform a virtual assignment.

“The Army is focused on developing the digital acumen of its Army Acquisition Workforce, and the Army DACM Office is leveraging PPTE to further that goal,” said Faria. “For the next program cycle, we are working with our partners at U.S. Combat Capabilities Development Command and the Deputy Assistant Secretary of the Army for Data, Engineering and Software Office on a pilot program specifically designed for Army Acquisition Workforce digital engineers. We look forward to continuing to grow the program to meet Army priorities and the needs of our workforce.”

*For more information on DOD PPTE, including how to apply, go to <https://asc.army.mil/web/career-development/programs/dod-ppte>.*

*STEFANIE PIDGEON is the Communications Branch chief in the U.S. Army Acquisition Support Center’s DACM Office. She has worked in strategic communications and public affairs for DOD and the U.S. Army for more than a decade. She holds a Master of Mass Communication in integrated communications from the University of South Carolina, and a Bachelor of Music Education from Winthrop University.*

# A FORCE IN FLUX

The Army is rethinking what's possible to build the workforce of tomorrow and create a workplace that is "a magnet, not a mandate."

*by Ellen Summey*

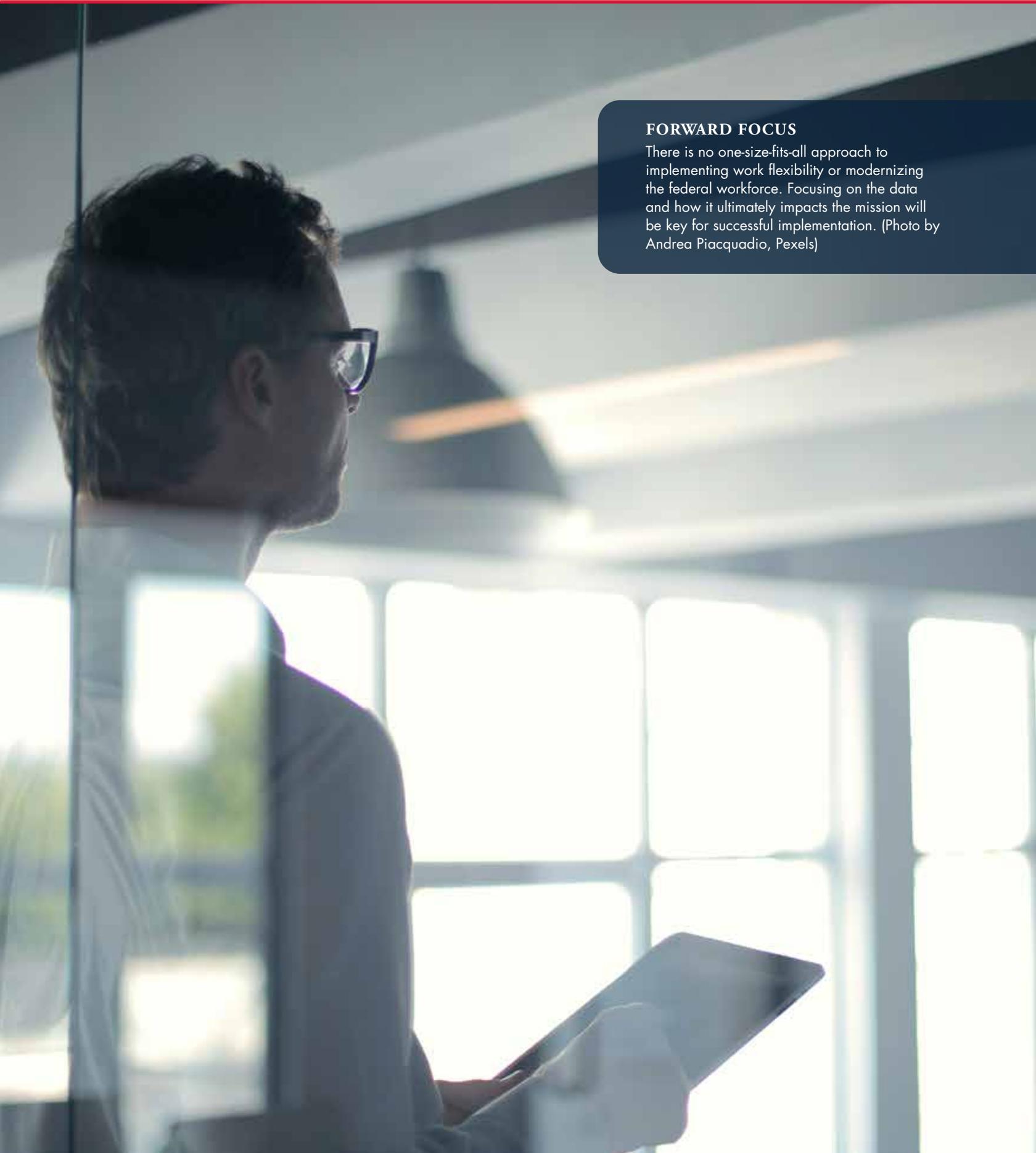
Change is the only constant—but that doesn't mean it's easy—and the U.S. Army is no exception. Since the early days of the COVID-19 pandemic, the service has seen seismic shifts in when and where work is being done across the workforce. Many of those changes, like liberal telework policies, remote training opportunities and other flexibilities, are known to be powerful tools for recruitment and retention but are sometimes still met with uncertainty within the service.

"You know, this organization is not used to some of these ideas," said Brig. Gen. Greg Johnson, adjutant general of the United States Army, United States Army Human Resources Command (HRC). "It's virtually all new." If there was one upside to the COVID pandemic, he said, it was that the Army was forced to think through the challenge of remote work and the hurdles to its wide implementation—which Army leaders were not willing to consider before.

## **DEEP END OF THE TALENT POOL**

Today, the Army is making a concerted effort to modernize its workforce, focusing on hiring for in-demand skills and providing additional technical training for existing employees, according to Edward Emden, director of the Army Civilian Career Management Activity (ACCMA) at the U.S. Army Civilian Human Resources Agency. "The Army is looking to recruit more civilians to the workforce in competitive fields such as engineering and cyber," he said. Emden cited new partnerships with universities and an upcoming advertising campaign for Army civilian careers. "This will be a critical component in raising awareness and understanding the benefits of Army civilian employment to reach a new generation of public servants."





**FORWARD FOCUS**

There is no one-size-fits-all approach to implementing work flexibility or modernizing the federal workforce. Focusing on the data and how it ultimately impacts the mission will be key for successful implementation. (Photo by Andrea Piacquadio, Pexels)

He also touted new training opportunities for Army civilians across all career fields, provided by his organization. “ACCMA invests in the professional development of all Army civilians by providing access to Udemy for Business, an online learning platform with over 10,000 courses,” he said. “Every Army civilian has access to unlimited courses related to their primary job roles, or something new to upskill or reskill to meet future missions.”

In addition, Emden said the Army can use work flexibilities to be more competitive in the talent marketplace and to remain prepared to continue operations in any future crisis. “Telework and remote work can be powerful tools for the Army civilian workforce because they allow us to remain competitive in recruitment and retention of great talent. Also, it provides resilience in the event of another national emergency, however it must be balanced with the needs of the Army warfighting mission.”

For Johnson, remote work and telework have been effective ways to expand the talent pool for HRC, particularly because

of its location in Radcliff, Kentucky. The command works with specialties like human resources, data, information technology (IT), social media and more, he said. “Some of that talent is not necessarily going to be resident in this part of the country.” Attracting that talent requires a new approach, Johnson said. “The old-school way would be, ‘Hey, move to Radcliffe. No ifs, ands or buts.’ You wouldn’t necessarily have that rich opportunity to pull in talent from other parts of the country.”

For one salient example, Johnson pointed to the director of the innovation cell at HRC, Col. Kristin “Kris” Saling. She is an active-duty officer who was ready to retire from the service when Johnson offered her a remote opportunity. “We’ve facilitated her staying in the Army by allowing her to kind of remote in to her job here at HRC,” Johnson said. “We probably would have lost her if we hadn’t facilitated that.” Remote work for civilians is one thing, but remote work for a service member is another thing entirely. Because HRC deals with IT and high-tech solutions, Johnson said the work is a good fit for remote

personnel, but he recognizes that this is not the case in many parts of the Army. “If you’re on the line in a squad in the United States Army or you’re in a tank, you’re not remote working,” he said. “But office work, tech work, knowledge work, there’s definitely an ability—and for me, I just think it’s a necessity.”

### ROAD MAP TO 2030

Like many Army commands, Johnson and HRC are working toward their workforce vision for 2030, which they call “HRC 2030.” The plan involves upskilling the HRC workforce on data, IT and analytical skills, as well as updating hiring and work flexibilities. “We think it’s really important, with that vision, that you open up how you hire, and you offer more remote work to draw in the talent needed to modernize the organization and then also allow for some of the remote [work] for specialties in our green-suit population, our uniformed population,” he said. Johnson said he also plans to have more remote workers in the coming years, based on strategic priorities for the command.

According to federal workforce expert Mika Cross, work flexibility can be a powerful tool for building the workforce of 2030 (See “A Flexible Future,” Page 86). Cross, who served as both an enlisted Soldier and an officer in the U.S. Army, has since worked with teams across the



### IN SYNC

Brig. Gen. Greg Johnson, the Army’s adjutant general of Army Human Resources Command, speaks to Army leaders, Soldiers and civilians for force-manning discussions at the Army People Synchronization Conference, Aug. 7-10, 2023, at Fort Knox, Kentucky. (Photo by Jenn DeHaan, U.S. Army Human Resources Command)

## WHERE THERE'S A 'WIL'

The GSA, commonly known as the federal government's landlord, is currently conducting a pilot with six federal coworking spaces across the U.S. and a Workplace Innovation Lab in Washington, where feds are invited to schedule tours and test out some of the newest office technology available—from the actual IT and communication systems all the way down to the furniture and even the wiring in the ceiling. Scott Morin is a tech expert who demonstrates the IT capabilities at the lab, which the team often refers to as “the WIL.”

“The Workplace Innovation Lab is actually a new environment that GSA created as part of their Workplace 2030 strategy,” Morin said. “And really, it's grown bigger than we ever thought. Now, we've had since February [2023], probably 5,000 to 6,000 federal employees through this space.” Morin said the WIL fills an important role for the federal government, as many organizations embrace a hybrid work environment. “The Workplace Innovation Lab has enabled us to kind of create a magnet, as people are figuring out, how to make the office a magnet versus a mandate.”

What will you see when you walk through the front door? “You're going to see an office that's different than any other federal office you've seen before,” Morin said. “There are a lot of different spaces, very open, flexible spaces for people to collaborate, and we have flexible technology, including video endpoints that can be moved to position based upon your meeting or your group activity.”

In terms of federal workspaces, the WIL is unique. It has digital signage and maps, along with a mobile app to reserve a working space and even real-time monitoring of room temperature, air quality and more.

“We have, often, 200 to 300 people coming through the space every week, and the feedback that we've been given is that this is spot-on for what the government needs to attract people back to the office,” Morin said.



### BANISH BACKGROUND

Taking a video call in a noisy office can be a headache. Background noise may make it difficult for others to hear you on a call—a problem that is compounded when officemates have simultaneous meetings. A visit to the WIL offers the chance to test out several types of soundproof workspaces. (Photo by the author)

federal government and private industry, advising Fortune 500 companies, nonprofits, academia and startups to leverage work flexibility to create a competitive advantage. Kiran Ahuja, director of the U.S. Office of Personnel Management, testified in March 2023 that remote jobs listed on USAJobs.gov receive an average of 17

times more applicants than nonremote roles. “There really is a significant impact when you're thinking about filling critical talent shortages,” Cross said.

For leaders contending with a competitive labor market, Johnson offered two pieces of advice. “If you're in a war for

talent and you're in a very tight recruiting market, then you have to do things that meet people on their own terms,” he said. Part of that should involve crafting an effective engagement strategy. “You've got to explain what we're doing.” Many Americans don't have a clear idea of the types of jobs that exist within the Army,



### CLOSING THE GAP

The Army is modernizing its workforce by focusing on hiring for in-demand skills and providing additional technical training for existing employees, especially in fields like engineering and cyber. This is crucial for attracting a new generation of public servants to Army civilian employment. (Photo by Mark Getman, U.S. Army Garrison Fort Hamilton)

he said. “There’s always a surprise as I start to talk to folks about our work on systems, IT architecture or social media and how we did the largest implementation of PeopleSoft in the world,” he said. “They go, ‘You’re doing that in the Army?’ Yes, we’re doing that in the Army.”

According to Johnson, the second major challenge is that Army leaders should ensure they are taking charge of their own education and staying abreast of the latest developments and ideas in their respective fields. “If we’re going to keep up, if we’re going to modernize, if we’re going to attract the best talent for the Army, we have to do that.” His directorate has created recommended reading lists for new concepts, data analytics, customer service and more, to foster continuous learning (See the Adjutant General Directorate’s essential reading guide, Page 48).

### A CHANGING WORKFORCE

Though it has dominated the headlines, COVID was not the only factor precipitating the changes in work flexibility in the U.S. “It is important to keep in mind that there were a few other

changes that happened around the same time as the COVID-19 pandemic, but actually have nothing to do with COVID,” said John O’Duinn, an expert on distributed teams and a senior adviser for the Office of Human Resource Management at the U.S. General Services Administration (GSA). “One is a generational change. In 2016, millennials became the largest segment of the U.S. workforce. In 2021, Gen Z, who come after millennials, became the second largest segment of the U.S. workforce. These two segments now make up 57% of the U.S. general workforce.” However, they only account for between 6% and 19% of the federal workforce, depending on certain factors. “By contrast, 45% of our federal workforce are over the age of 50 and 15% of the federal workforce is eligible to retire today,” he said.

Cross agreed that there is room for improvement in the makeup of the federal workforce, and she cited data about women in many roles and career fields. “When you’re thinking about the mission of the Department of Defense and the Army, diverse access to talent is mission-critical,” she said. “In STEM, mission-critical occupations are held by women under 22%, and they are

**“If you’re in a war for talent and you’re in a very tight recruiting market, then you have to do things that meet people on their own terms.”**

**THE COLLABORATION EQUATION**

How often should remote and hybrid workers come to the office? It’s a question that inspires a lot of debate, so what do the experts say? According to workforce transformation strategist Mika Cross, there is not an ideal tempo for in-person work across the board, but agencies should rely on performance data to make those kinds of decisions.

This is in line with an April 2023 memo from the White House Office of Management and Budget, which said that agencies should monitor organizational health and performance indicators—including productivity, efficiency, recruiting and retention—and should adjust workforce policies as needed based on that data. “If your only way to measure productivity is by hours spent at a specified location, then we have a problem,” Cross said of the debate over in-person work for remote and hybrid teams. “We need to measure what matters and we need to be accountable for work being performed, regardless of location.”

According to a December 2022 report from the Office of Personnel Management, telework has increased within the federal government and 72% of federal agencies set telework goals to measure impacts on performance indicators, noting increases in human capital goals including employee recruitment, retention, attitudes and reduced employee absences.

Cross recently conducted a GovLoop webinar about remote work and hybrid work for federal agencies, teaching leaders to create the infrastructure and capacity to operate more efficiently, and to adopt a flexible mindset to change the organization’s culture from within. Robin C. Kilgore, the deputy assistant director of the Immigration and Customs Enforcement Office of

Diversity and Civil Rights, participated in the webinar. She said that managing a virtual work environment is different than managing a team in person, but both require similar skills. “You really need to be looking at the competencies that you want your leaders to have, regardless of where they’re leading, and really help them build that if those skills don’t exist.”

Javier Inclan, an assistant inspector general with the National Science Foundation Office of Inspector General, spoke about measuring productivity on 2022 GovLoop event, saying “there is good data to back up what doesn’t need to be done in the office.” He said government leaders “need to get away from that classic ‘line of sight’ management, where we have to see you to know you’re working.”



**LET’S TALK TEAMS**

According to GSA senior adviser John O’Duinn, distributed teams should plan to intentionally meet in person once per quarter. (Photo by Fauxels, Pexels)



**GETTING THE WORD OUT**

Community outreach is a powerful tool for DOD in building connections, dispelling myths and attracting a diverse and committed pool of recruits to serve the nation. It also helps to bridge the gap between military service and the broader community, ultimately strengthening the effectiveness of the armed forces. (Photo by David Poe, Fort Bliss Public Affairs Office)

represented at levels of 20% or less in some pockets across the U.S. Army in positions of leadership,” she said. Combining that data with findings from the civilian labor market adds even more nuance. “Lean In’s workplace report on women in the workforce cites that women under the age of 30—who the federal government needs more than anything to come in to the ranks—said that if they saw leadership with the same levels of work-life flexibility that they would want, it would impact their desire to apply and compete for positions of leadership. Seventy-nine percent of them agree with that.”

This is an area where the Army can maximize its return on investment by keeping the focus on the mission, she said. “Let’s

face it, the Army gets it when it comes to distributed work and being able to understand the value and benefit of collaboration and working together and leveraging technology for the purpose of distributed teams,” she said. “But people are so wrapped around this concept of, like, how many days is the right mix, or, what does it take to get my people back in the office, rather than focusing on, as Scott

[Morin] said, creating the workplace that’s a magnet, not a mandate.”

**MAGNETIC MANAGEMENT**

So, what’s a manager to do with all this information? What about leaders who aren’t sure where to start, or how to implement work flexibilities? “I would say, ‘Go slow then go fast,’” Johnson advised. “You don’t have to jump in with every single idea that’s out there, or strategy that everybody’s using, but you can slowly work into this and see how it works for your organization, your command.” He said it’s important to understand the needs, preferences and skill sets of your workforce, since they can vary so widely. “You know your team, and some things probably won’t fit nicely in every organization.”

According to O’Duinn, implementing remote-work flexibility also requires an understanding of which roles are location-dependent and which are not—and why. Some employers, he said, are only willing to allow current employees to work remotely after they have proven themselves, but not with recruiting new hires for the same positions. Having a clear shared agreement on which roles are location-dependent versus location-independent can help, he said. “Intentional focus on the recruitment and onboarding processes, as well as intentional mentoring while physically distributed, can also help.”

At HRC, Johnson also plans to rethink how the command hires to make effective use of all the tools at his disposal. “One

**Work flexibility can be a powerful tool for building the workforce of 2030.**

of the things that we have to organize better is how we recruit talent across the spectrum of eligible folks,” he said. “We’re definitely moving into a heavy use of direct hire authority, which is a great tool.” Using that authority more frequently will facilitate “more remote [opportunities] to support our HRC 2030 strategy,” he said.

The command also aims to demonstrate the successes of Soldiers working remotely, Johnson said. “We had to show Army senior leaders that officers like Kris [Saling] and others could really do what we’re talking about remotely, and I think we’ve been able to do that successfully.” Johnson said it’s possible to retain some Soldiers for longer by offering this flexibility, and HRC has successfully demonstrated over the past year that it provides additional capability to the command.

### TESTING TOOLS AND TECHNIQUES

The GSA is running a federal coworking pilot, testing the concept of shared workspaces for federal employees from any agency, and arranging the floor plan to allow creative and collaborative use of space with standard government furnishings. According to O’Duinn, the agency takes an agile approach to the pilot. “We literally do daily surveys and then we move furniture around, like, ‘OK, try this,’ and then we see what happens for a week or two,” he said. “It’s about more than just moving furniture—people have different styles of working.” A federal coworking space, he said, has to allow for personal interaction while also providing adequate security, a professional environment, reliable internet connection and places to take video calls without being disturbed by others. “That means a different floor plan to what we used to have before,” he said.

The Army is also doing research on its ideal office setup, according to Col. Saling. HRC is looking at how to build a collaborative space, she said, “so that we don’t have an either-or between a cubicle and a kind of noncollaborative conference room.” She cited the command’s desire for more collaborative technology, not just for remote teammates but for working with other agencies as well. “We’ve also gained the ability to pull in our counterpart experts, wherever they might be, so we can do a partner whiteboard with somebody in [Training and Doctrine Command], with somebody in Futures Command, with somebody in D.C., from Fort Knox.”

“It’s really exciting to see how people’s mindsets are shifting,” Cross said of the GSA pilot and similar efforts. “Consider when you’re trying to attract and retain a multigenerational workforce—especially newer careerists and early-career talent—and

what that might look like when you have a space that can adapt to people’s preferences, and you have the technology that can serve as an enabler, rather than a distraction,” she said. “Having these kinds of models to adapt will help start changing the culture in very important ways that will impact the future of federal work for a long, long time.”

### CONCLUSION

Though the tools and technology are relatively new, work flexibility has been a part of the federal government for years, Cross said. “Mobility in the federal government—mobile work, telework, flexi-place, remote work, hybrid, or whatever you want to call it because that lexicon evolves—there have been policies in place since the 1950s,” Cross said. The key to successful implementation, in her view, is focusing on the data. “Agencies who are using it as an opportunity to really hone in on the measurement, assessing the data and looking at the impacts to their workforce, doing the right sets of measures, are the ones that are going to have what they need to stand up and say, ‘This matters to our workforce, it impacts our mission, here are the factors that it affects and we’re going to stick with it.’”

For the Army, Johnson said there is no one-size-fits-all approach to implementing work flexibility or modernizing the workforce, but the command has partnered with the National Security Innovation Network to help develop an assessment strategy to determine its return on investment. “We’re just nudging into this,” Johnson said. “Our return on investment is, I’m pretty sure this talent right here [Saling] would have been out of the Army. This is just an anecdote because it’s one person, but we feel we’re in a much better spot because [she] is in our innovation cell, really driving productivity.”

*For more information about Army HRC, go to <https://www.hrc.army.mil>. Learn more about Mika Cross at [mikacross.com](http://mikacross.com). Explore federal coworking at <https://workplace.gsa.gov/offerings/federal-coworking>.*

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# THE ADJUTANT GENERAL DIRECTORATE (TAGD) ESSENTIAL READING GUIDE



## THE ADJUTANT GENERAL READING LIST

These books expose readers to new concepts to think about processes differently and navigate challenges with a broadened mindset.

**Data-Driven HR:** How to Use Analytics and Metrics to Drive Performance, by Bernard Marr

**Moneyball:** The Art of Winning an Unfair Game, by Michael Lewis

**Team of Teams:** New Rules of Engagement for a Complex World, by Gen. Stanley McChrystal

**Range:** Why Generalists Triumph in a Specialized World, by David Epstein

**Good to Great:** Why Some Companies Make the Leap and Others Don't, by Jim Collins

**The Idea Factory:** Bell Labs and the Great Age of American Innovation, by Jon Gertner

**The Practical Guide to HR Analytics:** Using Data to Inform, Transform, and Empower HR Decisions, by Bernard Marr

**The Best Team Wins:** The New Science of High Performance, by Adrian Gostick

**Loonshots:** How to Nurture the Crazy Ideas That Win Wars, Cure Diseases, and Transform Industries, by Safi Bahcall

**Measure What Matters:** How Google, Bono, and the Gates Foundation Rock the World with OKRs, by John Doerr

**Working Backwards:** Insights, Stories, and Secrets from Inside Amazon, by Colin Bryar and Bill Carr

## TAGD CUSTOMER SERVICE/ SOCIAL MEDIA LIST

These books are a great start in shaping our thinking in these areas of improving our customer service and shaping interactions with Soldiers, veterans, retirees, and families on social media.

**Delivering Happiness:** A Path to Profits, Passion, and Purpose, by Tony Hsieh

**The Thank You Economy:** by Gary Vanerchuck

**The Art of Social Media:** Power Tips for Power Users, by Guy Kawasaki and Peg Fitzpatrick

**Likeable Social Media:** How to Delight Your Customers, Create an Irresistible Brand, and Be Generally Amazing on All Social Networks that Matter, by Dave Kerpen

**Unreasonable Hospitality:** The Remarkable Power of Giving People More Than They Expect, by Will Guidara

**Unexpected:** Breakthrough Strategies to Supercharge your Business and Earn Loyal Customers for life, by Howard Brodsky with Dustin S. Klein

**Building a Story Brand:** Clarify Your Message so Customers Will Listen, by Donald Miller

**LikeWar:** The Weaponization of Social Media, by P.W. Singer and Emerson T. Brooking



## TAGD DATA ANALYTICS READING LIST

Enhancing HR decision-making, understanding organizational trends and building data literacy are critical competencies aligned with TAGD priorities and initiatives.

**Be Data Literate:** The Data Literacy Skills Everyone Needs to Succeed, by Jordan Morrow

**Be Data Driven:** How Organizations Can Harness the Power of Data, by Jordan Morrow

**Storytelling with Data:** A Data Visualization Guide for Business Professionals, by Cole Nussbaumer Knaflic

**Excellence in People Analytics:** How to Use Workforce Data to Create Business Value, by Jonathan Ferrar and David Green

**Predictive Analytics:** The Power to Predict Who Will Click, Buy, Lie, or Die, by Eric Siegel

**The Technology Fallacy:** How People are the Real Key to Digital Transformation, by Gerald Kane, Ann Nguyen Phillips, Jonathan Capulsky, and Garth Andrus

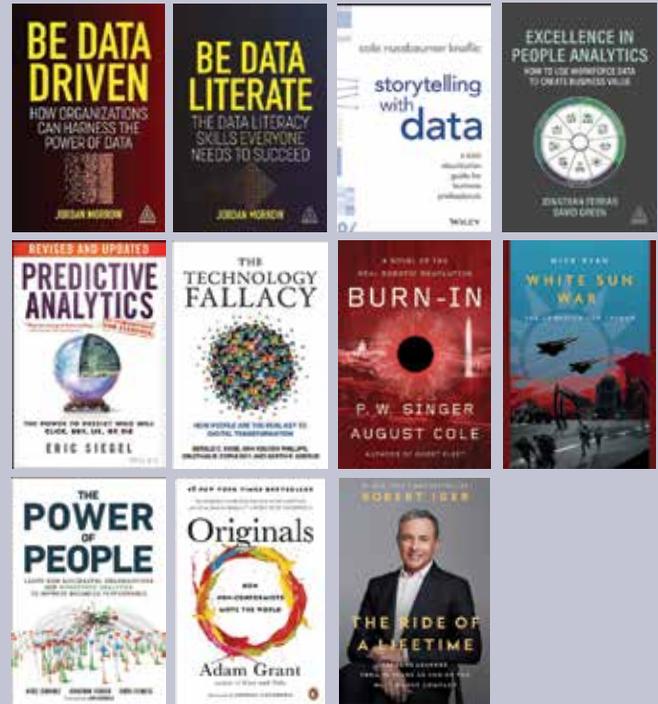
**Burn In:** Novel of the Real Robotic Revolution, by P.W. Singer and August Cole

**White Sun War:** The Campaign for Taiwan, by Mick Ryan

**The Power of People:** How Successful Organizations Use Workforce Analytics to Improve Business Performance, by Nigel Guenole, Jonathan Ferrar and Sheri Feinzig

**Originals:** How Non-Conformists Change the World, by Adam Grant

**The Ride of a Lifetime:** Lessons Learned from 15 Years as CEO of Walt Disney Company, by Robert Iger



## TAGD RECOMMENDED AUDIO RESOURCES

These audio resources offer unique insights and perspectives that can enhance personal growth, leadership skills, and professional development.

TED Talk: **"The Power of Vulnerability"** by Brene Brown

TED Talk: **"Grit"** by Angela Duckworth

Podcast: **"The GaryVee Audio Experience"** by Gary Vaynerchuk

TED Talk: **"The Danger of Single Story"** by Chimanda Ngozi Adichie

Podcast: **"The Social Media Entrepreneurs"** by Derek Videll

Podcast: **"The Modern Customer Podcast"** by Blake Morgan

TED Talk: **"Start With Why"** by Simon Sinek

Podcast: **Harvard Business Review "IdeaCast"** by HBR Editorial Staff

### RECOMMENDED READING

The "Adjutant General Directorate Essential Reading Guide" contains recommended reading lists for new concepts, data analytics and customer service to foster continuous learning. (Graphic by Army HRC and USAASC)





### CELEBRATING 60 YEARS

PM CCS celebrated 60 years as one of the longest tenured PM offices in the Army. (Photo by Todd Mozes, Chugach)

# EMPOWERED WORKFORCE

How PM Close Combat Systems maximizes employee participation to improve the organization.

*by Lisa Spinelli, Catherine Scheper and Michael W. O'Grady*

**P**roject Manager Close Combat Systems (PM CCS), within the Joint Program Executive Office for Armaments and Ammunition (JPEO A&A), is taking initiatives to develop employee soft skills, such as communication, leadership and teamwork. Ultimately, these skills will provide them with the emotional intelligence to excel in their careers, giving them the tools they need to better streamline their workload and mitigate the need for “rework.” The result is an empowered workforce that has a strong sense of belonging to a family, increased workforce efficiency, and greater employee job satisfaction.

PM CCS contributions span across all services and support the spectrum of conflict from lethal, large-scale combat operations to stability and support operations requiring the use of intermediate force. These capabilities are used in multidomain operations to enable efficient and effective joint warfighter success.

PM CCS, established in 1961, is one of the Army’s longest tenured project management offices and manages a diverse product portfolio, which includes 384 distinct armaments and ammunition. This presents a unique challenge to the workforce in that many team members work multiple programs of varying type, complexity and class of supply. PM CCS fosters and embodies the Army values through caring for its workforce and realizing that success is grounded in the strength of its personnel—a team effort. People are the number one priority; the organization is the people; and PM CCS strives for excellence by building the bench.

PM CCS, JPEO A&A developed an organization improvement model that focuses on developing the soft skills of employees. Increasing employees’ ability to use soft skills—including interpersonal and behavioral traits in their careers—provides an increase in emotional intelligence. Encouraging emotional intelligence allows employees the capacity of awareness to control behavior, express emotions and handle relationships in



the work environment. Through the organization improvement model, employee involvement, community outreach, mentoring and employee-focused workshops and training, PM CCS strives to encourage employees to personally excel in their careers and fully support the mission of the organization.

**ORGANIZATION IMPROVEMENT MODEL**

At the crux of their philosophy, leadership embraces the value of using its organization improvement model—a three-phased approach that includes pre-planning, planning and post-planning—to strategic planning developed to align the workforce with the PM CCS mission: provide dominant and innovative lethal and protective capabilities for the joint warfighter through acquisition excellence; and vision to maintain a skilled innovative team empowered to deliver dominating close combat capabilities.

Strategic planning involves the use of tools in the pre-planning and planning phases:

- Environmental scan, which identifies and addresses the internal and external environment of an organization that can influence future strategies.
- Strength, weakness, opportunity and threat (SWOT) analysis, which identifies and addresses internal and external factors.
- Brainstorming initiative development.

These allow leaders, working in conjunction with the workforce, to determine their vision for the future as well as to identify their goals and objectives for the organization.

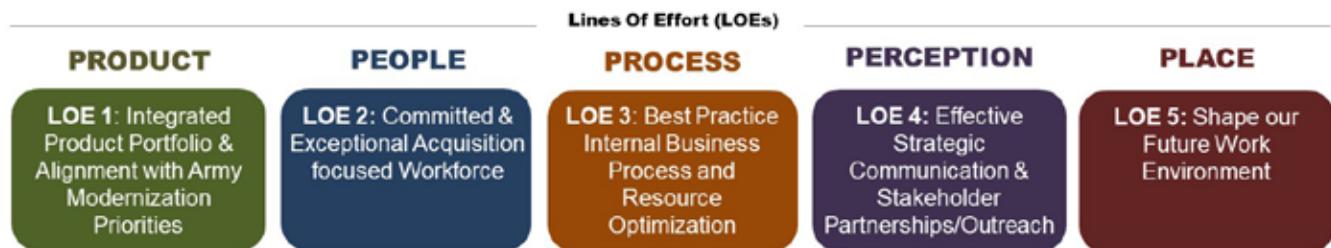
These tools enable PM CCS to set mission direction and alignment of priorities for the organization. Within their Strategic

Planning Organization Improvement Model, PM CCS executes lines of effort (LOE) in five key areas to foster the organizations’ improvement efforts in pursuit of excellence. These key areas are product, people, process, perception and place.

Currently PM CCS has 51 of its employees (about 45% of the workforce) in direct support of these efforts. Each line of effort is important to developing positive change for the organization at large and giving the workforce the chance to think strategically and engage in the future of PM CCS.

LOE 1 was identified to focus on product, concentrating on the integration of our product portfolio with the Army’s priorities. LOE 2 focuses on people, identifying what the organization can do to ensure a committed and exceptional workforce. LOE 3, process, works on the improvement of business processes to allow for resource optimization. LOE 4 is focused on perception, how others perceive the organization and how to increase the effectiveness of communication with stakeholders. Initially charted with four lines of effort in 2019, a fifth line of effort—place—was added in 2022 to reflect a post-COVID work environment for the organization to adapt to the work environment change.

Relevant to workforce development, the LOE 2 team is comprised of PM CCS volunteers from the workforce that are focused on enhancing the workforce by identifying and executing initiatives, including succession planning. In the past few years, PM CCS’ LOE 2 team has developed standard operating procedures (SOP) for rotational assignment opportunities and an onboarding SOP. These support the succession planning initiative by identifying and developing new leaders in the organization. PM CCS also has developed an Army 365 file repository SOP, which provides all authorized personnel a repository that houses the roles, responsibilities, business rules and PM CCS documents supporting



**LINES OF EFFORT**

By executing lines of effort in five key areas, PM CCS can foster organizations’ improvement efforts in pursuit of excellence. Each line of effort aims at developing a positive change for the organization and giving the workforce opportunities to engage in the future of PM CCS. (Graphic by Catherine Scheper, PM CCS)

effective knowledge transfer throughout the organization. This provides a place for knowledge transfer and collaboration across the organization.

An additional effort executed by the LOE 2 team is the interpersonal skills initiative. The intent is to engage PM CCS staff through interactive discussion. The team provided the workforce the opportunity to view videos of senior leaders discussing various communication topics. This effort enhanced collaboration across the organization by reinforcing effective communication. The videos were fun and lighthearted, yet engaging and informative. In the future, the LOE 2 team plans to develop interactive events focused on the areas of problem-solving, decision-making, active listening, teamwork and conflict resolution.

Another team, LOE 3, focused on process, identifying current acquisition and business processes across the organization with an intent to document, improve, streamline and make more efficient. One of the many efforts that the LOE 3 team executes is enhancing workforce development. This includes the development of functional toolkits which benefit the workforce by providing new and current employees the knowledge of the organization’s unique roles and responsible for all mission critical and support functional areas. For example, a new project officer will be supplied with the “program officer” toolkit. This includes all relevant training outlets, advancement opportunities, points of contact, and all functional processes and standard operating procedures used for that job function as well as those unique PM CCS cultural defined best practices. These toolkits are valuable to a new employee adapting into the organization as well as current employees. They are periodically updated to stay relevant and are made available on our organization’s share drive as well as



**SUCCESS THROUGH TEAMWORK**

Creating an environment that provides opportunities, the necessary tools to succeed and emphasizes team building contributes to the overall success of the PM CCS workforce. (Graphic by Diane Fee, PM CCS, Bowhead)

distributed in our new employee welcome package.

**ABOVE AND BEYOND**

PM CCS actively encourages employees to be involved in mentoring, both as protégé and mentor. As part of LOE 2, a mentoring program was established. This was quickly adopted by the JPEO A&A’s Talent Management Office. The mentoring program matches mentors and protégés through a more formal relationship. The mission for the JPEO A&A Mentoring Program is to provide a forum for the continual development of talent within all levels of the organization through junior-senior employee partnerships. This program is a symbiotic relationship offered to allow personnel an opportunity to learn from and ask questions of experienced

teammates regarding career decisions, technical skills and competencies, training, job opportunities and leadership.

Currently there are 123 participants (53 mentors, 70 mentees) in the mentoring program across JPEO A&A, of which 30% are from PM CCS. In addition, the workforce is encouraged to participate in other workshops and training events that enhance development, such as Franklin Covey’s 5 Choices to Extraordinary Productivity, a Getting Mentoring Going workshop and mentoring overview training, among others.

Another facet of developing the workforce is leadership development, which focuses on training and knowledge sharing. An example of this is PM CCS’s Leadership



### BRING YOUR CHILD TO WORK DAY

PM CCS hosted "Bring Your Child to Work Day" on April 27, 2023, which included activities and displays for children and adults. These included a pyrotechnic and smoke grenade demonstration, a pizza lunch, certificates for participating children, and plenty of popcorn and cotton candy for the kids to enjoy. (Photo by Diane Fee, PM CCS, Bowhead)

Article Club, which allows the workforce to participate in and lead discussions on various leadership topics, similar to participation in a book club. Every six-to-seven weeks, volunteers facilitate a discussion on a leadership topic selected by the PM's senior leaders. A leadership article is distributed as well as questions selected by the facilitator a few weeks in advance of the discussion. As of the publishing of this article there have been 16 club meetings facilitated by 16 different emerging leaders within PM CCS. These events receive high participation across the organization and benefit employee development by introducing various soft skill topics, such as leading in the virtual environment, time management, emotional stability, stress management and organizational change management.

Growing the next generation of Army acquisition leaders by encouraging their involvement in strategic planning, mentoring and leadership teaching across the organization goes a long way in ensuring the mission is met. Growing your people, providing them the tools to succeed in a family-like atmosphere is the best guarantee of meeting the mission.

### A SENSE OF COMMUNITY

In addition, PM CCS' workforce is involved in numerous team-building efforts, including the Innovative Morale Boosting integrated product team, which engages employees to participate in various social and charitable events. This initiative encourages employee involvement in team-building events that occur regularly, organized by a different division office on a

rotating basis. Examples of past events include holiday parties, denim days, bring your child to work day, a chili cookoff, taco Tuesday, a chicken wing contest and child CPR classes. Many of these events offer the opportunity to donate to a local charity, expanding the impact of PM CCS throughout the community. The Innovative Morale Boosting team also publishes a monthly newsletter that includes relevant and fun information about current events at Picatinny Arsenal, New Jersey, delicious meal recipes, inspirational quotes, pictures from PM CCS events and trivia games. These newsletters bring a sense of family to keep the morale of the workforce healthy.

### HIT THE GROUND RUNNING

Another facet within LOE 3, process, was to consolidate information that is required



**THE DUNK TANK**

During the Picatinny Community Day, held on July 13, 2023, the CCS leadership team participated in the Marine Corps’ dunk tank. (Photo by Diane Fee, PM CCS, Bowhead)

**CONCLUSION**

“Growing your people through involvement in strategic planning, offering them opportunities to lead and providing them the tools to succeed in a family-like atmosphere is the best guarantee of meeting mission,” Joe Pelino, deputy PM, said. A workforce that participates in the evolution of the organization can lead alternative ideas to “traditional” workforce development efforts. It is a positive feedback cycle of ideas and workforce ownership of the organization, that leads to increased workforce satisfaction, benefitting the employees and organization alike.

on a regular basis. To this end, PM CCS initiated an onboarding process that has received excellent testimonials and has been replicated by other PMs throughout JPEO A&A. The human resources (HR) office meets with every new employee whether military, civilian or contractor, and welcomes them to the organization with a welcome package. During this process, HR reviews the welcome package with the new employee, explaining the organization. Topics discussed are the project manager’s philosophy, the culture of commitment to a cohesive and flexible work environment focused on leadership and professional development, collaboration and teamwork, and recognition. The HR team discusses the PM’s portfolio of products and how we are unique from the other organizations under JPEO A&A because of our diverse portfolio. This package leads to a quicker learning curve for new employees and is even used by longtime PM CCS employees as a reference. New employees particularly like the “faces” portion of the welcome package, which features a photo of everyone in the organization. This adds to quicker familiarity between the existing and incoming workforce, leading to increased cohesion.

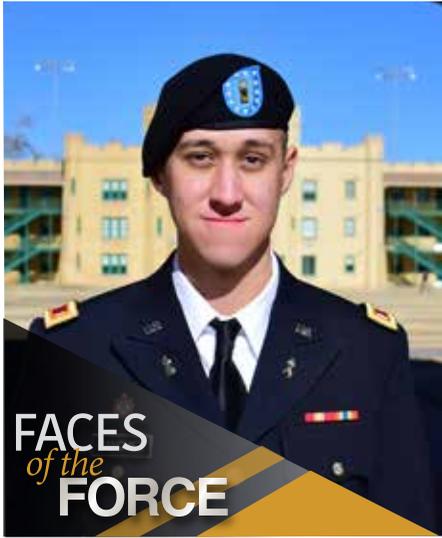
“The onboarding process was great,” said Butch Burgess, a contract employee with PM CCS since 2021. “Even as a contractor I was treated as a full team member from day one. It was like, ‘Welcome to the family.’ ”

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# IT GROWS AS IT GOES



## MARCOS SANCHEZ

**COMMAND/ORGANIZATION:** U.S. Army Mission and Installation Contracting Command – Fort Carson, Colorado, 918th Contracting Battalion, Installation Division

**TITLE:** Contract specialist

**YEARS OF SERVICE IN WORKFORCE:** Less than 1

**YEARS OF MILITARY SERVICE:** 7

**EDUCATION:** B.A. in government, New Mexico State University; A.A. in government, New Mexico Military Institute

**AWARDS:** U.S. Army Excellence in Competition Badge (Bronze, Rifle 2020); Army Achievement Medal with one oak leaf cluster (2019); National Defense Service Medal (2016)

The New Mexico state motto, *Crescit Eundo*, means “It grows as it goes.” According to Marcos Sanchez, his service to his country embodies his state’s maxim. As his twin careers in Army acquisition and the New Mexico National Guard progress, Sanchez said his knowledge and contributions expand.

A native of Las Cruces, New Mexico, Sanchez’s admiration for service and desire to remain in the “Land of Enchantment” led him to enter the New Mexico Military Institute in 2017. There, he said he excelled, and compared the institute as the “West Point of the West,” where he learned leadership, critical thinking and how to have a better eye for detail. He graduated and was commissioned into the New Mexico National Guard as a first lieutenant in the U.S. Army Ordnance Corps, whose broad mission is to procure and supply Army combat units with weapons, ammunition and maintenance. In doing so, he said he achieved his combined goal early in his professional career of service to our country and support to his home state.

His interest in the contracting side of the Army was first piqued when he worked as a material coordinator (contractor) at White Sands Missile Range, New Mexico. “I saw a large swath of military contract-run warehouse logistics and shipping and receiving for U.S. Army [Combat Capabilities] Development Command Data and Analysis Center. This was during the initial phases of the COVID-19 pandemic, when supply chains worldwide were disrupted,” he said. “Witnessing that experience led me to seek a position in the Army acquisition field.” Sanchez added he was fortunate to have the Mission Installation Contracting Command in Fort Carson, Colorado, land on his radar. He was hired and began working as a contract specialist at the installation division last August.

The thing Sanchez enjoys most about his role, he said, is seeing and being a part of the entire life cycle of a contract, from a request, to execution, and finally the end product. “While the first thing that comes to people’s minds when thinking of a contract is just a piece of paper, to me it is so much more,” he said. “It is repairs to the Soldiers’ barracks, custodial services keeping cleanliness to the entire post, and mission essential supplies to aid the lethality of the warfighter.”

Because Sanchez joined the team at the end of the fiscal year, out of necessity he said he was thrown into numerous actions at varying points along the acquisition process without the ideal ramp-up time for new employees to shadow more experienced specialists or have time one on one with a contract officer. “I learned construction contracting from the proverbial fire hose,” he said. “I picked my peers’ brains, modeled KOs’ [contract officers] thinking and studied along the way.”

“The main driving reason I decided to enter this field is the continuous learning opportunities available,” he said. “I receive training opportunities constantly in the form of on-the-job training, small working groups and working with my fellow peers. I have also had training opportunities outside of the office by being sent TDY [on temporary duty] for in-person training at my command’s headquarters and also DAU [Defense

*“I am looking forward to an experience that I will be telling as a story for the rest of my life.”*

Acquisition University] classes for achieving my certification”—living up to his state motto to grow as he goes.

Each month Sanchez returns to his home state for his service to the New Mexico National Guard, where he serves as the plans officer for the 111th Sustainment Brigade, a responsibility he said that does not limit itself to just one weekend a month. “What drives my service is being able to know that I can help Soldiers and their families directly and indirectly,” he said. “When working on a contract, I envision the first- and second-string effects that it has, and I use that as my motivation.”

In his short time in Army contracting, he has seen the impact and the potential further impacts that contracting can provide. “I am looking forward to an experience that I will be telling as a story for the rest of my life, whether that be delivering supplies to the local community during a natural disaster, a service establishing relations with foreign countries to provide essential support to service members downrange, or working on an R&D [research and development] contract that revolutionizes the modern battlefield,” he said.

—**MAJ. BRAD HEINLEY & HOLLY DECARLO-WHITE**



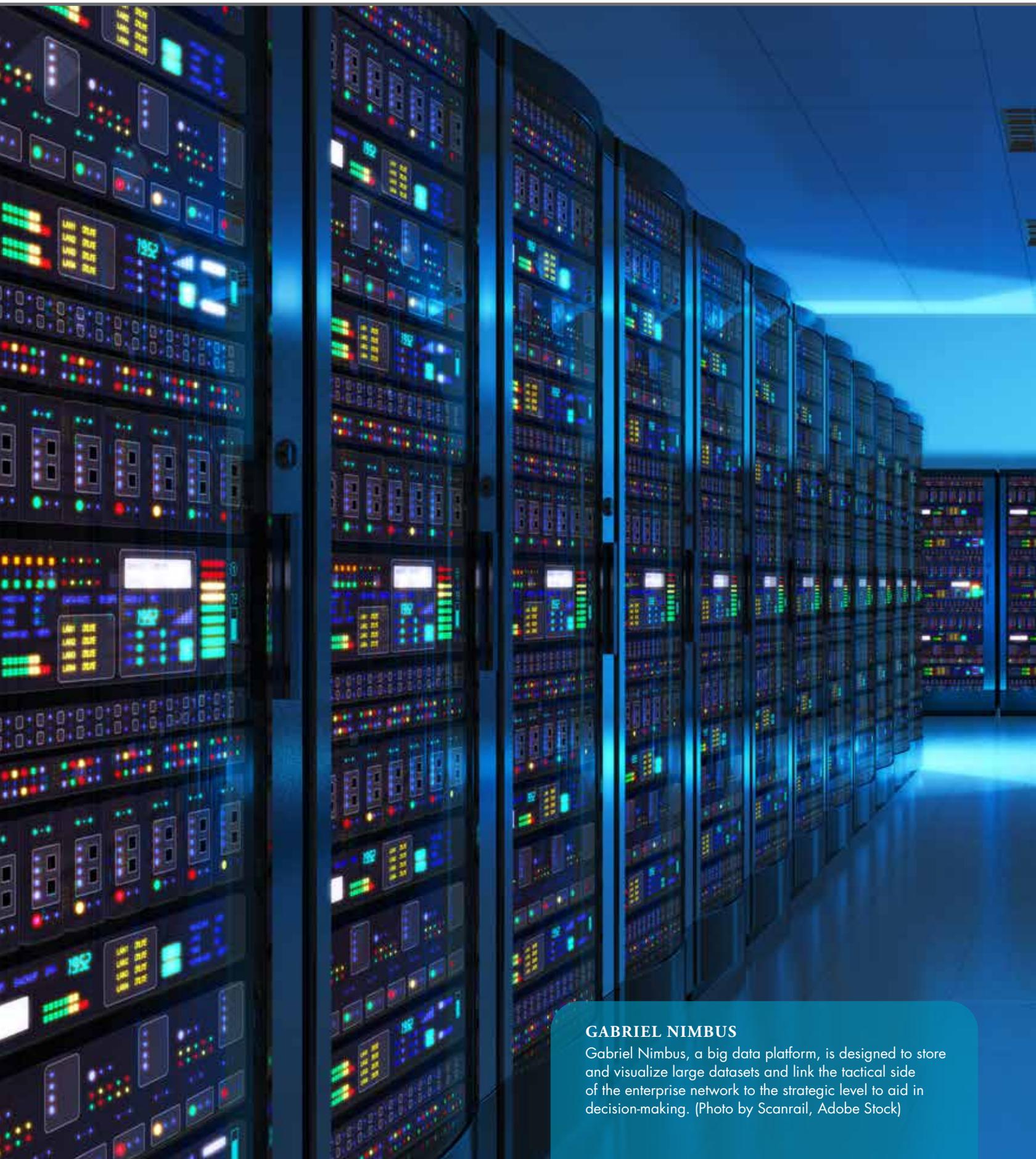
**RANKING HIGHER**

Sanchez receives his new rank patch during his promotion from second lieutenant to first lieutenant in the New Mexico National Guard in front of the 111th Sustainment Brigade, Feb. 5, 2023. (Photos courtesy of Marcos Sanchez)



**THROW BACK**

Sanchez, top row right, and other members of the 918th Contracting Battalion and Mission and Installation Contracting Command – Fort Carson, dressing up for a “Throw-Back Day” during the end of the fiscal year, September 2022.



### **GABRIEL NIMBUS**

Gabriel Nimbus, a big data platform, is designed to store and visualize large datasets and link the tactical side of the enterprise network to the strategic level to aid in decision-making. (Photo by Scanrail, Adobe Stock)

# THE DATA YOU NEED

The Army's new chief information officer discusses his vision for the OCIO and getting the right data to Soldiers.

*by Jacqueline M. Hames*

In the information age, we're surrounded by data—we can find practically anything about any subject on an internet search, including misinformation. We can pull statistics on our social media performance from the native platforms. We can read scientific studies and research papers for free online, or we can post our own opinions on blogs. It's a constant cascade of information that we must sort through.

"A lot of times, having all the data available all the time is not as helpful as we think it is," Leonel Garciga, the Army's new chief information officer, said during an interview with Army AL&T in August 2023.

At the most tactical level, Soldiers don't need the 50,000 fields of information on how their mission was selected or various collateral information on the mission's ramifications—they just need the specific information on the target, Garciga said. A natural shift toward this type of specific data is already taking place, with the Army focused on reducing kit and ensuring Soldiers know what data they need, he explained.

Minimizing the data from a huge pool at the enterprise level down to what's needed for the user is key—it will help drive the Army's decision-making process throughout the development of various programs and policies, especially those from the Office of the Chief Information Officer (OCIO). The best way to do that is through maturing the secretariat and perfecting the management of the OCIO's critical oversight and governance responsibilities.

## **RISE TO THE CHALLENGE**

The OCIO and the Army will face a handful of challenges in the coming years. One of the most difficult from an oversight and governance perspective is incorporating new technologies into the Army's network. For example, policy isn't currently supporting the use of commercially available artificial intelligence and machine learning. "We all love going online and using some of these services, but it's a little different if you have CUI [controlled unclassified information] and government data, or if you're using government data that has some privacy information there. So how do we start putting out some guidance to make sure we don't get ourselves into trouble down the road, and that we have a good approach to audit that?" Garciga said.

Another major challenge that the Army will face in the next few years is reducing the amount of technical debt, or tech debt, incurred over the last two decades, Garciga said. Tech debt is the implied cost incurred when businesses do not fix problems that will affect them in the future—and the longer a business waits, the more costly it will be to fix. In the cybersecurity realm, tech debt can be accrued from poor cyber hygiene practices. For example, while some cybersecurity programs may have expanded, they may not have kept pace with the organizations’ operational growth investments.

“It’s definitely going to be challenged by legacy integration methodology on the data side, and legacy access control methodology, which is going to be kind of an Achilles heel moving forward,” Garciga said. Access control methodology is a data security process that enables organizations to manage who is authorized to access corporate data and resources. Secure access control uses policies that verify users are who they claim to be and ensures appropriate control access levels are granted to users.

“I think the big piece here is how do we start looking at bringing in mitigation strategies to get at that, and as we move the enterprise toward a zero trust environment, how do we make sure that we don’t leave some of those legacy capabilities that we can’t modernize ... and bring them forward, or at least get them to a state that is a lot more secure?”

Mitigating legacy tech debt and ensuring cloud environments are secured appropriately will be major focuses in the future.

“As we look at expanding into the multivendor cloud service provider environment, this becomes even more challenging in the sense of having that

skill set that ubiquitously understands across the landscape—not just what the cloud service providers are delivering, but how we take their implementation from a security perspective and secure it to meet our needs,” Garciga said.

Ultimately, the OCIO will need to understand the enterprise across all mission areas, and how data is being accessed and used, and how to audit data at scale, he explained.

### WORKING TO ZERO TRUST

From the Army’s perspective, network convergence is a primary goal, Garciga said. Executing the Unified Network Plan—a framework that ensures technological dominance and establishes the foundation for a multidomain operations-capable force by 2028—and other

technology implementation and integration projects in support of unified network operations brings the Army closer to meeting the pillars of zero trust, he said.

This will help the Army to perform defensive cyber operations “in a much more streamlined way across the entire network,” he explained. “I think our unified security incident event management ... is going to be super, super important. That’s one of the more critical capabilities that we’re working on—continued expansion of the big data platform Gabriel Nimbus for the Army to support the DCO [defensive cyber operations] mission.”

Gabriel Nimbus is a system designed to store and visualize large datasets, and also link the tactical side of the enterprise network to the strategic level to aid in



### HARD AT WORK

Leonel Garciga, U.S. Army chief information officer, answers questions as part of the Under Secretary of the Army’s Digital Transformation Panel on Oct. 10, at the Association of the United States Army 2023 Annual Meeting and Exposition held at the Walter E. Washington Convention Center in Washington. (Photo by Jeremy Carlin, USAASC)

decision-making. That platform is an example of where the Army has done a great job aggregating and analyzing data, Garciga said.

“Those two things are going to be critical linchpins for zero trust,” he said. “We could not only see ourselves, but we can have some of that core capability to do the analytical work we need to do in the event that there was a compromise or in the event that we had an insider problem that we had to triage. Those are critical.”

Another critical piece of the zero trust puzzle is identity, credential and access management (ICAM), Garciga said. The Program Executive Office for Enterprise Information Systems established ICAM in January 2023 to create a global, scalable and robust capability with a single set of authoritative identity data to give access to Army information technology resources at the point of need. ICAM “really helps us get at step one business system audit, believe it or not,” and lays the foundation for the work the Army needs to do to make data available across all the mission areas and functional areas that have unique sharing constraints, he explained.

### SCALE UP

The OCIO needs to rethink the way it integrates with the Army acquisition community and become more of an enabler for that community, Garciga said. “I think that’s going to be the next step—how do we ingrain that in everyone and thicken that relationship? And the other piece is really reshaping the way we do non-acquisition program delivery. I think that’s huge. I think that continues to be one of the biggest challenges in the department, both fiscally and from a cybersecurity perspective,” he explained.

The cybersecurity and software acquisition pathways can have policy debt as well as tech debt. It’s important to determine which policies are value added and need to be implemented, and which are extraneous and a barrier to delivering capability. “People don’t like talking about it [policy], but it matters, right? If you’re a PM [program manager], it matters a lot,” Garciga said. “It costs money, it costs time and sometimes it slows you down.” He wants to figure out what guidance will best support the DevSecOps work that the program managers are doing.

The OCIO must examine how to support the Army’s four pilot continuous integration and continuous delivery selected acquisition programs from a cybersecurity and portfolio perspective, he added. Currently, there isn’t much official guidance on the subject, and it keeps Garciga up at night because if “you get it wrong, you just deliver software faster with more risk, as opposed to delivering software fast—that’s secure,” he said.

“The key there is getting some of that guidance and making sure that we’re having that conversation with [the assistant secretary of the Army for acquisition, logistics and technology] to shape what that looks like,” Garciga said. “The other piece of that is testing. ... How we integrate the test community into that is extremely huge.”

The OCIO also needs to determine how to support commands and what they need for their missions on a large scale, Garciga said. “We’re not a bodega—we’re Walmart plus Amazon. ... It’s hard to run your own Amazon and Walmart at the same time.”

Providing guidance that supports the logistics personnel who are trying to get parts in the motor pool and the intelligence personnel who are trying to get sensitive data to warfighters is extremely complex. “Those are like different planets,” he said. “How do you make sure that you can shape some guidance out there that supports both what folks are doing on the acquisition side and supports what folks are doing on the mission side?” There’s a balance that needs to be found with that, and Garciga hopes to help the OCIO find that balance as much as he can.

### CONCLUSION

The conversation in the cyber space must shift to integration, and not just making data available according to set standards, Garciga explained.

When he looks across the warfighting mission and the intelligence space, he sees the potential for growth in data integration and interoperability. “In an environment where we definitely have never fought alone—and we’re not going to, we fight with our joint partners—it continues to be more and more critical that we get at some of our interoperability and integration challenges across the board,” Garciga said.

Getting users the data they need at the right time and in the right place is paramount.

*For more information about the OCIO, go to <https://www.army.mil/cio>.*

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## DATA ARCHITECTURE

Through the use of data architecture, data architects can achieve data individuality, cataloging, discovery, accessibility, governance, analytics and retention periods with a well-planned and optimized data storage capability. (Photo by Kevin Ku, Pexels)

# LOGISTICS FOR DATA

Getting battlefield data to the right place at the right time:  
The mess versus the mesh.

*by Thom Hawkins and Andrew Orechovesky*

*Part Two of a three-part series.*

The Great Library of Alexandria, which flourished in Egypt during the Ptolemaic dynasty of the third and second centuries B.C.E., took any manuscripts found on ships that docked in its port, copied them, and then returned the copies to the ship while retaining the originals. Viewing an original and a copy as interchangeable relies on the notion that the parchment's information provides the value, not its medium—a giant step forward toward our modern, digital world.

While the first entry in this series (“Logistics for Data,” Army AL&T Fall 2023) discusses the demand signal for data, this entry will focus on inventory and warehousing of data. Making use of a physical resource, like an ancient parchment or a shiny new case of ammunition, requires geographic co-location and a limit on the number of simultaneous users. In contrast, an unlimited number of people can use a digital resource remotely at the same time. Even still, as we discuss in this article, the library is an apt metaphor, and ties data to the same physical logistics as something like ammunition.

## DATA STORAGE

Army logisticians seeking to replenish a unit's ammunition must know where the ammunition is stored and have access to view the current inventory, specifically the desired items. The same applies to data (e.g., tactical or strategic data products) stored in a data repository, or “data platform.”

The location of where data is used has evolved in recent years. A structured database, often referred to as a “data warehouse,” is co-located with the application that uses that data. This is inefficient because the same data may be needed by different systems, but each system may have its own source or frequency of update, resulting in the potential for discrepancies. Databases can use a process called federation to create links that synchronize those data points. However, this can lead to chaotic and disorganized connections that databases cannot maintain, especially as applications change.

From data warehouses, industry's response to the limitations of data warehouses was data lakes, which are a common pool of raw data, only structured or federated as needed to serve set purposes. Data lakes have their own set of limitations, including the potential for disparate or conflicting sources of data. More recently, data fabric, which acts as a common data warehouse, has gained popularity. Instead of assigning each application a database with its own data, all applications rely on data in the common

database. This solution offers more efficiency, but also additional challenges. In a degraded network environment with intermittent or unstable connectivity, systems may not have access to the shared data resource. Novel data also may require an update to the structure of the fabric, just as with a database or data warehouse.

Despite all of these various data “buildings”—the term “data architecture” can generalize to include the flow of data through systems and the inventory schema, expanding beyond the storage schema. Data architects can achieve data individuality, cataloging, discovery, accessibility, governance, analytics and retention periods with a well-planned and optimized data storage capability. Data individuality or uniqueness is one of the more essential characteristics; duplicate data brings on unwanted technical debt in the form of poor system performance, storage costs, data confidence concerns, data lineage problems and, eventually, archival issues. While digital forms make no distinction between original and copy, duplication is the process of replicating data and storing it separately, just as Alexandrian librarians did thousands of years ago.

### MESS VS. MESH

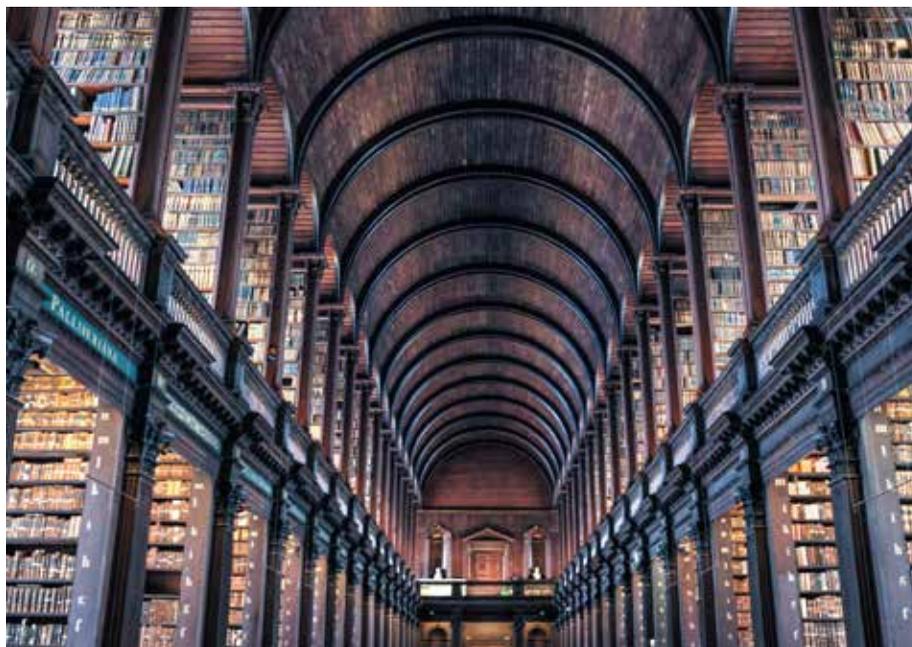
The problem with any physical or digital warehouse is decreasing efficiency with more content. Like Jorge Luis Borges’ fictional “Library of Babel,” which contained not only every book but every possible book, the vastness of the collection degrades access to either hardware or data. Amazon mitigated this problem in its warehouses through an inventory method called “random stow.” When goods arrive in the warehouse, Amazon employees shelve them wherever there is available space, with both the item tag and bin tag scanned and linked. This reduces time wasted adjusting allocated space to keep like items together. When items are picked

for delivery, employees follow automated guidance to the closest instance of an item, thus reducing travel time and effort to retrieve the next listed object within the warehouse.

Libraries have adopted the same policy. Faced with the increasing volume of books and the cost of expanding publicly accessible storage space, larger libraries have made using the catalog, rather than browsing the shelves, the primary method of locating a book. The book’s location no longer matters—including behind locked doors in the building or in cheaper offsite storage. The University of Nevada, Las Vegas’ Lied Library competes for attention with the fountains at the Bellagio with a glass-walled warehouse, where similar-sized books are stored together in bins to minimize wasted space. A user clicks

a button to send a request for a book to the Lied Automated Storage and Retrieval system, which sends a robotic arm to fetch the associated bin and deliver it to a retrieval desk.

Similarly, the Army is implementing a data mesh. A mesh links producers and consumers of data via a central catalog that lists the available data products. By the library analogy, the catalog connects a reader to a published book. According to Data.world, a data product is defined as “a reusable data asset, built to deliver a trusted dataset, for a specific purpose,” and thus a book is a physical version of a data product. Other examples of data products could include an operational order, a firing target and its coordinates, or a research dataset. One data product could derive another, just as a nonfiction author may



### OLD-SCHOOL DATA

Data management and storage often encounter similar problems to libraries—how do you best store vast amounts of data while making it easy for users to access? (Photo by Skitterphoto, Pexels)

consult references while writing a new book. Those references and their citations prove crucial for data trustworthiness and security, making the data product's lineage traceable to its source.

The data mesh does not concern itself with data storage, so anything can store the data including a warehouse, lake or fabric. This construct makes it easier to share data across organizations that may have their own ways of storing data, without the need to change those methods. Once a potential consumer identifies a data product in the data catalog, they can request it from the producer. For the Army, different domains, separated by subject, organization or area of operations, do not have to store their data in the same way if it can be shared upon request.

## The speed and security that catalogs offer support timely enhanced data-driven decisions.

### DATA INVENTORY

Metadata describe an individual data product and is stored in a data catalog. While metadata standards vary, most include author, subject, data domain, classification, releasability, temporal (time) coverage, spatial (location) coverage, confidence, lineage and governance policies. A well-crafted data product will contain each piece of metadata a user can employ to discover the data product within the catalog of all products. Metadata extraction and cataloging for each data product can begin once data has been ingested into the data platform.

Separating the data catalog from the data warehouse, although inefficient, provides an added layer of security by isolating one system from the other. The standalone digital data catalog system offers efficiencies such as fast searches, categorization, location links, data relation links and restriction tags for sensitive data products. The speed and security that catalogs offer support timely enhanced data-driven decisions.

### DATA RETENTION

Just as book retention is a hot topic among librarians, who debate the criteria used to cull their collections, data retention can also be contentious, with some declaring that all data is perishable and others wanting to hoard the data forever. The problem is that data may be used differently by various stakeholders. For some, only the most current data is relevant; others want to evaluate data trends over time. For example, data ingested into a data platform will be normalized to align with a particular standard (format, scale), and each new update will overwrite previous data, because the data platform's utility is to provide the latest data for decision or action. However, at the same time, updating machine-learning algorithms requires data in its raw, unadulterated form, including how that data has changed over time.

### CONCLUSION

When a library makes a decision to move some books to offsite storage, it does so based on a prediction about how frequently a particular book will be consulted. Data platforms may make that same calculation based on considerations of data usage and accessibility. Data platforms may lose the ability to synchronize due to denial or degradation of signal, just as area denial may interrupt a supply line.

Parchments arrived in ancient Alexandria by ship, but modes of transportation for data have changed quite a bit in the intervening millennia. Modern data transportation and synchronization will be discussed in the third and final article of this series.

*For more information, contact Thom Hawkins at [jeffrey.t.hawkins10.civ@army.mil](mailto:jeffrey.t.hawkins10.civ@army.mil).*

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## KEVIN VANYO

**COMMAND/ORGANIZATION:** U.S. Army Combat Capabilities Development Command Ground Vehicle Systems Center

**TITLE:** Deputy executive director for Ground Vehicle Modernization Technologies

**YEARS OF SERVICE IN WORKFORCE:** 25

**YEARS OF MILITARY SERVICE:** 30

**DAWIA CERTIFICATIONS:** Practitioner in engineering and technical management; Advanced in program management; Practitioner in test and evaluation

**EDUCATION:** M.S. in industrial engineering, University of Louisville; MBA, University of Louisville; B.S. in management science, State University of New York at Geneseo.

**AWARDS:** Legion of Merit; Defense Meritorious Service Medal; Army Meritorious Service Medal with six oak leaf clusters; Army Commendation Medal with two oak leaf clusters; Army Achievement Medal

# A BROAD SAMPLING

For Kevin Vanyo, job satisfaction didn't come solely from any one job or assignment he's held throughout his decades-long Army career. It was a sampling of all, and in varying capacities—especially the one he was most uncertain about.

“There was a time during my career when I felt I might not have been a great fit for an assignment, but I went anyway and I'm very glad that I did,” he said of a time, in 2010, when he was being assigned to Special Operations Command (SOCOM) and he didn't understand why, since he never worked with the special operations community before. “At the time I was pretty disappointed, but about a month after finding out about the assignment, I received a call from a colonel at SOCOM who told me I was actually being assigned to a different position [at SOCOM] based on my Army vehicle acquisition experience,” said Vanyo. “This wound up being one of the greatest assignments of my military career, so I'm extremely happy I didn't try to get out of the assignment.”

And he's had many others play out in similar ways. According to Vanyo, some of the best opportunities he's had in his acquisition career were from a diverse, well-rounded assortment of assignments. “I've had assignments in requirements development, program management, science and technology, and test and evaluation. The defense acquisition life cycle model is extremely complex and broad, and to have been able to work across the entire life cycle has increased my understanding of how the different elements work together to deliver capability to our warfighters,” he said. “I think this provides me with a tremendous advantage in having the ability to have meaningful discussions with numerous stakeholders across the acquisition enterprise.”

*“Acquisition sounded like the perfect career path to me.”*

Vanyo is the deputy executive director for Ground Vehicle Modernization Technologies, focused on science and technology efforts in ground vehicle survivability and protection, vehicle electronics and architecture, and ground vehicle power and mobility. He and his team accelerate the delivery and sustainment of ground system capabilities to allied partners, while ensuring overmatch for warfighters.

“The greatest satisfaction I have as a member of the Army Acquisition Workforce is being able to work with dedicated professionals who are committed to ensuring the Army never enters a fair fight,” said Vanyo. “We work extremely hard to ensure our Soldiers have the best equipment possible so they come home to their families after their duties put them in harm's way.”

Vanyo entered the Army Acquisition Workforce in 1998 as a uniformed officer after eight years as an armor officer. During a deployment to Kuwait in 1995, he had the opportunity to meet an acquisition officer who was doing contracting work, which was of

interest to him. “I had never heard of the Army Acquisition Corps before,” he said. “He explained what he did and I was fascinated about all the education and career opportunities in acquisition.”

As an armor officer, Vanyo was on tanks in Korea and Germany. “I absolutely love the Abrams, but I also often wondered how to make them even better, so acquisition sounded like the perfect career path to me,” he said.

Vanyo’s first acquisition assignment was as a combat developer at Fort Knox, Kentucky, where he had the opportunity to work on a joint U.S. and U.K. development effort called the Future Scout and Cavalry System. “It was a tremendous assignment as I was able to leverage my operational experience and really get to understand the requirements process and how industry engineers made design trades,” he said. “Working on an international program really opened my eyes to both opportunities and challenges. I could not have asked for a better first acquisition assignment.”

Vanyo said the Program Manager’s Course (PMT 401), which he took in 2012, prepared him to be an effective product manager by reviewing numerous case studies and having rigorous discussions

regarding specific situations, what happened, why and what could be learned from them. “The instructors told us we’d have ‘aha’ moments as PMs where we’d be in situations and recall a particular case study that encountered something very similar,” he said. “I was shocked at how right they were and the tremendous amount of actual aha moments I had where I was able to leverage the discussions and lessons learned and apply them to our program’s unique problems. I would encourage anyone desiring to become a program manager to take the course. ... It’s invaluable.”

Vanyo said he also would encourage junior acquisition personnel (both civilian and military) to try and get a broad sampling of assignments so they gain a better appreciation for how all aspects of the life cycle fit together. For example, he said, “I think having S&T [science and technology] engineers moving to a matrix program management office (PMO) assignment for a number of years increases their understanding of what it takes to deliver capability to the field and to sustain it. The opposite is also true, when PMO personnel take an assignment in science and technology, they gain an appreciation for the difficulty of developing new technology and transitioning it to programs of record.”

After spending 30 years on active duty and then returning to the Army as a Department of the Army civilian, Vanyo said most of his neighbors, family and friends consider him the “Army guy.”

“Most people outside the military or defense industry find that doing anything for the Army is fascinating, and depending on the job I’ve had at the time, they are really drawn to the fact that I’m able to work on things that have a real impact on Soldier survivability,” he said. “I think my father was very surprised how much and how closely I was working with industry after I transitioned to the Army Acquisition Corps.”

Vanyo said if there is one thing he’s learned it is that acquisition is extremely complex, and there are dedicated professionals across the enterprise that do their very best every day to make a difference for our warfighters. “When there are challenges and disagreements between different stakeholder groups, I try to see things from their point of view and remember they are doing what they think is best. So I do my best to try and find common ground so all the stakeholders can work together as a team to deliver capability.”

—*CHERYL MARINO*



#### CREW REST

Vanyo, taking a brief break inside an Abrams M1IP tank at the Tactical Assembly Area, Camp Casey, South Korea, in fall 1991. (Photo courtesy of Kevin Vanyo)



### SHOW 'EM HOW IT'S DONE

A Soldier operates the wearable version of the Tactical Biological Detector in the field. (Photo by Gabriella White, U.S. Army Combat Capabilities Development Command Chemical Biological Center)

# PARTNERING FOR THE WARFIGHTER

Technology development agreements drive chemical-biological defense efforts.

*by Brian B. Feeney, Ph.D.*

**A**n easy-to-use chemical and biological agent sensor that fits in a pocket; a portable device for detecting a chemical agent left by fingerprints without diminishing the forensic value of those prints; and a real-time automated biological aerosol detector that's small enough to be worn on a uniform are all innovations that are among the nearly 200 advances made possible in the past two years by technology transfer partnerships with the U.S. Army Combat Capabilities Development Command Chemical Biological Center (DEVCOM CBC).

U.S. defense research laboratories like DEVCOM CBC serve a vital role. They direct all their research toward developing technologies that will benefit the warfighter, and thereby the nation. Defense research laboratories cannot do it alone, however. They partner with industry for commercial development because it gets new technologies into the hands of the warfighter quickly and because it is required by law. Furthermore, the 2023 National Defense Strategy states that DOD “must be more proactive with its engagements with the private sector to make the right investments to capitalize on emerging technologies.”

The mission of executing that proactive engagement with industry falls to the center's Technology Transfer Office (T2), which was established in 1986. With a staff of less than 10 with an eclectic set of backgrounds, T2 actively initiates agreements with industry to collaborate on applied research, product development and testing. It establishes contacts in industry by attending science conventions, monitoring trade journals, and by meeting directly with industry experts, DEVCOM CBC scientists and engineers. With this accumulated knowledge, T2 personnel serve as a central repository of commercial partnership knowledge for the entire center.

## **MAKE ME A MATCH**

When a DEVCOM CBC research team arrives at the stage where commercial collaboration on its technology is the next step, T2 gets to work finding the right match with a private company. When the research team and the selected company arrive at an agreement in principle to work together, T2 digs into its toolbox. That toolbox includes cooperative research and development agreements, letters of intent, material transfer agreements, patent license agreements, technology support agreements, memorandums of agreement and memorandums of understanding.

The DEVCOM CBC research team and representatives of the private company select the best type of agreement for their circumstances and goals. Once an agreement is forged, the partner company reaps several benefits. DEVCOM CBC makes its intellectual property portfolio available, contributes its science and engineering

expertise and provides access to its one-of-a-kind chemical biological research and testing infrastructure. In return, the partner company offers its own specialized expertise, ability to commercially manufacture and entrepreneurial energy.

The result is twofold. New chemical biological defense technologies get into the hands of warfighters faster, and industry, particularly technology startup companies, benefits from new business.

What is easy to miss among the legal agreements and the technology development is the human story behind every successful DEVCOM CBC commercial partnership. With each partnership comes a team of DEVCOM CBC researchers that sees the importance of meeting a real warfighter need and understand that partnering with the right company in the private sector will get the job done, going from applied research all the way to a fielded device. Keeping the warfighter better protected in the field is a team endeavor. Each partnership adds private industry entrepreneurs to the effort. They recognize the value of the research team's new technology and appreciate the value of public-private sector partnership.

### FROM COUNTERTOP TO POCKET

Two DEVCOM CBC researchers, Jennifer Sekowski, Ph.D., and Kelley Betts, developed the Pocket Detection Pouch using seed money from an internal fund designed to test promising new ideas. It is a simple-to-use device that simultaneously tests for the presence of synthetic opioids and chemical and biological agents. It came about because Betts had a eureka moment in her kitchen. Her husband already had been deployed several times, and she wanted to find a way to make him safer by creating a field test for threat agents that would require no power source, provide quick results and fit in his pocket. What she and Sekowski came up with was a set of small channels inside a plastic bag that moves a liquid, sampled in the field and placed in the bag, over strips of paper that change color in the presence of agent. The paper reveals the presence of an agent based on the color change. "I questioned the traditional paradigm that threat agents can only be analyzed



### PROOF POSITIVE OR NEGATIVE

The Pocket Detection Pouch contains strips that change color in minutes to indicate the presence of chemical or biological agents as well as opioids. (Photo by Gabriella White, DEVCOM CBC)

using a test tube or cassette," said Betts. "I wondered if we could test using something different, like perhaps a pouch."

During field testing starting in 2019, Betts could see that they had a hit on their hands. During a technology demonstration event at Camp Dawson, West Virginia, a Soldier told them that the Pocket Detection Pouch should be considered as a new DOD program of record because it has the ability to amplify current capabilities and can provide security forces with a quick fentanyl response without calling in hazardous material specialists. A member of

**TACBIO Gen II was designed to be a lightweight, field-portable biological agent detection device.**

the 79th Military Police Battalion at Fort Carson, Colorado, told them that they had “strong interest in PDP [Pocket Detection Pouch] as part of a field-forward kit with the swappable detection strips.”

With a better mousetrap in hand, DEVCOM CBC’s T2 found a disabled-veteran startup company uniquely qualified to advance this technology. It is run by a former Army medic, Yusuf Henriques, who founded the genomics company IndyGeneUS in 2021. Henriques was immediately interested in the cleverness of the Pocket Detection Pouch and wanted to partner with the center. The T2 team sprang into action and created a letter of intent for a research partnership, which Henriques was able to use to raise startup funds. In June 2023, DEVCOM CBC and IndyGeneUS entered into a cooperative research and development agreement (CRADA), and together they are refining the Pocket Detection Pouch design and gearing up for an initial low-rate production to allow for expanded field testing. “Partnering with IndyGeneUS is enabling us to move the Pocket Detection Pouch out of the laboratory and develop a commercial version that can be put into the field where more Soldiers can use it and help us make it an even better fit for their needs,” said Sekowski. Future applications are not limited to the armed forces and may include civilian first responders and citizens who were possibly exposed to hazardous materials.

### LIGHTER IS BETTER

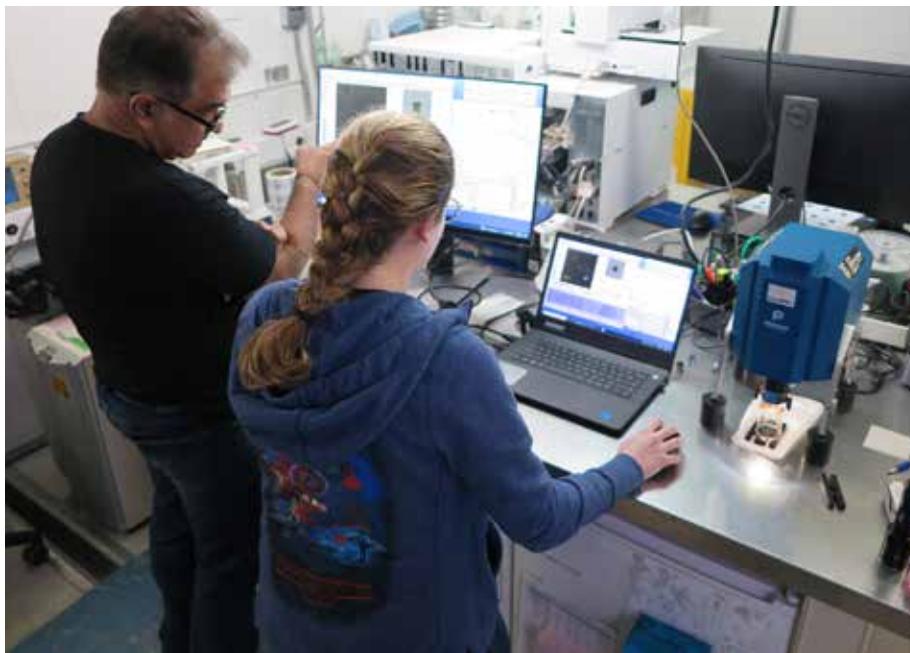
The Portable Microscopy Chemical Detection System is another technology borne of deployment. A senior DEVCOM CBC scientist returned from deployment in Afghanistan and presented a fingerprint sample on a substrate. He wanted to see if it was possible to identify traces of chemical agent on it without contacting or altering the forensic value of the

fingerprint. This was a recurring problem he experienced at the frontlines during deployment. A team of DEVCOM CBC scientists, led by Jason Guicheteau, Ph.D., and Ashish Tripathi, Ph.D., responded to the challenge by figuring out how to shrink an existing nondestructive agent detection system from the size of a small refrigerator to the size of a breadbox weighing 10 pounds. It requires minimal training to use, and the system captures the fingerprint image, which it can send electronically to the FBI’s Integrated Automated Fingerprint Identification System for identification.

At the same time, the system can perform forensic analysis of any trace explosives and illicit drugs from residues found between the fingerprint grooves on that surface.

Because the system is simply placed over the sample, the sample is never touched or altered in any way. The means of detection is so sensitive that microscopic deposits of a substance can be identified. It does this by hitting the substance with light. This technology is known as automated Raman microscopy. Raman occurs when an intense light source interacts with a molecule and produces a vibrational bond, much like a fingerprint, that can be used to identify what type of molecule it is.

While the technology was proven, the 80-pound detection device that existed at the time was not field-deployable. Getting it down to 10 pounds was going to require help from the private sector—they just needed the right partner. They found the ideal partner in Pendar Technologies, a



### TAKING A CLOSER LOOK

Ashish Tripathi, left, and project team member Evelyn Ligon, examine analytical results generated by the Portable Microscopy Chemical Detection System within minutes of hitting the object of interest with light. (Photo by Jason Guicheteau, DEVCOM CBC)

small Cambridge, Massachusetts-based technology company that specializes in advancing intelligent chemistry systems. In 2017, DEVCOM CBC T2 created a CRADA so that both parties could work closely together on solving how best to shrink it down to 12.5% of its starting weight. “The partnership and exchange of ideas with Pendar Technologies has been crucial for advancing the evolution of the portable microscopy technology we originally envisioned,” said Guicheteau. “And it accelerated the timeframe for eventual fielding.”

By taking the system on the road and demonstrating its capabilities and potential, Guicheteau and Tripathi were able

to obtain funding from DOD’s Irregular Warfare Technology Support Center and the United Kingdom Ministry of Defence. With the money in hand, and after months of hard work, they ended up creating the world’s smallest, most portable automated Raman microscope.

It received good reviews from the user community. Capt. Kyle Hallinan, laboratory director of the Joint Theater Forensic Analysis Center, said, “We are very excited to implement this technology as it compliments support to forensic science exploitation and force protection. Inside USAFRICOM’s theater exploitation laboratory, our chemists were able to use the technology to provide near real-time

identification of micron-size particles of explosives and drugs in a significantly smaller package than our stationary laboratory equipment.”

Guicheteau and Tripathi are now readying the technology for production and anticipate delivering the devices to their first customer, the U.S. Army Criminal Investigation Directorate, in early 2024.

### MAKING IT WEARABLE

The second-generation Tactical Biological Detector (TACBIO Gen II) was designed by a team of DEVCOM CBC scientists and engineers, led by Aime Goad and Gary Kilper, to be a lightweight, field-portable biological agent detection device. It can



### HOW-TO'S OF TACBIO

DEVCOM CBC scientists Aime Goad, center left, and Gary Kilper, center right, show Matt Jones, second from right, and his DEVCOM CBC Technology Transfer staff how to operate the wearable version of the TACBIO. (Photo by Gabriella White, DEVCOM CBC)

be used by warfighters and first responders alike to detect potential biological agent exposure. Generation II is a big improvement over the original 2008 version, TACBIO Generation I. First field tested in 2014, it reduced sample results time from 60 seconds to five seconds, reduced the weight from 3 pounds to 1 pound, and reduced the cost from \$10,000 to \$2,000. But never content to rest on their laurels, the team kept working on further refinements and greater technical sophistication, particularly greater miniaturization.

This ongoing research prepared the team to meet a very specific U.S. Coast Guard need. The Coast Guard wanted a miniaturized version of the TACBIO that can be clipped onto a uniform while on deck. To meet this requirement, Goad and Kilper

had to find a private sector research partner to help complete the device's refinements and scale it up for commercial production.

Scientists at Applied Research Associates (ARA), an employee-owned scientific research and engineering company with an office in Littleton, Colorado, were aware of the technology and eager to partner with Goad and Kilper's team to create a wearable version of TACBIO for the Coast Guard. Goad put T2's Matt Jones in touch with the company's corporate counsel and together they established a CRADA. DEVCOM CBC and ARA collaborated on and produced the now-patented Wearable Biological Warfare Agent Detector, which is in use by the Coast Guard and receiving interest in licensing for larger-scale manufacturing. "Applied Research

Associates proved itself to be a full partner in the two-year effort to miniaturize the TACBIO to meet the Coast Guard's requirements," said Goad. "By leveraging each other's talents, we arrived at a prototype far faster than either partner could have working alone."

## CONCLUSION

In each of these cases, scientists at DEVCOM CBC saw the importance of meeting a real warfighter need and understood that partnering with the right company in the private sector would get the job done—going from applied research all the way to a fielded device. Each of these cases demonstrates that keeping the warfighter better protected in the field is a team endeavor.

"The efforts of our researchers and the center's Technology Transfer team have really paid off for everyone," said DEVCOM CBC Director Michael Bailey. "These partnerships not only shorten the time between a good idea and a new technology in the hands of warfighters, they also invigorate the economy and expand the nation's chemical-biological defense industrial base."

*For more information, go to <https://www.cbc.devcom.army.mil>.*

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*BRIAN B. FEENEY, PH.D., is a public affairs specialist at DEVCOM CBC, where he writes news and feature stories on the science and engineering achievements of the center's researchers. He has written for the center since 2014. He holds a Ph.D. in risk communication from Temple University, an M.A. in communications from Cornell University, and a B.A. in history from Colorado College.*

## PARTNER WITH THE PRIVATE SECTOR—IT'S THE LAW

The effort to make federal laboratories a resource for the private sector formally began with passage of the Stevenson-Wydler Technology Innovation Act in 1980. This law required federal laboratories to set aside a percentage of the laboratory budget specifically for technology transfer activities. This was followed by the Federal Technology Transfer Act of 1986, which established the Federal Laboratory Consortium, a U.S.-based network of federal laboratories. The consortium has an established forum dedicated to finding ways to transfer technology developed by its members to the private sector. The act also established cooperative research and development agreements (CRADAs) to negotiate licenses for patented inventions developed at the laboratory. In 1992, Congress passed the Small Business Research and Development Enhancement Act, creating mechanisms for small businesses to enter into joint ventures with federal laboratories. In 2015, DOD stood up the Defense Innovation Unit, whose mission was to make contracting with DOD easier for small businesses developing leading-edge technology. This was in response to a growing Silicon Valley-Pentagon divide that defense planners saw as damaging to national security in the face of China's ability to adopt new commercial technologies with much greater agility.

### TEAMMATE TURNED MENTOR

Dominic Estanislao, a mentor for the FIRST Robotics Competition Team 3314 Mechanical Mustangs, holds the winning banner at the 2023 New England FIRST Southeast Massachusetts District event, held March 3-5, 2023, in Bridgewater, Massachusetts. (Photo by Savannah Garcia, Team 3314 Mechanical Mustangs senior)



# A VISION FOR THE AGES

A new robotics team is hoping that with Picatinny Arsenal's help, it can get a wider range of youngsters involved in STEM.

*by Cheryl Marino*

Science, technology, engineering and mathematics (STEM) programs are invaluable for nurturing critical thinking, innovation and problem-solving skills—ultimately driving progress, societal contribution and economic growth. Teachers of these subjects, like New Jersey educator James Hofmann, know this and the importance of teaching kids about the world around them in a fun, hands-on manner; something he has done throughout his 31-year career teaching technology in the Newton Public School District.

After five years in Newton High School's STEM Lab and 15 years coaching a local Picatinny Arsenal-sponsored varsity robotics team—called Aperture 3142, which he founded in 2009—he strongly believes that hands-on STEM instruction should be available to all interested students. Even beyond their locale.

Now retired, Hofmann is forming a new nonprofit robotics team called Aperture Fabric8 Inc., for which he plans to seek Picatinny sponsorship. The new nonprofit would be open to all of Sussex County, New Jersey. Hofmann hopes it will act as a conduit for all high school robotics teams throughout the tri-state area of New Jersey, New York and Pennsylvania.

The concept of Fabric8 would be much like a youth traveling soccer team or a multidistrict Little League Baseball association. A student would have the opportunity to join their local school varsity robotics team (if one is offered) or join a multidistrict, countywide team like Fabric8, or both.

"It's needed in our area and beyond," Hofmann said. "It's scalable. And if this goes as I think, it can be easily shared and transferred to other counties in New Jersey using FIRST [For Inspiration and Recognition of Science and Technology] Robotics teams as the motherboard."

### FIRST THINGS FIRST

FIRST Robotics is a not-for-profit international organization that partners with local and regional school districts to prepare young people for the future through a suite of inclusive, team-based robotics programs. Team Aperture 3142 is aligned (and Fabric8 will be aligned) with FIRST Robotics, now in its 32nd year of competition.

Through FIRST Robotics programs (grades pre-K through 12, ages 4-18), teams from across the globe enter FIRST Robotics Competitions each season during a six-week period to build remote-control

robots capable of competing with other robots. More than 3,300 FIRST Robotics Competition teams competed during the 2023 season, with 619 teams advancing to the international FIRST Championship in Houston scheduled in April 2024.

Picatinny Arsenal supports FIRST Robotics teams and played a key role as the founding sponsor of Team Aperture 3142—underscoring the arsenal’s commitment to promoting STEM education and fostering global competitiveness. Hofmann’s newly formed nonprofit, Fabric8, will also operate within the FIRST Robotics team framework and develop a community makerspace for young engineering hopefuls in grades five through 12.

The difference with Fabric8, Hofmann said, is that it has potential for a wider community reach than Team Aperture 3142, which is currently limited to Newton, Green Township and Andover, New Jersey, schools. The newly proposed Fabric8 will open the door for all Sussex County schools and beyond to participate—building an expanded network that he believes will boost Picatinny Arsenal’s STEM office reach.

“FIRST [Robotics] teams offer students the opportunity to solve problems, collaborate, design, broadcast, make change, engage legislators and offer community service,” Hofmann said. “It teaches students the career paths possible and also prepares them for the ones not yet innovated.” It’s as close to real-world engineering as a student can get, he said.

Dominic Estanislao, a former FIRST Robotics team member and an engineer at the U.S. Army Combat Capabilities Development Command Armaments Center (DEVCOM AC), said he initially had joined the robotics team to take

pictures and videos, but shortly thereafter began making parts for robots and supporting the remote-control drive team. It became clear which direction his career was heading, so he joined the Armaments Center as an intern, while he pursued his degree at the New Jersey Institute of Technology. After graduation, Estanislao was hired as a full-time mechanical engineer at DEVCOM Armament Center’s Analysis, Materials and Prototyping Directorate and continues to mentor his alma mater, Team 3314 Mechanical Mustangs, which he has been a part of for a decade.

“FIRST Robotics is a unique opportunity that can inspire students that are not sure what they want to do in life to pursue STEM. Picatinny STEM has been a sponsor of [FIRST Robotics Competition] Team 3314 since the early days of the team’s existence and an integral part of the program’s development to what it is today,” he said.

Being part of a FIRST Robotics Competition team has been “a great experience,” Estanislao said. As a high school student, he was able to work alongside engineers to design, build and field a robot in a short amount of time. As a mentor, he said, robotics provides opportunities to use different manufacturing tools than he usually uses for his job, so it not only benefits the students but the mentors, too.

“As an alumni and current mentor, I could not be prouder of my team’s achievements,” he said. “Being on my team now as an engineer I have realized that as a student you build robots, but as a mentor you build people.”

### SHARED VISION

Hofmann’s commitment to igniting inspiration among young minds within the realm of STEM subjects resonates with Picatinny Arsenal’s mission of fostering



### IN GOOD HANDS

James Hofmann handing the ball—used by robots to shoot hoops into baskets—off to his replacement, Ciana Roman, at the New Jersey State Fair, held at the Sussex County Fairgrounds in Augusta, New Jersey, Aug. 4-12, 2023. Roman will be teaching technology at Newton High School and coaching Team Aperture 3142 for the 2023-2024 season. (Photo courtesy of Caitlin Bailey, mentor and 2018 team captain, Team Aperture 3142)

**“We use that muscle sitting on top of your shoulders, no concussions in the sport of robotics. Earn a scholarship, internship or apprenticeship. Then you can turn pro on day one.”**

education and the cultivation of a passion for STEM fields designed to inspire those like Estanislao, and the next generation(s) of our future workforce. Teaming up with the DEVCOM Armaments Center to secure sponsorship from Picatinny Arsenal, Hofmann said, would foster growth for Fabric8 and, at the same time, aid the arsenal’s STEM office goals and objectives.

Picatinny Arsenal has long supported outreach events to encourage students to pursue careers in STEM. FIRST Robotics Competition and Team Aperture 3142 have been sponsored by the arsenal’s largest organization, the DEVCOM Armaments Center and DOD STEM, since 2009, initiated under the late Col. Edward Petersen’s mentorship and control and making it the first and oldest Picatinny STEM-sponsored team.

Since the program’s inception, Team Aperture 3142 has received about \$5,000 in DOD funding each year—more if the team advances to the world competition. For Fabric8 to be considered for similar funding, Hofmann would need to submit a proposal to DEVCOM headquarters, which would determine which teams are approved for funding through federal

grants. Currently, Hofmann is in the final stages of legally establishing Fabric8 as a nonprofit in the state of New Jersey, which he said is a slow process. Once finalized, plans can move forward.

FIRST Robotics operates under two grants. One from DEVCOM DOD STEM (Office of the Assistant Secretary of Defense, Research and Engineering/Office of Basic Research, which provides FIRST Robotics with funding for tools, services and travel for competitions) and one from Picatinny STEM (which provides mentoring support to engineers, scientists or others in FIRST Robotics teams in New Jersey, New York and Pennsylvania).

DEVCOM Armaments Center currently supports approximately 1,500 teams with a budget for FIRST Robotics estimated at \$250,000, which includes mentoring. Estanislao is one of 60 professionals supporting the 2023-2024 season, Stacey Yauch is another.

“When I was first approached by a fellow DEVCOM AC mentor who was encouraging me to become involved with robotics, I honestly dismissed it,” said Yauch, a chemical engineer at the Armaments Center



#### IT TAKES TEAMWORK

Members of Team Aperture 3142 posing in front of their STEM barn at the New Jersey State Fair, held at the Sussex County Fairgrounds in Augusta, New Jersey, Aug. 4-12, 2023. From left is Ryan Wuitik, Salvador Serillo, Hunter DeMartin, Rachel Porzilli and Andreama DeMartin. (Photo provided by Caitlin Bailey, mentor and 2018 team captain, Team Aperture 3142)

who has been mentoring FIRST Robotics Competition Team Aperture 3142 (ages 14-18, grades 9-12) since 2013. “I thought, ‘What can robotics do?’ Then I went to a FRC [FIRST Robotics] competition and was overwhelmed by what I saw and was immediately hooked.”

As she became more involved in the program, she said it became very evident that the robot was a tool for kids to learn not only about science and technology, but to learn to work together, to communicate effectively, to learn from mistakes, to continue to improve and to never give up. “Helping the kids realize what they are capable of is why I continue to mentor,” she said.

Mentors receive continuous learning points and time away from work while mentoring, but, she said, most of the time it's simply volunteer. "During the FRC build and competition season, mentors can typically work with a team for four to five hours per night every night of the week and eight-plus hours a day on weekends for 10-plus straight weeks," she said. "It's intense!"

### REAL WORLD PROBLEMS

All the intensity is for a worthwhile cause when it comes to equipping kids for real-life situations. According to Hofmann, "Students so desperately need to accumulate life skills with hands-on tools and machinery, and they love working with real world challenges such as the ones FIRST Competitions offer."

Hofmann's words were put into action in 2020. At the height of the pandemic when doctors, nurses and staff at area hospitals were scrambling for masks, Aperture 3142 students got a

firsthand look at how the technology skills they've acquired can be of significant value in the real world.

"The lessons of COVID showed us how important making our own PPE [personal protective equipment] was," Hofmann said. Protective equipment was scarce, but desperately needed at ground zero health care facilities like Newark University Hospital, where his son Justin was a third-year physician. Rather than sit around feeling helpless, Hofmann fired up a 3D printer in his basement, and two additional 3D printers at Newton High School, and designed a 9-by-9 inch clear plastic, reusable face shield prototype for area hospitals. Then, with the help of 50 students, teachers, his family and other business networking partners who provided the manpower and additional 3D printing machines, he was able to produce 5,000 face shields that health care professionals and first responders could use to safely treat patients.

"My wife, Mandy, and our daughter, Samantha, were in this trench night and day with me during those first 10 weeks," he said. "Working from our basement, which was converted into a 3D printing farm and PPE distribution center. It was fast and furious, but we know we helped save lives."

Just a few months before, Hofmann had attended a beneficial Picatinny-hosted STEM workshop that provided 3D printer training to New Jersey educators with instruction on how to properly set up, operate and maintain printers; use computer-aided design software; and access online resources to create 3D-printed projects and lessons that may be included in the classroom. Schools were housing 3D printers, but they came without instruction, and teachers had no idea how to use them. The workshop was also an opportunity to network with other teachers, which laid the foundation for Hofmann's teacher and student recruitment initiative.

"The impact that training event had on all of us definitely helped prepare us for what unfolded during those early pandemic days," he said. "Some of those teachers who I had already known from



### TEAM SPIRIT

Dominic Estanislao, center, and the Mechanical Mustangs drive team proudly display their winning trophy and banner from the FIRST Mid-Atlantic District Championship, held April 6-8, 2023, in Bethlehem, Pennsylvania. (Photo courtesy of Dominic Estanislao and FIRST Mid-Atlantic)

**“As a student you build robots, but as a mentor you build people.”**

FRC [FIRST Robotics] Competitions aligned with our PPE-making initiative during those critical first 10 weeks of the pandemic. Fifty people just like me banded together, one by one, to craft seriously robust medical-quality face shields when it was needed most.”

These kinds of skills and ingenuity are what he has been imparting upon Team Aperture 3142 and intends to continue passing along to an even wider range of students through Aperture Fabric8.

### REAL WORLD SOLUTIONS

According to Hofmann, kids who join FIRST Robotics teams acquire industry-standard software skills. To ensure for a more immersive experience, he plans to expand beyond Newton High School’s STEM Lab, securing 6,000 square feet of warehouse space to use as Fabric8’s robotics lab, located within a building at TechFlex, a local business and longtime supporter of the Aperture 3142 robotics team.

“Moving to a commercial space and all those startup dynamic fixed costs seems overwhelming now, but as each season goes by, our learning curve should get smaller,” he said. “Being in complete control of our own destiny in a new location can springboard into innovative ways to serve and inspire students and adults to become ‘tinkerpreneurs’”—his term for those who have an idea to develop a useful project but lack the funding, machinery and hand tools to overcome that shortfall.

“We use that muscle sitting on top of your shoulders, no concussions in the sport of robotics. Earn a scholarship, internship or apprenticeship. Then you can turn pro on day one.” Hofmann said if he had to guess, he predicts that 75 percent of existing students someday will own, run or manage a business.

“I had four students return during the eight-day fair [New Jersey State Fair in Augusta, held Aug. 4-12] from our original team 15 years ago. One by one they stopped in to say hello and catch up on life’s happenings. Each one now has a great job; each one has thanked me for helping open their eyes during their impressionable years as a youth,” Hofmann said.

Aperture Fabric8 Inc. is designed to improve the profitability and competitiveness of any of New Jersey’s 9,500 manufacturers, and according to Hofmann, would “survive merely on the generosity of STEM partners,” which are currently Thorlabs, Mira Plastics, Marotta, Ronetco, TechFlex and Johnson & Johnson. “Return on investment will become realized when the youth we serve have joined our area manufacturing workforce,” he said.

### CONCLUSION

Recalling the early days of the Picatinny STEM sponsorship program, Hofmann said, “Ed [Col. Petersen] used to often say, ‘Win the teacher, win the war. Lose the teacher, lose the war.’ ” Meaning that students join robotics teams as freshmen and in four years graduate and head off to well-regarded engineering schools. Then the training of new recruits (students, coaches, mentors) begins once more.

It’s an ebb and flow of maturity that develops with experience and confidence as each season passes. “Mentors have stayed on even with their own children graduating from college. Coaches and mentors find a balance between who is in charge, helping each other support the students with sub-team mentoring and advice during the year,” he said. The competition season lasts potentially four months. However, robotics teams conduct programs, outreach and meetings 12 months a year.

Aperture 3142 will always be a FIRST Robotics Competition team, Hofmann said. But his vision for Fabric8 is bigger: To become a resource for all of Sussex County schools and youth groups to learn from studio-based educational workshops provided by volunteers within the community who have backgrounds in education, technology and business. With the support of the DEVCOM Armaments Center, Aperture Fabric8 can not only develop the model, but can provide resources to help spread the program throughout the tri-state area.

*For more information, contact the DEVCOM Armaments Center STEM Outreach at <https://ac.ccdc.army.mil/outreach/STEM/index.aspx>, or Picatinny STEM on Facebook at <https://www.facebook.com/PICASTEM>.*

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*CHERYL MARINO provides contract support to the U.S. Army Acquisition Support Center at Fort Belvoir, Virginia, as a writer and editor for Army AL&T magazine and Network Runners Inc. Prior to USAASC, she served as a technical report editor at the U.S. Army Combat Capabilities Development Command Armaments Center (formerly ARDEC) at Picatinny Arsenal for five years. She holds a B.A. in communications from Seton Hall University and has more than 20 years of writing and editing experience in both the government and private sectors.*



## CHAD J. MARSHALL, PH.D.

**COMMAND/ORGANIZATION:** U.S. Army Space and Missile Defense Command, Technical Center

**TITLE:** Supervisory program and management analyst

**YEARS OF SERVICE IN WORKFORCE:** 15

**YEARS OF MILITARY SERVICE:** 4

**DAWIA CERTIFICATIONS:** Advanced in program management, DOD contracting professional

**EDUCATION:** Ph.D. in business administration, University of South Alabama; MBA, Columbia College; Bachelor of General Studies, Columbia College

**AWARDS:** 2021 National Defense Industrial Base – Tennessee Valley Chapter Management Award; U.S. Army Civilian Service Commendation Medal (2020); U.S. Army Commander’s Award for Civilian Service (2018)

# A CALMER CAREER APPROACH

Stressful times call for calming measures. And throughout his Army career, Chad Marshall has found that keeping calm in stressful situations may not always be the easiest thing to do, but it’s typically the most beneficial.

“While it is sometimes hard to achieve, I find that if I can remain calm during trying times, it has a positive impact on my team and can avoid unnecessary escalation of detrimental consequences,” he said. Though it’s hard to nail down the most important lesson he’s learned, he is often reminded how important the ability to remain calm is during stressful or irritating situations. “There are instances where situations are tense, such as high stakes meetings or negotiations, where being able to de-escalate harmful conflict can lead to significant progress.”

Marshall serves as the Army acquisition career management advocate (ACMA) for U.S. Army Space and Missile Defense Command (USASMD) and the chief of personnel management at USASMD Technical Center, supervising a diverse team of knowledge workers (e.g., developers, specialists and analysts) responsible for recruitment, personnel management, performance management, student programs and outreach, and associated programs and information technology systems.

Additionally, he serves as program manager for the USASMD Technical Center Science and Technology Reinvention Laboratory Personnel Demonstration Project (Lab Demo), responsible for the planning, implementation, monitoring and overall management of the Lab Demo program (an alternative personnel system specifically tailored to DOD laboratories to meet their unique challenges).

“My greatest satisfaction is ensuring leadership has the authorities and scientists and engineers needed for the technical center to provide cutting-edge science and technology, focused on the specific capabilities needed to directly support the Army’s tactical mission, develop small satellite and directed energy components and technologies, and support missile defense system testing,” he said.

Marshall said he entered the Army Acquisition Workforce before even having a basic understanding of what Army acquisition represented. “My first acquisition position was a management support specialist under the old DAWIA [Defense Acquisition Workforce Improvement Act] purchasing certification supporting the DEVCOM [U.S. Army Combat Capabilities and Development Command] Aviation and Missile Center.” In this role, he was a government purchase card cardholder (training cardholder and ordering official) supporting the lab.

With all the many job transitions throughout his Army career—both military and civilian service—he said career opportunities really started opening up when he joined the Army Acquisition Workforce. During his time in the military, he transitioned from a combat engineer to a Patriot crewmember to the military police. As a civilian, he started as a security guard and police officer and then transitioned to the roles of secretary;

management support specialist; management and program analyst; lead program analyst; supervisory project specialist and, most recently, supervisory management and program analyst as the current chief of personnel management for the technical center.

“Having spent nearly five years at USASMDC, the importance that the command places on ‘people first’ is unlike any that I have experienced in my career,” he said, as evidenced by USASMDC rated as the best place to work in the Army in 2022, tied with U.S. Army Special Operations Command. “USASMDC is truly an organization that respects all employees, values diversity, builds high performing teams, and provides opportunity for personal and professional growth.”

Marshall said he’s attended numerous leadership and functional training courses but wishes that he had pursued more leadership development opportunities earlier in his career, such as the Defense Civilian Emerging Leader Program (DCELP). “I believe that having exposure to programs like DCELP earlier may have assisted in my development as a leader and better positioned me for continued success,” he said.

His last formal career development program was the Acquisition Leadership Challenge Program II (ALCP II) in August 2022. “This course centered around leading teams through lessons focused on emotional intelligence, diverse personalities, influencing and presence, but what I appreciated most from the various leadership training courses I’ve attended, including ALCP II, is the use of 360 feedback,” he said, referring to top-down feedback from superiors as well as bottom-up reviews from subordinates.

Specific to ALCP II, he found great benefit from 360 feedback from his observers (i.e., supervisors, peers, subordinates). “The benefit of 360 feedback instruments is that we can gain insight into our own perceptions by comparing with those received by the various observers,” he said. “Using 360 tools helps us see if the perceptions of our own strengths and weaknesses match the perceptions of others, which provides an opportunity to better plan our future personal and professional development path.”

As the USASMDC ACMA, Marshall frequently gives advice relating to certification, training and acquisition workforce programs to junior acquisition personnel. “I enjoy assisting the command in developing the next generation of scientists and engineers,” he said. “With respect to career paths and planning, I try to stress the importance of becoming technically proficient in their respective field without rushing to chase the next promotion.” Marshall said

he believes those individuals who become experts in their current roles are the ones that set themselves up better for success in future positions, especially ones with great responsibility. “Those that rush for the next position are often those that have a harder time scoring well on hiring panels or interviewing.”

Achieving proficiency in your field provides better insight into your role and the roles of others, enabling individuals to offer unique perspective to other organizations. “I think people find it surprising that I’ve been able to extend influence beyond my specific organization or core set of duties within the Army and DOD,” Marshall said. While supporting Army Laboratories, he’s had the opportunity to lead and serve on many panels and working groups throughout the defense laboratory enterprise. “I frequently get asked by external commands and agencies to support their integrated project teams or working groups to provide my perspective.” He said he chaired the DOD Science and Technology Laboratory Quality Enhancement Program (LQEP) – Personnel, Workforce Development and Talent Management Panel; served on Army LQEP subpanels for science, technology, engineering and mathematics (STEM) educational outreach and for workforce and personnel; and supported the DOD Innovation Research, Test and Lab Infrastructure Working Group.

Outside of work, he said his life may be considered “rather boring,” to some but maybe not others, depending on who you ask. “The majority of the time is spent with my wife and three kids,” Marshall said. “To my kids, I am pretty sure that I am known as an elite Minecraft. However, my friends know me as either a marine enthusiast or a classic Alabama football fan. Both of which have taught me skills applicable to my work.”

For over 25 years, Marshall has kept saltwater aquariums. “There is incredible scope in marine aquaria, and whether you choose to keep a fish-only tank or one with a combination of fish and coral, it takes a lot of knowledge, attention to detail and patience to provide the care and feeding for each inhabitant,” he said. “In some ways, it is like leading a diverse team of employees in that the more you know about the personalities, habits, and strengths and weaknesses of the individual team members, the better you can lead the team,” he said.

“Maintaining saltwater aquariums for the last 25 years has taught me patience and attention to detail. And my time as an Alabama season ticket holder has taught me to detest losing.”

—*CHERYL MARINO*

## YIN AND YANG

The yin and yang depict two opposite but interconnected, mutually perpetuating forces: One is unsustainable without the other. (Photo by Peterschreiber.Media via Adobe Stock)



# OPTIMAL REORGANIZATION

PEO IEW&S incorporated new project management offices to better support cyber capabilities.

*by Megan Paice*

The U.S. Army recognizes that the areas of cyber, space and electronic warfare are three keywords that have a continuous need to scale yet work in synergy. To support the demand of these capabilities, both offensively and defensively, the Army recently restructured within the Program Executive Office for Intelligence, Electronic Warfare and Sensors (PEO IEW&S) to streamline its enterprise of network and cyber operations. PEO IEW&S reorganized with the incorporation of two new project management offices: Project Manager Cyber and Space (PM C&S) and Project Manager Defensive Cyber Operations (PM DCO). Missions also shifted within the Project Manager Electronic Warfare and Cyber (PM EW&C).

This reorganization assists in fostering an environment that enables Army and joint offensive cyber operations to further develop in a more cohesive environment. Offensive cyber acquisition materiel development requires the same focused leadership structures as our acquisition requirements in electronic warfare (PM EW&C) or defensive cyber operations (PM DCO). A good example of this is the yin and yang, which depicts two opposite but interconnected, mutually perpetuating forces—one is unsustainable without the other.

“The Army needs to balance offensive and defensive cyberspace capabilities in support of operational forces—offense informs defense and defense informs offense,” said Maj. Gen. Paul T. Stanton, commanding general of the Cyber Center of Excellence. “One program executive office for both portfolios improves visibility and supports flexibility to equip our forces according to a rapidly changing operational environment. Furthermore, one PEO improves the Cyber Center of Excellence’s ability to develop education and training required for new capabilities.”

## CREATION OF PM C&S

The establishment of PM Cyber and Space allows for more dedicated support to the Army cyber community. The core mission at PM C&S is to acquire and field offensive cyber and tactical space capabilities to protect the Soldier, the nation and enable cyberspace superiority.

However, it's important to note that it is crucial for the Army to recognize that these contributions to the joint cyber warfighting operations go further than Army Cyber Command, but also span throughout the entire Army acquisition community.

Initially, PM C&S will be comprised of Product Manager Information Warfare Cyber Development and Product Manager Information Warfare Cyber Infrastructure. This realignment includes the migration of various tools, including the Rapid Cyber Development Network—a remote accessible closed network supported by commercial-off-the-shelf (COTS) hardware and COTS/open-source software—to drive cyber capabilities development and testing for DOD equities and Joint Common Access Platform (JCAP), which supports U.S. Cyber Command by providing a protected, managed, orchestrated environment and common firing platform to coordinate and execute the delivery of cyber effects against approved targets. JCAP enables the cyber mission forces' ability to execute operations while managing detection and attribution.

“The days of the Army being a kinetic-only force are gone,” said Brig. Gen. Wayne ‘Ed’ Barker, program executive officer for IEW&S. “Our ability to operate in multiple arenas has become paramount with none more important than mastering the cyber warfare arena. ... The speed in which you must operate in this environment [cyberspace] is crucial. That's why we felt the emphasis on this domain is important enough to stand-up a dedicated organization. An organization with the agility, the mechanisms, the processes in place, the workforce, the culture to be able to respond quickly to threats.”

## THE TRANSITION

PM DCO transitioned to PEO IEW&S from PEO Enterprise Information Systems at the start of fiscal year 2024, on Oct. 1. The transition occurred during a critical time because the digital landscape continues to rapidly evolve.

“The Army must contend with the constant evolution of advanced persistent threats, thus requiring the U.S. Army to remain vigilant and adaptive. DCO will continue to provide information dominance and decisive lethality with platforms and systems critical

to defending the Department of Defense networks,” said Robert J. Zoppa, project manager for DCO.

With information dominance and decisive lethality, DCO analyzes data, monitors and detects insider threats, identifies malware and counters cyberattacks. The threats posed by adversaries in cyberspace are diverse and constantly evolving, requiring the Army to remain vigilant and adaptive.

The primary focus within DCO within the next year is to align with U.S. Army Cyber Command priorities, starting with accreditation. This includes a complete Risk Management Framework 2.0 continued package for use on DCO Suite of Complimentary Systems and continued authorization to operate on Department of Defense Information Network through U.S. Army Network Enterprise Technology Command.

## A LOOK AT PM DCO

The Cyber Platforms and Systems (CPS) provides total life cycle management capability to the force. CPS focuses on the procurement and delivery of cyber platforms and cybersecurity tools for the armed forces. The Defensive Cyberspace Operations Tools Suite is the foundational piece of equipment used by cyber-Soldiers. These tools are used to effectively conduct cyber protection team missions.

The Cyber Analytics and Detection (CAD) provides capabilities that help Soldiers analyze and detect external and internal cyber threats to the Army. CAD focuses on software-based programs that support mission command, planning, integration, analysis and execution at all levels.

## INTERNAL MOVEMENT

Another portion of the portfolio within PEO IEW&S is Project Manager Electronic Warfare & Cyber. The PM EW&C mission is to acquire and field integrated electronic warfare, intelligence and cyber capabilities to enable spectrum and cyberspace superiority to support an Army equipped with upgradable, integrated and networked electronic warfare, signal intelligence (SIGINT), cyber capabilities to overmatch the threat in multi- and joint all-domain operations.

From this mission set, the Terrestrial Layer System (TLS) family of systems was developed.

TLS is a family of systems all supporting SIGINT, cyber and electronic warfare operations but each covers a slightly different piece of the battlespace. TLS Echelons Above Brigade is planned

for mission command above the brigade level and will sit furthest from the forward line of its own troops. TLS Brigade Combat Team (TLS BCT) moves with the force and is planned for use with maneuver units, helping extend the range of sensing. TLS BCT Manpack extends sensing even further because it can be worn by Soldiers accessing more remote or vehicle-prohibitive terrain. Together, the TLS family of systems provides the deep sensing capability the Army needs in multidomain operations.

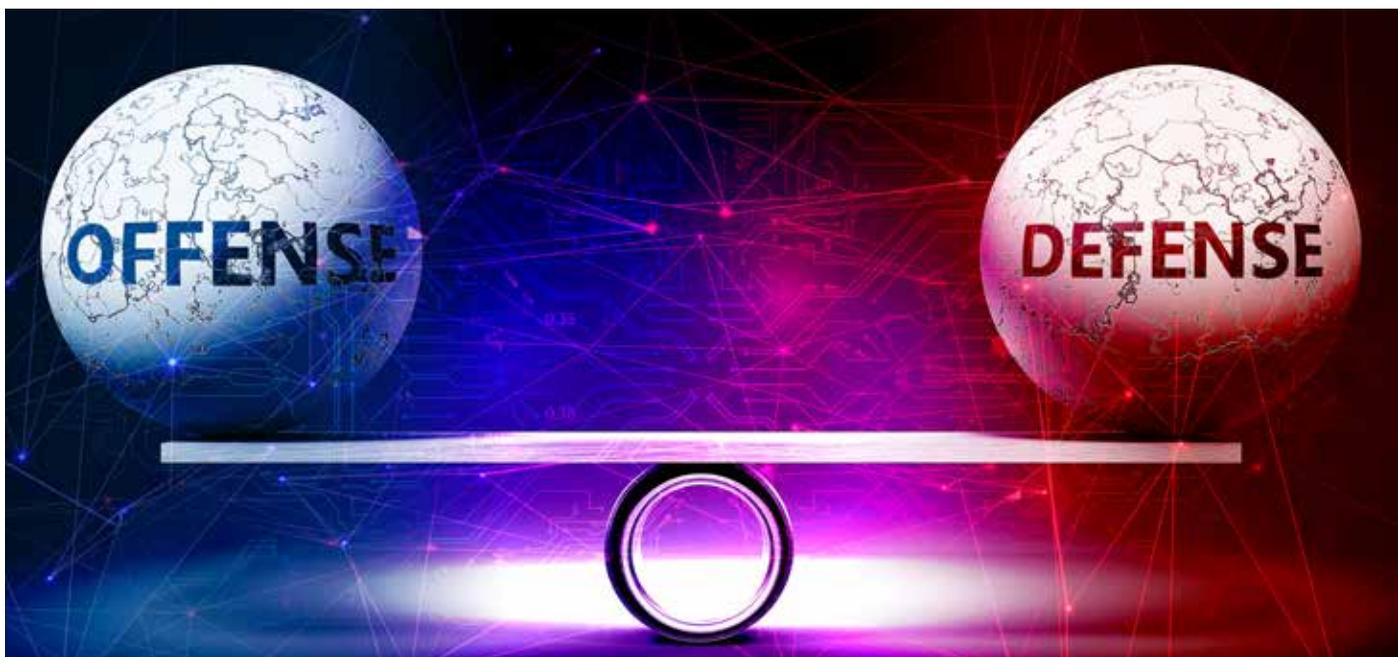
## CONCLUSION

“We’re already aware that the battlefield has long surpassed land, sea and air with space and cyberspace,” said Young J. Bang, principal deputy assistant secretary of the Army for acquisition, logistics and technology, when asked how synergy strengthens the future of the warfighter and DOD. “But with exponential growth in technology, these fields continue to evolve just as quickly. The strength in our forces is defined by the combination of our physical and digital warfare capabilities. As we see from the ongoing conflict in Ukraine, enhancing survivability in a contested cyberspace is just as critical to conducting successful operations across every domain. This reorganization is a wise investment in the Army’s future.”

New challenges and innovative solutions are needed at a time when having an active digital footprint is considered the “norm.” Continuous advancement in the growing and constantly evolving focus areas of electronic warfare, SIGINT and cyberspace will help ensure that our Soldiers exceed overmatch. Under the same PEO, information can now be shared seamlessly among team members to optimize the synergy needed to support the wide-ranging cyber warfare needs of the Army to prevent potential cyber vulnerabilities.

For more information, go to <https://peoiews.army.mil>.

*MEGAN PAICE is a public affairs specialist with PEO IEW&S. She has a B.S. in communications from Towson University. Before joining the PEO, she worked as a public affairs analyst in research and development.*



## BALANCING ACT

A synergy and balance naturally occur between successful offensive and defensive cyber, space and electronic warfare tactics. (Graphic by PEO IEW&S)

# A FLEXIBLE FUTURE

Creating cultures that embrace the changing nature of work.

by *Mika J. Cross*

The federal workplace has undergone a dramatic transformation because of the COVID-19 pandemic, opening new possibilities and challenges for the government and its employees. To thrive in the future of work, leaders and the workforce at large need to develop new skills, mindsets and ways of working that foster flexibility, innovation and resilience. Navigating the massive transformation in the way we work also requires cultivating a healthy and inclusive culture that promotes flexibility, career pathways that align to meaningful work and a focus on worker well-being to create high-performing, resilient teams that are prepared for success.

The Department of Defense employs over 700,000 federal civilians, with the Army being the largest employer among the military departments. The DOD civilian workforce is a critical component of the military and national security readiness, and yet it faces exceptional challenges in ensuring that its workforce is inclusive, adaptable and diverse enough to meet the changing demands and expectations of the 21st century. According to a recent report from the Government Accountability Office (GAO), DOD and the Army's civilian workforce face a significant challenge in achieving representation levels for women and historically disadvantaged groups. The report indicates that over the past decade, these representation levels have consistently remained below the levels of the total federal civilian workforce.

## STRETCHING INTO THE FUTURE

(Photo by Karolina Grabowska, Pexels)

### GENDER GAP IMPACTS

The GAO report documented that DOD hired about 500,000 civilians over the last 10 years, with the largest volume of hires belonging to the Army. However, it also lost more than 500,000 civilians, with the Army also having the most departures. This high turnover could be related to the gender gap found across the board in DOD. For instance, in fiscal year 2020, women left their jobs at a higher rate than men (9.2% versus 5.7%). Moreover, women were underrepresented in senior positions, especially in the Army, where they held only 20% of Senior Executive Service (SES) roles. Another area where women were underrepresented was science, technology, engineering and math (STEM) occupations, where women accounted for only about 28% of all employees. Women also had the lowest representation among engineering technicians, at about 9% annually.

These disparities, coupled with recent research from the RAND Corp., also reveal significant pay gaps in the DOD civilian workforce.

### SKILL GAPS AND AN AGING WORKFORCE

The GAO has identified skills gaps as a high-risk issue since 2001, signaling a stark warning that the government lacks the necessary skills in critical occupations such as human resources; STEM; cybersecurity and acquisitions. These skills gaps affect the government's ability to perform its missions and deliver its services efficiently and affects DOD significantly. In fact, in its latest report on high-risk issues for the federal workforce, GAO cites skills gaps, staffing, training and workforce planning issues affecting DOD business systems modernization, weapons system acquisition and protection of technologies critical to U.S. national security interests.

The percentage of workers over age 55 has almost doubled in the last two decades. The Bureau of Labor Statistics estimates that by the year 2028, one in four American workers will be 55 or older. The federal workforce is also facing a retirement wave as a large percentage of federal employees will be eligible to retire in

### SAME OLD SAME OLD

GAO data shows that the DOD civilian workforce has not become more diverse in the past decade:

- The percentage of women decreased slightly from 33.0% to 32.1%, while the percentage of historically disadvantaged groups increased slightly from 31.0% to 32.6%.
- Both groups were underrepresented in higher general schedule (GS) grades and SES positions.
- Women left DOD at a higher rate than men every year, with the Army having the highest attrition for women.
- Employees from historically disadvantaged groups left DOD at a similar or slightly higher rate than other groups.

the next few years, leaving behind gaps in leadership and institutional knowledge.

The aging of the workforce affects DOD and the Army's future, as it may worsen the skills gaps and impact the mission outcomes in the next decade. This could also become a "perfect storm" for the federal government, since only 8% of its workers, on average, are under 30. The low number of those early in their careers in the federal workforce, compared with those who can retire—especially in critical fields like information technology (IT), cyber, human resources, acquisition, and data science—raises serious concerns about how agencies can fulfill their mission if we don't change. This is also proof of why we must adapt to the changing nature of work and attract and retain talent for the future of the federal workforce.

### PAY GAP

RAND's report found that white males earned more than other demographic groups in DOD's civilian workforce from fiscal year 2012 to 2021, without a clear explanation. The research revealed that among U.S. Navy civilian engineers, IT specialists and computer scientists, Black women in a GS-12 IT management job in Virginia made \$5,185 less, and white women in the same positions made \$6,570 less, on average, than their male counterparts.

**WHAT WORKERS WANT**

Agencies were able to protect the health and safety of federal workers during the COVID-19 pandemic with remote work, increased telework and other work schedule flexibilities. During the height of the pandemic, when the U.S. economy lost millions of jobs and the unemployment rate reached almost 15%, the average daily visits to USAJOBS.gov, a measure of federal job interest, rose by 2.8%. This may be related to the remote-friendly

positions that the government offered at that time.

In a recent report by the Intelligence and National Security Alliance, “Reimagining the SCIF Life,” research points to expanding more flexible work options for the intelligence community as a matter of national security. Some intelligence communities, like the National Security Agency (NSA), are considering a range of workplace flexibilities given that 50%

of its workforce is retirement eligible and those who worked there five years or less are quickly rising to 20%. These shifting demographics mean the NSA is on a major, multiyear hiring push, and considering a range of workplace flexibilities it would have previously considered unimaginable.

**EMPLOYEE ENGAGEMENT AND MISSION OUTCOMES**

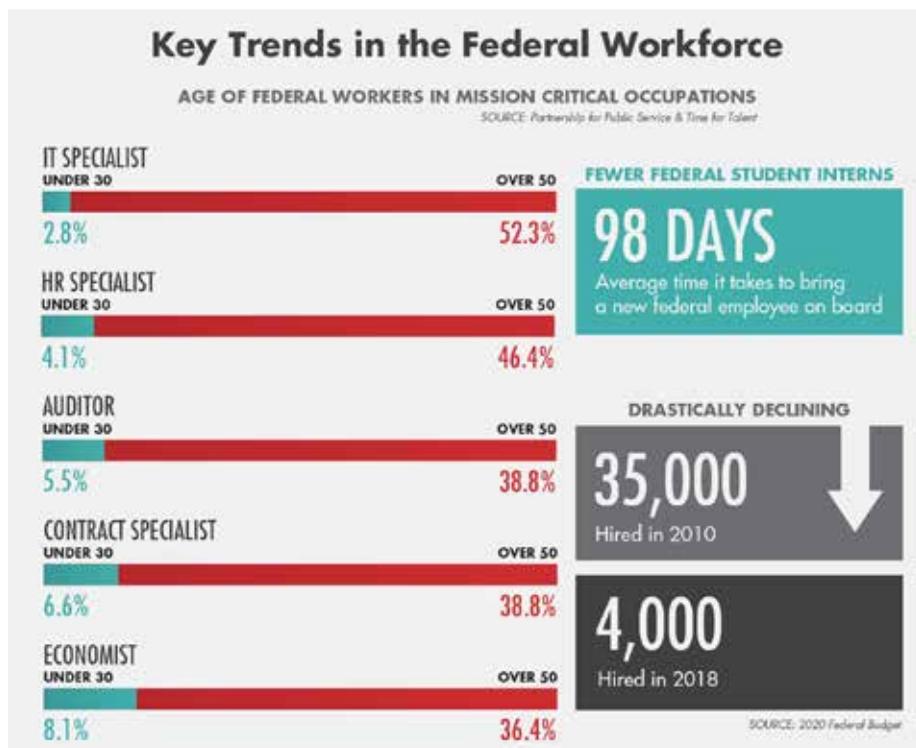
Employee engagement is a key factor for high-performing teams that deliver the best mission outcomes, as shown by research from Gallup. Engaged employees are more productive, loyal, present and healthy.

The President’s Management Agenda aims to improve employee engagement by addressing skills gaps. However, the 2022 Federal Employee Viewpoint Survey (FEVS) revealed a significant drop in employee engagement and morale, due to issues such as dissatisfaction with pay and returning to the office after several years of increased remote and telework options.

In contrast, in 2020, when close to half of FEVS respondents reported working from home and the pandemic increased work demands for more than half of the FEVS respondents, the FEVS scores were the highest in five years in the following areas:

- Overall engagement and overall global satisfaction.
- Leadership and management practices.
- Work environment.
- Ability to achieve the agency’s mission.

**Engaged employees are more productive, loyal, present and healthy.**



**AGING OUT**

The federal workforce is getting older. As a large percentage of federal employees retire in the next few years, a shortage of critical skills will grow, according to the GAO analysis of 2023 Federal Employee Viewpoint Survey. (Graphic by Mika Cross and the U.S. Army Acquisition Support Center (USAASC))

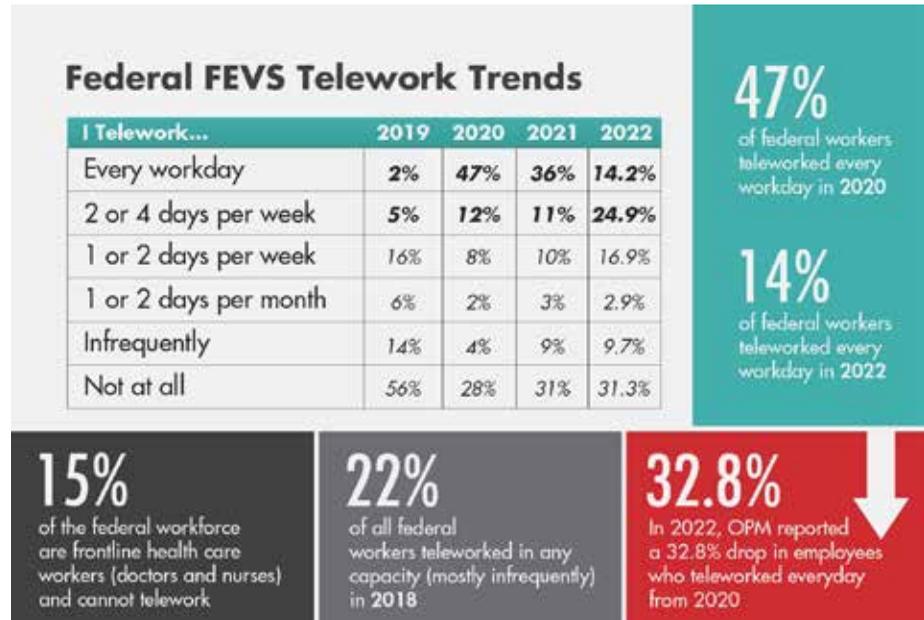
**BRACING FOR THE FUTURE**

The Army must foster a culture of flexibility, fairness and equity in its civilian workforce—values that are essential for

the future of work. Doing so can help attract and retain top talent, promote innovation and creativity, enhance decision-making and problem-solving, boost trust and collaboration, and improve readiness and mission effectiveness from any location. The Army also needs to develop leaders who can adapt to any cultural context.

To achieve these goals, the Army should implement specific actions to support the well-being and flexibility of its civilian employees.

- Encourage supervisors and managers to embrace and promote a wider range of access to flexible work arrangements, such as telework, compressed work schedules or part-time options; provide training and mentoring programs to enhance the skills and career development of its employees; and create a supportive and inclusive work environment that values diversity and respects individual differences.
- Conduct regular and comprehensive assessments of the current and future skills and competencies needed for its civilian workforce and develop strategies to close any gaps.
- Monitor and evaluate the effectiveness of its initiatives and the impact of workplace flexibilities such as remote work, telework in combination with special hiring authorities to recruit, develop and retain talent, and report on its progress and challenges to Congress and other stakeholders.
- Strengthen leadership development and succession planning programs and ensure continuity and stability in key positions.



**TELEWORK DROP**

The federal workforce’s use of telework dropped drastically since its peak during the COVID pandemic in 2020, according to the 2023 Federal Employee Viewpoint Survey (FEVS). (Graphic by Mika Cross and USAASC)

**This is also proof of why we must adapt to the changing nature of work and attract and retain talent for the future of the federal workforce.**

- Identify and address the root causes of leadership turnover and vacancies and establish clear roles and responsibilities for its senior leaders.
- Monitor and assess the culture and climate of the Army’s civilian work environment regularly, using various methods to collect feedback from employees at all levels and to monitor ongoing impacts on its organizational health and performance as a readiness indicator.
- Address the gaps and barriers identified by the assessments by developing and implementing action plans, such as improving hiring and promotion practices, providing mentoring and coaching programs, enhancing training and development opportunities and increasing recognition and rewards.

### CONCLUSION

The global shifts in work culture have created a “Great Reshuffle,” where workers seek more meaning, autonomy and empathy from their employers. In a period when employees are reassessing their relationships with work, it is important to train supervisors and managers on how to lead a diverse, modern and flexible workforce that can support the mission while offering various work alternatives to skilled employees who can deliver their best work in different ways. Organizations that can adapt to these changes and offer flexible, purposeful and human-centered work environments will have a competitive advantage over those that cling to outdated and rigid workplace norms.

The 2018 Federal Work-Life Survey conducted by the Office of Personnel Management (OPM) revealed that 64% of federal employees have responsibilities as parents or caregivers. Flexible work

## The time is now to take advantage of the opportunities of the changes we made to the way we worked.

options such as part-time, job-sharing, telework, remote work, compressed work schedules and flexible work schedules can help with talent management, engagement and recruitment for all employees. For example, flexible work can attract and retain high-quality and talented workers while allowing them to choose the best work option for their situation, such as military spouses who need flexibility to cope with their family needs while their partners are deployed or away.

By taking actionable steps to create a culture of flexibility, support and well-being for its civilian employees, the

Army will be well-positioned to attract and retain a diverse and talented civilian workforce that can support its critical missions in the future of work. The time is now to take advantage of the opportunities of the changes we made to the way we worked because of the pandemic, to improve human capital management, enhance workforce performance and readiness and ensure the success of its missions and goals.

*For more information, go to [www.mikacross.com](http://www.mikacross.com) or connect with the author on LinkedIn.*



### TAKING STEPS

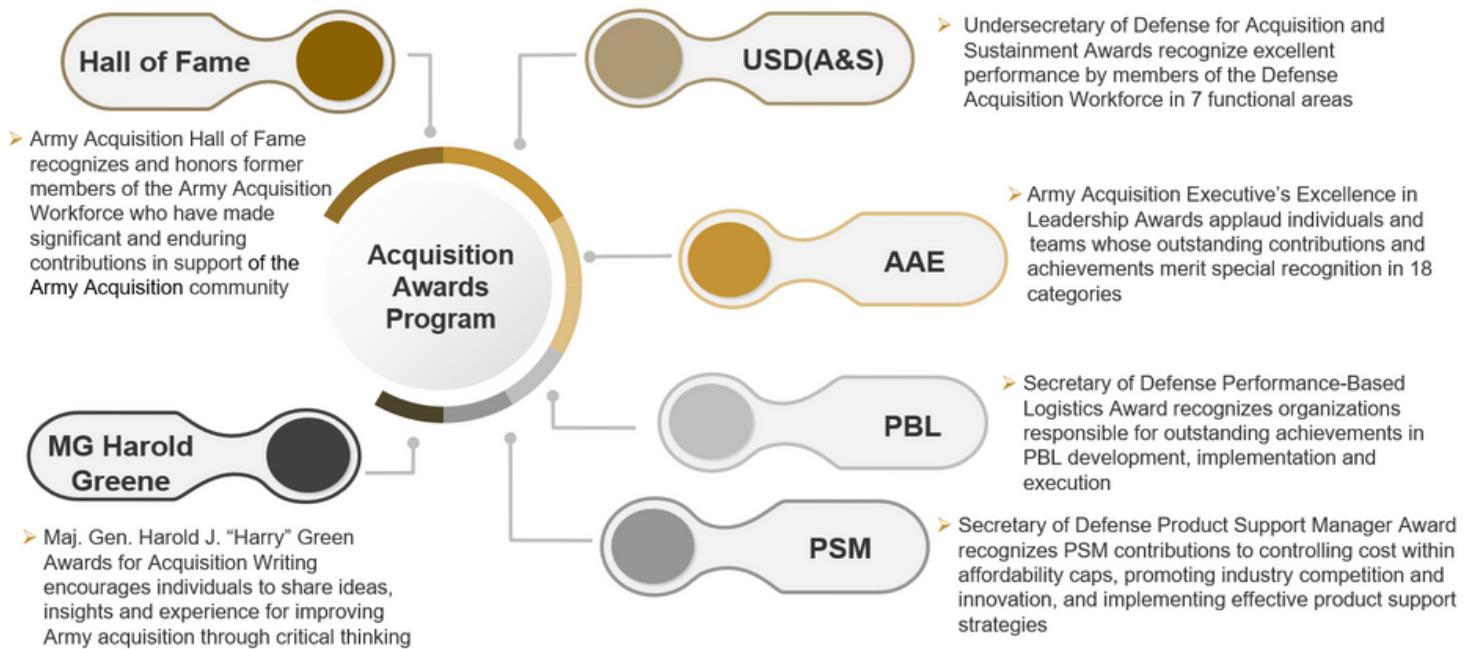
Employee engagement is a key factor for high-performing teams. The Army needs to take actionable steps to create a culture of flexibility, support and well-being for its civilian employees. (Photo by Mitchell Luo, Pexels)

*MIKA J. CROSS is an expert, speaker and innovator in the field of workplace transformation. In December 2021, she testified as an expert witness at the Future of Federal Work hearing for the U.S. House of Representatives Oversight and Accountability Committee’s Subcommittee on Government Operations and the Federal Workforce. Cross has over 20 years of public service experience in various federal agencies, including the U.S. intelligence community, the White House, the Office of Personnel Management, the Department of Labor and the Department of Agriculture. She also served as vice president of employer engagement for FlexJobs, a fully remote company. Cross served in the U.S. Army as both an enlisted Soldier and an officer. She holds a Master of Public Administration from Georgia Southern University and a B.A. in communications from the University of Louisville.*

# ACQUISITION AWARDS

# 2024

## SAVE THE DATE



## CALL FOR NOMINATIONS OPENINGS

Calls for nomination are estimated and will be released at the direction of each of the respective award sponsors.

April 2024	May 2024	June 2024	July 2024
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
USD(A&S) Hall of Fame	AAE	MG Harry Greene	PBL & PSM

VISIT THE ACQUISITION AWARDS WEBPAGE FOR THE LATEST:  
[HTTPS://ASC.ARMY.MIL/WEB/ACQUISITION-AWARDS/](https://asc.army.mil/web/acquisition-awards/)



# BUILDING AN ACQUISITION LEADER PIPELINE

To ensure a future workforce that is ready, diverse and integrated, we must provide folks with the experience necessary to meet the increasing demands of our profession.



**W**e need the right people in the right place at the right time. That doesn't just mean filling open positions and building a cushion of subject matter experts. It also means considering the goals and growing needs of the organization and identifying and developing future leaders who can help bring those goals to fruition.

We need to build a pipeline of leaders who are poised to not only take on future Army challenges, but also to successfully manage our teams and organizations, ensuring our Army Acquisition Workforce (AAW) remains ready, diverse, integrated and professional.

Building a pipeline of leaders—think the next two generations of acquisition leaders—is no easy task and is one that requires deliberate planning on the part of both the current leader and the acquisition professional. In my considerable experience, from serving as an Army officer to working with industry and to my current role as the Army Director of Acquisition Career Management (DACM) as an Army civilian, I see three areas where leadership skills can be developed.

## MODELING

The first time we are exposed to leadership (the Army defines leadership as “the process of influencing people by providing purpose, direction and motivation while operating to accomplish the mission and improve the organization”) happens when we take our first job. For me, that was when I was about two weeks out of the Officer Basic Course. I experienced a stressful situation and saw firsthand how two leaders can react to a situation in very different ways. One leader yelled and pointed blame, while the other chose to stay calm and focus on learning and looking ahead to the next exercise. I decided in that moment the type of leader I was going to be—and the type I was not going to be.

The calm leader became my mentor for many years. The leadership he exhibited in that moment, and the model that he provided over time, very much shaped my perception of what it means to be a Soldier and a respected leader. I look back at that initial experience and realize now the profound impact it has had on my career and the type of leader I have matured into.



### KEEP AT IT

As leaders, we have to give folks the breadth and depth of experience necessary to meet the increasing demands of our profession. (Image by Gerd Altmann, Pixabay)

As leaders, we must model good leadership to our subordinates, live the Army values and ethics and establish a benchmark that our future leaders desire to work toward. We must hire people into leadership positions who demonstrate those desired characteristics and set and maintain the positive tone and commitment to the mission we need in our organizations. We must walk the talk.

### FORMAL TRAINING

I'm proud that my office, as well as big Army, provides a wide range of formal leader development opportunities for our AAW, across all components throughout the various stages on one's career.

While our military personnel often come into the AAW with leadership experience and a more defined plan for leadership development, civilians have flexibility to determine their path. Participation in formal leader development training requires desire and commitment from both the individual and the organization.

For our emerging civilian leaders, the Army DACM Office sponsors the Inspiring and Developing Excellence in Acquisition Leaders (IDEAL) program for GS-12 and GS-13 (or broadband equivalent) workforce members who are interested in a supervisory or leadership position. IDEAL focuses on basic leadership skills such as self-development, interpersonal relationships and strategic management to set the foundation for further learning.

Our Leadership Excellence and Acquisition Development (LEAD) program is for our GS-13s (or high-performing GS-12s) and is the next opportunity for civilians to expand their learning through a series of education, leader development and broadening assignments to prepare them for positions of greater responsibility, including leading others.

Senior Service College is the pinnacle of formal leader development training. The Defense Acquisition University Senior Service College program is for those on track to become our most senior leaders, such as product and project managers and program executive officers, and further develops critical thinking skills, broadens perspectives and exposes participants to innovative initiatives.

### INFORMAL DEVELOPMENT

Much of leader development comes from experience. Organizations should look for opportunities to move emerging leaders into detail positions or developmental assignments or assign them to lead special projects.

Current leaders can also inspire subordinates through counseling sessions and professional development discussions, such as those that take place as part of an individual development plan (IDP) planning session or through the Senior Rater Potential Evaluation (SRPE). The SRPE gives leaders a sense of an individual's potential and helps them to identify leadership strengths that can be entered as part of their career path in the IDP.

### CONCLUSION

For me, nothing's been better than my career in the Army Acquisition Workforce and having the opportunity to work with leaders, peers and subordinates to support our Soldiers. What I now look most forward to is the opportunity to empower those on my team and build up the leaders that will replace me. I give my team the freedom to fail and learn from mistakes; I allow people to take risks and give them flexibility; I give as much guidance as needed and enjoy watching them go out and do great things for my organization, the Army acquisition community and the Army.

As leaders, we can't just check the box of formal learning; we have to build teams and give folks the breadth and depth of experience necessary to meet the increasing demands of our profession. To ensure our future Soldiers are never in a fair fight, we must strive now to build a strong acquisition profession led by leaders of character. 🙌🙌



## TINESHA NICHOLAS

**COMMAND/ORGANIZATION:** Project Manager Close Combat Systems (PM CCS), Joint Program Executive Office for Armaments and Ammunition (JPEO A&A)

**TITLE:** Branch chief, Grenades and Protection Systems

**YEARS OF SERVICE IN WORKFORCE:** 21

**DAWIA CERTIFICATIONS:** Advanced in program management; Practitioner in engineering and technical management

**EDUCATION:** M.S. and B.S. in electrical engineering from New Jersey Institute of Technology; enrolled in Defense Acquisition University (DAU) Senior Service College Fellowship (SSCF) Program (2023-2024)

**AWARDS:** Army Achievement Medal for Civilian Service (2002 and 2020)

# DEVELOP A CAREER ROAD MAP

From time to time, we all encounter problems, setbacks or challenges but, according to Tinesha Nicholas, the outcome will just depend on your approach. For her, it's about weighing decisions to achieve results at all times.

"There is always more than one way to solve a problem," she said. "It takes creative thinking, evaluating multiple courses of action and assessing risk," because, she said, "there will be times where you will need to assume some level of risk." Like in proceeding with a 90 percent solution with the understanding that you will need flexibility and different courses of action to address the 10 percent deficit.

As branch chief for Product Director Combat Armaments and Protection Systems (PD CAPS), Nicholas supervises acquisition professionals who manage various grenades (lethal, non-lethal, training and specialty) and intermediate force capability programs. "The items we provide help protect and keep the joint warfighters safe," she said. "The greatest satisfaction I have being part of the Army Acquisition Workforce is witnessing the warfighter using the items we produce."

In addition to planning, directing and controlling resources to achieve the Army's overall vision, mentoring has also been an important part of her career. Nicholas is actively involved in the JPEO A&A mentoring program as both a mentor and mentee, motivating her team to achieve mission success and mentoring individuals for personal or professional growth. "It is very rewarding to see junior engineers or project officers who come to me for career or professional guidance, receive promotions or [be] recognized by the Army for professional accomplishments," she said. "I've had many leaders take the time to provide advice on my career and help me as I navigated through different positions. So it feels second nature for me to do the same."

*"There is always more than one way to solve a problem."*

Nicholas said since her academic and career paths are both in fields typically dominated by men, inclusion has always been important to her. With a focus on fairness, she established and led the diversity, equity and inclusion integrated product team for PM CCS, in direct support of Secretary of Defense priorities in 2020. "My mission is to ensure everyone feels like they are part of the team, regardless of their background," she said. "It felt great to conduct a sensing survey and listening sessions for over 130 personnel, ensuring everyone's voice was heard and identifying changes to improve the organization that were actually implemented."

According to Nicholas, the PM CCS survey and sensing sessions created a safe forum to discuss the return to the office, job satisfaction, diversity, equity and inclusion and career

opportunities. “As a result of the survey and sensing sessions, PM CCS established multiple initiatives to include a new line of effort that focused on shaping the future work environment as we prepared to transition from telework to the workplace after the pandemic,” she said.

Nicholas joined the Army Acquisition Workforce shortly after college, as an engineer in the U.S. Army Combat Capabilities Development Command Armaments Center (DEVCOM AC) at Picatinny Arsenal, New Jersey. In this role, she was responsible for developing the command, control, communications and computers architecture for the XM1100 Scorpion munitions system that was managed by PM CCS. Previously known as the Intelligent Munitions System or IMS, the XM1100 is a (remotely operated) smart system that allows for controlled and safe use of munitions in the battlefield.

“Knowing I would be involved in an evolutionary munitions system that would be used for the warfighter gave me a sense of pride and accomplishment,” she said. “I learned it included a new user interface system for the operator and unlike the traditional landmine, it can be remotely turned on or off by the operator, allowing friendly vehicles to pass through lethal area unharmed if necessary, thereby saving countless innocent lives.” This opportunity turned into a career as she transitioned from DEVCOM AC to PM CCS, where she took on multiple roles before transitioning to branch chief.

Since she began taking on leadership roles and relevant training in recent years, Nicholas has seen how beneficial that training can be for cultivating the Army’s vision and inspiring her team. “If I had the opportunity to go back in time, I would have developed a career roadmap at the very beginning,” she said. “I would have taken leadership training such as [Leadership Excellence and Acquisition Development] and [Inspiring and Developing Excellence in Acquisition Leaders] and completed a rotation at the Pentagon or with industry earlier in my career. Leadership courses provide a multifaceted perspective—they allow you to look at a vision from different levels and devise a plan to relate, influence and motivate others to meet the mission at hand.”

She said leadership courses like Civilian Education System Advanced, the Acquisition Leadership Challenge Program and the University of Pennsylvania’s Leadership Dynamics helped her become more self-aware and prepared her for roles of increasing leadership responsibilities. But she believes all leadership development programs have prepared her for the Senior Service College

Fellowship, which she has been accepted to as part of the class of 2023-2024.

“My advice to junior acquisition personnel is to develop a career roadmap and start preparing yourself early for positions you see yourself in the future. Seek input from your leadership and mentor to ensure you’re on track,” she said. “It’s great to be committed to the mission, but it’s also important to take time to develop yourself so you can be a better acquisition professional.” Nicholas would also encourage junior acquisition personnel to not be afraid of change.

After 15 years tackling challenges in networked munitions, Nicholas moved to her current position where almost everything was new (from product line to stakeholders and basic engineering and manufacturing principles). “During these times, I leaned on my strengths in program management and on subject matter experts within my team on unfamiliar matters. Making the change only helped me evolve and change as a leader.” She said if you’ve been in the same position where you’re no longer learning and growing, it’s most likely time to try something new. “It may be uncomfortable in the beginning, but it will be rewarding at the end.”

Outside of work, Nicholas enjoys vacationing with her family—Aruba is her favorite place to visit for some eclectic cuisine, time on the beach, touring the island and riding ATVs. And when not vacationing, she unwinds by jogging around her neighborhood, walking along various trails, or taking in nature at the Poconos, Pennsylvania, where she said she gains serenity and recharges from the fast pace of program management life.

She also serves at her local church, working with parents and children. “In this role, I am responsible for helping ensure their needs are met,” she said. “This is similar to my current position where I’m a leader in my organization making sure project officers have tools, knowledge and skillsets necessary to be successful in their roles.”

“Program management involves working with many—stakeholders from engineering, contracting, financial and many more entities,” she said. “There is a lot of planning to execute programs. It doesn’t just happen overnight.”

—*CHERYL MARINO*



# REELING IN NEW FISH



An updated approach to hiring practices will draw in today's diverse civilian workforce.



*by Brianna Clay*



## TAILOR YOUR CAST

Employers need to tailor their hiring approach to fit the group they are targeting. Just as different types of bait attract different fish, millennials and Gen Z workers may not look for the same things that a baby boomer seeks in a job. (Photo by Karolina Grabowska, Pexels)

In recent years, significant changes have swept through both the workplace and our daily lives, with COVID-19 playing a pivotal role. Practices such as teleworking and the growing spotlight on mental health are shaping how employees navigate the work environment and choose where to work.

Additionally, a generational shift is transforming the workforce. According to the Bureau of Labor Statistics, by 2029 more than 38.5 million people age 35 to 44, or millennials, are expected to join the labor force, outnumbering all other age groups, while the newest group to join the workforce, Generation Z—aka the “Zoomer” generation—has already overtaken the number of baby boomers in the workplace. With the rise of a new generational mindset, an updated approach to hiring practices is needed to draw in today’s diverse civilian workforce.

### READ THE ROOM

Before hiring, employers must ask themselves, who is the target audience? What do they want? Nuances among different generations will always exist, but recognizing common characteristics between each group can assist employers in attracting the right candidates.

Employing the same hiring strategy for a Zoomer as one would a “Boomer,” or someone of the baby-boom generation, is likely to yield disappointing results. Unlike their predecessors, millennials and Zoomers have grown up in a digital age, using the benefits of advanced technology throughout most of their lives. Baby boomers and Generation X have had to adapt to this new technology as adults. Furthermore, older generations exhibit greater loyalty to an organization, often staying within a single organization for many years.

According to a report from Forbes, younger workers are more willing to leave the financial security of a position to pursue meaningful work that offers better work-life balance. They tend to value flexibility and stronger connections with their work. Mental health is a priority, while concepts like diversity, equality and inclusion are essential to fostering a positive work environment. Unlike older generations, this workforce places a stronger emphasis on identity in the workplace over uniformity. With these characteristics in mind, employers adapting to this new work landscape have options for making improvements in the hiring process to attract candidates.

### TEAMWORK MAKES THE DREAM WORK

Employees don’t work in a vacuum. They are often engaging in collaborative projects and trading input. Therefore, the hiring

process doesn’t have to be in a vacuum, either. Employers should take advantage of the best resource around them: People.

Partnering internally and with other organizations not only increases the opportunity for referrals but improves the hiring process. For hiring managers that have been in the game for a long time, it can be hard to break away from old habits or see where new opportunities lie. Establishing a forum with other organizations encourages a sharing of best practices. In addition, it opens avenues for current or future recruiting opportunities, like job fairs and conferences, in underrepresented or overlooked talent pools.

Hiring managers shouldn’t be afraid to let team members get involved or ask them for feedback. Before posting a new job opening, the team can identify what assets a hiring manager should look for in a candidate beyond the baseline job description. They can increase the efficiency of the process by offering helpful additions to job postings and thoughtful questions to use during interviews.

## Employees don’t work in a vacuum.

### MEET THEM WHERE THEY ARE

“We are currently in a candidate-driven market,” said Yolanda Compton, chief of the Inclusion, Diversity, Equity and Accessibility (IDEA) office for the U.S. Army Acquisition Support Center. In a candidate-driven market, prospective employees have a lot more leverage when it comes to the final decision, so employers must ensure strategies are interesting and strongly connect with target audiences.

What’s one way to do this?

“Appeal to the ‘influencer’ in each candidate. And demonstrate an interest in unique talents,” Compton said, adding that when advertising a job, employers should emphasize the role candidates will play in influencing the organization, speaking to their creativity and social recognition.

Employers need to be willing to meet candidates on their playing field. If a hiring manager is looking to fill positions for those early in their career, a GS-9 level or lower, digital platforms are key

to success. In addition to popular social media platforms like LinkedIn, they might find it worthwhile to invest in hiring platforms that directly target college students early in their careers. Organizations should also consider employing audio or visual imagery in their job postings to increase engagement.

When trying to appeal to younger generations, employers should enlist the help of Gen Z or millennials already working in the organization to provide insight on what draws candidates at a similar level. Taking this approach would encourage creativity in the hiring process while fostering an inclusive and collaborative work environment.

### GET TO THE POINT

The longer the hiring process, the more likely an organization will lose a job candidate. While more stringent requirements and lengthier assessment periods are necessary on some level to ensure accountability, an exhaustive hiring process increases the difficulty of filling vacancies. When the hiring need is critical or a qualified candidate is identified, government organizations shouldn't be afraid to embrace direct hiring authorities, which can be a valuable tool for expediting the hiring process. Government employers are afforded some leeway in hosting open continuous announcements for highly sought-after candidates, helping them maintain a competitive edge with industry.

Hiring managers can also streamline the process by setting timelines for interviews and reviewing assessments, in addition to maintaining consistent communication with candidates. Even before a need arises, organizations should work on building a talent community through channels such as social media and forecast hiring gaps in the workforce.



### PLANTING THE SEEDS

Job seekers are looking for opportunities to grow. To attract new hires, organizations need to convey the types of developmental and educational opportunities that come with the job. (Photo by Akil Mazumder, Pexels)

### CREATE GOLDEN OPPORTUNITIES

Candidates are always looking for indicators that the work environment will be a good fit for them. Younger generations are especially keen to know what opportunities are available, so communicating what the organization can offer is essential in the hiring process. This is why the Army Director of Acquisition Career Management (DACM) Office is including such guidance in its civilian support strategy that is currently being developed to support civilian hiring in the acquisition workforce at the enterprise level.

“Regardless of where someone currently works, they may have opportunities all over the world,” said Aaron Hutson, branch chief for strategy and policy at the Army DACM Office.

Hiring managers can attract workers by emphasizing leadership development opportunities through DACM-sponsored programs such as the Defense Civilian Personnel Advisory Service, learning and professional development programs and educational opportunities through tuition assistance or student loan repayment programs.

Organizations need to communicate what unique work flexibilities they can offer to potential hires, like remote work capabilities or flexible work hours. When those flexibilities aren't available, pivot toward other offerings. For seasoned workers in the acquisition community, the flexible pay scale offered by the DOD Civilian Acquisition Workforce Personnel Demonstration Project (AcqDemo) could be a huge incentive, while early career

employees could enter through Enterprise Civilian Talent Acquisition Programs, such as the Army Fellows program, which offer an array of developmental opportunities.

“Organizations are learning that they have to be adaptive. Now they are saying, ‘If I can’t offer this benefit, what I can offer is something else,’” said Maj. Kevin Harris, DACM proponent officer.

## “Using old recruitment, retention and workforce management methodologies is like trying to force yesterday into tomorrow.”

### MISSION FIRST, PEOPLE ALWAYS

“We take ourselves wherever we go, therefore personal concerns influence professional behaviors and engagements,” said Compton.

Because of this, connectivity through work experiences is vital to attracting candidates. Today’s workforce looks for work environments that prioritize meaningful work and workers’ well-being.

As the most diverse and outspoken generation, Gen Z is particularly concerned with having a sense of belonging and feeling appreciated in the workplace. From the start, hiring managers will need to show that the organization is worthy of trust.

How does a budget officer or human resources specialist support the Soldier in the field? This is the question hiring managers must answer for potential hires. If they can’t make a connection between the daily tasks they’ll be doing and the broader accomplishments of the organization, then the motivation to work isn’t there.

Organizations can communicate that connection by personalizing candidate experiences as much as possible. During the hiring process, remember the following:

- Job postings should be concise yet compelling and cover how certain tasks contribute to the big picture, possibly linking candidates to career pages or media content that

highlights employee experiences or how the organization is fulfilling its mission.

- Focus job descriptions on the candidates’ needs, not just the skills the employer is seeking.
- Getting on the phone or into an interview as soon as possible allows interviewers to demonstrate their own passion for the job, and helps candidates understand the value of the mission in guiding their objectives.
- Bring awareness to benefits that show a concern for workers’ well-being, like mental health resources, counseling programs and diversity, equity and inclusion initiatives. Emphasizing how the organization prioritizes the well-being of its employees builds a positive rapport with the candidate.

### CONCLUSION

“Using old recruitment, retention and workforce management methodologies is like trying to force yesterday into tomorrow,” Compton said, adding that employers must innovate not only with technology but with all their resources, especially human capital. In this job economy, “how we demonstrate meaningfulness, safety and availability in the workplace will determine the type of employees we have in the roles.”

Part of the effort to innovate is practicing what is preached. Whether it is upholding concepts like work-life balance or fostering connectivity, organizations need to commit to the long-term vision. It’s one thing to hire great workers; it’s another to keep them. As the boomer generation rolls into retirement, it is imperative that government employers not only bring on young talent but keep them in the workforce long after hiring. Improving the hiring process may just be the beginning, nevertheless, it is an important step in the right direction.

*For more information on DACM’s civilian programs or acquisition career development opportunities, go to <https://asc.army.mil/web/career-development/civilian>.*

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## LEAD GRADS

From left, William “Cody” Swinford, Cassandra Reilly, Megan Henline, Kelly Sowell, LEAD program manager Kelly L. Terry and Thomas LaFontaine stand together following the Year Group 2021 and 2022 LEAD graduation ceremony on June 29, 2023, in Springfield, Virginia. (Photo by Jeremy Carlin, U.S. Army Acquisition Support Center)



# OLD DOG, NEW TRICK?

| An Army civilian pursues a change in career path at age 55.

*by Thomas LaFontaine*

**T**hey say you can't teach an old dog new tricks. This idiom has been used more often than most people over the age of 40 care to hear. Is it true? How many times have you seen an older or more senior person struggle with their phone only to hand it to their kids to fix the issue? My goal is to break this idiom wide open and change my Army civilian track while being north of 55 years old. I feel that if the Army can change from counterinsurgency operations to multidomain operations, why can't I, and others, effectively execute a career path change? It is time I moved from working as a program manager in international programs to a domestic program manager or product director.

How do I make a change while ensuring I learn all I can to be an effective leader? The Army Director of Acquisition Career Management (DACM) Office has a program that provided me with the relevant classes and on-the-job training, allowing me to transition from international programs to domestic. I applied for the Leadership Excellence and Acquisition Development (LEAD) program to jumpstart my transition. In

fiscal year 2022, I was the only selectee for the LEAD program, beginning my 24-month journey in April 2022.

### TAKING THE LEAD

After 11 years working in international programs supporting the Tactical Aviation and Ground Munitions (TAGM) Project Office within the Program Executive Office for Missiles and Space (PEO MS), I began the LEAD program. In my final years at TAGM, I was the international branch chief for aviation programs. I managed international programs supporting the Hellfire anti-tank missile system, the AGM-179 joint air-to-ground missile and the Aviation Rockets and Small Guided Munitions product offices. I always felt then, as I do now, that the international sales of those weapon systems enabled our product directors to deliver more to our Soldiers. Our foreign military sales (FMS) team created increased production numbers, helping to reduce cost and obsolescence. The FMS sales reduced unit costs and ensured the continued success of the missile system for the U.S. Army and its allies.

## My heart told me to make the change late in my career to support our warfighters.

Why would I change my path while enjoying work on international programs? It wasn't an easy decision, but I ultimately changed because I felt a calling—one that many who served in uniform have felt at one point in their lives. I wanted to give back more directly to our Soldiers. FMS cases deliver capability to our allies, ensuring they are more capable of defending their borders and handling small-intensity conflicts in their regions. This reduces the need for U.S. Army local assistance and keeps our Soldiers out of harm's way. International sales also allow our Soldiers to operate with their allies with like equipment, creating battlefield synergy between coalition partners in conflict. So, why do I feel I needed to change? I want to do more to directly support or influence the support of the Army's warfighters.

I have gained the skills over the years to be in line with, or a bit ahead of, young product managers. All I needed was the motivation to continue to learn and the sharpening of my skills guiding

me to lead a future product team with competent skills and leadership attributes.

Is it possible to make such a drastic change supporting the Army? Yes, absolutely. I, along with many others, make career changes all the time. My first change was heading off to the Army from a small town in northern Wisconsin. Within a couple months I was a Soldier in uniform, taking commands and doing outstanding things to defend our country. In eight years, I was taking another broad jump, attending a grueling seven-month program to become a technical missile system warrant officer. The biggest leap of all, while I was in the military, was my decision to leave it. It was the moment with the most uncertainty, as I had to learn to navigate the waters of private industry for the first time in 24 years.

After retiring, I spent the next 17 years working in FMS programs. I absolutely love the field of FMS and security assistance programs. I was fortunate to work on and support programs from multiple offices, U.S. Army Aviation and Missile Command, the Office of Military Cooperation in Egypt, U.S. Army Security Assistance Command and multiple project offices. Traveling the world in support of these programs proved to be exciting and rewarding. After almost two decades working the international programs, I felt it was time to focus my efforts internally on our Soldiers.

I chose a fast-paced program with multiple classes and assignments to jump start my transition from FMS to domestic program management—the Army's LEAD program. The first nine months of my LEAD program were busy, with an assignment to the Search, Track, Acquire, Radiate, Eliminate (STARE) Project Office within PEO MS, working as the deputy in the Program Management Directorate. I worked to build my skills in business management. Not only did the STARE Project Office provide me with the skills I was seeking in business management, but also many new friends. In addition to opening my eyes to new disciplines and advanced training, the LEAD program is allowing me to meet new people.

### STAYING ON COURSE

During LEAD, I attended the How the Army Runs Course, the Synchronization Staff Officer Training Course, the FA51 Intermediate Qualification Course, the Congressional Operations Seminar at the Government Affairs Institute at Georgetown University and the U.S. Army Data Driven Leadership Program at Carnegie Mellon University. The How the Army Runs (HTAR) Course, presented by the Army Force Management School, is designed to educate and train military and civilian force



### THE TEAM

The author, front right, stands with ASA(ALT) DASM Intelligence and Simulation Directorate, Department of the Army systems coordinators at the Pentagon, June 2023. Front row from left, Maj. Justin Bond, Abi Laxa and Fontaine. Back row from left, Edgar McAnderson, Linda Comfort, Steve Przybylowicz, Maj. Timothy Roberts and Sely Papal. (Photo courtesy of the author)

managers on how the Army runs in the current operating environment. HTAR teaches the roles, missions and functions of the seven interdependent and continuous processes within the Army Force Management Model—strategy, joint capabilities integration and development system, defense acquisition system, structure, authorizations, personnel and equipment—the nine force integration functional areas—structuring, manning, equipping, training, sustaining, funding, deploying, stationing and readiness—and the requirements and acquisition processes that work together to produce trained and ready forces for the combatant commanders. HTAR provided focused training on

the above Army functional areas that sharpened my understanding of Army processes and skills to navigate within those processes. HTAR training provided me with not only the knowledge gained but a connection to the subject matter experts in their field to call on for advice.

The Synchronization Staff Officer (SSO) Training Course is primarily designed to provide director of material deputy chief of staff G-8 personnel with an in-depth understanding of SSO specific missions, responsibilities and organizational relationships. The course examines how an SSO coordinates the Joint Capabilities Integration and Development

Systems; the Defense Acquisition System; and the planning, programming, budgeting and execution process in support of the research, development, acquisition, procurement delivery allocations and sustainment of required capabilities. The SSO course is a deep dive in financial and acquisition planning, furthering my movement to domestic acquisition programs.

The FA51 Intermediate Qualification Course (IQC) is part of the FA51 Leader Development Plan taken by Army officers transitioning into acquisition. IQC trains military acquisition leaders and civilian LEAD program participants on innovative leadership and acquisition topics.

IQC provides depth and understanding of Army acquisition programs and leadership of those programs. IQC provided me with a broader depth of knowledge from civilian contractors, Army depots and Army senior leaders.

The Congressional Operations Seminar at Georgetown University includes topics such as leadership and organization in Congress, key stages in the authorization process, the budget and appropriations process, representing constituent interests, the role of committee staff, and the role of special interests in policy formulation, to name only a few. The seminar has been conducted for over 40 years for industry and government personnel. This course is beneficial to understand how an acquisition program should interact correctly in the political process. The seminar was arguably the best short course I have ever taken. The course provides accurate insight into how Congress actually operates versus the standard high school civics information we all fall back on to discuss politics. I wish everyone had the opportunity to attend this course. We all should know more about how our government works.

The U.S. Army Data Driven Leadership Program is a direct response to Young Bang, the principal deputy assistant secretary of the Army for acquisition, logistics and technology, who last year said, “2023 is the year of digital transformation for the Army. ... Simplifying and flattening the Army’s data architecture will result in more effective and efficient data-driven decisions.” This course will help workforce professionals meet that intent and is a must for senior acquisition personnel. It provides students with knowledge on how to make decisions based on facts versus personal feelings. While a gut instinct decision can sometimes be a winner, more often it is best to compile accurate data and make informed decisions. I feel

I chose a mixture of this when applying to LEAD. My heart told me to make the change late in my career to support our warfighters, while data told me I could do even more to support them if I worked in domestic programs.

To pull all this training together, LEAD participants are required to apply to the Army’s centralized selection list (CSL) for acquisition product directors before graduating from the program. In my first attempt at the CSL, I was selected for the alternate list for product directors. Once chosen to be on the tentative list, selectees are invited to attend the Acquisition Leader Assessment Program (ALAP), part of the Command Assessment Program, conducted at Fort Knox, Kentucky. During this assessment, military and civilian selectees are put through several assessments and scenarios used to further assess an individual’s readiness to lead. At ALAP, civilians go through most of the same assessments as their military counterparts. ALAP allows selectees to further showcase their knowledge of acquisition principles, leadership and Army values.

## I felt a calling.

### CONCLUSION

The culminating assignment while in the LEAD program is to work as a Department of the Army system coordinator (DASC) for the Office of the Deputy for Acquisition and System Management (DASM) within the Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASA(ALT)). During this development assignment at the Pentagon, I learned Army acquisition, reporting and staffing at a remarkable pace. I learned

as much in a few months on the job in ASA(ALT) as I had in the previous year. The mission as a DASC is not only fast paced, but provided me with a view of the Army acquisition process through a lens much different from a project office. The ASA(ALT) DASM Intelligence and Simulations Directorate provided a lifetime of knowledge from my director, John Reid, and deputy director, Kelly Tisch. Thanks to their leadership and the constant support from the team, my time at the Pentagon will pay off immensely in my future assignments.

I stand ready for what my career may hold for me for the latter part of my working life. Thanks to the LEAD program and the CSL, I have taken gigantic leaps in a short time while honing my skills as a future product director. I will take all I have learned during my international years and all I have learned in the past two years to demonstrate you can teach an old dog new tricks, if the old dog wants to learn.

*For more information on the LEAD program, go to <https://asc.army.mil/web/career-development/programs/lead>.*

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*THOMAS LAFONTAINE has worked for the U.S. Army for 39 years, including 15 years as a Department of the Army civilian and 24 years on active duty before retiring as a chief warrant officer 4 missile system electronics technician. He is currently working as a Department of the Army systems coordinator supporting PEO Simulation, Training and Instrumentation. He has an M.S. in program management from the Naval Postgraduate School and a B.S. in management from Park University. He holds the DAWIA Advanced certification in program management and the Foundational certification in life cycle logistics.*

# ON THE **MOVE**



## **PROGRAM EXECUTIVE OFFICE FOR AVIATION**

### **1: MEDEVAC CHANGE OF CHARTER**

**Lt. Col. Alec Finlay**, left, accepts the Medical Evacuation (MEDEVAC) guidon from **Col. Calvin Lane**, Utility Helicopters project manager, during a change of charter ceremony July 18, 2023, at Redstone Arsenal, Alabama. Finlay assumed responsibility after the outgoing product manager, **Col. Seth Swartz**, right, departed the role. Swartz received the Army's Meritorious Service Medal and the Army Aviation Association of America's Order of Saint Michael silver award for his leadership of the MEDEVAC office since 2020 and contributions to Army Aviation. (Photo by William "Lee" Suggs, PEO Aviation)



### **2: SEMA CHANGE OF CHARTER**

**Lt. Col. John Plitsch**, right, accepts the charter for the Special Electronic Mission Aircraft (SEMA) Product Office from Fixed Wing project manager **Col. Joe Minor** during a change of charter ceremony July 14, 2023, at Redstone Arsenal. **John Perkinson** (not pictured), who served as the acting SEMA product manager for the past two years, will return to his previous role as deputy product manager. Plitsch joined SEMA following his assignment as product lead for the Future Long-Range Assault Aircraft Modernization Product Office. (Photo by Tracey Ayres, PEO Aviation)



### **3: CHANGE OF CHARTER AT A3S**

**Lt. Col. Paul Flanigen**, right, accepts the Assured Airspace Access Systems (A3S) Product Office charter from **Col. Burr Miller**, Aviation Mission Systems and Architecture project manager, during a change of charter ceremony Aug. 8, 2023, at Redstone Arsenal. Flanigen assumed responsibility for the role previously held by **Lt. Col. Adam Moodie** (not pictured). (Photo by Peggy Meagher, PEO Aviation)



### **4: RETIREMENT CAPS 22-YEAR CAREER**

**Lt. Col. Adam Moodie**, right, who most recently served as product manager for A3S, celebrated his retirement from the Army after 22 years of active duty at a ceremony Aug. 8, 2023, at Redstone Arsenal. At left is **Col. Burr Miller**, Aviation Mission Systems and Architecture project manager. In recognition of his leadership of the A3S office since 2020 and his contributions to Army Aviation, Moodie received the Army's Legion of Merit award and the Army Aviation Association of America's Knight of the Honorable Order of Saint Michael award. (Photo by Peggy Meagher, PEO Aviation)



**5: FLRAA CHANGE OF CHARTER**

**Col. Jeffrey Poquette**, right, assumed leadership of the Future Long-Range Assault Aircraft Project Office June 29, 2023, at Bob Jones Auditorium at Redstone Arsenal. With Moodie is **Maj. Gen. Robert Barrie**, who was the program executive officer for Aviation until July 2023. Moodie previously served as the executive officer to the principal military deputy for the assistant secretary of the Army for acquisition, logistics and technology and director of the Army Acquisition Corps. His current assignment is a return to PEO Aviation. From 2018 to 2021 he managed the Apache Helicopters Production and Fielding Product Office. (Photo by Paul Stevenson, PEO Aviation)

**6: NEW PM FOR UTILITY HELICOPTERS**

**Col. Ryan Nestrsta**, center, accepts a guidon from **Rodney Davis**, the acting program executive officer for Aviation, symbolizing Nestrsta's role as the newest project manager for Utility Helicopters. Nestrsta officially assumed responsibility at a ceremony July 27, 2023, at Redstone Arsenal. Nestrsta previously served at PEO Aviation in the Cargo Helicopters project office and returns following his last assignment at the Army Futures Command. (Photo by David "DB" Swaine, PEO Aviation)

**7: PM SET TO RETIRE**

**Col. Calvin Lane**, right, the outgoing project manager for Utility Helicopters, received the Legion of Merit award from **Rodney Davis**, acting program executive officer for Aviation, for his leadership and service. **Tim Crosby, Maj. Gen. USA (Ret.)** (not pictured), representing the Army Aviation Association of America, presented Lane with the Order of Saint Michael silver award for his significant contributions to Army aviation. Lane is set to retire from the Army at a later date. (Photo by William "Lee" Suggs, PEO Aviation)

**8: UAS CHANGE OF CHARTER**

**Ed Gozdur** accepts the Soldier Uncrewed Aircraft Systems Product Office charter from **Col. Danielle Medaglia**, project manager for Uncrewed Aircraft Systems, during a change of charter ceremony July 12, 2023, at Redstone Arsenal. **Carson Wakefield** (not pictured) was awarded the Civilian Service Commendation Medal and the Knight of the Honorable Order of Saint Michael medal in recognition of his service as product lead since 2021. Wakefield will attend the Defense Acquisition University Senior Service College Fellowship program. (Photo by Barbara Mayers, PEO Aviation)



**PROGRAM EXECUTIVE OFFICE  
FOR COMMAND, CONTROL AND  
COMMUNICATIONS – TACTICAL**

**1: MISSION NETWORK CHANGE OF  
CHARTER**

**Lt. Col. Marquessa Keith**, center, accepts the Product Manager Mission Network charter from **John Gillette** during a ceremony Sept. 29, 2023, at Aberdeen Proving Ground, Maryland. **Col. Stuart McMillan**, right, project manager for Tactical Network, hosted the ceremony. Product Manager Mission Network is assigned to Project Manager Mission Network, within the Program Executive Office for Command, Control, Communications – Tactical. (Photo by Lynn Bellia, PM Tactical Network)

**PROGRAM EXECUTIVE OFFICE FOR  
ENTERPRISE INFORMATION SYSTEMS**

**2: GFIM CHANGE OF CHARTER**

**Robert Porter**, the product director for Global Force Information Management (GFIM) at the Program Executive Office for Enterprise Information Systems (PEO EIS), addresses attendees at the GFIM change of charter ceremony Aug. 17, 2023, at Fort Belvoir, Virginia. Porter previously served as the acting product director for the General Fund Enterprise Business System at PEO EIS. (Photo by Laura Edwards, PEO EIS)



**3: NEW PD AT ENTERPRISE  
SERVICES**

**Reginald Shuford**, right, incoming project director for Enterprise Services, receives his charter from **Ross Guckert**, the program executive officer for Enterprise Information Systems, during an assumption of charter ceremony July 24, 2023, at Fort Belvoir. Shuford recently returned to PEO EIS after attending Senior Service College at the U.S. Army War College in Carlisle, Pennsylvania. (Photo by Laura Edwards, PEO EIS)



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## REMEMBER!

*In Bimini, Bahamas, King wrote one of his most inspiring speeches, "I've Been to the Mountaintop." It was delivered a few weeks later in Memphis, Tennessee, one day before King was assassinated on April 4, 1968.*

## CELEBRATE!

*"And I've looked over, and I've seen the Promised Land. I may not get there with you. But I want you to know tonight, that we, as a people, will get to the Promised Land."*

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*A Day On,  
Not a Day Off!*



**MARTIN LUTHER KING, JR. DAY**  
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ARMY ACQUISITION, LOGISTICS & TECHNOLOGY  
ISSN 0892-8657

DEPARTMENT OF THE ARMY  
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FORT BELVOIR, VA 22060-5567

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“Our workforce must concurrently develop and acquire the necessary digital skills and knowledge it needs to understand and work with AI and ML technology.”

—**The Hon. Douglas R. Bush**  
*Army Acquisition Executive and  
Assistant Secretary of the Army for Acquisition,  
Logistics and Technology (ASA(ALT))*

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