

# EFFICIENT AND EFFECTIVE FORCE

#### **BREAKING THE ICE** ICE seeks solutions to challenges

experienced in the extreme cold

#### A SOLDIER-LED SOLUTION New camo net invention by Soldiers, for Soldiers

PREPARE, DEPLOY, AND SUSTAIN Transforming medical logistics to sustain survivability

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#### FROM THE AAE

4 EFFICIENT WORKFORCE, EFFICIENT ARMY

The Army Acquisition Workforce drives the effectiveness and efficiency of the Army

### EFFICIENT AND EFFECTIVE FORCE

#### 8 BREAKING THE ICE

ICE program seeks solutions to challenges experienced by the U.S. military in the extreme cold

#### **14** BETTER OFF WITH CEDS

CEDS program completes testing activity, highlighting progress of a novel decontamination capability

18 FACES OF THE FORCE: BRIANNA BAZILIO Grace to learn

20

MANAGE THE LOAD How to build a sustainable and agile acquisition workforce

#### 26 MINIATURE BUT MIGHTY

DEVCOM CBC continues miniaturizing chemical agent destruction technology

- **32** A SOLDIER-LED SOLUTION The camo net invention by Soldiers, for Soldiers in the field
- **36** FACES OF THE FORCE: SGT. 1ST CLASS DONALD PIPER Always hit the save button
- **38** EFFICIENCY BUYS FLEXIBILITY HMS Next-Gen Radio Platform Integration team executes a digital transformation

#### 42 AFATDS GETS AN UPGRADE The Army's new fires software will be user-friendly and Soldier-driven



#### ON THE COVER

The Office Assistant Secretary of the Army for Acquisition, Logistics and Technology is helping to create and efficient and effective force through climate resilience, better infrastructure, equipment modularity and embracing a people-centric workforce philosophy.



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#### FEATURE ARTICLES

- **48** PREPARE, DEPLOY AND SUSTAIN Transforming medical logistics to sustain survivability
- 54 FACES OF THE FORCE: BRITTANY WIELAND It's not what you think
- 56 NEW OBJECTIVES CECOM ARAT hosts a tri-service working group to improve overall collaboration within the community
- 60 FACES OF THE FORCE: SGT. 1ST CLASS RYAN D. JOHNSON Be a sponge

#### COMMENTARY

62 CHANGING CULTURE The PMR program evokes change—starting with itself

#### WORKFORCE

70 FROM THE DACM: A SUSTAINABLE ENTERPRISE Targeted learning keeps the workforce's skills sharp

#### 73 RANKING HIGH

USAASC is recognized as one of the 'Top Five Best Places to Work in the Army'

76 IN SELECT COMPANY

A Centralized Selection List assignment can boost acquisition careers and grow leadership skills

**82** FACES OF THE FORCE: KATHRYN "CALETTE" CHAMNESS Don't be outworked

#### **84** A UNIQUE APPROACH

Making the most of 90 days of on-the-job acquisition training with SOF AT&L

#### 88 CAREER NAVIGATOR: TAKE YOUR REST

For true resilience, seven types of rest are best

#### 92 PIONEERING NEW PATHS

Chris Young's groundbreaking direct commission into Army acquisition

#### 96 CELEBRATING EXCELLENCE

New 2024 inductees enter the Army Acquisition Hall of Fame

98 ON THE MOVE

### From the Editor-in-Chief

n this issue, we focus on how Army acquisition creates and sustains an efficient force. What constitutes "efficient" is open to much interpretation and many, many studies. Generally, efficiency is seen as achieving a goal with the fewest wasted resources, like time, energy or money. Way back at the dawn of the Industrial Age in the late 19th and early 20th centuries, Frederick Winslow Taylor, an American mechanical engineer, precisely measured the time it took to perform specific tasks to find the "one best way" to complete a task. Frank and Lillian Gilbreth, a husband-andwife team who were both industrial engineers and efficiency experts, focused on understanding the motions involved in a task and improving them. Combined, they created the concept of a Time and Motion study that is still used today but, more refined, is commonly known as the Lean Six Sigma approaches to efficiency.

However, efficiency is not a straight line of time and motion-it has many tangents: Costs, open system architecture, contracting, longevity, sustainability, supply chain management, modularity and much more. The Army is revolutionizing efficiencies across these areas through a focus on cost effectiveness, longevity and adaptability. Investing in durable, long-lasting technology and infrastructure ensures that resources are used optimally over time, reducing the need for frequent replacements (think M1 Abrams tank, CH-47 Chinook helicopter and the M2 Browning .50 caliber machine gun). Modular systems, which can be easily upgraded or modified, enhance operational flexibility and readiness. Streamlining contracting processes and improving workforce efficiency leads to faster, more responsive procurement and deployment of resources. Supply chain logistics are a critical component, ensuring the timely and efficient delivery of materials and equipment to where they are needed most. Innovations such as 3D printing are transforming the production of ammunition and equipment, allowing for on-demand manufacturing and reducing dependency on traditional supply chains. This technology significantly cuts lead times and costs, enabling rapid adaption to changing battlefield conditions.

By integrating these elements, the Army aims to build a resilient, agile and sustainable acquisition framework. While we cannot cover all the efficiency initiatives the Army Acquisition Workforce is undertaking, a few are covered in detail in this issue and are quite interesting. For instance, for anyone who has ever pitched a camo net and hated every minute of it, there is help on the way. In "A Soldier-Led Solution," on Page 32, read about how the Marne Innovation Center at Fort



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Stewart, Georgia, partnered with the University of Florida to develop a new, more efficient camo net prototype called the Vehicle-Integrated Camouflage System. This adaptive ground-based mount for an armored vehicle cuts down the time and manpower used for setup by half. It takes less than 15 minutes to set up and can stay in place if the vehicle is moved. Magic! And, as mentioned above, the Army invests heavily in durable, long-lasting systems such as the M1 Abrams tank. A great current example of that is found on Page 42, in "AFATDS Gets an Upgrade." The article describes how The Advanced Field Artillery Tactical Data System (AFATDS)-the Army's 30-year-old software for fires—is getting an upgrade. The need for quick, effective and intuitive software that will help Soldiers execute fires is crucial to a unit's ability to fight in fast-moving and largescale combat operations. Finally, efficiency and sustainability don't happen by themselves-it takes a trained, nimble workforce. Learn why the Army acquisition enterprise is well-situated to realize transformation in contact by developing an agile-and, by extension, sustainable-workforce in "Manage the Load" on Page 20.

As always, if you have a story, a story idea or just a general comment, contact us at **armyalt@army.mil**. We look forward to hearing from you.

Nelson McCouch III Editor-in-Chief

#### FIRST IN THE FIELD

Sgt. Maj. of the Army Michael Weimer discusses the Next Generation Squad Weapon during a visit to Fort Campbell, Kentucky, on Oct. 23, 2024. The 101st Airborne Division is the first Army unit to field the Next Generation Squad Weapon program. (Photo by Staff Sgt. Kaden D. Pitt, 101st Airborne Division)

#### FROM THE ARMY ACQUISITION EXECUTIVE DOUGLAS R. BUSH



## EFFICIENT WORKFORCE, EFFICIENT ARMY

The Army Acquisition Workforce drives the effectiveness and efficiency of the Army.

et me take this opportunity to wish everyone a Happy New Year, especially the more than 33,000 members of the Army Acquisition Corps and Army Acquisition Workforce. Because of the work you do, the materiel aspect of the Army's transformation is going well. On any given day, we have more than 500 programs underway—not all get time in the spotlight but all matter to the Army. There's always risk, but I'm very pleased with the work being done.

Our workforce professionals can be found across Army organizations, including program executive offices, the U.S. Army Materiel Command, U.S. Army Futures Command, U.S. Army Test and Evaluation Command, U.S. Army Medical Command and numerous others. They do amazing work every day—developing requirements, developing sustainment plans, working with industry, testing programs and delivering capability to the joint warfighter. They are dedicated public servants and an important reason why we're in such good shape.

Let me also mention our industry partners. They have a critical role in our success—large, medium and small businesses. We are charged with increasing the speed and scale by which we develop, acquire and deliver materiel solutions to the warfighter. Our plan is to provide capability so advanced, so intimidating, that we deter conflict in the first place.

Small businesses are particularly important here because they drive the innovation we need to retain our competitive advantage, and we are continuing to improve how we work with innovators nationwide to be a better customer and collaborator. In fiscal year 2024 (FY24), the Army awarded more than \$24.5 billion in prime contracts to small businesses. This was the highest dollar amount by any federal agency and enabled the Army to achieve 29.6% prime contracts to small businesses, surpassing its small business goal of 26%.

Why are we doing so well?

First, consistency of priority and support from Army senior leaders. It makes a huge difference. It has kept the Army on track and moving in the same direction.

Second, we have flexible requirements that are very well thought through, technically achievable and informed by experimentation and real threats. That has enabled us in acquisition to work with the requirements in an iterative basis so nothing gets thrown over the fence. Everything is an ongoing conversation. Through the years, the Army has been challenged with getting requirements right to make acquisition success possible. We have a much better system in place now.

A third reason is flexibilities from Congress. Congress passes a lot of laws each year, and back in the 2016 and 2017 period, several flexibilities were established that we are using aggressively. We wouldn't be where we are without them. Middle Tier of Acquisition authority allows us to start programs in a rapid prototyping environment and with rapid fielding, which hopefully follows after a successful prototyping effort; as a result, we are slashing the time needed to field advanced capabilities from seven to 10 years down to four to six years. Currently, we have 23 programs in rapid prototyping and nine in rapid fielding. We also have the software acquisition pathway to enable faster, more agile software development and acquisition. We have 19 software pathway programs, 11 in the planning phase and eight in the execution phase.

So, those factors all coming together, along with the great work being done across the Army, are reasons we are doing so well in acquisition. There are risks in all programs especially those that are trying to do very technically challenging things. We will hit bumps along the road, but the issue is how does the Army



deal with the bumps, and so far, I've seen great work getting over them.

One other factor I want to highlight is the importance of teamwork. I served in the Army, and the Army's culture and values don't change that dramatically. A core value of the Army is putting yourself behind the greater good—working together as a team, working together to accomplish something more important than your personal goals. That happens all the way to the top, I assure you, and it's absolutely essential.

I am enormously proud of our success. Let me highlight just a few achievements:

- We have invested more than \$4 billion in our organic industrial base to facilitate 155 mm artillery ramp-up through a combination of new, commercial production facilities and modernization projects at existing Army ammunition plants.
- We achieved more than \$42 billion in new Foreign Military Sales business in FY24, a vast increase over prior years.
- Our FY24 contract actions totaled more than 163,000 for contract awards that surpassed \$118 billion, including more than 2,100 in Other Transaction Authority valued at more than \$6 billion.
- Our Operation and Maintenance, Army execution rate for FY24 was 99.9%.

We in acquisition have an important job to do. We can develop technologies and work to create new capabilities for the Army, but that's not enough to produce real capability in the field. It's not just the platforms. Everything else is just as important. It's about the integration and synchronization of all those DOTMLPF-P or doctrine, organization, training, materiel, leadership and education, personnel, facilities and policy—domains, which must be brought together, of which materiel is only a part, to

#### HYBRID AVIATION

A 25th Infantry Division Soldier steps off a mockup of the Future Long-Range Assault Aircraft (FLRAA) to test and provide feedback for improvements on Sept. 9, 2024. The FLRAA program is scheduled to begin building prototypes in 2025 and will have the hybrid capabilities of both planes and helicopters. (Photo by Spc. Charles Clark, 25th Infantry Division) enable our men and women in uniform to fight and win decisively should deterrence fail.

In the area of materiel, we have numerous achievements to highlight, including:

- First unit equipped for the Next Generation Squad Weapon program, which provides warfighters with significant capability improvements in accuracy, range, signature management and lethality.
- The FLRAA achieved Milestone B, and the program is scheduled to begin building prototypes in 2025.
- As part of the Long Range Precision Fires (LRPF) program, the Mid-Range Capability leverages a mix of existing Navy Standard Missile-6 and Tomahawk missiles for ground launch with an ability to strike targets more than 1,000 miles away.
- The Army is replacing legacy Patriot radars with the Lower Tier Air and Missile Defense System and using the new Integrated Battle Command systems to connect a wide range of sensors across platforms to increase the capacity of our Patriot air defenses.

The cornerstone of the Army is our people. They are and will remain our No. 1 priority. Our military and civilians provide us a decisive advantage against any adversary and are the most important element in our success.

The rapid pace of change in technical, process and digital tools demands that our dedicated workforce professionals remain committed to continued professional development. The Army continues to provide the right training opportunities for the workforce to enhance their own careers, as well as their skills.

From my experience, I am confident that members of the Army acquisition, logistics and technology team will continue to meet every challenge they are presented and will continue to demonstrate excellence in supporting the joint warfighter at best value to the taxpayer.

On a personal note, as I leave my position, I just want to say thank you to the entire Army acquisition team. It has been the honor of my life to lead this organization, but I accomplished nothing—all of *you* did. Thank you all for serving the Army and the country.

My best wishes for much success in 2025.



#### FROM SHIP TO SHORE

Brig. Gen. Rory Crooks, director of the Long Range Precision Fires Cross-Functional Team, speaks at the 2024 Association of the United States Army Annual Meeting and Exposition in Washington, Oct. 16, 2024. The LRPF program is using existing Standard Missile-6 and Tomahawk missiles to develop ground-launched versions that can strike targets more than 1,000 miles away. (Photo by Annie Odom, U.S. Army)



# **BREAKING** THE ICE

ICE program seeks solutions to challenges experienced by the U.S. military in the extreme cold.

by Rebecca Wright

hen thinking about the Arctic, images of snow, ice—maybe even a polar bear—likely come to mind. Located at the northernmost region on Earth, the Arctic covers eight countries including the U.S., Canada, Denmark, Norway, Finland, Iceland, Sweden and Russia. Approximately four million people call the Arctic home along with a vast amount of wildlife, large and small. It's also a region that experiences extreme weather changes, including intense cold, high winds, even days when the sun does not rise or set.

For U.S. joint forces and DOD, the impacts of climate change and an evolving geopolitical environment reach beyond snow and polar bears. Although the Arctic's weather conditions remain extreme and at times can be dangerous, the Arctic terrain is becoming more accessible due to warming temperatures. With ice melting and opening transportation pathways that were not there before, both peers and adversaries are expanding activities in the area. Improving infrastructure, increasing mapping of the region, strengthening military capabilities and protecting service members from the cold are some of the efforts the DOD is investing time and research into. It is essential that the DOD maintains readiness in the Arctic in order to safeguard natural resources, shipping routes and North American territory from potential threats, while also being committed to the preservation and protection of both the Arctic's environment and its people.

#### ICE CONTROL FOR COLD ENVIRONMENTS

Enhancing the U.S. military's capabilities and safety in the Arctic is no small feat specifically when it relates to the extreme cold and icy conditions. Weapons freezing, Soldiers suffering from frostbite and other cold-related injuries, along with negative impacts on electronics and military transportation are some of the obstacles faced. They all pose serious risks. To assist in these efforts and in support of the 2024 DOD Arctic Strategy, the U.S. Army's Arctic Strategy (Regaining Arctic Dominance) and additional joint service strategies, the Defense Advanced Research Projects Agency (DARPA) launched the Ice Control for cold Environments (ICE) program. ICE has a mission to "develop solutions for extreme cold weather DOD operational challenges by discovering and optimizing biologically-sourced or inspired molecules to enable tuned inhibition or nucleation of ice crystallization, propagation and adhesion."

In layman's terms, the ICE program is exploring biologicallyenabled materials for ways to control and manipulate ice to protect military personnel and assets. "The overall goal of the ICE program is to basically use molecules and materials that coldadapted organisms already employ to help them survive and take [those] materials ... and then use them in operational environments to help our warfighters operate more effectively in cold Arctic conditions," said Christopher Bettinger, Ph.D., DARPA program manager in the Biological Technologies Office. "Essentially, we're learning from nature, right? What is and specifically how does nature control and modulate ice?"

#### **ICE IS A HOT TOPIC**

The U.S. Army Engineer Research and Development Center's (ERDC) Cold Regions Research and Engineering Laboratory (CRREL) plays an important role in the program by serving as the Independent Verification and Validation (IV&V) partner, as well as supplying partner institutions with novel microorganisms adapted to cold conditions. The DARPA ICE program launched in January 2024 with a two-day kickoff held at ERDC-CRREL in Hanover, New Hampshire. Emily Asenath-Smith, Ph.D., a research materials engineer at ERDC-CRREL and founder of the Advanced Materials Team, is leading the IV&V effort for the ICE program. Asenath-Smith's research has focused on ice materials science for 10 years. Materials science is a field that researches and develops materials along with studying material behavior. These studies can lead to the modification and improvement of existing materials or even development of new and enhanced materials.

"We actually make ice in the laboratory and then use various material science strategies to see if we can manipulate the properties," Asenath-Smith said. "So, can we make ice not melt as fast? Can we make it stronger? Can we make it more or less reflective?



#### **ICY CAPABILITIES**

Emily Asenath-Smith, Ph.D., research materials engineer at ERDC-CRREL, demonstrates CRREL laboratory capabilities to performer team members of the ICE program in January 2024. ICE is a DARPA program that aims to manipulate ice material properties to safeguard military assets and personnel. (Photo by Justin Campfield, ERDC-CRREL)

These are materials science perspectives we're using structure and processing to tune the properties of ice."

Typically, in the field of materials science, there are standards established by the American Society for Testing and Materials or the International Organization for Standardization. For example, if an aircraft needs to be deiced, the deicing material and the process have specific governing standards. Asenath-Smith explains that currently there aren't any formal standards that govern ice materials or coating technologies to mitigate ice adhesion. "One example is that if we want to use ice to construct a free-standing bridge over an open gap, there's no standard to go to. We perform experiments like this at CRREL," she said. "These types of studies ensure that cutting-edge technologies are transitioned to U.S. military applications and operations in cold and extreme environments."

But why try to manipulate and control ice? "Ice is an adversary. Ice sticks. It causes catastrophe. It downs planes. It collapses utilities. Ice creates messes, right?" Asenath-Smith said. Discovering ways to control ice properties can lead to methods that can mitigate some of the troubles that ice can cause. However, ice serves a dual role in our environment. While it can create dangerous conditions and disruptions, it also is a valuable resource. "Ice can be the only readily available material that you have in the Arctic, and we seek to leverage it to fill deficiencies in the material supply line in regions that are extreme and remote like the Arctic."

While the ERDC-CRREL team is not at the point of developing new materials just yet, they are researching and testing how some of the already commercially available products can meet specific standards and how they can be applied. Many of us



#### LEARNING FROM NATURE

An ICE program performer team member inspects an ice sample during the program kickoff event held at ERDC-CRREL in Hanover, New Hampshire. (Photo by Justin Campfield, ERDC-CRREL)

have seen, and maybe even used, a deicing material during a winter storm. But can these deicing products be synthesized to meet standards to be used on military assets? "Some of these products are already commercialized, but they have not been demonstrated on military assets. For example, research on how these materials perform at large scales is needed. Consider the potential cost of coating an aircraft or a ship with a coating that prevents ice adhesion in laboratory studies only to find out that the coating doesn't mitigate ice in the field scenario or on a large structure," Asenath-Smith said. "Our research is aimed at transitioning ice and icing technologies to meet these types of needs."

#### **BENEATH THE ICE**

An abundance of research and knowledge is coming from laboratory-created ice by analyzing it, creating different scenarios to learn how it behaves and testing various materials on it to see how it reacts. But what about outside of the laboratory? There is an abundance of natural ice in the environment that has been around for thousands of years.

There is a lot that can be learned from naturally occurring ice, especially from a biological standpoint through the practice of biotechnology-the use of living organisms to develop technologies and processes that can be used to create new products. Robyn Barbato, Ph.D., a research microbiologist at ERDC-CRREL, is performing a wide variety of research as part of the soil microbiology team. This involves the exploration of a cold region's microbiome-which is made up of microorganisms that have adapted to live and grow in extremely cold temperatures-and extracting and isolating the microorganisms, including bacteria and fungi, that are living in the permafrost. "Permafrost is ground that's been frozen for at least two years. And that is thawing, and the



#### INTO THE COLD

Ivan Beckman, Ph.D., acting director of the ERDC-CRREL (orange coat), Christopher Bettinger, Ph.D., DARPA program manager (blue coat) and performer team members of the ICE program inspect ice samples inside an ERDC-CRREL cold box. (Photo by Justin Campfield, ERDC-CRREL)

microorganisms are waking up. We're isolating bacteria and fungi, [which] means we're taking them out of the permafrost and we're looking at them as individuals," Barbato said. "Ice can be very pesky for equipment for the Air Force, the Army and the Navy. As it gets colder, a thin film of ice can be very problematic in whatever you're trying to do. Fly a helicopter, use a drone, fly a plane. Deicing is a challenge. They [bacteria] can make proteins that can inhibit ice formation. Those are called antifreeze proteins, and you can inhibit ice as well using these bio-inspired materials."

Microorganisms, plant life and wildlife are thriving in subzero temperatures. However, humans continue to struggle. By studying the antifreeze proteins found in microorganisms, the ICE program teams hope to develop new bio-inspired products that can be used to modulate and control ice. Antifreeze proteins can inhibit or delay the growth of ice, ice nucleation and ice adhesion (how likely ice is to stick to a surface). Asenath-Smith explains that ice nucleation is the process where the smallest particle of ice forms when enough water molecules come together to form a solid, and this solid will continue to grow as long as there continues to be water available. "Imagine fish that live in the Arctic Ocean, and they are swimming around in water that's below freezing ... Why don't they freeze? While the fish might have tiny ice crystals in their bodies, they have special proteins that ultimately inhibit uncontrolled ice growth. Such antifreeze proteins prevent ice from puncturing cells and breaking veins, to ensure their survival below freezing," Asenath-Smith said. "This example illustrates the heart of what the

DARPA ICE program is pursuing from a biological perspective—to leverage biological adaptations that allow life to survive in cold and extreme environments."

While developing methods to protect our nation's assets are of utmost importance, in recent years the Army has been prioritizing reducing its negative impact on the environment. By extracting microorganisms from the local environment and creating new materials for the military, not only does it give the U.S. military a competitive edge, but these materials will have less negative environmental impact. "The idea is that it's more suited to return to that environment and that the environmental effect would be minimal," Barbato said. "Biology is so interesting and how the military is looking at biotechnology to solve these problems because these organisms have existed in these situations for thousands of years adapting to survive. So, if we can understand them, then we can help create new materials for the U.S. military to have a competitive edge," Barbato said.

Barbato explains that once the microorganisms are extracted, they can be provided to one of the ICE program performer teams. The performer teams will then study or genetically modify the microorganism's properties and provide them to Asenath-Smith's team, which will perform icing studies and the formal IV&V processes at the Ice Adhesion Facility, where deicing technologies are tested and evaluated for a wide range of industry and military applications.

#### A FROZEN FRONTLINE

So, what can all this research and development potentially do for Soldiers? From July 2022 through June 2023, 423 service members suffered from at least one cold weather injury, with the highest injury rate occurring amongst members of the

### The ICE program is exploring biologicallyenabled materials for ways to control and manipulate ice to protect military personnel and assets.

Army and frostbite being the most common cold weather injury suffered. Therefore, being capable of preventing cold weather injuries, such as frostbite, can have a significant impact on Soldier readiness. "They [DARPA] are not just interested in using biological examples and products to control ice, but also, how can we help humans survive more effectively in this cold environment?" Asenath-Smith said. "Imagine you are going to wear a balaclava, which is like a ski mask, and every time you exhale the vapor in your breath freezes on the fabric. Now you're at risk of getting frostbite on your nose and your lips because your gear is icing up." She explains that while there is one commercialized product that can be used for the treatment of frostbite, there isn't anything available yet to prevent it. "If you can prevent the freezing of tissues in fish internally, is there some way that we can leverage that to prevent freezing of tissues externally on humans?"

The ability to provide medical treatment, ensure communication devices remain operational and managing ice accumulation on military equipment are a few additional challenges the military is facing in Arctic conditions. Imagine a medical emergency when intravenous (IV) fluids need to be administered, however the IV fluids are frozen solid. Or experiencing a loss of communication because antennas and satellites have frozen and collapsed due to the weight of the ice that has accumulated. The buildup of ice on ships can result in an increase in their center of gravity weight, causing them to capsize. Military aircraft can also experience increased weight if they accumulate ice. Additional negative impacts to aircraft can include frozen propellers, rotors and even their landing gear. The ICE program's research has all these obstacles in mind. The IV&V team will continue to work with the performance teams and through ongoing testing and development efforts, while ERDC-CRREL aims to overcome some of these hurdles.

#### CONCLUSION

The ICE program's recent research and development efforts are just the tip of the iceberg. Currently, the program is in Phase 1also referred to as the discovery phase-and is broken out into two tracks. Bettinger explains that during Phase 1, performance teams are conducting field research, establishing testbed experiments, developing molecules, collecting and testing samples for ice-modulating proteins and making inferences about possible capabilities of certain proteins (such as preventing ice from growing). "The first phase is really broken out in those two efforts we have, basically. One track is discovering those molecules that might exist and then the [other] track is building testbeds to evaluate their prospective performance," Bettinger said. Once Phase 1 is complete by August 2025, Phase 2 will be formulation and application-driven by taking the discovered proteins and researching how they can be engineered into a product. "You think about protecting our warfighters by having those same proteins that the bacteria use, right? But now maybe we develop them and formulate them into an applique or a lotion or a gel or a cream that we can put on our hands," Bettinger said when discussing the future development of frostbite protection. "That's already endowed to bacteria, but let's bring them [the proteins] over to the human."

As the climate continues to warm, developing eco-friendly ways to better protect warfighters in extreme weather conditions in the Arctic not only assists in the safety of our Soldiers, but in our national security objectives as well. The ICE program continues to study and test methods to potentially overcome obstacles such as frostbite, hypothermia and loss of functionality pertaining to military assets in the extreme cold. Instead of viewing ice only as a hindrance, the ICE program's research and testing on how ice can be used as a tool can better position the Army to protect Soldiers and safeguard our nation's interest.

For more information, go to https://www.darpa.mil/program/ ice-control-for-cold-environments or contact Emily Asenath-Smith at emily.asenath-smith@usace.army.mil or (603) 646-4131.

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 more than 15 years of experience writing and editing for DOD and the U.S. Department of Justice.

#### **CLEAN SWEEP**

Soldiers detect radiation during chemical, biological, radiological and nuclear scenario-based decontamination training in the U.S. Central Command area of operations on February 23, 2024. Service members train to identify chemical threats with reconnaissance in order to decontaminate personnel and equipment and reduce casualties. (Photo by Sgt. Christopher Neu, 69th Air Defense Artillery Brigade)



# BETTER OFF WITH

The Critical Equipment Decontamination System program has completed a key testing activity, highlighting the progress of a novel transportable decontamination capability.

by Kelly Burkhalter

eveloping the best equipment for warfighters requires a delicate balance. The equipment must be operable across any climate, so it needs to be rugged and resilient, but it can't be too heavy. These factors become even more complex for items used in chemical, biological, radiological and nuclear (CBRN)-contested environments as they need to maintain operability in environments where the equipment can be contaminated.

The Joint Program Executive Office for Chemical, Biological, Radiological and Nuclear Defense (JPEO-CBRND) is working with partners to develop a capability called the Critical Equipment Decontamination System (CEDS). Once fielded, CEDS will rapidly decontaminate CBRN-compromised equipment in forward, austere, hostile and denied areas to support extended operational mission cycles and reconstitute combat capabilities—keeping the U.S. Special Operations Command (SOCOM) in the fight.

#### HOW IT WORKS

The CEDS, designed to meet the needs of Special Operations Forces (SOF), is a transportable system with the capability to rapidly decontaminate chemical and biological agents from sensitive, low-density-issued operational equipment to a level that allows reuse. CEDS-treated gear would not require a warfighter to wear additional protective equipment when reusing items that have been processed through the system. The goal of CEDS is to quickly re-equip the force and maximize tactical flexibility and fighting strength, while also minimizing the logistical burden and cost of conducting countering weapons of mass destruction operations through CBRN gear survivability.



#### SAVING TIME, SAVING LIVES

The CEDS, once fielded, will rapidly decontaminate sensitive equipment exposed to CBRN fallout, allowing it to be returned to the field and the fight as soon as possible. The small variant CEDS is pictured here. (Photo by Lindsay Longobardi, JPM CBRN SOF)

For example, a warfighter is operating in a CBRN environment and encounters a suspected agent; the warfighter completes the mission and conducts a recovery effort by placing critical equipment into the CEDS for decontamination. Once decontaminated, the critical equipment can be reissued for use without any additional requirements or risks to force readiness.

The CEDS is currently an Acquisition Category III program, which began prototyping efforts in fiscal year 2022. The Joint Project Manager for CBRN Special Operations (JPM CBRN SOF), JPEO-CBRND, leads the CEDS program. Two CEDS variants are in development—one large and one small. The small variant is being developed by Integrated Solutions for Systems Inc. in Huntsville, Alabama, and the large capability by HDT Expeditionary Systems Inc. in Fredericksburg, Virginia. The large variant CEDS resembles a medium-sized metal shipping container, while the small variant looks like an inflatable tent-like structure with soft walls.

#### **PUTTING IT TO THE TEST**

The small variant CEDS completed developmental and operational testing (DT/OT) at the Vojenský výzkumný ústav, s.p. (VVU) in the Czech Republic as part of a larger testing event. The objective for the DT/OT in the Czech Republic was to conduct field tests to evaluate the small CEDS' performance at various chemical agent challenge levels.

"Testing CEDS' decontamination capability on the operational equipment SOF users rely on to safely complete their missions, using real-life threats they encounter, was the uncompromising goal I had for this test program," said Traci Sheely, JPM CBRN SOF joint product lead for the program of record portfolio. "Surrogate materials or equipment and simulants [for chemical agents] don't provide the level of certainty needed to ensure that when we field CEDS, we can be confident that our SOF users are safe. That's why we chose to conduct this testing at the VVU to use real-life threats on actual equipment."

The team looked at several agents and challenge levels, with and without pretreatments, to observe how CEDS performed in the environment. Before testing in the Czech Republic, the team worked with its partners to conduct preliminary laboratory testing stateside, including new equipment training and evaluations with SOF users. Once that was done, the team shipped the system overseas to begin the field tests. Results are currently being evaluated and will be implemented into the operational test event for the small variant, which is planned for the first quarter of fiscal year 2025, while testing for the large variant at the VVU will begin in the second quarter.

"The biggest advantage of testing in the Czech Republic is that in the U.S. we have limited facilities for open-air testing. The Czech Republic has a process where they can set up a site, execute and decontaminate the site and prepare for the next test, which allows us to move quickly and gain quality data," said Laurel O'Connor, CEDS test engineer, U.S. Army Combat Capabilities Development Command (DEVCOM) Soldier Center. "It's also another great opportunity to leverage our international partners to help get data faster to stay on schedule."

The ability to quickly prepare, conduct testing, analyze results and implement changes for the next test is of special importance to the SOCOM community. Their programs run on a shorter timeline, thus finding ways to accelerate the schedule wherever possible. Taking on calculated risks where appropriate allows the team to make the necessary refinements and deliver solutions to the force.

"The intent is to get the end users what they need as quickly as we can while also ensuring the equipment performs. It's a balance between maintaining a certain speed but not pushing too hard on the process in a way that would negatively affect the results we need on the backend," O'Connor said.

#### THE RESULTS ARE IN

The analysis of the results and data collected from the testing is a critical part of the process that cannot be rushed. The CEDS program team collaborates with different independent organizations to obtain a thorough analysis. Some of the organizations include the Defense Threat Reduction Agency, National Assessment Group at Kirkland Air Force Base and the DEVCOM Analysis Center. This collaboration allowed the team to have objective analyses of the data to confirm the results obtained during the testing.

"Due to the nature of CEDS, we want to make sure without a shadow of a doubt that the data we are basing our decisions and test [results] on are as accurate as possible," said Tim Cadle, CEDS assistant program manager for JPM CBRN SOF. "There are no additional sensors or backstops that can confirm that CEDS has decontaminated every bit of agent from the equipment. Thus, we need to be very confident in our data to ensure that we can say that the system achieves the right efficacy level."

The CEDS test data the team is obtaining will also support the development of tactics, techniques and procedures for use with CEDS when it is fielded to SOCOM. The testing is looking at actual operational equipment's efficacy levels and informing the best practices per equipment set.

"We want to achieve a level of understanding for what is operable for different pieces of equipment throughout the test process and pass that information to the end user," Cadle said. "As an example, if a protective mask eye lens is difficult to decontaminate to the right efficacy level, then the entire mask would become a throwaway item. If you want to mitigate this and recover the mask, then you would need to ensure that the mask eye lens protective cover is in place during CBRN operations. By doing this, the throwaway item is now the disposable eye lens protective cover and not the entire mask. This information gets passed to the end user as a recommendation that the eye lens protective cover must be worn during CBRN operations if you want to be able to recover the mask."

#### **CONCLUSION**

The JPM CBRN SOF CEDS program team and the SOCOM stakeholder community confirmed that the CEDS small variant prototype design documentation was sufficient to proceed into fabrication, demonstration and testing. They also reviewed the technical and test data to ensure that the systems produced for DT/OT testing in the Czech Republic are standardized against approved design information and that future design modifications can be implemented.

"This test event moves us one step closer to fielding the CEDS capability to SOCOM, which will improve the lethality of the SOF warfighter by enabling them to quickly reconstitute missionessential equipment and resume real-world CBRN response operations," Sheely said.

The testing event at VVU was a major accomplishment to keep the CEDS program moving forward, but there is still more to be done before this equipment can be fielded. The small variant underwent operational testing in December 2024, while the large variant will commence testing in the first quarter of 2025. The team is working towards a Milestone C decision in fiscal year 2025, which would greenlight it for production and deployment, and then equipping the first SOCOM units in fiscal year 2027.

For more information, contact the JPEO-CBRND Public Affairs Office at usarmy.apg.dod-jpeo-cbrnd.mbx.jpeo-cbd-publicaffairs-office@army.mil or go to https://www.jpeocbrnd.osd.mil.

KELLY BURKHALTER is a strategic communications specialist at Booz Allen Hamilton where she leads strategic communications programs in support of U.S. Army clients, such as the JPEO-CBRND. She holds an M.A. in communication from Johns Hopkins University and a B.A. in journalism and English from Syracuse University.



#### **BRIANNA BAZILIO**

**COMMAND/ORGANIZATION:** Joint Program Executive Office for Armaments and Ammunition

TITLE: Program analyst

#### YEARS OF SERVICE IN WORKFORCE: 2

**EDUCATION:** B.S. in business management, Stockton University

### **GRACE TO LEARN**

Brianna Bazilio's budding career in Army acquisition as a business management major began with the perfect blend of a family recommendation and a positive internship experience.

Her brother, who is a contract specialist in the Army, encouraged her to pursue a government job while she was attending university. In her junior year, she was accepted to the DOD College Acquisition Internship Program within the Joint Program Executive Office for Armaments and Ammunition (JPEO A&A). With high expectations for the program, she said she soon learned that everyone, although serious about the mission, was also kind and willing to pass the baton.

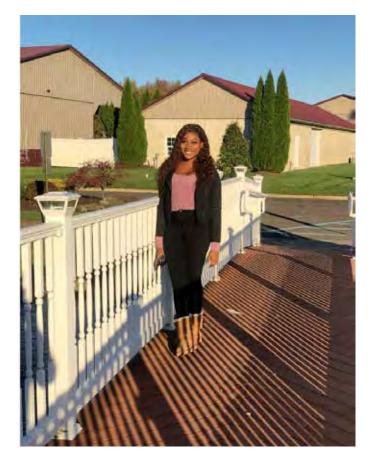
"I was working with a really great leader who showed me so much and got me so interested in the field—the rest is history," Bazilio said. She remained in contact with the office and was hired upon graduation. "The JPEO A&A helped me see how essential the everyday civilian is for helping the warfighter on their mission. There is so much behind-the-scenes work that I never realized existed. It is an honor and pleasure to be a part of that."

As an internal operating budget program analyst for JPEO A&A, Bazilio's job ensures that the project managers and project directors have everything they need financially in order to do their work to support the warfighter. Her day-to-day consists of fielding requests that come in from the different project managers within the organization and tracking all of headquarters' internal spending.

"The greatest satisfaction I have in being part of the Army Acquisition Workforce is knowing that the hard work that we put in actively affects the people who are fighting for my freedom," she said. "I also love being part of my team and the leaders that I get to work under who teach me so much every day."

As an Army civilian, she said the most important points in her career are the opportunities she has to learn. "The encouragement to continue learning throughout our time there is constant," she said. "Through the requirement of earning continuous learning points, I am constantly learning and seeking new opportunities to further my team." Her favorite program she is actively enrolled in is the organization's mentorship program. "I meet with my mentor every couple of months and we strategize how I can achieve my career goals in the Army," she said. The last career development program she participated

"The hard work that we put in actively affects the people who are fighting for my freedom."



#### **KEEP IN TOUCH**

Bazilio remained in contact with JPEO A&A leadership following her participation in the DOD College Acquisition Internship Program. She was hired upon graduation. (Photo courtesy of Brianna Bazilio)

in and would recommend to others, in or outside of the Army, is Emergenetics. She described the training as an interactive and insightful leadership workshop that took individual personality behaviors and taught how they can be applied in the workplace and used to their advantage when working with others in their careers. "It opened my eyes to how I learn and interact in the workplace based on my personality," she said. "It just helps me be more aware of the best ways to interact with other individuals."

As she continues to learn and grow in her career, she said she would recommend to junior acquisition professionals starting out to be eager and willing to step up to the plate and do whatever it takes. "You're not going to get it right the first time and there's a huge learning curve in the Army, especially with all the acronyms, but there is also so much good that happens if you take your time and give yourself a lot of grace to learn," she said, meaning that it's "a journey, not a race, and although the urge is to come into a new job and dominate, it is okay to take it one step at a time when there is such a big learning curve."

The most important lesson Bazilio has learned is that the best experience is hands-on experience. "Even if you don't know how to do something, being willing to ask questions and learn is so important to build the trust of others around you," she said, adding that hands-on experience is also key to learning the job and becoming a vital part of the team. "The goal is to be useful and valuable to the bigger goals of the organization."

Bazilio's role in helping to plan, manage and track funding plays a vital part in making those goals a reality. "I am known as a planner," she said of her hobbies outside of the office, too. While she said the enjoyment of planning travel or birthday parties doesn't exactly correlate to her current role, being able to have the attention to detail to plan and forecast applies. Planning and managing a budget is important as project managers plan for how they are going to spend their funding in the year ahead and how they plan to set funds aside to ensure they are available whenever needed.

"The best part of the Army is there are so many departments that you can transfer to and experience," she said, However, her plans are to continue growing right where she is. "In the future I would love to be a team lead and have more responsibility because I love what I do," she said.

#### -HOLLY DECARLO-WHITE

#### MAKE IT BRIEF

Gen. James E. Rainey, the commanding general of Army Futures Command, briefing U.S. Army Gen. Randy A. George, chief of staff of the Army. George uses the term "transforming in contact" while Rainey says, "continuous transformation." Both terms are in reference to an agile workforce. (Photo by Sgt. Brahim Douglas, 24th Theater Public Affairs Support Element)

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U.S.ARMY



# MANAGE THE LOAD

A foundational, universal approach for building a sustainable and agile acquisition workforce.

#### by Col. Matthew G. Clark and Lt. Col. Edwin Kolen

ince ancient times, great militaries have needed to figure out how to effectively manage manpower in the face of ever-evolving technology. Today's challenge is meeting the speed of transformation—at the speed of relevance.

For the U.S. Army, current manpower modernization and operational processes are inflexible and slow, often taking more than two years to complete. They don't consider future workloads. There are limited metrics and no means to apply rigor to promote a quality workforce, which result in manpower structures without the requisite expertise to adapt in a rapidly changing environment. All of which makes it extremely challenging to achieve effective defense planning and programming.

So what's the solution? We must apply an iterative, agile methodology to promote the continuous improvement needed to enable flexibility and adaptability in manpower management at the "speed of relevance" in the face of rapidly changing technologies and threats. Army Chief of Staff Gen. Randy A. George characterizes this as "transforming in contact." Gen. James E. Rainey, commanding general of U.S. Army Futures Command, calls it "continuous transformation."

However it's termed, it's clear that we must transform beyond Army materiel and build an "agile workforce." The assistant secretary of the Army for aquisition, logistics and technology (ASA(ALT)) can achieve this objective through the current manpower analysis across acquisition formations. By applying an iterative, agile methodology to promote continuous improvement processes, flexibility and adaptability in manpower management can be achieved. Better still, it truly puts people first.

Our aim is to build on processes of the past, using a shared manpower workload worksheet (WLW) that we developed for the Joint Program Executive Office for Chemical, Biological, Radiological and Nuclear Defense (JPEO-CBRND). This WLW was presented at the ASA(ALT) Deputy Assistant Secretary of the Army Program Executive Office (PEO) Summit on November 13, 2024. The WLW is a baselining tool for all PEOs and project managers that empowers development of an agile workforce if used in a similar way across PEOs.

Our baselining approach also generates key performance indicators (KPIs) and objectives and key results (OKRs) at echelon. After identifying relevant stakeholders, the baseline helps conduct supply, demand and gap analyses that enable actionable plans for delivering the workforce for "transforming in contact, solving problems and seizing opportunities today"—as promoted by Rainey.

Our method provides an achievable vision and actionable process for realizing a sustainable and agile workforce that is more responsive to security needs while employing lessons from the digital industry and economy. By focusing on quality at the speed of relevance, it empowers goal setting at all organizational levels, instead of using a coercive, top-down approach that hinders meaningful transformation.

#### A BUILDING BLOCK FOR PLANNING

Our WLW-baselined manpower requirements for completing program activities and operations follow applicable laws, policies and regulations (with a focus on deliverable outputs). ASA(ALT) and the U.S. Army Manpower Analysis Agency provided guidance and a simplified spreadsheet to capture manpower, but we quickly realized the need to re-build the worksheet to cover all aspects of acquisition operations, including exploiting the Adaptive Acquisition Framework.

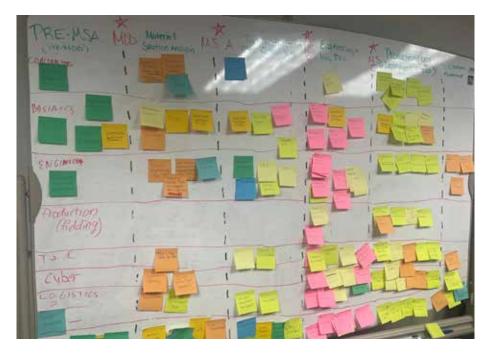
The WLW needed to support strategic to tactical workforce planning and enable thorough workforce supply, demand and gap analyses. JPEO-CBRND employed a workforce stand-down led by the authors and key personnel from PEO staff to develop the tool that we propose is useful for the entire Army Acquisition Workforce. It is a building block that starts from the functional product office level and, through aggregation, goes through PEOs and ASA(ALT) for planning at echelon.

Creating the WLW was not without its difficulties. The first problem encountered was developing the WLW to serve as a tool for establishing a baseline across ASA(ALT). The challenge was how to create a defendable foundation to measure workload, phases of operations, tasks and outputs, as well as one that works for all programs regardless of mission and structure. The JPEO, uniquely situated for this task, took the approach of identifying what constraining and limiting factors affect all PEOs and acquisition programs. The JPEO-CBRND team initially used laws, policies, regulations, mandated program activities, deliverables and processes for programs specified in Adaptive Acquisition Framework Pathways to bound available work activities. Our WLW graphic highlights some of the key aspects of the WLW and shows the dropdown menus that facilitate its successful completion by work centers.

After identifying unifying work outputs and activities across the Army, we used laws, policies and regulations to define associated activity criteria as written guidance for why these activities occurred and the authorities provided to execute success (see "Mandate/Mission Directive" column in Figure 1, Page 24). These became the WLW's "North Star" in developing an outputoriented framework: The foundation was now defendable because all activities and subtasks supporting mandates or mission directives were aligned to a higher guidance, regulation, policy and law. This ended up being notable, even for those who faced diminished planning, programming and budgeting requirements despite having clear outputs.

The next challenge was quantifying echelons of support by creating products that reference support at appropriate levels (e.g., O-5/GS-14, O-6/GS-15 and JPEO). This ensured that the required support was available to a workforce that operated at all echelons; however, by recognizing all contributions, it also prevented a one-size-fits-all approach to product development and empowered operational levels to quantify manpower requirements to complete the previous year's work (being directed to examine the previous year's activities).

Our approach, when employed at echelon, helps the Army acquisition enterprise realize the agile workforce needed to reach its strategic goals.



#### **TRANSFORMING IN CONTACT**

In a process ranging from sticky notes to a customized and templated Excel spreadsheet providing outputs of more than 450 datapoints, CBRN Medical created a defendable foundation to measure workload, phases of operations, tasks and outputs. It will work for all programs regardless of mission and structure. (Photo by Lt. Col. Edwin Kolen, JPEO-CBRND)

#### WHAT GETS MEASURED, MATTERS

The most important capability that the WLW provided was the ability to measure the manpower required for tasks. That's because what gets measured, matters. Measuring the right kind of manpower not only demonstrates that it matters, but it is also required to win.

By incorporating the capabilities into the WLW, our tool can examine a previous year's requirements and measure the manpower required to accomplish all tasks in approved program schedules. Once reviewed by at least one echelon above generation, we were able to validate the WLW as a baseline for the fiscal year, effectively illustrating how much work was accomplished. At baseline, we were able to analyze programs by type (e.g., acquisition, investment or workload master lists); work by type (e.g., direct, indirect, unfunded); acquisition life cycle phase, product or deliverable by type; and performance by sub-organization and acquisition function (e.g., business, contracting, cybersecurity, engineering, logistics, program management, test and evaluation, program and quality activities and production). We identified how much work by function was needed for respective program types for each developmental phase.

From this WLW, we developed a supply analysis tool, depicting the capabilities at the level of a joint project office (O-6/ GS-15) with reference to workforce capabilities, talents, experience and numbers that were tied to outcomes and phases. Additionally, by considering successful deliveries, as well as program delays and unfinished work, we described and assessed the current workforce against clearly defined outputs. With our biostatistician, we created a workload model that defined manpower availability, and activities were cross-correlated across respective functions.

With a proven baseline and supply analysis complete, the WLW product provided a tool for demand and gap analyses using a parametric approach to determine the manpower required for future demands. While the Army demand for the acquisition workforce comes in the form of deliverables and strategic objectives, it never dictates the manpower required to achieve those goals.

Our approach, when employed at echelon, helps the Army acquisition enterprise realize the agile workforce needed to reach its strategic goals. We used baseline data to create two statistical manpower models: one for funded and one for unfunded (forthcoming new starts or assisted acquisition efforts outside "program of record") activities. These mathematical models allowed forward-looking assessments for programs and near-term activities so we could plan manpower needs accordingly. When considering using this for an agile workforce objective, we kept the demand analysis focused under four years to capture execution and budget plus two years into the program objective memorandum planning phase. This creates pressure that promotes near-term change to meet the needs of the force now.

This approach helps the Army address tactical acquisition needs while addressing future strategic priorities; leaders see themselves applying rigor to understand the workforce required to meet their objectives, which are informed by gaps between current manpower and what is needed to meet desired OKRs. The WLW enables positional comparisons to identify gaps based on the difference between manpower supply and future demands, ensuring that organizations are right-sized for the future. Consequently, leaders can assess risks inherent in gaps and then create strategies to mitigate and incorporate that risk accordingly.

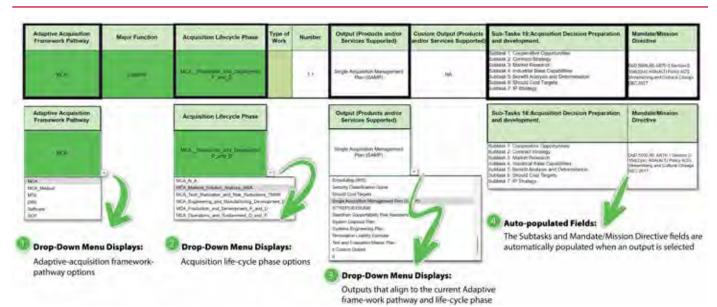
The capabilities afforded by the WLW enable planning around known risks and opportunities at the lowest level possible with support from higher echelons. This tool provides data on which project offices have the talent when and where the capability is needed. That talent is further organized into functions, which adds flexibility rather than specific position titles. Leaders are then able to share talent as required to meet established OKRs. As such, teams can be matrixed and aligned to surge on projects that require specific skills, replacing the "play with the team you have" mentality of the past. Understanding gaps and sharing information empowers leaders to make risk-based decisions and position the right talent at the right place at the right time—ensuring that they can deliver the right capability with acceptable risk.

#### AN AGILE, RELEVANT WORKFORCE

We recommend developing and utilizing the WLW data and analytical method on three occasions:

- 1. During an annual refresh after the baseline to re-examine what was required to conduct prior-year activities and to assess how well the current structure handled requirements.
- 2. When looking at future manpower demands to assess gaps and structure the workforce to meet future demands, including whether to train current employees in areas of weakness, create matrixed teams that have required skill sets, hire new employees with needed skills or accept risks and utilize existing structures to accomplish the mission. Looking forward should not go further than four years because creating an agile process promotes appropriate pivots (and beyond four years limits agility and speed).
- 3. At echelon when strategic guidance or emergent scenarios dictate quick pivots. In recent years, the Army had to pivot from winning counterinsurgency operations to preparing for large-scale combat operations overnight. A successful pivot "in contact" requires manpower flexibility at organizational levels closest to the acquisition outputs needed for capability delivery. Using the WLW and related analyses maximize agile acquisition at the speed of relevance, especially in emergent scenarios.

Technology is changing and maturing overnight. If our manpower and workforce cannot predict or quickly adjust to



#### FIGURE 1

#### **BUILDING ON THE PAST**

The shared manpower WLW developed for JPEO-CBRND builds on processes of the past. It is intended for use by all PEOs and project managers to empower agile workforce development. (Graphic by Scott Brown and Lt. Col. Edwin Kolen, JPEO-CBRND)

the change, we will become irrelevant. Using the WLW to assess available manpower supports new strategic directions that will be critical. It affords leaders the ability to not only say "we are changing direction" but to assess if the organizational structure is acceptable. This is notable because the way ahead does not need perfect requirements—it needs data that supports flexibility to meet the needs put forth by the secretary of the Army and chief of staff of the Army. In other words, it needs an agile workforce.

#### CONCLUSION

Going forward, incorporating predictive modeling software in the WLW should be used to determine probabilities of success when current manpower capabilities are compared with demands. This will ensure more rigor is placed on the assessment of the workforce structure and will continue to empower organizations at the point of need, maximizing transformation in contact.

Ultimately, project and product offices will reap several benefits from the WLW. First, it provides manpower measurements for accomplishing tasks locally, which means each echelon can use its own manpower data for maximum effect to meet the needs of the force.

Second, the WLW provides the ability to quantitatively measure requirements for KPIs or OKRs, empowering echelons to set their own KPIs and OKRs, much in the manner employed by the technology sector as explained in "Measure What Matters," by John Doerr. This methodology allowed the U.S. technology sector to pivot at a rate equal to or faster than Moore's Law, which is precisely the need expressed by the secretary of the Army and chief of staff of the Army to transform in contact. By comparing manpower requirements for KPIs or OKRs identified by leadership, goals are nested and driven to the level of meaningful action rather than pulled from the top. Leadership can then assess the level of effort required for their organization to achieve success.

Finally, our WLW and analytical methodology provides a common understanding of the skillsets that are nested within and across each organization, allowing for talent-sharing as needed to meet goals, targets and objectives that deliver critical and quality outcomes. The WLW lists sources that define authorities given to execute each task, knowledge, skill and ability to align workforce needs while executing programs that the service has already deemed critical for transformation and modernization. This also occurs because the WLW is aligned to outputs for the acquisition life cycle and each adaptive acquisition pathway. Following this approach, regularly evaluating manpower needs and then hiring for agility (not strictly tied to position categories) will allow the

Army acquisition enterprise to introduce the agility and quality needed to maximize effective transformation.

Ultimately, the WLW and analytical process provides the ability to transform in contact because with it, the Army acquisition enterprise will be able to regularly assess needs, conduct continuous process improvement and pivot manpower to anticipate current and future warfighter needs. Our manpower is the core element for presenting credible deterrence to adversaries and our processes serve in that role by creating organizational deterrence through the resilience and agility of the workforce.

For more information, contact Col. Matthew G. Clark at matthew.g.clark18.mil@army.mil or Lt. Col. Edwin Kolen at edwin.l.kolen.mil@army.mil.

COL. MATTHEW G. CLARK is the joint project manager for Chemical, Biological, Radiological and Nuclear Medical (JPM CBRN Medical) and is responsible for leading the medical portfolio for JPEO-CBRND. He holds a Ph.D. in behavioral and neural sciences from Rutgers University; a master's degree in strategic studies from the Army War College; and a Doctorate of Humane Letters from Coe College.

LT. COL. EDWIN KOLEN is the joint product manager for Biological Defense Pharmaceuticals for JPM CBRN Medical. He was commissioned from Marion Military Institute. He holds an M.A. in management and leadership from Webster University; a B.A. in history from Norfolk State University; and he is a Certified Project Management Professional.

#### **PORTABLE DESTRUCTION**

The CRaCANS is a highly portable chemical agent destruction system designed by DEVCOM CBC to fit inside military aircraft, on a small flatbed truck or suspended from a helicopter. (Photo by Michael Marinelli, DEVCOM CBC)

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# MINIATURE BUT MIGHTY

DEVCOM Chemical Biological Center continues miniaturizing chemical agent destruction technology.

by Brian B. Feeney, Ph.D.

hen chemical agents are found in the field, either as legacy waste from prior conflicts or recently produced by bad actors, there are advantages to destroying them at or near the place of discovery rather than packing them up and transporting them to a brick-and-mortar destruction facility. The U.S. Army Combat Capabilities Development Command Chemical Biological Center (DEVCOM CBC) has been steadily miniaturizing destruction technology to make that increasingly possible.

According to DEVCOM CBC's Field Response Team Operations Director Timothy Blades, chemical agents found in the field present unique challenges to warfighters and commanders. "Because of the risk of transport and mission timelines, it's almost always better to destroy these items on site," Blades said. "Part of our mission at DEVCOM CBC is to identify and develop technologies that make that possible."

#### A BIG START IN MINIATURIZATION MAKES HISTORY

Louis

DEVCOM CBC's effort began in 2012 when the U.S. Defense Threat Reduction Agency (DTRA) and National Security Staff approached DEVCOM CBC's field response team, the Chemical Biological Application and Risk Reduction (CBARR) business unit, with an urgent need to destroy Syria's chemical warfare agent stockpile. The national team was considering incineration of the stockpile in or near Syria as a possible solution. Based on decades of experience, Blades told them that destruction using hot water, a method known as neutralization, would be a much better solution. An incinerator would take too long to build, require too many people to operate and involve too large a logistics train.

Until then, neutralization had only been used to destroy the U.S. chemical agent stockpile in the early 2000s in large factory buildings covering acres of land. Blades and his team got to work and came up with a modularized system called the field deployable hydrolysis system (FDHS) that could be disassembled and fitted into standard shipping containers. It was designed for ease of maintenance and came with a portable laboratory for testing batches to ensure complete agent destruction. The rest is history. The FDHS was placed inside a Maritime Administration Ready Reserve Fleet roll-on/roll-off ship and was used to destroy 600 metric tons of mustard agent and 130 metric tons of sarin precursor chemicals in the international waters of the Mediterranean Sea in just 42 days.

#### MAKING HISTORY IS GOOD, MAKING IT SMALLER IS BETTER

While that was a great triumph receiving world recognition, it was only a start. The scientists and engineers at DEVCOM CBC were intent on further miniaturizing chemical agent destruction technology so that it could be used by CBARR operators and warfighters alike to destroy caches of agent encountered in austere environments around the globe. They began this effort by shrinking the FDHS, which filled several 8-by-20-foot shipping containers for transport and took up over a 20,000-square-foot area once assembled.

DEVCOM CBC further miniaturized the FDHS with a system called the Compact Rapid Chemical Agent Neutralization System, or CRaCANS, for short. Its dimensions are 88 inches by 108 inches by 80 inches and it fits on a standard NATO military aircraft shipping pallet. It can also be placed on a small flatbed truck or suspended from a helicopter. It can destroy two tons of bulk agent or agent from more than 48 projectiles and mortars in 24 hours when paired with an access system. It contains its own generator, compressor, heaters and waste storage. As a result, the CRaCANS only requires reagent plus diesel fuel to run.

A transportable laboratory that accompanies it confirms greater than 99.9% destruction as required by the Organisation for the Prohibition of Chemical Weapons (OPCW) and greater than 99.99% destruction required by the U.S. Environmental Protection Agency for each batch of agent. The process renders the agent a conventional industrial waste that is stored in bulk containers for disposal at a commercial hazardous waste disposal facility.

CRaCANS development is funded by DTRA and DEVCOM CBC and has already proven its effectiveness with agent simulant testing. It is currently undergoing live agent testing and DEVCOM CBC plans to field it for CBARR, making it available to operate in austere environments in 2025. It could be available to warfighters as early as 2026.

CRaCANS opens entirely new field response capabilities according to Michael Marinelli, DEVCOM CBC environmental scientist and CBARR project manager. "Once the CRaCANS is ready to deploy with us in the field, we will be able to quickly go to locations around the world where chemical agents are found, arrive with all the equipment we need, set it up within hours, and within days have the threat eliminated and be gone."



#### **COMPACT DEPLOYABLE**

The field-deployable hydrolysis system destroys chemical agent by mixing it with hot water and a caustic compound to render it a conventional industrial waste. It's even compact enough to fit into tight spaces like the hold of a ship. (Photo by Jack Bunja, DEVCOM CBC)

#### STILL GOING SMALLER

All too regularly, a chemical munition will be unearthed during construction at a current or former military site, or warfighters will encounter one while forward deployed. There needs to be a simpler, less expensive way to deal with these situations than having to ship and set up the CRaCANS in a location that may be on the other side of the country or the other side of the world. That capability, now under development, is called Blackdog. It has two components. The first is a mechanism called Viper, which drills into the munition and drains out the chemical agent for neutralization. The second is the Polycat system, which neutralizes the drained agent in a bag. Each system can fit inside a single backpack and can be man-carried to the discovered munition.

The Viper consists of mechanical drill with a vacuum-attached self-sealing probe that punctures the munition and enters the chamber containing the agent. The drill is controlled by a sophisticated mechanical control unit (MCU), which is wirelessly attached to a display tablet and a camera to allow for the process to be conducted by field operators at a safe distance. The MCU monitors the depth of the drill and operates the drill through a cable link. Once inside the munition, it draws a sample of the liquid for testing through a small pipe attached to the probe. If the sample tests positive as a chemical agent, it is time to pull the Polycat system out of its backpack.

While still under development, Polycat will be combined with the Viper, which is already used in the field, to form the combined Blackdog chemical agent destruction system. The hose used for sampling the munition will be attached to a 15 kilogram "kill bag" containing an absorbent powder that neutralizes the agent. The bag can neutralize up to six kilograms of agent. Alternatively, responders can use a 14.5 kilogram "kill drum" that also neutralizes up to six kilograms of agent. Complete neutralization takes seven days, although most of the agent is neutralized in the first hour, making it safe for warfighters or a field response team to place the container in the back of a truck.

Working in tandem, Viper and Polycat give warfighters and field response teams the ability to carry the system to a remote location in the back of a vehicle or on their backs, set it up in minutes, sample the contents of the munition and, if positive, have the agent in a bag or barrel being neutralized in an hour, then move on.

Blackdog is the result of a joint industry call from the U.K. Ministry of Defence and the U.S. Department of Defense in 2018. With most of the world's stockpiles of chemical agents eliminated under the Chemical Weapons Convention, they focused on the need to respond to small caches of chemical agent found in munitions or in illicit laboratories and production facilities. The U.K. companies, Polycat, Ltd. and Valent Applications Ltd., were selected to collaborate on a solution. They teamed up with DEVCOM CBC to take advantage of the center's 100+ years of chemical agent experience and live agent testing facilities.

In July 2024, DEVCOM CBC scientists concluded a successful initial round of bench scale testing with live agent at the milligram level. Polycat, Ltd. and DEVCOM CBC plan to soon scale up to testing in three-liter quantities to further prove the concept.

For DEVCOM CBC lead project manager Laura Graham, this is an exciting development project. "Nothing in this niche exists, and it will be a valuable new tool for our field response teams," she said. "The spirit of collaboration with the Polycat and Valent teams has been terrific, and we are all very excited about it."

#### AND SMALLER YET

Still smaller is the thermite bag system. It can fit into a single pelican case and weighs 85 pounds. The concept behind it is simple; place a chemical munition found in the field inside a double bag with thermite grenades, fire them and the thermal reaction destroys the agent in the munition. DEVCOM CBC is performing advanced development and testing on the prototype originally developed by Southwest Research Institute, a non-profit research and development organization in San Antonio, Texas.

The double bag arrangement safely contains the temperature and expanding gases because the outer bag is reinforced with aluminum sheeting similar to a fire suit. The heat and pressure of the detonation decomposes the molecular structure of the agent, leaving inert remains that can be disposed of at a commercial disposal facility.

Once fielded, the thermite bag system will provide commanders in the field with a simple and effective option for field destruction of individual chemical munitions and small chemical agent caches with a minimal logistics burden. After destruction, the intact bags can be placed in a container and then into the back of a vehicle for disposal. The threat is disabled and the unit can keep moving.

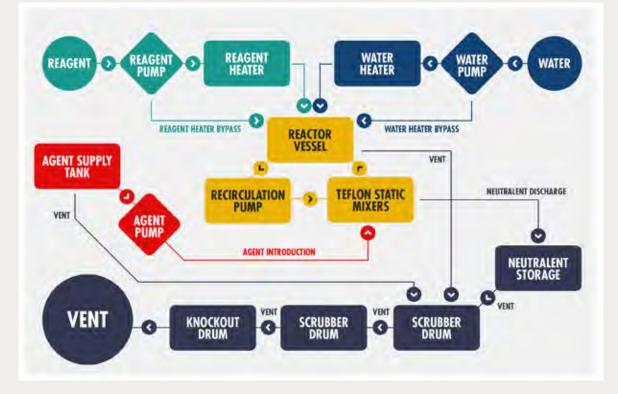
DEVCOM CBC began advanced development in 2023, and it is currently at the testing stage. The development team is ensuring that the thermite bag can fully contain the thermal reaction. The next steps are to test the effectiveness of agent destruction, starting

#### **How Neutralization Works**

Neutralization is a method of chemical agent destruction that uses water to break apart the chemical agent molecules. Agitating a mix of water and agent alone is often enough to destroy the agent because of the kinetic energy generated by the baffles in the system. The destruction byproduct the process produces is highly acidic. Typically, a second reagent is added, commonly sodium hydroxide, to reduce the acidity. That makes the byproduct less corrosive to the pipes and valves in the destruction system and makes it more suitable for disposal as a conventional hazardous waste.

The tricky part is coming up with the right quantities of water, agent and second reagent in the recipe. DEVCOM CBC has more than 100 years of experience with chemical agents and is a recognized world authority on how to achieve optimum destruction. Marinelli compares it to finding the best recipe for baking a cake. "You have to look at the batch size you want, the temperature and the amount of agitation you want to maintain in the reaction vessel, plus the optimum time to agitate each batch. On top of that, you have to consider the ratio of agent and reagents for each batch."

The recipe varies by chemical agent. For example, the VX nerve agent destroyed at the U.S. Army Chemical Materials Agency's Newport, Indiana, stockpile site in the early 2000s used 20% sodium hydroxide at 90 degrees and a two-hour period of agitation to achieve destruction. Other U.S. stockpile destruction facilities made minor variations to best meet the characteristics of the chemical agents in each stockpile.



#### **REAGENT AND WATER FLOW**

A specific chemical substance, called a reagent, is mixed with water to neutralize toxins. (Graphic by USAASC and Michael Marinelli, DEVCOM CBC)



#### **ONSITE OPS**

A mobile laboratory on a field mission at Dugway Proving Ground, Utah, in support of a U.S. Army Corps of Engineers field response operation. Having the laboratory onsite accelerates the confirmation testing process during chemical agent destruction operations. (Photo by Dennis Dickson, DEVCOM CBC)

with simulants and, ultimately, live agent in a specially designed DEVCOM CBC testing chamber. The development team hopes to see it available for use by warfighters in 2026. The project is being funded by the Office of the Deputy Assistant Secretary of Defense for Threat Reduction and Arms Control.

DEVCOM CBC's program manager for the system, Janson Stoltzfus, sees this as a big benefit to the warfighter. "A thermite bag reduces the logistical burden on Soldiers when compared with current destruction methods. It is much lighter, more compact and easier to deploy. It will be a powerful tool in the commander's suite of chemical agent defeat capabilities."

#### CONCLUSION

The greatest success of the Chemical Weapons Convention (CWC) of 1993, signed by 193 nations, is that it led to the destruction of the world's large stockpiles by those signatory nations. They were destroyed under the direction of the OPCW, which was created by the CWC. It performed regular inspections during destruction and confirmed final destruction. What the world faces now is the illicit production of chemical agent by rogue nations and non-state actors.

DEVCOM CBC is addressing the new threat by making agent destruction technology smaller and thereby easier to transport, set up, operate and remove. By replacing the large brick and mortar destruction facilities of the 1990s and early 2000s with highly portable destruction systems, field response teams such as CBARR can, in effect, make house calls. Some of those house calls are to harsh and barren locations where providing the logistics for a larger system would be impossible.

The scientists and engineers of DEVCOM CBC who are advancing and operating this technology are proud of the contribution they are making to the world. DEVCOM CBC Director Michael Bailey shares in that pride. "The men and women who design, construct and operate these miniature agent destruction systems are making the world a safer place and demonstrating that the United States is a force for good in the world."

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

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.

#### RAPID DEPLOYMENT

Soldiers learn how to install the Vehicle-Integrated Camouflage System on an Armored Multi-Purpose Vehicle. The new mounts cut setup time and required manpower by half. (Photos by Sgt. 1 st Class James Brennan, U.S. Army)

# A <u>Soldier-Led</u> Solution

The camo net invention by Soldiers, for Soldiers in the field.

by Brianna Clay

t's the Soldier in the field who experiences firsthand the benefits and challenges of the Army's modernization efforts. The process for camouflaging large combat vehicles highlights just one of the challenges a Soldier encounters on the ground.

Currently, setting up a camo net to conceal a combat vehicle takes approximately 30 minutes, according to 1st Lt. Mallory Moore, an innovations officer at the Marne Innovation Center. Four Soldiers are required to set up this camo net, which is supported by several large poles staked into the ground around the vehicle. Not only does this hinder the mobility of the vehicle under camouflage, but the setup also requires more solid terrain conducive to supporting these tent-like poles. Because of these challenges, forward-thinking crews must position camo nets on top of their vehicles, even as many other crews may decide to abandon the task altogether to dedicate time and manpower towards other mission-relevant tasks.

To search for a solution to this challenge, a group of Soldiers from the 10th Brigade Engineer Battalion presented the problem at the Marne Innovation Challenge in 2022. During this challenge, teams from across the 3rd Infantry Division (3ID) provided a five-minute presentation to a panel of judges consisting of leaders and experts across the defense industry, academia and government. These presentations opened the door for Soldiers to collaborate with the Marne Innovation and Technology Center and its partners for solutions to today's challenges on the battlefield. From here, the idea of a new camo net variety started to become a reality.

#### THE INNOVATION TEAM

The Marne Innovation Center at Fort Stewart, Georgia, is an innovation cell at 3ID. The center supports 3ID, as well as the XVIII Airborne Corps, by giving Soldiers the opportunity to identify capability gaps in the field and design and prototype solutions to these problems. In essence, the program functions as a bottom-up process for innovation.

"Everything here is created by the Soldier," said Moore. Inventions developed by the center include a range of technology, such as 3D printers, a plasma cutter and Computer Numerical Control mill and lathe machines. At the helm of these projects is a collaborative team of eight Soldiers and three civilians from the nonprofit Civil-Military Innovation Institute, including Moore and the noncommissioned officer in charge, Sgt. 1st Class Nathan Lopez. When Soldiers, such as those who presented the camo net challenge, approach the center for a solution, this team of 11 helps train and guide them. The center also facilitates partnerships with the defense community and universities to develop the inventions.

In February 2023, the Marne Innovation Center partnered with the University of Florida (UF) to develop a new camo net invention that supports the deployment of the Army's latest camouflage technology, the Ultra-light Camouflage Netting System. As part of a capstone program, students in the spring and summer semesters at UF spent their time researching new designs, and by the end of the 2023 fall semester, the first prototype—an adaptive ground-based mount—was built. Although it wasn't yet the final prototype presented in the future Dragon's Lair competition, it was an essential starting point for the project.

As young intellectuals in a creative learning environment, "they think outside the box," said Lopez. By collaborating with universities like UF, the Army can see a more rapid rate of innovation. Soldiers were then able to take the prototype developed by these students and adapt it to mount on an armored ground vehicle. After going through several iterations of prototypes, the Marne Innovation Center worked with the 1-41 Field Artillerv Battalion to conduct field tests. Twelve mounts were used on two Armored Multi-Purpose Vehicles, with six mounts along either side of the vehicles. The first field test of their proof of concept was conducted at the Army's National Training Center in July 2024.

#### THE FINAL PROTOTYPE

The final prototype, called the Vehicle-Integrated Camouflage System (VICS), consists of five individual pieces of metal welded together. This forms a bracket that can be bolted onto the vehicle using existing holes on the vehicle's exterior. Poles with the camo netting attached are inserted into this bracket to enable concealment. Each of these mounts cost approximately \$40, according to the Marne Innovation Center, making the switch to the VICS a cost-effective choice. All the tools needed to set up this system can be found within the vehicle. Since no permanent modifications are required for



#### A SIMPLE SOLUTION

The new mounts consist of five metal pieces welded together. These mounts are bolted into already existing holes in the vehicle using tools found in the vehicle.

the system to be mounted to the vehicle, it can also be easily removed for rail and air load operations.

With these improvements, the new system cuts down the amount of time and manpower used for setup by half. Now, two Soldiers can conceal a vehicle in less than 15 minutes. Instead of taking down the camo net each time the vehicle is moved, this invention allows the net to stay in place. This means that the ability to camouflage a vehicle is no longer terraindependent.

"As long as the vehicle can make it there, we have the ability to camouflage it," said Lopez. "We are now giving Soldiers the ability to quickly protect and hide their position." Innovations such as these are crucial to a Soldier's survivability in the field, where target recognition software can be used to track and threaten an armored formation's position.

#### **FUTURE DEVELOPMENTS**

With a final prototype in hand, the team presented their invention at the XVIII Airborne Corp's annual Dragon's Lair competition in Stuttgart, Germany, in September 2024. After pitching their camo net solution to a board of military and tech experts across the field, the invention was selected as the best submission.

"I realized that the product is great, but the story of supporting the Soldiers really connected with the panel. Every Soldier has dealt with this issue," said Lopez. "I was told that the first Dragon's Lair competition had to do with camo net employment, so it felt like everything was brought full circle."

Since the competition, the team has garnered interest in their invention across the field and has been working with partners like the Army Combat Capabilities



### **BLENDING IN**

With a VICS, the ability to use camo netting to conceal vehicles is no longer terrain-dependent. Soldiers can employ the system to better protect their location and stay safer on the battlefield in less time.

Development Command (DEVCOM) to further develop it. By working with DEVCOM, the team can enable production of the system across 3ID and other Army platforms. The two are now working to test and field the system on various combat vehicles, in addition to the Armored Multi-Purpose Vehicle. "We're being deliberate in our actions to ensure we're going about this in the proper manner," said Lopez.

### CONCLUSION

According to Lopez and his team, the mission of the center is focused on developing ideas by the Soldier, for the Soldier. Inventions like the Vehicle-Integrated Camouflage System are vital solutions to the real-world challenges Soldiers face on the ground, and the Marne Innovation Center plays a key role in ensuring Soldiers have a place to voice their ideas.

"Seeing what Soldiers come up with is amazing," said Lopez. "The capabilities they bring to our Army is incredible, and our goal is to enable the Soldiers to get after innovation and help their day-to-day lives. We're giving the Soldier the ability to create a solution today to directly influence the field tomorrow." For more information on the Marne Innovation and Technology Center, go to **https://home.army.mil/stewart/contact/marneinnovations**.

BRIANNA CLAY is a public affairs specialist at the U.S. Army Acquisition Support Center. She holds an M.S. in international affairs from the Georgia Institute of Technology and a B.A. in international affairs from the University of North Georgia.



### SGT. 1ST CLASS DONALD PIPER

#### COMMAND/ORGANIZATION: 1965th

Contingency Contracting Team, deployed with 408th Contracting Support Brigade Theater Contracting Support – Southwest Asia

**TITLE:** Noncommissioned officer-in-charge, Regional Contracting Office – Jordan

#### YEARS OF SERVICE IN WORKFORCE: 6

### YEARS OF MILITARY SERVICE: 14

**DAWIA CERTIFICATIONS:** Contracting Professional

**EDUCATION:** B.S. in business administration, Southern Illinois University Edwardsville

**AWARDS:** Joint Service Commendation Medal; Army Commendation Medal; Army Achievement Medal; Air and Space Achievement Medal; Humanitarian Service Medal

## **ALWAYS HIT THE SAVE BUTTON**

Sometimes the most valuable lessons learned are those taught through our own mistakes. For Sgt. 1st Class Donald Piper, this happened early in his career when a simple mistake cost him hours of additional work. As mistakes go, this one was somewhat small, but the lesson had great impact.

"Always hit the save button and double-check your work," he said about the step he won't forget to do again. Piper, who is a noncommissioned officer-in-charge (NCOIC) for the Regional Contracting Office – Jordan, had been working in Procurement Desktop-Defense, which is part of the Standard Procurement System for training, when the site crashed unexpectedly, just as he was finalizing his work. "After I was able to log back into the system, I realized none of my previous work had been saved. I was upset with the fact it seemed like I had just wasted an entire day of work, but in reality, it was more like a couple of hours. After this incident, I hit the save button all the time."

On the computer and in real life, saving and retaining valuable information he learns along the way helps avoid future problem-inducing issues.

"Another important lesson is to always be open to learning. Always be able to learn from and grow from your own mistakes, be open to other people's ideas and advice, and be willing to seek out the answers you are looking for," he said.

Piper is currently deployed with the 408th Contracting Support Brigade as the office's primary contracting officer and the administrative contracting officer for all Army Base Life Support contracts throughout Jordan. In this role, he provides theater contract support for things like nontactical vehicles, host nation coordination services, custom broker services and military exercises in Jordan. As administrative contracting officer, Piper also ensures that all aspects of the contracts are being adhered to, managing all contracting officer's representatives (CORs), reviewing and approving monthly status reports and handling any issues that may arise.

Overall, Piper said, he assists the units he supports in procuring the supplies or services that allow them to complete their missions. "When my supported units are completing their missions, they are also assisting in completing their higher headquarters mission, which, in turn, helps with the Army's overall mission success."

And the people he works with are a big part of that success. "This goes from other Army Acquisition Workforce colleagues, requiring activities and CORs to contractors," he said. "We all must form a partnership to be able to ensure our missions are completed successfully."

The most interesting thing people find about his work is the wide range of things the Army purchases. "One day I can be purchasing simple supplies or catered meals, to the next day trying to figure out how to procure supplies for humanitarian assistance," he said. "One of my friends thinks I have a bunch of the U.S.'s secrets. But I, in fact, don't have any of the U.S.'s secrets."



### **DADDY AND DAUGHTERS**

Piper with daughters Kaydence, left, and Loralie, in February 2023, before a Daddy and Daughter Dance in Edwardsville, Illinois. (Photo courtesy of Donald Piper)

Piper said his decision to become a member of the Army Acquisition Workforce is probably a bit different than most.

"In December of 2016 I received an email asking me if I was interested in a tour of duty in contracting. At that time, I didn't even know what 'contracting' was, let alone the Army had this as a MOS [military occupational specialty]. Without hesitation, I replied with, 'I'm interested, but what is contracting?' The response I received was just a copy and paste of the job description from the posting."

At the time he received the offer, Piper said he wasn't satisfied with where his current career path was heading. "I knew if I decided to accept the tour of duty, I would receive active-duty orders for a significant amount of time, thus allowing me the time to try and figure out how to change my civilian career path, while also changing my military one. So, I took the chance and accepted the tour of duty."

Once he received his orders, Piper's first position in the workforce was at the

United States Property and Fiscal Office – Illinois Purchasing and Contracting Division. "The appeal was being able to learn about something completely new," he said. "A few months into this position I learned I would be heading on my first deployment, and six months later, I was deployed to Camp Lemonnier, Djibouti. During this deployment I learned I could do this as a DOD civilian, so I applied for an open position as a 1102 [National Guardsman] and was offered the job as a contract specialist."

He said the most important points of his career are being able to meet the needs of the units he supports, giving sound advice to supported units and being able to help shape the next batch of contracting professionals.

"In this field it's not only important to be able to assist the units we support by just contracting for the things they need, but also important to be able to provide business advice on ways to improve submitting requirement packages or providing ways to help streamline the procurement process." And when mentoring individuals, he tells them he's not there to teach them as a contract specialist, he's teaching them to become a contracting officer.

"The advice I always give to junior acquisition personnel is never stop honing your craft. There is always something new to learn," he said. "Once you think you have it all figured out, either something new arises, or the policy changes."

Another important tip for honing one's craft is training. Piper's latest career development course was the Construction Contracting Course. "I took this course back in December 2021 and learned there was a lot that went into awarding a construction contract as well as administering the contracts."

Outside of work, Piper is known for being a loyal friend. "If any one of my friends or family ask me for help, and if I can help them, I will stop what I'm doing to go help, and I do the same thing in my work. If a junior team member needs assistance, I make sure I am available to assist them. I do the same thing with the requiring activity and the contactor," he said. "The way I see it, the more efficient they are at their jobs, the more it allows me to be efficient at my job."

"I wish I had been made aware about acquisitions sooner, not only in my military career but also my civilian career," he said. "It has truly been a great decision to join the Army Acquisition Workforce."

### -CHERYL MARINO

### UP TO THE TASK

The Army's Handheld, Manpack and Small Form Fit platform integration team is responsible for Next Generation radio platform integration across the force, including a recent effort at Pine Bluff Arsenal, Arkansas, for a M1085 vehicle pilot build. The team's engineers incorporated 3D CAD software and other modern tools to digitally build TDPs, all hosted on the ePDM framework as part of the Army's digital transformation effort. (Photo by Htay Thet, U.S. Army)



# EFFICIENCY BUYS FLEXIBILITY

HMS Next-Gen radio platform integration team executes a digital transformation.

by Fred Kelso, Kenny Lee and Jack Schaefer

id you know that the U.S. Army has hundreds of vehicle variants and that each one needs a custom-designed and custom-built kit to mount its radios? Add to this the reality that the Army also carries multiple radio types, originally designed to be hand-held or carried in rucksacks and produced by several different vendors, and it's easy to see how managing the design, production, testing and installation of these kits (a process known as integration) presents a challenge for the engineers and logisticians who must routinely ensure that every kit fits and works perfectly across the Army's diverse portfolio of vehicles.

The Army's Handheld, Manpack and Small Form Fit (HMS) platform integration team is tackling these challenges by moving out of the analog age and into the digital age, aligning their processes with the goals of Army Directive 2024-02, "Enabling Modern Software Development and Acquisition Practices"—particularly the need to "accelerate the Army's digital transformation to deliver needed capabilities to Soldiers."

The scope and magnitude of the efforts required from the integration team for the Army's HMS tactical radios gradually increased over many years until it suddenly exploded with the advent of the Next-Generation (Next-Gen) radios. In addition, radio fielding needs are subject to short notice changes due to real world conditions. In the face of these complex challenges, increased efficiency became imperative to maintain the flex-ibility needed for kit design and production.

## PLATFORM INTEGRATION CONCEPT OF OPERATIONS

The first step in designing a Next-Gen radio installation kit is to get boots on the ground who can perform hands-on engineering work by evaluating space constraints, cable routing paths, available power sources and any potential impediments to successful integration. Depending on the scope of the work, the team may also decide to build and install a prototype kit based on the initial engineering findings to work out any remaining kinks in the design.

The designs vary by mission, as sometimes our kit designs include ancillary equipment for the special needs of the warfighters. For instance, Soldiers in a medical unit may need to take their tent-based chem-bio shelter off their vehicle and deploy it in a hazardous environment; once inside the protective shelter, however, they have typically been unable to access their radio controls. To solve this, the integration team added a keypad display unit to the shelter, connected by a very long cable to the radio in the cab of the truck. This kit design enhancement, added during a recent engineering trip to Pine Bluff Arsenal, Arkansas, will allow Soldiers to operate their Next-Gen radio inside their shelter while the hazard persists.

Once the kit configuration and integration details are laid out, technical data packages (TDPs) can be built. Currently, the HMS Platform Integration team maintains about 100 different TDPs covering vehicle installation kits for two manpack (rucksack) radio and two leader radio (handheld) variants. When maximum communication capabilities are needed, roof space may be required for five or more antennas, with cables from each antenna running back to the radios, while additional pieces of hardware are needed to make the system fully functional. Furthermore, cable routing on any platform can be challenging, as antennas must be far enough apart to preclude electromagnetic interference and safety hazards, and most platforms were not designed to accommodate future cabling requirements.

Given all this equipment complexity, the TDPs themselves can be quite challenging, requiring numerous part drawings, many of which are used across multiple TDPs.

### SWITCHING OUT THE TOOLBOXES

To simplify the process, the integration team kicked off a digital transformation initiative, which includes the current effort to update all legacy TDPs, using a new toolbox. The old toolbox was inefficient and error-prone. That's because it consisted of 2D computer-aided design (CAD) software, PDF software to save drawings and data sheets, email to share files and conduct engineering change control and the use of spreadsheets for configuration management—which, taken together, meant that revisions to a single drawing necessitated manually replacing the relevant pages in the TDP PDF package, sometimes across dozens of kit designs.

For example, reliance on the 2D software required the team to first identify which structural members of an equipment rack shouldn't be painted and then take the time to mask those areas before painting. What's more, an incorrect reading of the drawing could lead to improper paint application, which would result in rework and schedule delays. Using 3D models will make part details, such as the areas to be masked, much more visible.

By incorporating these digital transformation efforts, the new toolbox will feature the latest 3D CAD model format and an enterprise Product Lifecycle Management (PLM) library to digitally build TDPs with built-in revision controls—all hosted on the Army's enterprise Product Data Management (ePDM) framework.

Industry has long been using ePDM to protect designs and improve efficiency, and now the Army will reap similar benefits. For example, by using the PLM software on the new platform, the team can complete two legacy TDP updates in just three weeks, compared to the three or four months it took with the old. What's more, it tracks the latest revisions of all drawings and incorporates them into each new legacy TDP update. The PLM's engineering change request function also enables the team to efficiently initiate, manage, review, approve and release engineering change proposals entirely through the software. And most importantly, it allows for more than one person to make changes and update the component, which ensures that the component cannot move to the next revision level without going through this process.

Now that the team is using ePDM for the radio kits with 3D modeling software, they are seeing increased efficiency and reduced downtime, while maintaining the highest quality for our products and TDPs.

### CONCLUSION

Digital transformation is a key component to the Army's modernization strategy, and it is now playing a vital role in ensuring that HMS Next-Gen radios continue to deploy across the entire Army vehicle portfolio, including a large number that are being integrated onto Army rolling stock. The added efficiencies and enhanced engineering change and configuration management



### **RIGHT FIT, RIGHT VEHICLE**

Technicians with Program Executive Office for Command, Control, Communications and Network's (PEO C3N) Project Manager Tactical Radios install a new radio into a High Mobility Multipurpose Wheeled Vehicle in August 2024 at Fort Bliss, Texas. Managing the design, production, testing and installation of radio kits requires engineers and logisticians to routinely ensure a perfect fit across the Army's diverse portfolio of vehicles. (Photo courtesy of Project Manager Tactical Radios, PEO C3N)

processes enabled by transitioning from an analog to a digital TDP design and maintenance framework is making the entire radio-vehicle integration process more efficient, quicker and less prone to errors.

While the magnitude of ensuring that the right radio gets installed in the right way across hundreds of vehicle variants may seem daunting, we are committed to managing our efforts down to the single configuration item to ensure that every Soldier has access to the radio he or she needs, when they need it.

For more information on HMS radios, go to https:// peoc3t.army.mil/Organizations/PM-Tactical-Radios/Handheld-Manpack-and-Small-Form-Fit.

FRED KELSO was a platform integration engineer with Project Manager Tactical Radios within PEO C3N from August 2022 to October 2024 and currently works in Command, Control, Communications, Computers, Cyber, Intelligence, Surveillance and Reconnaissance's Manufacturing Readiness/ Industrial Base branch. He holds an M.S. in civil engineering from Johns Hopkins University and a B.S. in aerospace engineering from Penn State University. He is a DAWIA Certified Practitioner in engineering and technical management.

KENNY LEE is a mechanical engineer with the Platform Integration branch of Project Manager Tactical Radios within PEO C3N. Following his service in the U.S. Navy, he earned a B.S. in mechanical engineering from George Mason University.

JACK SCHAEFER is a platform integration systems engineer with the Platform Integration branch of Project Manager Tactical Radios within PEO C3N. He holds a B.S. in mechanical engineering from the University of Maryland-Baltimore County.

### **GET READY**

Fire support specialists Sgt. Jonathan Guerrero, left, and Spc. Brantley Tercero, assigned to the 10th Mountain Division Artillery, use AFATDS AXS to enhance the readiness of 10th Mountain Division Soldiers. (Photo by Spc. Salvador Castro, 27th Public Affairs Detachment)

# AFATDS GETS AN UPGRADE

The Army's new fires software will be user-friendly and Soldier-driven.

### by Danielle Kress and Maj. Henry Castillo

he need for quick, effective and intuitive software that will help Soldiers execute fires is crucial to a unit's ability to fight in fast-moving and largescale combat operations. Which is why the Army's 30-year-old software for fires is getting an upgrade.

The Army's software for fires, known as the Advanced Field Artillery Tactical Data System (AFATDS), has long provided reliability in coordinating, controlling and executing fires and effects. Because it is built as a monolithic piece of software, however, it requires an extensive process for updates, and current operational environments demand an intuitive, more modern fires software that can provide new capabilities at the speed of need.

The new software, dubbed AFATDS Artillery Execution Suite (AXS), will be intuitive and data-centric, allowing for quicker upgrades and a more adaptable system—with the heart of the solution being the incorporation of Soldier feedback and a partnership of development with operational units.

## WORKING WITH THE 10TH MOUNTAIN DIVISION ARTILLERY

According to Pam Savage-Knepshield, Ph.D., senior human factors engineer and the human systems integration lead for the Program Executive Office for Command, Control, Communications and Network's (PEO C3N) Product Manager Fire Support Command and Control, bridging the gaps between the system and the user is at the foundation of making the software work for the Soldier. It's also in understanding those gaps that the Army discovers exactly where the software can be improved.

"Soldiers who use AFATDS have a lot of information that they have to process very quickly," said Savage-Knepshield. "The simpler we can make the system, the less they actually have to remember how to *use* the system. They can focus on their job and not the buttonology."

On July 16, 2024, Soldiers from the 10th Mountain Division Artillery at Fort Drum, New York, were given the software to conduct a usability test to see how smoothly and quickly they could navigate and complete tasks. With no formal guidance and having never seen AFATDS AXS, they were asked to complete tasks like select and add units, create a target, install plugins and more.

Overall, participants experienced success navigating through the software, relying on the system's intuitiveness to help guide them through completion of the task.

The parts that didn't come so easily are what informed specific design changes to enhance the system's usability. After one time working with the software, Soldiers offered actionable feedback

on more than 40 items, such as implementing a systemwide search capability, sorting drop-down lists in alphabetical order and recoloring graphics to make targets more visible within the map.

"The details matter," said Maj. Henry Castillo, assistant product manager for AFATDS AXS, who understands how important it is for a fires software to operate quickly and effectively.

"We can all relate to the frustration of navigating a website or app that doesn't work properly. User experience is key to success, especially when you need to be able to navigate in a matter of seconds. We want our Soldiers to have a system that works seamlessly. There is no time for hesitation when we get into a real-world situation. It's what makes our work with the 10th Mountain Division so critical. We are getting real feedback."

There were a lot of positive Soldier comments as well. "You don't have to be experienced to work through it," said Sgt. Ethan Gash, fire control noncommissioned officer with the 10th Mountain Division, who participated in the usability test. "In two to three hours, I'd be perfect on using this."

Some Soldiers also commented on the speed and said that the system "is 10 times faster" than the legacy AFATDS system, while others highlighted the fact that it was more defined and "you could tell where everything was," which will be key as the software eventually makes its way throughout the Army for wider use in fiscal year 2025.



#### **OPERATIONAL FEEDBACK**

Spc. Brantley Tercero with the 10th Mountain Division Artillery provides feedback on AFATDS AXS by completing a usability test. The test measures the system's ease of use against stringent usability targets, including how quickly and accurately Soldiers can perform critical tasks. Feedback from the test informs software updates, making sure AFATDS AXS meets operational needs. (Photo by Spc. Kade Bowers, 27th Public Affairs Detachment)

## "The simpler we can make the system, the less they [Soldiers] actually have to remember how to *use* the system."

### A CYCLE OF ITERATIONS AND TRANSFORMATION

The usability test is just one phase in what will be a continuous cycle in the development of AFATDS AXS, with the 10th Mountain Division Artillery serving as the Army's DevOps unit. Product Manager Fire Support Command and Control will continue to prioritize upgrades and improvements based on Soldier feedback, particularly as the 10th Mountain Division uses the software in additional command post exercises and trainings.

"During the Soldier touch points [STP], Soldiers are exposed to the software only for the duration of the STP," said Castillo. "With the 10th Mountain, we are leaving the software with the unit in what we're calling 'Unit Transformations.' We are giving them the opportunity to incorporate it into their training and build the software into the actual architecture of the unit." As the Army continues to iterate on the software, the goal will be to put new versions into the hands of Soldiers as frequently as possible.

Soldiers are seeing the benefits of the quick turn, as Spc. Brantley Tercero, a fire support specialist with the 10th Mountain Division who took part in two Unit Transformations, said of the vast improvement of AFATDS AXS. "We don't have to wait for a whole system to be completely updated," he said. "As soon as one thing is updated, they're [PEO C3N] sending it to us."

### CONCLUSION

Because AFATDS AXS is based off the government-owned software called Tactical Assault Kit (TAK), the Army foresees training to be simpler and quicker, with the software's look and feel resembling other familiar Army systems. Castillo compares it to adjusting to a new app on your phone. "TAK is the base like your Android phone, and AXS is like an app within that base. Soldiers will be able to spend more time planning and executing rather than learning the software."

With shorter training time will also come a host of benefits, like improved mission performance and warfighter readiness, reduced life cycle costs and optimized system performance. "This is really going to benefit the Army," said Savage-Knepshield. "We were given the challenge to reduce training time from 120 hours for AFATDS down to 40 hours, or less. If we can do that, we will not only reduce complexity but provide a tool that transforms the Army's ability to execute fires and defend our nation."

For more information, go to https://peoc3n.army.mil /Organizations/PM-Mission-Command/ Fire-Support-Command-and-Control.

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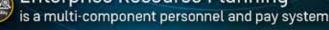


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### **TEAM TRAINING**

Operators assigned to 10th Special Forces Group (Airborne) conduct medical evacuation training on Oahu, Hawaii, Aug. 9, 2024, as part of joint training exercise Operation NAKOA FLEEK, which saw the operators train and evaluate Soldiers of 25th Infantry Division on warrior tasks and battle drills. (Photo by Cpl. Alec Brueggemann, 10th Special Forces Group (Airborne))



# PREPARE, DEPLOY AND SUSTAIN

Transforming medical logistics to sustain survivability.

by Col. Marc R. Welde and Leigh Anne Alexander

t the heart of every Army operation is a Soldier—and it's the mission of the U.S. Army Medical Logistics Command (AMLC) to support the battlefield medics and doctors who sustain that Soldier's fighting strength.

As the Army transforms to meet the demands of the future fight, Army medical logistics are also rapidly evolving and synchronizing to become more agile, efficient and effective.

### AMLC ORIGINS

While the Army has been around for nearly 250 years, AMLC has existed for a mere five years. Headquartered at Fort Detrick, Maryland, AMLC was activated in 2019 as part of a larger Army restructuring effort.

Previously, all medical logistics functions belonged to the U.S. Army Medical Command, specifically, under the U.S. Army Medical Research and Materiel Command (MRMC). MRMC was a two-star command that served as Army Medicine's headquarters for medical research and medical materiel.

To optimize Army sustainment, the Army split medical logistics functions out of MRMC and created AMLC under the U.S. Army Materiel Command (AMC). In that transition, 100% of the medical logistics mission, functions and funding were transferred to AMC.

AMLC rapidly took shape, becoming the headquarters overseeing three direct reporting units: the U.S. Army Medical Materiel Agency; the U.S. Army Medical Materiel Center-Europe; and the U.S. Army Medical Materiel Center-Korea.

### **TODAY'S RESPONSIBILITIES**

As the Army's Life Cycle Management Command for medical materiel, AMLC oversees a medical materiel portfolio of nearly 90,000 pieces of medical equipment, executes \$300 million in Class VIII medical materiel transactions annually and centrally manages medical contingency programs worldwide. The command also distributes 2.7 million vaccine doses worldwide, valued at more than \$50 million, and fabricates nearly 70,000 pairs of glasses at its two medical materiel centers in Europe and Korea.

AMLC synchronizes medical sustainment throughout the acquisition life cycle—a key part of how the DOD makes decisions on what types of medical materiel to develop, procure and field to the force.

In 2022, AMLC marked a major milestone in medical logistics (MEDLOG)'s capabilities with the creation of an AMLC Integrated Logistics Support Center (ILSC)—which is a critical centerpiece of AMLC's ability to support the operational force. The ILSC serves as the end-to-end integrator for medical materiel throughout its life cycle, starting with product development all the way through divestiture as items reach the end of their useful life.

A key capability under the ILSC is the Logistics Assistance Program (LAP), which provides support to operational units across the Army. Army medical maintenance is a layered approach. A unit's biomedical equipment specialist, or 68A, performs field-level medical maintenance. If the unit's Soldiers need help to overcome a specific maintenance issue, they can get support from a LAP expert.

Since AMLC oversees and executes sustainment-level maintenance, the LAP experts can bridge the gap between field- and sustainment-level maintenance, helping units determine if a device needs to be evacuated back to a Medical Maintenance Operations Division for higher level repairs.

LAP experts are also educating the force about an important change directed by the Army in 2021 (HQDA EXORD 138-21) that requires units to place all medical devices into the Global Combat Support System – Army, the Army's tactical logistics and financial management information enterprise resource planning solution to increase readiness reporting.



#### **HOSPITAL HOW-TO**

Fernando González-Rodriguez, center, AMLC biomedical equipment specialist, explains the annual service requirements on a medical imaging system at a DOD Role III hospital at the Baghdad Diplomatic Support Center, Iraq. (Photo by Maj. Andrew DeStefano, AMLC)

In most cases, however, the LAP serves as the "face to the force" when it comes to operational support. LAP representatives provide a direct link to units, providing training, resolving medical maintenance issues and being the eyes and ears for Army MEDLOG in the field.

### THE WAY AHEAD

One key emerging capability of the ILSC is it uses data science to execute predictive logistics support, informing decisions at the speed of war. Predictive logistics is the use of data analysis, machine learning and statistical algorithms to forecast future supply chain requirements, identify potential disruptions and optimize resource allocation. By harnessing historical data, real-time information and advanced analytics, military planners can anticipate logistical needs, mitigate risks and streamline operations. By predicting equipment maintenance requirements and supply needs, the Army can ensure that troops are adequately equipped and prepared for missions. Predictive maintenance algorithms can anticipate equipment failures before they occur, reducing downtime and enhancing overall readiness.

The AMLC is learning to use predictive analytics to enable efficient allocation of resources by forecasting demand patterns, optimizing inventory levels and identifying opportunities for cost savings. This ensures that critical supplies are available when and where they are needed, reducing waste and improving resource utilization.

Predictive logistics will also enable the AMLC to identify potential disruptions, such as adverse weather conditions or enemy actions, and develop contingency plans to mitigate their impact and enhance supply chain resilience.

By optimizing inventory levels, minimizing transportation inefficiencies and



### **READY AND PREPARED**

Soldiers and members of the AMLC working together as the Home-Station Medical Maintenance Support site pilot kicks off at Fort Liberty, North Carolina. (Photo by Chief Warrant Officer 3 Richard Hendricks, U.S. Army Medical Materiel Agency)

preventing costly equipment failures, predictive logistics can result in significant cost savings for the Army. By leveraging data-driven insights, military planners can make informed decisions that maximize operational efficiency and minimize expenditure.

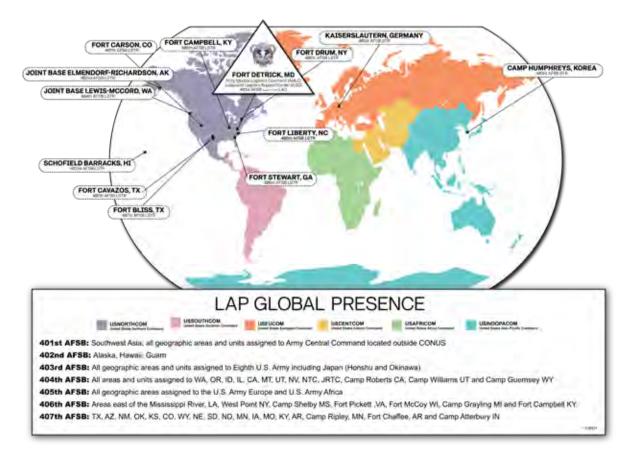
As AMLC continues to strengthen its enduring ILSC capabilities, such as predictive logistics, the organization is also tackling some major issues that have plagued MEDLOG for decades. These include a lack of common operating picture, decentralized materiel management, deficient demand forecasting, nonstandard catalogs and reliance on medical treatment facilities for medical materiel and maintenance support.

As a way forward, the Army directed medical logistics to fully integrate into

the Army Sustainment enterprise as part of the Army Campaign Plan 2023-2030. To make this happen, AMLC has taken the lead with an effort called MEDLOG in Campaigning (MiC).

MiC will bring MEDLOG into the Army's enterprise business systems. The aim is to eliminate the "swivel chair" burden. This will rid the need to use multiple systems to order, maintain or conduct inventory management. Presently, MEDLOG is siloed in its own ordering platform. This change will reduce systems, training requirements and overall complications with many common medical logistics functions.

MiC will simplify and standardize the catalog, as well as create a single medical supply and pharmaceutical catalog, based upon combat requirements.



### **GLOBAL PRESENCE**

Map of where AMLC LAP personnel are located worldwide. (Graphic courtesy of AMLC)

Additionally, MiC will eliminate process variations so Soldiers train as they fight. One of the biggest challenges in MEDLOG was that the old way of doing business meant doing it one way at home station and a different way in an operational environment. MiC will also integrate medical materiel into multiclass supply support activities. Medical materiel will be received, stored and distributed in the same facilities and platforms as all other commodities. By shifting medical materiel into the regular sustainment infrastructure, AMLC will reduce redundancy and streamline storage and distribution requirements.

The effort will also improve unit access to maintenance. MiC is establishing a Home-Station Medical Maintenance Support (HMMS) capability, in accordance with Army Regulation 750-1, "Army Materiel Maintenance Policy," which provides field-level maintenance support to units without authorized biomedical equipment specialists on their Modification Table

As the Army transforms to meet the demands of the future fight, Army medical logistics are also rapidly evolving and synchronizing to become more agile, efficient and effective.



### WELL-EQUIPPED

Soldiers collaborate with members of the AMLC as the HMMS pilot kicks off at Fort Liberty, North Carolina. Fort Liberty is the first site in the Army to test the new HMMS concept. (Photo by Chief Warrant Officer 3 Richard Hendricks, U.S. Army Medical Materiel Agency)

of Organization and Equipment. This will align medical maintenance to existing sustainment processes of non-medical Army equipment. It also enhances unit medical equipment readiness and reduces overall cost. The first HMMS capability is currently operating as a proof of concept at Fort Liberty, North Carolina.

### CONCLUSION

Change is always challenging, especially the level of dramatic transformation MEDLOG has embarked on over the past five years. AMLC has found through lessons learned that to create lasting change, the organization must leverage partnerships across the Army and joint forces.

To shape MEDLOG integration and transformation in a way that garners stakeholder buy-in, AMLC has partnered with stakeholders, including Headquarters, Department of the Army-G4; U.S. Army Forces Command; U.S. Army Europe-Africa Command; U.S. Army Materiel Command; U.S. Army Sustainment Command; Combined Arms Systems Command; Special Operations Command; U.S. Army National Guard Bureau; and other organizations throughout the DOD. These partners have been key to shaping MEDLOG integration—and truly none of AMLC's achievements would be possible without them.

Finally, end-users, including Soldiers in the field, have been a crucial source of feedback to ensure changes do not negatively impact their ability to execute mission requirements. Participating in Army and joint exercises worldwide is one way that AMLC tests its mission capabilities and gets direct feedback from units about what is working and what needs improvement.

Just like all other parts of the Army, MEDLOG is adapting and evolving to counter emerging threats worldwide. AMLC remains open to change that benefits the Army's overall ability to fight and win our nation's wars. Yet, what will never change is Army Medicine's promise to warfighters that if they fall sick or get wounded or injured on the battlefield, support will be there equipped and ready to help.

AMLC remains prepared to deliver medical logistics, sustainment and materiel readiness—from the strategic support area to the forward tactical edge—to increase survivability and sustain fighting strength.

For more information, go to http://www.amlc.army.mil/ILSC.

COL. MARC R. WELDE is the commander of the U.S. Army Medical Logistics Command. He holds an M.A. in national security and strategic studies from the U.S. Naval War College and an M.S. in human resources from Chapman University. He was commissioned through ROTC into the Medical Service Corps upon graduation from Weber State University.

LEIGH ANNE ALEXANDER is the director of the Integrated Logistics Support Center at Fort Detrick, Maryland. She holds an M.S. in biotechnology, an MBA from University of Maryland, a B.A. in chemistry and a B.A. in American studies from Lafayette College.



### **BRITTANY WIELAND**

**COMMAND/ORGANIZATION:** Program Executive Office for Soldier, Project Manager for Soldier Survivability, Product Manager for Soldier Protective Equipment

TITLE: Senior product engineer

### YEARS OF SERVICE IN WORKFORCE: 2

**DAWIA CERTIFICATIONS:** Foundational in engineering and technical management

**EDUCATION:** B.S. in biomedical engineering, Lawrence Technological University

## **IT'S NOT WHAT YOU THINK**

As a senior product engineer for the Product Manager for Soldier Protective Equipment (PdM SPE), Brittany Wieland is accustomed to the odd looks she gets when she explains her work. And that's before she mentions the cadavers.

"From the get-go, people are shocked when I tell them what I do. I've even been asked a couple times if by 'body armor' I mean the sports drink," she said. "It's no secret that engineering is a male-dominated field. When you add 'body armor' in front of it and consider the makeup of the military and defense industry, it's unlikely anyone would picture someone who looks like me, a 5'5" female."

Wieland is a relative newcomer to the Army Acquisition Workforce, getting her start as an intern with the DOD College Acquisition Internship Program (DCAIP). Her dad is an Army civilian and her mom is a contractor for the U.S. Navy, and her dad's work with Col. Gregory D. Gadson (USA, Ret.) played an important role in her career path.

Gadson lost both legs in an IED attack in Iraq in 2007 but remained on active duty. He was named garrison commander of Fort Belvoir, Virginia, in 2012 and retired from active duty in 2014. "It was really inspiring to see everything that he accomplished, and that motivated me to work with wounded warriors," she explained. "I was pursuing opportunities to work with prosthetics, given my biomedical engineering background, and when I got the opportunity to work on body armor through the DCAIP, I took it. In a way, it's like I'm working the opposite end of the equation: I get to prevent injuries and save lives."

Her work as an intern led to a position with the Army Fellows Program. "I honestly didn't know what to expect," Wieland said. "But once I landed at PdM SPE, we hit the ground running. I quickly started filling everyday engineering roles and found myself doing work that was similar to the other engineers I worked with. I'm lucky that I landed on a team that used my full potential and supported travel and other opportunities that didn't fit into the conventional scope of the program."

She cited a handful of take-aways from the course. "Take initiative and screw the status quo. I would have never known the full realm of opportunities to see and participate in exciting and educational events if I didn't seek some of them out. Some opportunities take a bit of legwork to pull off, but the more you show that you are willing to put in that extra effort, the more often the opportunities start finding you," she said. "And 'because that's just how it is' is not an answer. Speak up for things you believe in and

"It's no secret that engineering is a male-dominated field."



### **ROUNDING FIRST**

Wieland, assistant coach for the varsity softball team at Edison High School in Alexandria, Virginia, coaches first base and rewards a player for her base hit at a game in May 2024. The team recently made it to the regional semifinals for the first time in school history. (Photo by Susan Johnson, SGJ Photos)

don't be afraid to play the devil's advocate. You're not always going to be in the position to directly foster large-scale change, but your actions may create a snowball effect or, at the very least, excite others to do the same." Lastly, she said, the course taught her the importance of taking pride in her work. "Sometimes it's the first or only impression others will ever have of you; make it something worthy of respect."

Most of Wieland's work at PdM SPE focuses on the Army's new hard armor, known as vital torso protection (VTP). "We're always looking for new ways to lighten the Soldier load and increase mobility while maintaining protection through technology and material advancements," she explained.

What she enjoys most about her work is the hands-on, interactive nature of it. "Sometimes when we conduct human factors evaluations, engineers get to participate too. I've jumped in a pool with the full kit to help test out the emergency release mechanism. This allows us to gain understanding and feel what the Soldier experiences," she explained. "Some of the team's testing involves human and animal cadavers. It's not everyone's cup of tea, but I don't think anyone denies that it's cool," she said. "We also spend some time visiting or hosting different senior Army leaders, units, countries and other services to gain feedback, show what we're working on and find areas to collaborate on future testing and products."

For the past year, she has chaired an integrated product team tasked with the purchase description rewrite for the VTP program. "Our goal is to rebalance the testing to optimize the time and cost spent, while maintaining performance. This will allow industry to redirect resources toward developing more advanced designs and technologies, which in turn benefits the Soldier. We're looking to make the test procedures more statistically significant, operationally relevant and aligned with the original requirements." The work has "really forced me to get comfortable briefing to higher leadership and large groups of people, expanding my network and exercising different leadership skills," she said.

She's hoping to continue her career development through the Executive Leadership Development Program (ELDP). "I think it would be perfect for my role as a body armor engineer. The warfighter wants someone like them creating gear, and we're often asked how someone who has never had to wear the gear or experience first-hand the challenges that come with it can possibly create product of value," she said. ELDP "is the next step past human-factor evaluations and user feedback. Apart from joining the Army as a Soldier, ELDP would be the next best thing for a civilian engineer like myself."

When she's not in the office, you might find Wieland on a softball diamond, where she coaches a local high school team. "After graduating, I struggled with feeling fulfilled and lacked an outlet for my competitive nature. I direct as much of that to my job as I can, but it's not the same." So she started coaching. "I got addicted to it. It is so rewarding to be able to give back and watch your efforts take form in a new way, through someone else. Similar to my work, it helps me to develop my leadership and interpersonal skills."

She added, "One lesson I always find myself coming back to is that people respect those who are passionate and hard working in what they do. I think this makes me a better softball coach, employee and leader. Finding something you're passionate about will motivate you to work harder and feel more fulfilled."

-SUSAN L. FOLLETT

### TAKE AIM AT COLLABORATION

Soldiers test the A5 Stinger Man-Portable Air Defense Systems (MANPADS) at Grafenwoehr Training Area, Germany, in August 2024. The joint service use of MANPADS highlights the need for interoperability. (Photo by Spc. Thomas Dixon, 7th Army Training Command)

# **NEW** OBJECTIVES

CECOM ARAT hosts a tri-service working group to establish key stakeholders, facilitate the sharing of resources and improve overall collaboration within the community.

by Kevin Deegan and Robert "Kris" Knopp

he mission of the United States Army Communications-Electronics Command (CECOM) Software Engineering Center (SEC) Army Reprogramming Analysis Team (ARAT) is to produce threat analysis software for Soldiers deployed worldwide. Recently, ARAT has been teaming up with other organizations to maximize its impact by leveraging increased readiness and reduced response times to complex enemy threats.

In August 2023, ARAT coordinated with joint service reprogramming centers to establish memorandums of understanding (MOUs) to formalize the sharing of software applications and threat simulations across services. These MOUs were based on prior visits to each of the dedicated joint service reprogramming centers to better understand partner capabilities, existing challenges and potential collaborative opportunities. At those meetings, respective teams established common obstacles—for example, keeping in lockstep with evolving radar threats for simulation purposes.

In conjunction with the Program Executive Office for Intelligence, Electronic Warfare and Sensors (PEO IEW&S) Project Management Office for Aircraft Survivability Equipment, the ARAT program office hosted the first-ever tri-service working group in August 2024. There were three objectives: 1) establish key stakeholders, guidelines and future engagements to establish unity; 2) institute a centralized repository to enable sharing of reprogramming artifacts and facilitating effective sharing of other resources; and 3) define commonality in capabilities and hurdles to improve overall collaboration within the community.

### THREAT ANALYSIS

Threat analysis plays a critical role in the electronic warfare reprogramming life cycle because it allows for an in-depth examination of a given threat and its potential impact on a system. The triservice working group specifically targeted how each service conducts threat analysis at scale by focusing on the challenges arising during large-scale combat operations. The group sought a heightened understanding of the current mission and improvement areas, such as leveraging the centralized repository to ensure effective identification, assessment and response time to emerging threats.

"Soldiers, sailors and airmen will be fighting alongside each other in the conflicts of the future," said John Sensing, lead for the ARAT Infrastructure Enhancement Program. "To ensure their success in the field, the support teams here need to learn to work together as well."

ARAT is fully committed to this joint community and is dedicated to driving a unified strategy across the services, ensuring continued progress and collaboration.

### **OVERLAPPING BENEFITS**

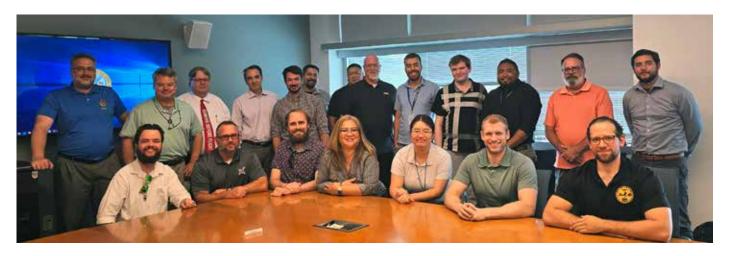
One key takeaway from the tri-service working group is the considerable overlap among threats faced by each service—Army, Navy and Air Force—indicating a critical need for a centralized repository on the Secret Internet Protocol Router Network, or SIPRNet, to share threat-specific information. Such a repository enables the services to collaborate and share valuable resources, improving readiness and response capabilities.

Maintaining the balance of expanded participation and intended scope is essential in this type of effort. While growth tends to introduce complexity, it also presents a path for integrated solutions.

Each of the services has threats it is focused on defeating, with some overlapping and some service-specific. An example of this overlap can be seen with Man-Portable Air Defense Systems portable missile systems that are utilized across the Army, Air Force and special operations forces—that highlight the need for interoperability across services for enhanced communication, coordination and operation. These overlapping domains present significant opportunities for mutual benefit.

In addition, when unexpected threats suddenly enter one service's domain of concern, they can benefit from another service that previously built and maintained a simulation of that threat. In such cases, the affected service can use the centralized repository to check if a threat simulation exists. If it does, the service can readily access the simulation or quickly modify it to meet their specific needs for testing, rather than starting from scratch. This process saves time and resources and enables the services to effectively respond to emerging threats and maintain readiness across their respective domains.

"CECOM SEC's ARAT team is leading the charge in the reprogramming theater, using its collaboration ability with external stakeholders and overall experience in techniques and processes, becoming a force multiplier in support of large-scale combat operations and posturing success for Army, DOD and joint



#### **GATHER 'ROUND**

The ARAT working group's goal is to establish unity; institute a centralized repository of resources; and define commonality in capabilities to improve overall collaboration within the software community. (Photo by Kyle Champion, CECOM ARAT)



### **RADAR WARNING**

ARAT and joint service reprogramming centers established common obstacles in software and threat simulations across services in August 2023—for example, keeping up with evolving radar threats for simulation purposes, illustrated here with the ARAT Electronic Warfare Radar Warning Receiver Laboratory Test Cart. (Photo by Kevin Deegan, CECOM ARAT)

forces," said Matthew Bernhardt, associate director for SEC's Intelligence, Electronic Warfare and Sensors Directorate.

### CONCLUSION

Threats are ever-changing. Highlighted in the tri-service working group was ARAT's Simulation Modeling Framework (SMF), a game-changing solution that facilitates threat simulation sharing by standardizing the format in which simulations are constructed. With minimal constraints, SMF empowers simulation builders to model threats as they operate in real-world scenarios, enabling simulations to adapt and "pace the threat" as it evolves. SMF is revolutionizing the simulation landscape across reprogramming centers, government organizations and potentially the broader industry, and driving a paradigm shift in how threat simulations are created, shared and utilized.

Teamwork will continue to prove critical as the tri-service working group establishes a centralized repository and fosters an environment of open communication and information sharing. This approach is expected to help maintain readiness among the increased complexity of enemy threats, reduce response times to emerging threats and foster progress toward joint force efforts supporting large-scale combat operations.

The tri-service working group plans to meet again in March 2025. Its agenda includes gathering input on best practices and continuing to build a robust and efficient repository to support simulation sharing and overall collaboration efforts.

ARAT and the Project Management Office for Aircraft Survivability Equipment also plan to initiate an O-6 level forum. This forum's goal is to get leadership buy-in and will supplement the reprogramming working group advocacy and decision-making, while also including a hardware-related scope.

For more information about CECOM SEC, go to **cecom.army.mil/SEC**.

KEVIN DEEGAN provides contract support to CECOM as a strategic communications specialist at Aberdeen Proving Ground, Maryland. He holds a B.A. in journalism from Temple University and is certified as a Project Management Professional.

ROBERT "KRIS" KNOPP is the Systems Engineering and Integration branch chief and chief engineer for the Army SEC's ARAT Program Office at Aberdeen Proving Ground, Maryland. He holds a B.S. in physics and mathematics from Randolph-Macon College.



### SGT. 1ST CLASS RYAN D. JOHNSON

**COMMAND/ORGANIZATION:** U.S. Army Acquisition Support Center, The Army Acquisition School

**TITLE:** Instructor

YEARS OF SERVICE IN WORKFORCE: 10

YEARS OF MILITARY SERVICE: 14

DAWIA CERTIFICATIONS: Contracting Professional

**EDUCATION:** B.S. in agriculture, Washington State University; A.A. in general studies, University of Maryland

**AWARDS:** Meritorious Service Medal (one oak leaf cluster (OLC)); Army Commendation Medal (four OLCs); Army Achievement Medal (six OLCs); Meritorious Unit Citation (two OLCs); Superior Unit Award

## **BE A SPONGE**

When Sgt. 1st Class Ryan D. Johnson first joined the Army Acquisition Workforce, he didn't know what Army acquisition was—but he learned fast.

In late 2012, he had been assigned to Headquarters and Headquarters Company, 2nd Battalion, 5th Cavalry Regiment, 1st Brigade Combat Team, 1st Cavalry Division and was considering a transition from the Army back to civilian life since his initial fouryear enlistment was ending. Johnson had enlisted in the Army at the age of 36, and in a few short years, he reached the conclusion that "the infantry was a young man's game." He had moved from the Mortar Platoon to the training room in order to start his transition back to civilian life.

"One day, my company commander, Capt. Fred Martin Jr., said, 'Sgt. Johnson, you are not getting out of the Army, you are going to acquisition!' At the time, I didn't think much of it and I had no idea what Capt. Martin was talking about; however, it did spark some interest," he said. "I had no idea what Army acquisition was or even that contracting was a thing. Capt. Martin helped me with my application for reclassification to 51C and I was selected in May 2013."

Johnson's first assignment was in San Antonio, Texas, with the 412th Contracting Support Brigade, where he was assigned to work at the Mission and Installation Contracting Command's Installation Support Programs Division. "My first actions as a contracting specialist were service and construction requirements in support of BRAC [Base Realignment and Closure] and the 63rd Regional Support Command," he said. "The challenging nature of the job, understanding the FAR [Federal Acquisition Regulation] and, most importantly, the people, are all very appealing aspects of this career field."

He is currently the primary instructor for the Army Contract Writing Lab (ACWL), a course offered through The Army Acquisition School in Huntsville, Alabama. He has been in the position since 2023, training Soldiers on using the Procurement Desktop-Defense (PD2) software, a key system used for creating contract actions in support of the warfighter.

"As the instructor for the ACWL, I leverage my expertise to ensure Soldiers are properly trained using PD2 to write clear, accurate and standardized contracts efficiently and accurately, while ensuring compliance with relevant acquisition regulations," he said.

Johnson takes great pride in being a member of the Army Acquisition Corps, and one of his greatest satisfactions is understanding the impact a 51C has on the success of the Army's mission. "As a member of the [Noncommissioned Officer] NCO Corps and the Army Acquisition Corps, I use my expertise as a professional and business expert to ensure that the warfighter has the right supplies and services acquired at the best possible value," he said. "The role of a 51C is supporting the warfighter by procuring supplies and services in complex and challenging environments. The important work we do ensures that the Army has what it needs and is often the unseen part of the military's success."

Deployments as a 51C have been defining moments in Johnson's contracting career, putting all of his training into practice in an operational environment, procuring supplies, services and minor construction in direct support of the warfighter and seeing the tangible impact of his work. He said other important moments were mentoring and mentorship among superiors, peers and subordinates. "Learning new skills and techniques from others and then being able to share what I've learned over my 10-plus years in contracting has been very important to me."

Johnson attended the Joint Operational Contract Support (OCS) Planning and Execution Course in October 2021. The course, which he recommends taking, really helped him develop new skills and knowledge about OCS planning and execution in a joint environment, which prepared him for supporting Pacific Pathways exercises while assigned to the 921st Contracting Battalion.

"Some of the advice I have given to newly assessed 51Cs in the past is read the regulation, pay attention to the details and be a sponge," he said. "Government contracting has many rules and regulations; familiarizing yourself with the FAR is a great start. In my opinion, success in this career, in part, depends on a keen eye for the details. Always double-check your work and have a peer review it to ensure that everything is accurate and complete. Most importantly, do not be a copy-and-paste bandit."



### **COMMANDER'S COIN**

Johnson, left, with Master Sgt. Isabel Sierra, Sgt. 1st Class Mark C. Lewis, Maj. Evert Chung and Sgt. 1st Class Ikai Wright, received the commander's coin for excellence in December 2016 at the Regional Contract Center-Afghanistan during deployment in support of Operation Freedom's Sentinel. (Photo courtesy of Sgt. 1st Class Ryan D. Johnson) Finally, he added, "When you get out into the field after successful completion of the Army Acquisition Transition Course, soak up knowledge from a seasoned contracting professional. Shadow them, ask many questions and learn from their experiences."

Johnson has also learned from his experiences outside of work. "When my kids were younger, I was always involved with coaching youth sports," he said. "I was part of the coaching staff for youth football in Cedar Park, Texas, and a soccer coach at Fort Sam Houston. Many of the leadership skills learned while serving in the Army helped me be a better coach."

In the contracting field, Johnson attributes staying up to date, facilitating the learning process and managing expectations to on-the-job success." Contracting evolves with new technologies and changes to policies, procedures and regulations. "A 51C must quickly adapt and stay informed about these changes to ensure their work remains effective and compliant. When interacting with requiring activities, you must be able to set clear expectations from the beginning. It is crucial that a 51C communicate realistic timelines, deliverables and potential challenges to supported organizations and their leadership," he said. "This proactive communication helps avoid misunderstandings and delays down the road."

-CHERYL MARINO

### **TEAM COORDINATION**

By building a network of procurement analysts to decentralize the Procurement Management Review process, Army Contracting Command - Aberdeen Proving Ground can provide access to more empowered review teams and direct links to experts. Coordination between teammates can expedite processes and eliminate potential rework. (Photo by Thirdman, Pexels)

# CHANGING CULTURE

The goal of a PMR is to evoke change, starting with the PMR process itself.

### by David A. Chiola

n the fast-paced world of Army procurement, success hinges on a workforce that can adapt quickly, work smarter, learn faster and embrace automation. However, the everchanging landscape of regulations, policies and personnel can be a significant hurdle. Enter the Army's Procurement Management Review (PMR) program, a potential agent of change that can uncover efficiencies and accelerate processes. But to be truly effective, the PMR program needs reformation one that embraces open-mindedness and eschews traditional, rigid processes. The Army Contracting Command - Aberdeen Proving Ground (ACC-APG), has found the solution in the 5-I Model (see 5-1 Model, Page 56).

### **INSIGHT INTO THE 5-I MODEL**

The PMR process can still achieve its primary goals but in a more productive, preventative, positive and educational manner. This is no small feat, but ACC-APG has developed the 5-I Model to change the culture—Inspection, Identification, Improvement, Iteration and Integration. The Army Materiel Command (AMC) believes an organization must be able to "see itself," and ACC-APG uses "5-Is" to do just that.

### INSPECTION

The first step in changing a culture often involves obtaining leadership buy-in. Explaining the motivational and educational benefits of the change can be a powerful tool. ACC-APG built a network of procurement analysts from each of its 16 buying divisions to decentralize the PMR process. By working together with leadership, the buying divisions could be trusted to conduct internal self-assessments and have their results validated. This decentralization provided access to more empowered review teams and direct links to experts. Within a year, ACC-APG more than doubled the number of files it could review in PMR from 400 to 850 annually.

Additionally, ACC-APG harnessed the analytical nature of its acquisition professionals through discussions on the intent behind each PMR question. These discussions led to a better and more comprehensive understanding of the requirements, ultimately resulting in higher-quality files. As more people got involved, questions were vetted, fear subsided, people learned and the program matured. ACC-APG also increased the number of PMR volunteers it provided to its headquarters by 300% over the past year, continually developing its PMR knowledge base.

### **IDENTIFICATION**

Personnel, time and energy are often scarce within organizations, so it's best to focus on the issues that have the largest impact. Tips include taking quality samples, mitigating double work and understanding the question.

*Take quality samples.* Results are more accurate when a proper sample size is selected. A sample cannot be so large that it drains the team nor so small that it increases the margin of error. Additionally, samples must be reflective of the universe they represent. Over the past five years, ACC-APG adjusted sample sizes up and down depending on mission requirements, never going below a statistically valid threshold, ensuring high-confidence rates and low margins of error.

*Mitigate double work*. Nothing derails team morale more than completing a review only to learn the file was added to the sample

## To be truly effective, the PMR program needs reformation—one that embraces open-mindedness and eschews traditional, rigid processes.

by error or didn't belong to the command in the first place. Double work distracts the review team and fractures the trust imperative to the process. The ACC-APG review team leads work diligently to ensure reviews are selected carefully and correctly before starting. Team leads study the full list of awarded files over a period of time and use simple random sampling to determine which files must be inspected.

Understand the question. Consistent interpretation and verification methods pay dividends. Ensure your teams know what the questions mean, what documents they typically appear in and how to verify what right looks like. Active coordination between teammates can minimize response variation, expedite the process and eliminate rework and response correction. ACC-APG developed verification methods for each PMR question to ensure consistent understanding and answers, significantly reducing the time it takes to conduct a file review.

### IMPROVEMENT

In a large organization with high stakes, accountability matters. By drilling down to the root cause, corrective actions can be deployed to resolve future weaknesses, making accountability possible without overlooking what people do correctly. ACC-APG looks for what is right more than what is wrong, lifting morale year-over-year because a commendation goes much further than a finding and people want to repeat what works. Detailed review comments expedite root cause analysis and make for meaningful trend analysis. Future pre-award mitigation efforts are reviewed more favorably when not shrouded in negativity. As a result, ACC-APG has gathered 70 best practices over five years, all proven successful in driving risk, in various areas, to an acceptable level.

### ITERATION

Iteration enables accurate and near-real-time trend analysis. Before variables diminish and degrade the reliability of the data, a team can truly see if their efforts are impactful. A corrective action plan (CAP) should do more than just track the implementation of the fix—it must also determine if anything improved. By using the same measurement tool, with the same scale, within a close proximity, the quantified data can speak to the action's success or failure. Overlapping file reviews and corrective action tracking facilitate an ongoing assessment process, producing near-real-time data that leaders learn from. Monthly or quarterly checkpoints can be established to give more frequent indications of success. These are predictive methods that go beyond the more typical year-over-year analysis. Additionally, a corrective action can be modified if a trend indicates a negative turn. Proven practices can be extracted from this analysis since there is now quantifiable data to support sustained success. Future pre-award mitigation efforts are more trustworthy when based on data-driven internal controls and proven statistics. In 2024, these concepts gave ACC-APG enough confidence to remove procurement analysts from the peer review and document review processes, freeing up over 15 full-time employees to concentrate on other priorities.

### INTEGRATION

As the PMR program matures, it can be integrated into and with other internal controls across the organization, such as audit readiness, Risk Management Internal Control (RMIC) Program, talent management, resource planning, training, etc. The program will increase in speed and agility as this occurs and can even spin off customized processes, such as targeted reviews. These special reviews enable a surge capability because they include evaluation of areas not covered by the PMR questions. Basic rules can be predetermined, such as a severity of deficiency scale and how individual results are added to overall results. Ultimately, all of this connects back to creating value for the command. All risks can be integrated proactively into pre-award processes so they may be infused with measures of accountability. As data is generated, validated and verified, decisions can be made based on trends, thus increasing the return on investment. ACC-APG was able to eliminate 33% of its RMIC effort by determining synergy between PMR and RMIC criteria.

### THE 5-I MODEL IN ACTION

Over the course of five years, ACC-APG used the 5-I Model to build a PMR program that reviewed more files, built a more



### THE 5-I MODEL

To assist the PMR process in achieving its goals in a more productive, preventative, positive and educational manner, ACC-APG has developed the 5-I Model to address hurdles and create a positive change in the procurement process. (Graphic by David A. Chiola, ACC-APG and USAASC)

robust knowledge base, provided better support to its headquarters, improved morale, produced more comprehensive results and systematically drove center-wide risk from medium to low.

The 5-I Model has value beyond PMR. ACC-APG demonstrated the effectiveness of the 5-I Model once again when faced with three simultaneous inspections: a command inspection through the Headquarters Army Contracting Command's Organizational Inspection Program (OIP); a PMR as outlined in the Army Federal Acquisition Regulation Supplement (AFARS) Appendix CC; and assessments as part of the RMIC Program, as outlined in Army Regulation 11-2, "Managers' Internal Control Program." This time, however, the 5-I Model was used to show the similarities of each inspection even though each was guided by separate processes, rules, regulations and reporting chains. ACC-APG realized that each process, although different, included the same I's that the Model speaks to: Inspection, Identification, Improvement, Iteration and Integration. That realization allowed ACC-APG to distill each inspection into its simplest steps, align them, uncover similarities, communicate requirements to all stakeholders and tackle everything as a unified team.

Taskers to the workforce, data collection efforts, briefings and meetings were all conducted once but had triple the impact, as the results could be applied to all three inspections. Reporting processes were combined so that a single point of contact could handle all inspection due outs. Additionally, best practices and lessons learned from all inspections could be integrated into pre-award processes to be mitigated early. The result was lowrisk ratings in all three inspections and zero material weakness reported in the RMIC Program.

In 2023, ACC-APG shared these concepts with the Office of the Deputy Assistant Secretary of the Army – Procurement (ODASA(P)). Then in 2024, the ODASA(P) conducted "PMR Roadshows" to all its enterprise partners including the Army Contracting Command, Mission and Installation Command, the Army Corps of Engineers, the National Guard Bureau and



### TAKING A STEP TOWARDS EFFICIENCY

By implementing and analyzing a step-by-step plan, proven best practices and areas of improvements can be more easily identified, resulting in a more efficient and timely procurement process. (Photo by RDNE Stock project, Pexels)

the Army Medical Command. The PMR Roadshows discussed the benefits of the 5-I Model and explained the changes the ODASA(P) made to incorporate it. One change was the rewriting of the AFARS Appendix CC to include inspection, identification, improvement and integration concepts.

These concepts were included by more clearly defining the types of PMRs. A PMR Type 1 now includes actions taken at the lowest level to ensure internal controls are considered. Actions like peer review, document review and legal review are now conceptualized as inspections. This is a positive thing because findings from larger audits can be integrated into these low-level inspections, creating opportunities to identify and improve early. A second change was the development of an automated CAP process and the establishment of quarterly checkpoints for all enterprise partners. The CAP process and quarterly checkpoints included the iterative concept by establishing a mechanism and battle rhythm for trend analysis. Trend analysis is crucial to ensure improvement is sustained. Now the ODASA(P) and its enterprise partners can hold each other accountable via data. If data trends positively, proven practices can be extrapolated and shared amongst the enterprise. If data trends negatively, corrective actions can be adjusted early to change the trajectory of the issue.

### CONCLUSION

The PMR program must evolve from a reactive after-award evaluation to a preaward integrated process focused on near-real-time results. ACC-APG has proven that the 5-I Model works, and the ODASA(P) is on the verge of reaping similar benefits. This reform must be carefully coordinated to ensure many stakeholders are included. It must be able to adapt to the rapidly changing modern acquisition environment. As AMC and the Army operationalize contracting, organizations must be better equipped to see themselves. More can be explored, such as rewriting AFARS Appendix BB to include some of these concepts and perhaps even merging it with Appendix CC. Other Army auditing programs could connect with each other to reduce redundancy and improve efficiencies.

Regardless of whether the process is related to PMR, OIP, command inspections, RMIC Program, etc., the 5-I Model can help distill steps and align them for efficiency and resource preservation. It is natural for people to resist change, mostly out of fear, especially if it is complex change. The simple framework of the 5-I Model can alleviate those fears and make change more impactful. At the end of the day, it's the mission and the warfighter that matter. Ensuring we get quality and timely products and services to meet Army priorities is paramount.

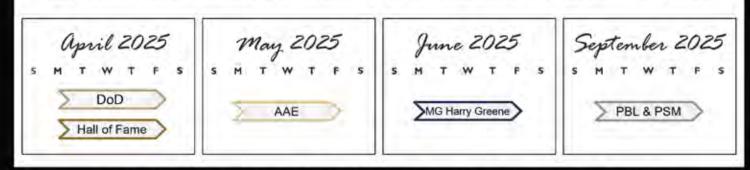
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### FROM THE DIRECTOR OF ACQUISITION CAREER MANAGEMENT RONALD R. RICHARDSON JR.



# A SUSTAINABLE ENTERPRISE

The DACM is committed to providing targeted learning to keep the workforce's skills sharp.

B uilding and maintaining an efficient and sustainable acquisition workforce is reliant on our commitment to the fundamental tenants of lifelong continuous learning. A new continuous learning points cycle started in October and our acquisition professionals are looking toward the next two years of professional and personal growth. Our Army acquisition functional leaders have curated exciting learning paths and new enterprise opportunities in areas like digital engineering and artificial intelligence that help the workforce stay current and ready to tackle any challenges ahead.

Alongside each of the programs, classes and other offerings included in your individual development plan is the call for personal commitment to identify and grow the skills necessary to be a successful acquisition professional. Prioritizing continuous learning in all areas of your career development leads to an increase in productivity and overall organizational success, according to Gallup's 2024 "State of the Global Workforce" report. As you consider the best path forward to achieve your professional goals, think about the skills that will best suit your needs in helping maintain and support an efficient workplace. Leadership, critical thinking and other soft skills are vital in our workforce's ability to evolve into best-in-class professionals.

Over the last few years, the Army Director of Acquisition Career Management (DACM) Office has addressed the needs of a successful and efficient acquisition workforce. It has been my mission to encourage and enable each workforce member to take hold of every opportunity that will lead them on a path to success.

### **OPPORTUNITIES UNFOLDED**

Back-to-Basics, the first major overhaul of the Defense Acquisition Workforce Improvement Act in almost 30 years, was implemented in 2022 to address the need for a more agile and adaptive acquisition workforce. Through an increased emphasis on experiential learning, Back-to-Basics tailors training opportunities to the ever-evolving individual, team and organizational needs.

In 2023, we built a foundation for digital transformation with the rollout of learning pathways through Udemy, data-driven educational opportunities, enhanced credentials through the Defense Acquisition University and new partnerships with a digital focus that placed Army civilians in industry environments to get exposure to digital engineering. (See "Serving the Digital Soup," in the Fall 2023 issue of AL&T.)

The MOREin'24 campaign is an exciting highlight from the last year. (See "Serving the Digital Entrée," in the Summer 2024 issue of AL&T.) The campaign allowed us to add three new courses to the digital transformation offerings in Udemy, including the launch of the first-ever Army-specific Digital Foundations credential. Fostering the digital-first culture is vital to



#### NO TECHNICAL DIFFICULTIES

Twenty-five warrant officers completed the Talent Acquisition Course on July 11, 2024, at Fort Knox, Kentucky, to become talent acquisition technicians—the Army's newest military occupational specialty, 420T. Soft skills, like leadership and critical thinking, go hand in hand with the technical requirements of the acquisition workforce and are vital to becoming an effective acquisition professional. (Photo by Lara Poirrier, U.S. Army Recruiting Command)

our investment in acquisition workforce upskilling, allowing us to keep an advantage over our adversaries.

As we move forward in the new year, the Adaptive Acquisition Framework continues to provide new pathways for accelerating delivery of capability to the force and requires that every acquisition professional has access to innovative learning opportunities that keep our workforce current and ready to support the warfighter. It is our duty to dream big and create the space to be adaptable and reliable, while maintaining the integrity of our programs and ensuring longevity for the future of the workforce. Alongside our training opportunities, from the basics to advanced, it is also essential that we put a spotlight on the soft skills that can help push forward our professional and personal growth.

#### PERSONAL DEVELOPMENT CALLS FOR PERSONAL REFLECTION

I am proud of the advances we've made in providing exciting and engaging learning opportunities for our workforce members. You and your supervisors can work within our framework to create a learning path that best suits the requirements of your given priorities and the hard skills necessary to advance in your career.

While you work with your supervisor to identify areas of advancement, your career development also demands moments of purposeful reflection to recognize potential areas for personal growth. Soft skills, such as leadership and critical thinking, go hand in hand with the technical requirements of the acquisition workforce and are vital to becoming an effective acquisition professional. As a member of the acquisition workforce, it is your responsibility to develop the skills necessary to benefit the Soldier. Gone are the days that mandated years of preparation before taking any action. It is our individual responsibility to evolve, adapt and anticipate the future needs of service members. I encourage you to consider how you can build these soft skills through a combination of our formal training offerings and opportunities for growth throughout your day-to-day work.

For example, the DACM Office offers specialized programs, such as Inspiring and Developing Excellence in Acquisition Leaders and Leadership Excellence and Acquisition Development, that give our emerging civilian leaders the opportunity to take part in programs that are geared towards enhancing the leadership acumen of the Army's civilian acquisition workforce. For acquisition professionals that have not yet held supervisor roles, these programs are a great way to hone your skills in a formal setting and prepare you for future leadership opportunities.

Critical thinking skills grow your ability to problem-solve, embrace changing authorities and adapt to very volatile and complex environments that may make new demands and require new and novel approaches. As acquisition professionals, the ability to assess risk and make informed decisions is essential to sustaining an efficient workforce. Over time, every challenge we face gives us more tools and key learning to succeed in the future.

Programs and classes serve the workforce well in offering formal leadership development opportunities, but much of our growth in leadership and critical thinking comes from hands-on work and experience over time. Taking individual responsibility and identifying the soft skills that need to be nurtured is a skill in and of itself, and pursuing our own personal growth requires determination and resilience. Perseverance and a bit of an entrepreneurial spirit are enough to guide each of us to pursue greater heights. The more we cultivate these skills, the more we can ensure that our Soldiers have a unique advantage.

#### CONCLUSION

Achieving a sustainable enterprise requires a commitment to targeted learning and self-development that helps accelerate our capabilities to support the modern-day Soldier. Ensuring that they have the technology and tools needed to respond to threats and world events is essential. As a valued acquisition member, our office will continue to provide you with the necessary opportunities to prosper and cultivate the skills needed in the workforce.

Take that moment to reflect on the skills you'd most like to nurture and consider the many avenues that can help you achieve your goals. Use the programs and tools our office offers to plot your personal path to success. Together, we can continue to build the current and committed acquisition workforce that the warfighter deserves.  $\gamma \gamma \gamma$ 



#### **DIGITAL-FIRST FUTURE**

Young Bang, principal deputy assistant secretary for the Army for acquisition, logistics and technology, discusses the roles and risks of artificial intelligence at the annual South by Southwest Conference held on March 12, 2024, in Austin, Texas. Fostering a digital-first culture is vital to our investment in acquisition workforce upskilling, allowing us to keep an advantage over our adversaries. (Photo by Austin Thomas, Army Futures Command)



#### IT'S ALL IN THE DELIVERY

Jeffrey Vargas, president and CEO of Generationology LLC, presents during the Defense Acquisition Leadership Certificate Course on effective communications on February 21, 2024, at White Sands Missile Range, New Mexico. Programs and classes serve the workforce well in offering formal leadership development opportunities. (Photo by Vanessa Flores, White Sands Missile Range Public Affairs)

#### WORKFORCE



#### **CIVILIAN SHOWCASE**

Secretary of the Army Hon. Christine Wormuth, left, with Lt. Gen. Robert M. Collins, military deputy director, ASA(ALT), middle, and Col. Barry Williams, deputy director, USAASC, right, at the Civilian Showcase portion of the 2024 AUSA Annual Meeting and Exposition in Washington. AUSA Army Civilian Advisory Committee Chairman Bill Moore moderated the event. (Photo by USAASC)

# RANKING HIGH: USAASC RANKS TOP FIVE BEST PLACES TO WORK

4

AUSA

by Cheryl Marino

USAASC is recognized as one of the 'Top Five Best Places to Work in the Army,' empowering employee excellence.

he U.S. Army Acquisition Support Center (USAASC) has been recognized as one of the Top Five Best Places to Work in the Army for 2023 by the Partnership for Public Service and Boston Consulting Group, reinforcing its dedication to acquisition excellence throughout its workforce—and driving home that its greatest asset is its people.

The USAASC provides training, education and career-development opportunities for professionals in the Army Acquisition Workforce to effectively support and equip the U.S. Army. As a direct reporting unit to the assistant secretary of the Army for acquisition, logistics and technology (ASA(ALT)), included in this recognition are the 12 USAASC-supported program executive offices (PEOs), that are responsible for the cost, schedule and performance of acquisition programs and portfolios.

"It is an honor that the USAASC is being recognized as a Top Five Best Places to Work in the Army," said USAASC Director Ronald R. Richardson Jr. "The program executive offices have a big responsibility in managing a range of acquisition programs and portfolios. And our team at the USAASC headquarters supports the PEOs and the broader Army Acquisition Workforce by providing superior career development opportunities. These collective efforts enable Army modernization and continuous transformation, and I'm proud that our employees feel supported and empowered in their professional journeys."

#### **MORE OF UPS**

Secretary of the Army Hon. Christine Wormuth presented Col. Barry Williams, deputy director, USAASC and Lt. Gen. Robert M. Collins, military deputy ASA(ALT) and director of the Army Acquisition Corps—and leaders from the other top five Army organizations—with a banner for this achievement at the Army Civilian Showcase portion of the 2024 Association of the United States Army (AUSA) Annual Meeting and Exposition on Oct. 16, 2024, in Washington. The theme for this year's Showcase was "Army Civilian Innovations and Changes that Keep Army Top 10 Best Places to Work," where a panel of military and civilian leaders shared their expertise, insights and experiences with military personnel and fellow civilians, as well as industry and future talent.

"There is a sense of family," Williams said of USAASC, after receiving the banner. "It was probably one of the only places that I've worked, for sure one of the few, with the amalgamation of great leadership and a great family atmosphere." Every organization has its ups and downs, but he said in his experience at the support center there are more ups than downs. "It's about teamwork and working together, and that's why I'm honored to accept the award. We just have to keep it up and maintain it."



#### MAKING THE LIST-BADGE

2023 Best Places to Work in the Federal Government banner. (Graphic courtesy of USAASC)

#### MAKING THE CUT

In addition to USAASC, organizations ranking in the top five were Space and Missile Defense Command, U.S. Army North and 5th Army, Army Test and Evaluation Command and Headquarters Department of the Army Field Operating Agencies and Staff Support Agencies.

AUSA Army Civilian Advisory Committee Chairman Bill Moore, who moderated the event, said making the list of best places to work in the federal government is a tribute to the senior leadership in the Army. "Leaders do three things: get missions done, prepare organizations for the future and most importantly, take care of their people," he said. "And this is reflected in how the Army scored."

Results were based on index scores from the Office of Personnel Management (OPM)'s annual Federal Employee Viewpoint Survey (FEVS) and calculated by the Partnership for Public Service and the Boston Consulting Group. The FEVS was designed to assess how employees jointly experience the policies, practices and procedures characteristic of their agency and its leadership, then provide those results and indices across the federal government by agency size and by agency, through its OPM FEVS dashboard.

The results offer insights into whether (and to what extent) workplace conditions characterizing successful organizations are present in federal agencies and provide information important to successful organizational change and development initiatives. USAASC's overall index score has consistently increased over the last few years, making the organization one of the most desirable workplaces within the Department of the Army.

"If you give people the ability to do their job well, and give them the environment to do it, they are happier and more effective," said Frank Gonzalez, director and equal employment opportunity chief at USAASC's Inclusion, Diversity, Equity and Accessibility (IDEA) Office. "Great leaders are people focused, and people make the organization. The secret sauce for making the top five is simple: Take care of your people. Make them happy and they stick around a while. They're happy and it makes recruiting easy."

Gonzalez explained that USAASC's top five result was obtained by looking at the larger federal ranking system and breaking that down into sub agencies—large, medium, small and subcomponents—and their individual rankings. The Army, as a large organization, has made the Top 10 Best Places to Work, and USAASC, with 6,500 employees around the world, is considered a subcomponent and, according to Gonzalez, "in the blue," meaning above median. "We did well in several areas," which, he said, translates to above average for the Army and above average for the federal government.

"Not only are we in the top five in the Army; we did even better than some NASA [National Aeronautics and Space Administration] organizations." Gonzalez added that NASA has been the No. 1 place to work in the federal government for 12 years in a row. So, he said, he's happy with our progress so far. his office to figure out where the push point is if there is conflicting data. For example, he said, "if both surveys say we need to improve [employee] recognition, we probably need to improve recognition. If one says recognition is great, and one says we need to improve it, well let's see if it's a civilian problem or military problem we need to dive into. The advantage of two different surveys really helps validate one another and we know if they both say it's a problem, it's a problem and we're going to fix it."

Historically, he said, USAASC does not have a high employment turnover. "People get promoted, people get selected for programs

## "I'm proud that our employees feel supported and empowered in their professional journeys."

"We [at the IDEA Office] take the results, evaluate them and do a deeper dive," he said. "We look at the PEOs. Where can we move the needle to improve things? Now you're doing great over here, but you seem to drop the ball down here. How do we improve communication? How do we improve collaboration? We've got all the data for the best places to work in the federal government so what we look at is actually part of a much bigger survey. We're looking at all the aspects, not just how great of a place it is to work."

Gonzalez said the FEVS was distributed to Army civilian employees (not military personnel or contractors); he's hoping for a higher response in 2024, which would give his office more data to work with and a better idea of how to improve things. "USAASC is a wonderful organization where people are engaged and dedicated to the mission. People like their jobs." He said this is important since we (acquisitions) aren't the point of the spear, we are the people who develop and purchase the spear. "Without the acquisition community there would be no weapons. There would be no equipment. There would be nothing for the people to use. Our organization, the PEOs, are the ones developing the next generation of all the equipment our folks are using."

#### CONCLUSION

Gonzalez said the IDEA office is currently working on another survey called the Defense Equal Opportunity Climate Survey, which includes all 6,500 USAASC employees—both military and civilian personnel. A comparison of both surveys will allow and move on to bigger and better things, but typically they do not leave for more money, only a better situation. We've got some people who have been here for 30 to 40 years. They like the organization and that's doing something right if they stick around."

For more information, go to https://asc.army.mil.

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#### WELL-DESERVED AWARD

Everett Roper, Ph.D., who recently went through the Centralized Section List process and was chosen for a GS-15 project manager position, receives the Professional Achievement in Government Award at the Science, Technology, Engineering and Math Black Engineer of the Year awards gala in Washington, in 2017. Presenting the award is retired Gen. Gustave Perna. (Photo courtesy of Everett Roper, Missile Defense Agency)

# IN SELECT COMPANY

Acquisition professionals say the Centralized Selection List process not only gave them a career boost but made them better leaders.

#### by Heather B. Hayes

hen Everett Roper, Ph.D., decided it was time to move to the next level in his Army acquisition career, he found himself facing a unique and uncertain choice: Should he take the traditional route of going through USA Jobs—as he had done on several occasions since leaving academia and joining the Army's civilian workforce—or should he apply for a Centralized Selection List (CSL) position?

The CSL route is a competitive process that relies on two highlevel boards to identify and carefully select the best-qualified acquisition personnel for the Army's top acquisition jobs, including major contract efforts and Acquisition Category I, II and III weapon systems programs. Whether civilian or military, being selected for a CSL job, which is open only to O5/GS-14 and O6/GS-15 personnel, is the kind of resume builder that can help ambitious acquisition personnel rise more quickly up the career ladder.

After a discussion with his supervisor and taking time to research the requirements, Roper, then working as a systems engineer, opted to take the admittedly more arduous CSL route.

"I knew it would be challenging and that there would be hurdles, but then I thought, why not try?" he recalled. "Let me go ahead and obtain the extra training, the Senior Service College completion and the certifications that I need. Let me put in a strong package and just see what happens. And if I'm selected against that level of competition, it would say something about my qualifications and my performance, and it would be a real confidence builder."

The risk paid off for Roper. After completing the training, putting together his application and attending the required week-long Acquisition Leader Assessment Program (ALAP), he was placed in a CSL assignment as a GS-15 project manager for the Ground-Based Interceptor Program at the Missile Defense Agency in Huntsville, Alabama.

#### FINDING THE BEST OF THE BEST

The CSL program is well recognized as highly beneficial for Army acquisition personnel. A key reason, according to Adam Polite, acquisition civilian proponency analyst for the Army Director of Acquisition Career Management (DACM) Office, who oversees the "faces" component of the CSL process, is that these positions are identified by acquisition senior leaders as the most critical and impactful to Army readiness for the very near future. That means product and project managers selected through CSL will ultimately oversee the teams and offices responsible for fielding equipment, technology and other critical items used by Soldiers and civilians in theater. And they'll do it only for a specified period of time, generally three or four years, depending on the position. As a result, Roper notes, "you have to get in, you have to learn fast, you have to implement something fast, and then you have to prepare your mind to leave and move to the next assignment."

Polite agreed: "The operational tempo for a CSL position is very high so it's a demanding assignment, which means it's going to take a lot of mental focus and effort and energy. But if you're truly serious about moving up the career ladder, especially if you want to become a member of the Senior Executive Service or a general officer in acquisition, then you should at least consider taking a CSL assignment at both the product and project manager level."

CSL jobs are prestigious because they are limited. In the most recent cycle, for example, there were just 72 CSL positions slated for O5/GS-14 personnel, according to Polite, and 14 of those jobs are specific to military.

There are three phases to the CSL process. First, applicants submit their packages and then the CSL board reviews and determines if the applicants meet CSL qualifications, provides a performance score and ranks them on what's known as the Order of Merit List (OML). Based on those scores and the number of Army Acquisition Corps CSL positions, applicants are invited to attend ALAP.

During the second phase, all candidates who are deemed fully qualified for CSL consideration and receive an invite must then attend ALAP. This required assessment is focused solely on determining the applicants' readiness for command based on the attributes and competencies articulated in the Army Leadership Requirements Model. This is accomplished by putting them through a series of psychometric, cognitive and non-cognitive assessments, including a psychological interview, a timed writing assessment and observed behavior exercise.



#### WELCOME TO ALAP

Col. Fred J. Toti, officer-in-charge of the Strategic Leader Exercise, part of the Colonels Command Assessment Program, prepares a group of ALAP candidates before they participate in the exercise at Fort Knox, Kentucky, October 2022. (Photo by Lt. Col. Twygena Cotton, Army Talent Task Force)

"If you want to go this route, make sure you are strengthening your people management skills, your interviewing skills and those areas that are outside your comfort area." The assessment also includes a "double-blind" interview before a panel of senior Army leaders, in which neither the candidate nor the interviewers can see each other. This ensures that the interviewers don't allow any potential bias to creep into their consideration based on any previous interactions they may have had with the candidate or based on the candidate's appearance rather than the content of their answers or their verbal skills. In addition, because the candidates can't see the interviewers, they don't skew their answers or get thrown off based on someone's facial or body language reaction.

Once ALAP is completed, the third phase begins. At this point, the CSL principal and alternate selection lists are approved by the Army acquisition executive, and career managers start matching selectees to jobs.

"It's an arduous process, however, as it's not nearly as simple as assigning the No. 1 ranked selectee to the top CSL job," Polite said. He explained that a variety of factors go into the



#### **CREAM OF THE CROP**

U.S. Army Command Assessment Program's CAP26 participants undergo a mock in-brief, Oct. 4, 2024. The CAP mission is to execute world-class assessment to provide proven and objective data as a component of the Army's selection process to slate the best leaders into the Army's most impactful leadership positions. (Photo by Spc. Mark Bowman, CAP)

selection, including the needs of the Army, a selectee's skills and professional experience and their regional preference. "The process of actually slating and assigning the CSL selectees into jobs is done at the Human Resources Command, and they will spend months going through that process," he said.

## GROWTH WITH THE JOURNEY

The CSL process is clearly about finding and matching the right person to each job, but it's also designed to tweak and grow the candidates' leadership skills along the way.

That is certainly the way Lt. Col. Camille N. Morgan saw it. While still working as proponent officer for talent management and recruiting at the Army DACM Office, she decided that pursuing a CSL position (which the military sometimes refers to as Command Select) would put her in a role that would allow her to not only "have a strategic impact and the opportunity to shape strategy, policies and the direction of Army acquisition," but would also provide all manner of personal and professional growth opportunities.

And those benefits, she said, start accruing before and during CSL, noting that the selection process and the preparation for ALAP "challenges you to develop leadership skills, enhance decision-making and prepare participants to effectively lead acquisition teams."

Morgan said she took the time upfront to talk to her team to help better assess her leadership style and address any weak

#### **MAKING THE CUT**

The deadline for civilian candidates to submit a package for the fiscal year 2027 CSL cycle is April 18, 2025. The military candidate opt-in deadline will be documented and announced via a fiscal year 2027 CSL Board military personnel message.

Here are the basic steps involved:

**Application.** Civilians who apply for a CSL assignment must put together a package that includes several key documents, including their resume, three years of job performance reviews and Senior Rater Potential Evaluations. Candidates must also provide their regional preference at this time.

**Review.** The Army DACM Office reviews the application packages to determine if a candidate meets the minimum qualifications to be considered for a CSL position. Any candidate that doesn't will not be submitted to the CSL Board in the current cycle but is free to apply again in the future.

**Qualification and ranking.** The CSL Board will determine if a candidate is fully qualified to assume a CSL position based on several factors, including relevant experience, manner of performance and demonstrated potential. It will then determine a performance score for each candidate and put together an initial Order of Merit List (OML). The Acquisition Corps CSL position requirements and initial OML are used to identify the candidates who will be invited to the ALAP.

**ALAP.** This fast-paced, week-long assessment event takes place in October every year and is an important and mandatory phase of the CSL process for all candidates.

**Assignments announced.** Based on the combination of CSL Board and ALAP results, candidates are then categorized as principal or alternate selectees. The Human Resources Command will ultimately match jobs with candidates, based on the ALAP OML and other factors. Although there is an effort to place candidates within their regional preference, this is not always possible.

points. For example, she knew that she wasn't the strongest writer, so she enrolled in several courses in anticipation of ALAP's timed writing test. All of this helped improve her performance at ALAP.

ALAP, she said, was particularly challenging but also gave her new insight into her leadership style. In meeting with an onsite psychologist, she was asked about everything from her recent reading list to her career aspirations to how she might respond to various scenarios. And during the panel interview, Morgan was asked simple, but probing, behavioral-based questions and prompts based on her experiences. She said the entire process is designed to force acquisition leaders out of their comfort zone and help them recognize how they think, how they respond under pressure and how they interact with others, including their peers.

"The whole process is tremendously effective because they're trying to ensure your success in whatever position you're placed," she said.

Morgan was ultimately chosen for a CSL assignment as the product manager of the Army Contract Writing System under the Program Executive Office (PEO) for Enterprise, formerly known as PEO for Enterprise Information Systems. In this role, she supervises 48 people and a contractor in integrating three Army contracting systems—the Standard Procurement System, Procurement Desktop-Defense and Procurement Automated Data and Document System—into a single modernized system, while also managing its budget, schedule and performance.

#### GET READY AND GO FOR IT

So how can a talented and ambitious acquisition professional improve his or her chances of getting a CSL job?

Morgan said preparation is the key. Even before they apply, candidates should take time to familiarize themselves with CSL and ALAP, along with their structures, objectives and evaluation criteria and then proactively undertake a self-assessment to find and fix "the holes in your swing," she said.

"Reflect on your leadership style, strengths and areas for improvement," she explained. "Be honest with yourself about your capabilities and how they align with the expectations of senior leaders. Engage with peers, mentors and superiors to gain insight into your leadership skills. Constructive feedback can help you identify gaps and work on them before the assessment."

Roper said that even as candidates ensure that they have the requisite knowledge and technical skills for a CSL assignment,

they should simultaneously work on assessing and then improving their soft skills.

"Don't apply just because you are a smart engineer or because you have a lot of radar experience or missile experience," he said. "It will help, but that alone will not make you a good candidate. If you want to go this route, make sure you are strengthening your people management skills, your interviewing skills and those areas that are outside of your comfort area, like budgeting, logistics, contracting and other program management areas."

Polite agreed and highly encourages talented and ambitious acquisition professionals to take a chance and apply.

"CSL is really an opportunity for an individual to step outside their comfort zone, whether it be geographically or in an organization they're unfamiliar with, and they can learn new skills and truly lead while developing themselves professionally," he said. "So I tell people to really consider trying because once you have that CSL assignment, the CSL designation travels with you and it's a great resume builder that is very high visibility. It really means something—and if you do a great job, you're going to be highly sought after once your assignment is completed."

For more information on the CSL application process, go to **https://** asc.army.mil/web/centralized-selection-list.

HEATHER B. HAYES provides contract support to the U.S. Army Acquisition Support Center as a contributing writer and editor for Army AL&T magazine and JANSON. She holds a B.A. in journalism from the University of Kentucky and has more than 30 years of experience writing and editing feature articles and books.



### KATHRYN "CALETTE" CHAMNESS

**COMMAND/ORGANIZATION:** Program Executive Office for Missiles and Space, Integrated Fires Rapid Capabilities Office

TITLE: Integrated fires test operations chief

#### YEARS OF SERVICE IN WORKFORCE: 28

**DAWIA CERTIFICATIONS:** Practitioner in engineering and technical management

**EDUCATION:** M.S. in civil and environmental engineering; B.S. in industrial and systems engineering, both from the University of Alabama in Huntsville

**AWARDS:** Space and Missile Defense Technical Achievement Team Award for the Army Integrated Air and Missile Defense Test Operations Team (2018)

# **DON'T BE OUTWORKED**

Kathryn "Calette" Chamness got her first taste of Army acquisition in 1995, when she served as a component engineer for the Stinger missile system for the Army Aviation and Missile Research Development and Engineering Center (AMRDEC), now the Aviation & Missile Center of the U.S. Army Combat Capabilities and Development Command. Back then, she thought that was cool since the first Stinger missile—a lightweight, selfcontained air defense system—rolled off the production line around the time she was born. Today, as the integrated fires test operations chief for the Integrated Fires Rapid Capabilities Office, Chamness thinks her job is cool for a few different reasons. Like "blowing things up in the middle of the desert and getting paid for it," according to those she knows outside of work.

Chamness began her government career with the U.S. Army Corps of Engineers as an engineering technician in 1990, where she worked on the Defense Environmental Restoration Program for Formerly Used Defense Sites, assisting a team of explosive ordnance disposal specialists in cleaning up ordnance and chemical warfare agents buried at various DOD installations.

"My mother [Joan Chamness] worked for the Corps of Engineers as well [as a project management specialist], and she knew and loved my team of 'crazy, retired military men who obviously had a death wish,' as she described them. I would go TDY [temporary duty] and watch them 'sweep' for unexploded ordnance and mom would warn, 'She better come back with all the body parts she left with, and I mean it!' They made sure I kept all my fingers and toes, and it was definitely one of the most fun jobs I ever had."

From there, a fully intact Chamness moved on to her acquisition position as component engineer at AMRDEC.

"I became part of the Army Acquisition Workforce because I certainly loved engineering, but mostly because my family has a long history of military service and I always felt great pride in serving my country in whatever capacity I could." Chamness said she never served in the military, but her father (Jacky Chamness, Army E4) was a Vietnam veteran, her grandfather (Vernie O.A. Chamness, Navy E7) was a World War II veteran and many of her uncles served in all branches of the military. She is also married to a Marine (Randall Barbee, E4), who served during Desert Storm.

As the fires test operations chief, Chamness handles the management of resources and planning and execution of developmental and operational testing for the Army's air and missile defense systems. The planning and execution of these developmental and operational test events are critical to fielding new and advanced capabilities to the warfighter to defeat advanced threats using numerous sensors and weapons.

"I love being part of a major acquisition program that I began working on during concept development and now in the final stages of being fielded to Soldiers for Army air defense testing," she said. "It is satisfying because you are part of a team that takes hard



THIS IS JUST A TEST

Chamness and her team at White Sands Missile Range, New Mexico, in December 2019 for the 5th Missile Flight Test for the Army's Integrated Air and Missile Defense System, where she was the test event manager and successfully executed a near-simultaneous engagement of two cruise missiles. (Photo courtesy of Calette Chamness)

work from multiple engineering disciplines and demonstrates the system's capabilities and how those capabilities will help our Soldiers strengthen national defense."

Chamness has participated in many flight tests, but she said it is still exciting to see a host of hardworking people running around onsite in the early morning hours to execute a hot mission. "I love hearing and feeling the launchers firing off some rounds and being able to step outside and see firsthand what it looks like to put a few 'fireballs' in the sky and appreciate all the hard work that went into making it happen."

One of the most important points in her career, she said, was when she made the transition from systems engineering to test engineering. Chamness went from testing components in a line-replaceable unit, like a circuit card assembly, to testing a fullup Army air and missile defense system, including a command-and-control node with multiple sensors, launchers and interceptors, along with other systems from the Air Force, Navy and Marines. "Transitioning [from the component level] to test engineering allowed me to gain test experience and knowledge at the system level, which has made me a more valuable tester to the Army, and I have a much better understanding and knowledge on how to test and integrate at the system level."

When she moved to test engineering she became part of a mentoring program, where she has served as both mentee and mentor.

"The program paired me with a mentor that provided guidance in technical areas and also on assignments and training that I should take advantage of to better posture myself for broadening my career," she said. She pays that forward as a mentor. Her best advice for new test engineers is: "Don't let anybody outwork you, listen more than you talk and take advantage of every opportunity to learn new things. There are always career opportunities available if you are willing to work hard and continue your education and training. By doing these things you can position yourself to take advantage of career opportunities when presented and be in control of your own career path."

She said the only thing she didn't do, but wished that she had, was to participate in a six-month rotation at the Pentagon when that program was available because she really thought that would have helped her to better understand the "Big Army" picture.

Outside of work, Chamness enjoys outdoor activities like hunting, camping and riding motorcycles with her husband. The field test environment offsets her desk duties. "I enjoy working in the test environment because the work takes me away from the desk and allows me to be outside at a test range and working with actual hardware in a tactical environment, alongside Soldiers and materiel developers."

Whether it's indoors at your desk or outside in the test environment, Chamness stresses that one should strive to always work harder. "You will always be surrounded by people that are smarter than you, but don't let that intimidate you; instead, use their expertise to your advantage and work hard to learn from those people," she said. "Over the course of my career I have learned that growth occurs by surrounding yourself with people who challenge you and help you grow, no matter what stage you are in your career."

#### -CHERYL MARINO

#### **BATTLE OF THE BAY**

THE REGION

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Service members from USSOCOM, Special Operations Component Command and International Special Operations partners and allies, conduct a capabilities demonstration during Special Operations Forces Week 2024 in Tampa, Florida, on May 8, 2024. (Photos by Tech. Sgt. Bradley Tipton, U.S. Air Force)

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# A UNIQUE APPROACH

How 90 days with Special Operations Forces Acquisition, Technology and Logistics helped an acquisition professional build an innovative foundation of knowledge.

by Maj. Dallas Balaban

s I walked into the United States Special Operations Command (USSOCOM) Headquarters in June 2023, my sponsor said, "You will see more in your three months at Special Operations Forces Acquisition, Technology and Logistics [SOF AT&L] than you've seen over your entire acquisition career." I would find out 90 days later that he was right.

My first 59 minutes on the ground were spent touring the USSOCOM Headquarters building, walking through all the SOF AT&L program executive offices (PEOs), touching various materiel solutions and meeting numerous acquisition leaders—among them were SOF leaders and legends who had been portrayed in the movies. Before that time had even ended, I not only felt a high sense of pride in being there but quickly understood how critical the SOF AT&L mission is to the SOF operators.

The intent of the USSOCOM SOF Peculiar Acquisition Development Experience (SPADE) is to introduce personnel to USSOCOM acquisition processes. SOF AT&L leverages various processes, methodologies and mindsets that enable quick-turn solutions, both proactively and reactively, to a variety of SOF mission needs. To propagate this approach and the efficient interpretation of the Department of Defense acquisition processes into the services, highly qualified individuals are selected for this on-the-job training experience. The lessons, skills and insight gained during their tour is intended to build an innovative foundation of acquisition knowledge that can be brought back and used to assist with streamlining non-SOF programs.

The SPADE was formerly called the SOF AT&L Army Ghost Program but changed names in late 2024 to avoid conflict with the U.S. Air Force's "Ghost Program," which was initiated in 2007 by James "Hondo" Guerts. The program was named after a special unit that U.S. Army Gen. George S. Patton created to deceive enemies during World War II.

The 2023 SOF AT&L service-specific developmental programs included service members and civilians from the Army, Marines, Air Force and Space Force and provided numerous networking opportunities for these personnel to interact with their acquisition counterparts from across the services.

SPADE falls under PEO Special Operations Forces Warrior (PEO SW). The PEO SW team has a talented group of U.S. Army uniformed personnel and civilians—many of whom served in the Army Acquisition Workforce—that want to see SPADE participants learn and grow while they are at SOF AT&L. Regardless of the organization you are supporting during SPADE, PEO SW will provide you with many opportunities to learn about SOF AT&L acquisition and the PEO SW programs.

## WHAT MAKES SOF AT&L SPECIAL?

The center of gravity and a core enterprise priority that was clear across USSOCOM and SOF AT&L is the recognition that "humans are more important than hardware." Another consistent phrase I heard across SOF AT&L was: "Our people are the reason we win." USSOCOM's people—its force and families—are USSOCOM's competitive and comparative advantage. In support of the current mission and future mission successes, SOF AT&L's PEOs place special emphasis on recruiting, assessing, selecting, educating, training, diversifying, equipping and transforming their innovative and groundbreaking teams, much like the other premier organizations across USSOCOM.

Leaders at the USSOCOM Headquarters, SOF AT&L executive level and PEOs always found time to walk around their work areas and engage the members of their organizations. As a temporary member of Program Manager Tactical Transport and Program Manager Tactical Communications teams, I felt valued from day one. The digital systems and tools SOF AT&L leadership have in place enable transparency of information across the enterprise. As a new team member, you could quickly access critical acquisition documents for your programs while also understanding what the programs around you were doing. Recurring training, driven



#### NEW WAYS ON DISPLAY

Special Operations Forces Week is the premier gathering for the SOF community and industry, bringing together more than 19,000 attendees, including representatives from more than 79 countries to collaborate on new initiatives and capabilities needed for SOF professionals to compete and win in the future. This year's event was held in Tampa, Florida, on May 8, 2024.

at the SOF AT&L headquarters level, allowed the workforce to learn and grow weekly as acquisition professionals.

Whenever problems arose at SOF AT&L, acquisition leaders pulled together their team members and key stakeholders at the lowest level, analyzed the situation, developed their courses of action and worked quickly to put the mechanisms in place to implement a fix. Although SOF AT&L had the processes and tools in place to allow for agility, I ultimately observed the "people" who came together to drive rapid acquisition within the programs.

Involving operators early and often throughout touch points and test events was a key theme I observed at SOF AT&L. During my participation in three different events—a tactical handheld biometrics capture equipment operational test and evaluation, satellite communications on-the-move operational test and evaluation and Lightweight Machine Gun - Medium preliminary assessment—I observed that capability sponsors and test and evaluation personnel were always involved in programmatic events and focused on delivering the best capability for the end user. At these events, end users, who were usually operators from the USSOCOM service components, provided valuable feedback at touch points and test events to ensure that the program manager knew if the capability would enable their organization to "win."

#### A PECULIAR KIND OF ACQUISITION DEVELOPMENT EXPERIENCE

The majority of my time during the summer of 2023 was spent supporting programs and efforts that were located under the Program Executive Office for Tactical Information Systems (PEO-TIS) and primarily consisted of tactical transport and tactical communications. SOF AT&L's selective placement aligned the unique acquisition backgrounds of myself and other SPADE members so we could all get the most out of our experience. There also were many opportunities to attend and participate in programmatic events across the other PEOs. Throughout my time in PEO-TIS, I was the only U.S. Army uniformed member in the organization, which gave me a unique perspective to share my Army knowledge and experiences while also learning from service members and acquisition professionals across the other services.

The SPADE program allowed multiple opportunities for travel. During my time in the program, I traveled to facilities in three different states, experienced materiel touch points with SOF operators, various test and evaluation events, team building events and numerous engagements with industry. I also interacted with end users across all USSOCOM component commands and Theater Special Operations Commands.

I came into SOF AT&L with an acquisition background that was primarily satellite communications, but through my participation in integrated product team meetings, programmatic events, conferences, test and evaluation events and SOF Week within PEO-TIS and PEO SW, I left with hands-on experience with and acquisition knowledge of tactical radios, networks, weapons systems, biometrics and vehicles.

Walking out the door of the SOF AT&L headquarters on my last day of training in Tampa, Florida, I left with a general understanding of SOF rapid acquisition (and a tan), but I also had a new mindset that will keep me constantly asking, "How can I propel my future programs and teams at the speed and efficiency I experienced at SOF AT&L?"

#### CONCLUSION

The SPADE program is accepting applications and has flexible start dates throughout the fiscal year. The program selects highperforming acquisition professionals with two to four years of acquisition experience. If you are selected, your command will incur no cost, as the program is funded through the Defense Acquisition Workforce Development Account.

For those interested, I recommend reaching out early on and beginning the conversation with SOF AT&L. Although SPADE is only 90 days long, you will return with a diverse knowledge and experience that will enable you to be a better asset to the acquisition workforce and to the Army.

SOF AT&L is currently working with the Army Director Acquisition Career Management (DACM) Office to create a new link for additional information on the fiscal year 2025 SPADE program, which will be released in a future monthly email for Army DACM's "Hot Topics" newsletter.

For more information on the USSOCOM SPADE program, contact Maj. Christian T. Ray at **christian.t.ray.mil@socom.mil**.

MAJ. DALLAS BALABAN is a branch chief at Army Capability Manager – Mission Command and Command Posts. He holds an MBA and B.S. in finance from the University of South Florida. He is a DAWIA Certified Practitioner in program management.

#### **RUFF DAY**

Amanda Jackson Mojica, center, a chemist for the Regional Planning and Environmental Center for the U.S. Army Corps of Engineers, spends time with a therapy dog at the Emergency Field Office in Lahaina, Hawaii, Dec. 31, 2023. Engaging with therapy dogs can help manage feelings of job burnout. (Photo by Charles Delano, U.S. Army Corps of Engineers)

# CAREER NAVIGATOR

# TAKE YOUR REST

The workforce is familiar with a few mental health maintenance tools, but for true resilience, seven types of rest are best.

by Jacqueline M. Hames



t the time this article is being written, Hurricane Milton is bearing down on Florida at historic strength, the world has just marked the first anniversary of the war in Gaza, and political tensions are running high as the United States presidential election draws near. Collectively, the workforce is experiencing a stressful time in national and world events, not to mention any personal stressors employees are experiencing. It is important during times of high stress—personal, national, global or all three—to take care of your mental health.

The Substance Abuse and Mental Health Services Administration (SAMHSA) defines mental health as "emotional, psychological and social well-being. It affects how we think, feel and act, and helps determine how we handle stress, relate to others and make choices." Everyone can experience mental health issues at any point in their lives, which can affect thinking, mood and behavior. Additionally, some people may have a serious mental illness. These illnesses can be chronic conditions that interfere with a person's life and ability to function.

Regardless of whether your mental health challenges are conditional and temporary, or are a chronic illness, it is important to take care of yourself in the best way you can.

#### **CRISIS ON THE RISE**

A recent Forbes article, "Mental Health Related Leaves-Of-Absence Up 300% Since 2017," stated that studies have shown that mental health and well-being are continuing to decline in 2024, with anxiety being the most often reported mental health disorder in the United States. Job burnout and workplace toxicity were major factors in the decline. "In 2023 alone, mental health-related leaves of absence increased by 33% over the prior year," the article said.

It's easy to say that increasing your work-life balance will help your mental health. Managing your time, setting firm boundaries between work and home, taking a vacation and exercise are all good ways to increase your mental health—but these are the most basic of tools in a mental health maintenance arsenal.

One of the first steps in improving your mental health is being aware of how workrelated stress can affect you, a recent article from Healthline said. Exposure to long-term unmanaged stress can impact your mental health and your physical body, the article explained. Some physical signs of stress are low energy or fatigue, headaches, sweating

#### **GET HELP**

Are you or someone you love currently experiencing a mental health crisis? Call, text or chat the 988 Suicide & Crisis Lifeline. Services are free and available 24/7/365. You are not alone.

Call or text 988 to speak with a counselor.

Go to **988lifeline.org** to live chat with a counselor.



#### MIND AND MATTER WORK TOGETHER

Physical fitness is an important building block for mental health maintenance. Here, U.S. Army Brig. Gen. Deydre Teyhen, left, director of the Defense Health Network's National Capital Region, and Sgt. 1st Class Kendrick Robinson, center left, master fitness trainer for 3rd Division Sustainment Brigade, discuss the unit's physical readiness training program during Teyhen's visit to observe the unit's Holistic Health and Fitness system at Fort Stewart, Georgia, Aug. 15, 2024. (Photo by Sgt. 1st Class Jason Hull, 3rd Division Sustainment Brigade) and low self-esteem. "Keeping a journal to track your stress triggers and reactions may help" to pinpoint major sources or stress at work, the article said. The article went on to explain that letting go of perfectionism, having a solid support network of friends and family to help take on tasks and approaching your supervisor for support can help alleviate stress.

#### GET THE REST YOU NEED

"Sleep is not enough. A vacation is not enough," Claudia Skowron wrote in a 2022 article from Psychology Today, "The 7 Kinds of Rest You Actually Need." Even all the previously mentioned mental health building blocks would be functionally useless without having rest—true, multifaceted rest, not just sleep.

Rest is the best alternative therapy available, and we need seven different types of it—physical, mental, sensory, emotional, social, creative and spiritual, Skowron explained.

Most people seem to have mastered the idea that we need physical, mental and social rest. Sleeping, relaxing and restorative exercise are considered physical rest. Mental rest includes activities like

#### **RESOURCES FOR THE FEDERAL WORKPLACE**

Fact sheets from the SAMHSA for employees and supervisors provide important information and resources about mental health for the federal workforce. "Supervisors play a vital role in understanding what it means to be mentally healthy, ensuring a positive work environment and supporting employees who may be facing mental health or substance abuse challenges," the administration states. Employees also play a critical role in creating a positive work environment and supporting those who may be facing mental health challenges. Review the fact sheet for more information on what you can do:

Supervisors: https://chcoc.gov/sites/default/files/opm-samhsa-supervisor-fact-sheet\_0.pdf.

Employees: https://chcoc.gov/sites/default/files/opm-samhsa-staff-fact-sheet.pdf.



meditation and journaling. Social rest is knowing when you need to recharge and how; if you're an introvert, alone time is best, while extroverts need social interaction. These three concepts are familiar to most of the workforce, but the other four types of rest are far less familiar:

- Sensory rest is the concept of intentional sensory deprivation to avoid overstimulation, Skowron said. Taking designated social media or screen breaks, dimming the lights or taking 20 minutes in a quiet room away from rambunctious children or pets can all contribute to sensory rest.
- *Emotional rest* relies on the concept of authenticity don't suppress or avoid emotions. Work through them and release them. "Emotional rest also means surrounding ourselves with others who help provide emotional peace," Skowron said.
- *Creative rest* involves removing the pressure to do anything creative while surrounding yourself with inspiration—like engaging with art, nature or music.
- *Spiritual rest* means connecting with something greater than ourselves. "This can mean adding prayer, meditation or purpose to our lives," Skowron said.

Incorporating all seven varieties of rest into your life may seem daunting. Scheduling rest should be a relaxing experience. If it's having the opposite effect and stressing you out more, consider a different approach. One way to fit more rest into your day would be to set aside short chunks of time for each type—meditate for five minutes, turn off screens for an hour before bed and journal to get rid of looping-thought patterns, among other small-scale techniques.

#### PART OF SOMETHING BIGGER

Engaging with your spirituality helps maintain your mental health. U.S. Army Capt. Gabriel Marquez, left, a chaplain for the Michigan National Guard, performs a baptism ceremony for 2nd Lt. Evan Carrizales, 126th Infantry Regiment, Michigan Army National Guard, in Augusta, Michigan, Sept. 7, 2024. (Photo by Sgt. Elanor Adams, U.S. Army National Guard)

#### CONCLUSION

Even if you're unable to take all seven types of rest a day, taking as much rest as you can is still more helpful than none at all. Coupled with other, more widely known building blocks for improving mental health, getting the rest you need can improve your job performance and your quality of life outside of work.

Sometimes, self-care habits are not enough. If you're feeling particularly overwhelmed, don't hesitate to reach out to a professional. Therapists can assist in identifying sources of stress and finding ways to navigate them, as well as help you develop strategies for taking better care of yourself, according to Healthline.

Be well.

For more information about mental health, go to the National Institute of Mental Health website at **https://www.nimh.nih.gov**.

JACQUELINE M. HAMES is the senior editor at Army AL&T magazine. She holds a B.A. in creative writing from Christopher Newport University. She has more than 15 years of experience writing and editing news and feature articles for publication.

#### **SWEARING IN CEREMONY**

Chris Young is officially commissioned as a major at the Direct Commission Course on August 16, 2024, at Fort Moore, Georgia. Embracing a new role in the U.S. Army, he begins an intensive journey to build his skills from the ground up. (Photos by Chief Warrant Officer 2 Nathan Ramos, USAASC)



# PIONEERING NEW PATHS

Chris Young's groundbreaking direct commission into Army acquisition.

by Ashley M. Kestner

n a landmark move that reflects the evolving nature of military recruitment and talent acquisition, Chris Young broke new ground by becoming the first individual to receive a direct commission into the Army Acquisition Corps. This significant milestone marks a pivotal shift in how the Army is integrating highly skilled professionals into its ranks in support of technological innovation. Young, a seasoned professional with extensive experience in project management and technological innovation, made history when he became an Army major at Fort Moore, Georgia, in August 2024.

His commissioning signifies a broader strategy to bring specialized expertise from civilian sectors, thereby enriching its acquisition processes and ensuring our nation's Army remains competitive—recruiting the best and brightest acquisition professionals. Reflecting on the historic moment, Young was most excited to contribute to improving the Soldiers' experience and giving back to the mission.

"I am driven by a passion for advancing initiatives and constantly ask myself, 'How can I contribute to making this better?' For me, 'better' translates to enhancing the effectiveness of our Soldiers and improving the likelihood of their safe return home," Young said.

#### THE DIRECT COMMISSION INITIATIVE

The first-of-its-kind direct commission is part of an innovative initiative by the Army to create specialized pathways for commissioning in various job fields. The John S. McCain National Defense Authorization Act for Fiscal Year 2019, signed into law on August 13, 2018, empowers the DOD with enhanced authority to grant constructive service credit. This authority facilitates the direct commissioning of officers up to the rank of colonel,

across all branches and functional areas, reinforcing the Army's commitment to attracting top-tier civilian talent.

Maj. Brad McPherson, who oversees the program, emphasized the significance of the process.

"Direct commissioning is about identifying individuals who not only possess the technical skills we need but also the leadership qualities that align with Army values. Chris exemplifies both," McPherson said.

The path to direct commission is intense. The Army's direct commission initiative is designed to streamline the integration of civilian expertise into military structures and requires candidates to meet rigorous standards to include undergoing a comprehensive selection process. In his new role, Young will be tasked with leading efforts to modernize the Army's acquisition strategies, focusing on efficiency, innovation and the rapid deployment of cutting-edge technologies. This includes overseeing projects that range from developing next-generation weaponry to enhancing communication systems used by Soldiers in the field. The direct commission of individuals like Young highlights the Army's commitment to overcoming the challenges posed by rapidly changing technological landscapes. With cyberwarfare and digital threats becoming ever more sophisticated, the need for agile and innovative acquisition strategies has never been greater.

McPherson elaborated on the broader implications. "This is not just about filling a position; it's about setting a precedent for how we approach talent acquisition in the future. We need leaders who can think outside the box and drive change," he said.

Young is eager to marry his industry experience with his new role as a Soldier and is currently conducting interviews with a number of Army acquisition organizations. "It's essential to balance the understanding of risks—recognizing when to take bold steps and when to exercise caution," he explained. "Leading in technology and innovation demands a readiness to embrace calculated risks to achieve optimal outcomes."

#### **A VISION FOR THE FUTURE**

Young's direct commission into the Army Acquisition Corps symbolizes a new era of military recruitment and innovation. By drawing on the skills and expertise of leaders like Young, the Army is positioning itself to meet the challenges of the future head-on, ensuring that it remains a formidable force for national defense.

Lt. Gen. Robert M. Collins, principal military deputy to the assistant secretary of the Army for acquisition, logistics and technology and director of the Army Acquisition Corps, is enthusiastic about the future, noting that direct commissions like Young's will play a critical role in shaping the Army's strategic direction.



#### LEARNING THE BASICS

At the start of his journey, Young tackled his first training course, learning basic land navigation during the Direct Commission Course from August 16 to September 20, 2024, at Fort Moore, Georgia. As a former civilian stepping into a military career, he's gaining essential Army skills from the very beginning. "We're looking beyond what's needed today and anticipating the skills necessary for tomorrow. It's about being proactive and ensuring that our Soldiers have multiple accession pathways available to them to get the critical skills we need," Collins said. "Chris Young's direct commission clearly highlights the innovative approaches we're taking to reshape our talent management process and drive Army transformation," he added.

Looking ahead, Young is focused on fostering a culture of innovation within the Army Acquisition Corps. He aims to create pathways for collaboration between the military and private sector innovators, ensuring that the Army remains adaptable and forward-thinking.

"I intend to draw on my industry experience to identify and address gaps in meeting Soldiers' needs. For instance, when they express, 'If only I had this tool, my job would be more effective,' it resonates with me," he said. "I am passionate about driving progress and eager to channel that energy into the Army acquisition mission."

With a rigorous training path ahead, he has already graduated from the Direct Commission Course and will also complete the Signal Basic Officer Course and the Signal Captain Career Course. After this training, he will transition to a Functional Area 51, where he will compete in the 25-02 job market for a position as an assistant product manager. He's hoping for a position in a program executive office.

As Young settles into his role, the impact of his commission is already being felt, setting a powerful example for how civilian expertise can be leveraged to enhance military effectiveness. With a clear vision and a commitment to excellence, Young is poised to make lasting contributions to



#### MORE COURSES AHEAD

Maj. Chris Young proudly graduates from the Direct Commission Course, Class 004-24 on September 20, 2024, at Fort Moore, Georgia. This milestone signifies his successful transition from civilian to officer in the U.S. Army.

the Army and its mission, making way for the many who will follow in his footsteps.

For more on the direct commission program, go to https://talent.army.mil/job/acquisition. For more information about officers in Army acquisition, go to https:// asc.army.mil/web/career-development/ military-officer/information.

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# EXCELEBRATING EXCELEBRATING

New 2024 inductees enter the Army Acquisition Hall of Fame.

#### by Rachel M. Longarzo

he Army Acquisition Hall of Fame, established in 2022, honors former members of the Army Acquisition Workforce who have made lasting contributions to the Army's mission in support of the Army acquisition community. At the 2024 Association of the United States Army's Annual Meeting & Exposition in Washington, during a well-attended ceremony, four distinguished individuals were inducted into the Army Acquisition Hall of Fame.

The exemplary inductees—Maureen Cross, Cathy Dickens, Gary Winkler and Joseph Yakovac—leave a legacy of leadership, dedication and impact that has profoundly shaped the Army's acquisition mission and continues to ensure our Soldiers have the equipment they need to defend the nation.

"These individuals embody the most sought-after traits among our military and civilian professionals and those who lead them: loyalty, duty, respect, selfless service, honor, integrity and personal courage," said Hon. Douglas R. Bush, assistant secretary of the Army for acquisition, logistics and technology (ASA (ALT)) and the Army acquisition executive, during his opening remarks. "They are being recognized for their significant and enduring contributions to the Army acquisition community's historic and ongoing mission."

Bush emphasized that these inductees represent the pinnacle of commitment, having devoted their careers to equipping the

warfighter with capabilities that deter adversaries. "Our inductees exemplify the highest standards of the Army Acquisition Workforce," he added.

Before presenting the awards, Bush noted, "The individuals we honor have been sought after through the years for their problem-solving abilities, change agent approaches and collaborative abilities, which they used wisely and effectively to embrace and further the Army acquisition's mission."

Bush and Undersecretary of the Army Gabe Camarillo presented the awards to each inductee. First to be honored was Maureen Cross, who served as director of the Army Systems Acquisition Review Council Secretariat and led the Plans Branch at Army Futures Command (AFC) prior to her retirement. Bush highlighted, "She was instrumental in building strong and enduring relationships between AFC's requirements community and our acquisition community."

Next, Cathy Dickens was inducted. Bush described her 37-year civil service career, culminating as the U.S. Army Aviation and Missile Command's deputy commander. "Her connection with Soldiers in the field and firsthand understanding of their needs drove her efforts in providing critical equipment needed," he said.

Gary Winkler, who concluded his more than 20-year civil service career as Program Executive Officer for Enterprise, followed.



#### CONGRATULATIONS ARE IN ORDER

The 2024 Army Acquisition Hall of Fame inductees were honored at the Army Acquisition Hall of Fame ceremony during the 2024 Association of the United States Army's Annual Meeting and Exposition in Washington on October 15, 2024. From left, Maureen Cross, Cathy Dickens, Gary Winkler and Joseph Yakovac. (Photos by Rachel Longarzo, USAASC)

Bush praised Winkler's leadership, stating, "His role as a leader was to focus, develop and unleash the collective power of the workforce."

The final inductee was Lt. Gen. (Ret.) Joseph Yakovac, who served as military deputy to the ASA(ALT) and director of the Army Acquisition Corps. "He was an early advocate for Army transformation and his vision helped pave the way for our achievements today," Bush remarked.

Bush reiterated the significance of this recognition: "Our inductees represent the very best of the Army Acquisition Corps, having dedicated their lives to ensuring our warfighters are equipped with the capabilities that safeguard our nation. Our inductees exemplify the highest standards of the Army Acquisition Workforce." They join the distinguished legacy of past honorees, each bringing unique experiences, yet united by a common thread: an unwavering commitment to advancing Army Acquisition.



#### WELL-DESERVED RECOGNITION

Awards were presented to Hall of Fame inductees recognized for their significant and enduring contributions to the Army acquisition community's historic and ongoing mission.

To view a recording of the ceremony, go to **www.dvidshub.net**/ webcast/35272. For more information on the Army Acquisition Hall of Fame, go to https://asc.army.mil/web/hall-of-fame.

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#### JOINT PROGRAM EXECUTIVE OFFICE FOR CHEMICAL, BIOLOGICAL, RADIOLOGICAL AND NUCLEAR DEFENSE

#### **U.S. ARMY MEDICAL SERVICE CORPS PROMOTION**

Lt. Col. Owen L. Roberts II is promoted to the rank of colonel for the U.S. Army Medical Service Corps on October 4, 2024, at Fort Detrick, Maryland. Roberts is the highest-ranking active-duty service member from the region of Micronesia, which includes Palau. From left, Lt. Col. Owen L. Roberts II and his wife, Erin Roberts, with Nicole Kilgore, deputy joint program executive officer. (Photo by JPM CBRN Medical Graphics Team)



#### **PROGRAM EXECUTIVE OFFICE ENTERPRISE**

#### 1. ACWS GETS NEW PRODUCT MANAGER

**Lt. Col. Camille Morgan** assumes the role of product manager for Army Contract Writing System (ACWS) on July 19, 2024. **Kevin Curry**, project manager for Defense Integrated Business Systems, officiated the assumption of charter ceremony in Arlington, Virginia. (Photo by Laura Edwards, PEO Enterprise)

#### 2. EBS-C FIRST-EVER PERMANENT PROJECT MANAGER

**Col. Melvin Mitchell**, right, receives the Enterprise Business Systems – Convergence (EBS-C) project management office's first-ever permanent project manager title, presented by **Col. Robert "RJ" Mikesh Jr.** at an assumption of charter ceremony, July 23, 2024, at the Fort Belvoir Community Center, Virginia. Mitchell took over for **Michael Gormley** (not pictured) who had been EBS-C's acting project manager since February 2024. (Photo by Cecilia Tueros, PEO Enterprise)

#### 3. DPEO PROMOTED TO BRIGADIER GENERAL

**Col. Robert "RJ" Mikesh Jr.** is promoted to the rank of brigadier general during a ceremony at the National Museum of the U.S. Army at Fort Belvoir, Virginia, on August 15, 2024. Mikesh has served as the deputy program executive officer (DPEO) since May 2024.

#### 4. NEW ATIS PRODUCT MANAGER ASSUMES CHARTER

Lt. Col. John Nikiforakis, left, receives the charter for the Army Training Information System (ATIS) from **Brian Raftery**, project manager for Army Data and Analytics Platforms at an assumption of charter ceremony on September 27, 2024, at Fort Belvoir, Virginia. Nikiforakis, whose new role is product manager for ATIS, previously served as the division chief for Data Links at the National Reconnaissance Office in Chantilly, Virginia, where he managed classified programs within the intelligence community. (Photo by Cecilia Tueros, PEO Enterprise)

## THE CHIEF OF STAFF OF THE ARMY ANNOUNCES THE FOLLOWING RETIREMENT:

**Brig. Gen. Samuel L. Peterson** completed more than 34 years of service and concludes his distinguished career as program executive officer for Combat Support/Combat Service Support in Warren, Michigan.

## THE CHIEF OF STAFF OF THE ARMY ANNOUNCES THE FOLLOWING PROMOTION:

**Col. Anthony R. Gibbs** for promotion to the rank of brigadier general. He is currently serving as program manager for Soldier Warrior for the Program Executive Office for Soldier at Fort Belvoir, Virginia.







3



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"I am confident that members of the Army acquisition, logistics and technology team will continue to meet every challenge they are presented and will continue to demonstrate excellence in supporting the joint warfighter at best value to the taxpayer."

—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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