

ARMY

OCTOBER 2022

AUSA.ORG

\$20.00



GREEN BOOK

2022-2023

THE MAGAZINE OF THE ASSOCIATION OF THE UNITED STATES ARMY



IT'S BEST NOT TO MESS WITH AN ORIGINAL

THE ONLY PROVEN JLTV SOLUTION

Oshkosh Defense is the design authority on the Oshkosh Joint Light Tactical Vehicle (JLTV) and the premier manufacturer of armored vehicles for the U.S. military. There are a lot of uncertainties in this world, but Oshkosh isn't one of them.



ARMY

Gen. Bob Brown, USA Ret.
President and CEO, AUSA

Lt. Gen. Leslie Smith, USA Ret.
Vice President, Leadership and Education, AUSA

Rick Maze	Editor in Chief
Michelle Tan	Deputy Editor in Chief
Liz Rathbun	Managing Editor
Sam Votsis	Art Director
Gina Cavallaro	Senior Staff Writer
Christopher Wright	Production Artist
Kevin Kaley	Deputy Managing Editor
Karli Goldenberg	Staff Writer
Joseph Craig	Book Review Editor
Col. Scott Halstead , USA Ret.	On Leadership Editor

Contributing Editors

Lt. Gen. James Dubik, USA Ret.
Lt. Gen. Daniel Bolger, USA Ret.
Brig. Gen. John Brown, USA Ret.
Scott Gourley

Desiree Hurlocker

Advertising Production and
Fulfillment Manager

ARMY is a professional journal devoted to the advancement of the military arts and sciences and representing the interests of the U.S. Army. Copyright©2022, by the Association of the United States Army.

ARTICLES appearing in **ARMY** do not necessarily reflect the opinion of the officers or members of the Board of Directors of AUSA, or its editors. Articles are expressions of personal opinion and should not be interpreted as reflecting the official opinion of the Department of Defense nor of any branch, command, installation or agency of the Department of Defense. The magazine assumes no responsibility for any unsolicited material.

ADVERTISING. Neither **ARMY**, nor its publisher, the Association of the United States Army, makes any representations, warranties or endorsements as to the truth and accuracy of the advertisements appearing herein, and no such representations, warranties or endorsements should be implied or inferred from the appearance of the advertisements in the publication. The advertisers are solely responsible for the contents of such advertisements.

SPECIAL REDUCED RATES. Individual membership fees payable in advance are \$30 for two years and \$50 for five years. \$400 Life Membership may be paid in four automatic monthly installments when using a credit card.

ADVERTISING

Information and rates available from:
Fox Associates Inc. • 116 W. Kinzie St.
Chicago, IL 60654
800-440-0231 • adinfo.rmy@foxrep.com

ARMY (ISSN 0004-2455), published monthly.
Vol. 72, No. 10

Publication offices: Association of the United States Army, 2425 Wilson Blvd., Arlington, VA 22201-3326, 703-841-4300, FAX: 703-841-3505, email: armymag@ausa.org. Visit AUSA's website at www.ausa.org. Periodicals postage paid at Arlington, Va., and at additional mailing office.

POSTMASTER: Send address changes to **ARMY** Magazine, Box 101560, Arlington, VA 22210-0860.

ON THE COVER



Arizona Army National Guard soldiers from the 1st Battalion, 158th Infantry Regiment, 29th Infantry Brigade Combat Team, train at Camp Roberts, California.

ARMY NATIONAL GUARD/SGT. LIANNE HIRANO

Educate, Inform, Connect

AUSA Initiatives Help Army Succeed

By Gen. Bob Brown, USA Ret.

President and CEO, Association of the U.S. Army

In conjunction with communities and national partners across the country and around the globe, the Association of the U.S. Army helps educate the public about why the Army exists, its critical role in peace and war, and its many benefits to the nation. AUSA works to inform soldiers and professionals alike and spreads awareness of the Army's contribution to national security and the unique capabilities and resources it provides. **Page 4**



Wormuth Upbeat About Today's Army

By Rick Maze, Editor in Chief

Secretary of the Army Christine Wormuth remains upbeat about today's Army despite the many challenges facing the force. Now in her second year as the Army's civilian leader, Wormuth says transforming the service for 2030 and beyond means focusing more on people and talent management, as well as fielding improved equipment and weapons faster than ever. **Page 10**



McConville Oversees Significant Changes

By Michelle Tan, Deputy Editor in Chief

Army Chief of Staff Gen. James McConville leads a very busy Army, from domestic missions, to overseas deployments, to partnership-building exercises. But he knows that today's requirements cannot slow the service from looking ahead and modernizing for the future. **Page 16**



Grinston Worries About Stress on Soldiers, Families

By Michelle Tan, Deputy Editor in Chief

Sgt. Maj. of the Army Michael Grinston has not wavered from his goal of building stronger, more cohesive teams across the Army. He also remains immersed in efforts to improve quality-of-life programs for soldiers and their families, especially as they shoulder numerous missions at home and overseas. **Page 22**



Guard Strives to Meet Challenges After Pandemic

By Gina Cavallaro, Senior Staff Writer

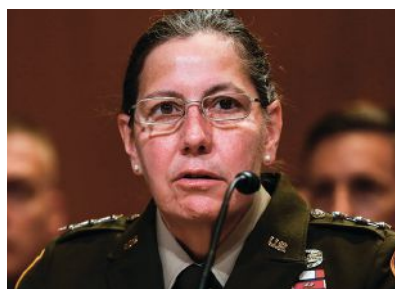
Coming off a year where the Army National Guard has responded to floods, wildfires, storms, hurricanes, civil unrest and the COVID-19 pandemic, Army Guard Director Lt. Gen. Jon Jensen is reemphasizing leadership training and refocusing on modernizing equipment and weaponry to meet upcoming global challenges. **Page 28**



Reserve Chief Reviews Critical Capabilities

By Gina Cavallaro, Senior Staff Writer

After the pandemic forced the U.S. Army Reserve to miss in-person recruiting and training time, Lt. Gen. Jody Daniels, the Reserve chief, is overhauling the way the force interacts with potential recruits and reviewing training procedures to make sure the component modernizes along with the Regular Army. **Page 34**



Caring for Those Who Care for Others

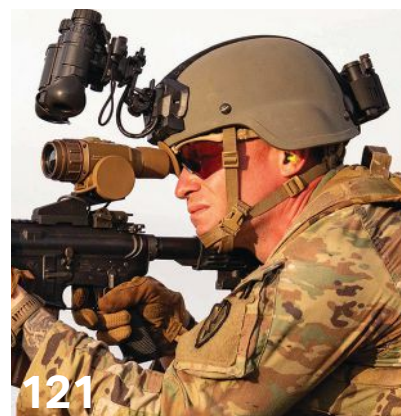
By Elizabeth Dole

Former U.S. senator and leader of the American Red Cross Elizabeth Dole is the 2022 recipient of the George Catlett Marshall Medal, the Association of the U.S. Army's highest national award. Through the Elizabeth Dole Foundation, she seeks to inspire national unity by supporting caretakers of wounded, ill and injured service members. **Page 40**



Year in Review

ARMY magazine revisits important events that have impacted the U.S. Army over the past year, from rapid deployments to Eastern Europe, to enlistment challenges, to honoring America's heroes, to celebrating modernization breakthroughs. **Page 49**



Army Command & Staff	93
State Adjutants General	102
Civilian Aides to the Secretary of the Army	104
Army Reserve Ambassadors	108
AUSA Senior Fellows.....	112
AUSA Leadership Fellows	116
Weapons & Equipment.....	121
Posts & Installations.....	175
Advertisers in This Issue	199
Final Shot	200



Articles in **ARMY** magazine do not reflect the official opinion of AUSA, the U.S. Army, DoD or any branch, command, installation or agency of DoD.



DIEHL
Defence

DIEHL'S DUAL-MODE HAND GRENADE DM51A3



Highest flexibility in the field

Blast and fragmentation option – dual mode

Qualified and in service for more than 30 years

www.diehl.com/defence

Educate, Inform, Connect

AUSA Initiatives Help the Army Succeed

By Gen. Bob Brown
U.S. Army retired

At a time of critical transformation and in the face of new global threats, the Association of the U.S. Army stands ready to help America's Army.

Founded in 1950 as a nonpartisan, educational nonprofit, our growing professional association exists to strengthen the bond between soldiers and the American people, promote the military profession and enhance ties with industry.

This has always been a worthy mission. It is even more important today as America faces national security challenges from new and expanding threats and an increasing disconnect between service members and the citizens they serve, all while the Army works on a pressing need to transform its capabilities and doctrine.

Just as we did in 1950, when the creation of AUSA consolidated the efforts of its many branches to speak with one voice about national security threats and foster public understanding and support for the Army, AUSA in 2023 and beyond must continue to focus on three key objectives—Educate, Inform and Connect—to support the Army of today and the future.

Spreading Awareness

“Educate” means many things at AUSA. We deliver programs, publications, products, events and resources

to soldiers and their families, Army civilians, veterans and retirees, and the many businesses and industries that support the Army. Using our platforms, we spread awareness of the Army's critical role in national security and the unique capabilities and resources it provides.

Our efforts also include educating policymakers, legislators and the public about the role of industry as the Army modernizes. We compile reports on national security issues, explaining the Army's expanding role in national security and its essential part in combined joint operations. Included in this work are national security reports and studies, produced by our professional staff, examining the critical role of the Army in future warfare.

Our year-old Center for Leadership is a big part of AUSA's education mission. Backed by more than 35 mentors, the team is focused on sharing best practices and developing new ideas for helping young officers and enlisted leaders. Through podcasts, webinars and in-person events, the program is designed to help leaders and their teams succeed.

In May, we offered a well-received solarium for young Army leaders in conjunction with AUSA's LANPAC Symposium and Exposition in Honolulu, and we are planning an even bigger solarium during our Annual Meeting and Exposition Oct. 10–12 in Washington, D.C.

We also have plans to grow our popular Young Professionals program, which offers networking and mentorship opportunities for soldiers, veterans, family members, Army civilians and others who support the Army and are in search of professional development.

“Inform” means telling the Army's story to a wide audience, something that has been a priority at AUSA since its founding. Through *ARMY* magazine and our many other publi-



Retired Gen. Bob Brown, president and CEO of the Association of the U.S. Army, speaks at the association's headquarters in Arlington, Virginia.

AUSA/LUC DUNN





cations and events, we explain why the Army exists, its critical role in peace and war, and its many benefits to the nation.

This is an important task, as we remind key decision-makers of the critical role of the Army and why its transformation is so important. We address key issues and current and future threats. Recent papers have looked at the value of the Army's new multi-domain task forces, how better data management and sharing can give the Army an upper hand and why the U.S. needs to be concerned about hypersonic weapons being developed by Russia and China.

"Connect" may be one of our most

important undertakings. Aided by our members across nine regions and 121 chapters, AUSA has the network to link communities with soldiers in deeper, more meaningful ways that go beyond just thanking a stranger for their service.

We are a bridge connecting the Army, industry and the public, with the goal of strengthening support for our Army. It is a way of building support for Army and industry initiatives. It also creates a network that can help military members and their families find local resources and feel like part of their community.

AUSA's network includes community and national partners, programs to help transitioning soldiers and programs to help young professionals.

Widening our connections even more, our Association Partners program links AUSA with like-minded groups in a mutually beneficial relationship.

Taken together, what we have is a global network of volunteers who show by their membership in AUSA that they are interested in helping and supporting soldiers and their families.

This mix of Educate, Inform and Connect fulfills AUSA's purpose of contributing to the advancement of the Army and the security of the U.S., a vital task in our complex and challenging world.

Changing Times

We are at a critical moment in history as the Army undertakes a far-reaching transformation and revises its warfighting doctrine. Change is difficult and explaining why the Army is changing and why it needs new capabilities requires dedicated effort.

This is a big task. After spending two decades fighting terrorism with counterinsurgency operations, the Army now must be prepared for high

Association of the U.S. Army President and CEO retired Gen. Bob Brown addresses the audience at AUSA's 2022 LANPAC Symposium and Exposition in Honolulu.

AUSA

MOSARC™

OPEN SYSTEM ARCHITECTURE, FUTURE-READY AVIONICS



A family of modular solutions ready to equip the U.S. Army's current and future airborne fleets

DISPLAYS • NETWORKS • COMPUTING • SOFTWARE

Tomorrow's battlespace calls for modular solutions to equip every type of mission for success. Mosarc™, our advanced, open system avionics solution makes third-party integration easy. With large area displays, secure networks, and maximum computing power and software flexibility, Mosarc is ready to support Future Vertical Lift and keep the Army's enduring fleet flying.

collinsaerospace.com/Mosarc

MOSARC™ AVIONICS BENEFITS

- Field new technology faster
- Accommodate budget pressure
- Break vendor lock



Collins Aerospace



stakes and fast-moving warfare. The Army must be ready to deter aggression by making any potential foe think twice about attacking the U.S., its interests and its friends, and it must be ready to defeat any adversary that makes the wrong choice.

There is no doubt that the Army is on the right track. Its wise list of modernization priorities will deliver by 2030 an Army that does everything its leaders have promised. The challenge is the Army needs time, money, momentum and a little patience to succeed.

While the Army is on the right path, the way ahead remains bumpy. Full funding of Army transformation has not been secured and creating dramatically superior technology takes time, even with streamlined processes. To succeed, the Army



Above: Soldiers with the 3rd Squadron, 3rd Security Force Assistance Brigade, conduct live-fire training in Jordan.

Below: Association of the U.S. Army President and CEO retired Gen. Bob Brown speaks with foreign military representatives during AUSA's 2021 Annual Meeting and Exposition in Washington, D.C.

ABOVE: U.S. ARMY/SPC. CLAUDE NELSON.
BELOW: AUSA/MIKE MORONES

needs to maintain its momentum and, if possible, move even faster, because potential adversaries are not standing still with their own weapons programs.

The result must position the Army to be part of a combined, joint force where success may depend on how well everyone works together and how adaptive they are when war plans need to be altered.

The Army faces another challenge where AUSA's help is needed, and that involves recruiting. One of AUSA's missions is to connect the Army with the rest of America, revealing the

many opportunities available to those who want to serve.

Through our chapters, national and community partners, events, podcasts and publications, AUSA can spread the word about the array of benefits available to those who serve, the opportunities to learn new and highly marketable skills and the simple value of being part of something worthwhile. It is more than bonuses, pay and paid vacation. It is also about doing meaningful work as part of a team.

Here at AUSA, we stand ready to help America's Army. ★



MODERNIZING MILITARY MOBILITY

From delivering integrated vehicles to providing advanced power and propulsion solutions, GM Defense is driving the future of military mobility. **Visit us in booth 7901** to learn more about our innovative technologies and capabilities.

Wormuth Upbeat About Today's Army

People Initiatives Show Success; Modernization Plans Move Ahead

By Rick Maze
Editor in Chief

In her second year as Army secretary, Christine Wormuth faces many challenges, but she is also upbeat.

"I think the Army is in a good place," Wormuth said in an interview timed for publication as the Association of the U.S. Army hosts its Annual Meeting and Exposition in Washington, D.C. The Oct. 10–12 meeting is shaped around a theme focused on the future: "Building the Army of 2030." Wormuth is satisfied about the path the Army is on.

Transformation of the force, more focus on people and talent management, and an array of other initiatives are starting to show success, Wormuth said. "I recently heard some [people] who served more than 30 years in uniform say the audio now matches the video," she said about the Army's efforts to take care of people. "Every time I go someplace, I meet soldiers doing amazing things or talk to spouses who are doing amazing things."

The Army's ambitious transformation plan to develop and field new capabilities that give soldiers a definite advantage over potential adversaries had skeptics when the effort began because of past failed programs such as Future Combat Systems, which cost about \$18 billion but had little to show after a six-year effort. For a variety of reasons, funding for the program was delayed and then cut



before the program was canceled in 2009.

That is not happening again, Wormuth said. "I feel really good about where we are on modernization and the pace of our modernization," she said. "The results so far, in my view, speak for themselves."

"Coming soon, we will have either prototypes or will be fielding 24 systems," she said. This milestone has a catchy name, "24 in '23," referring

to 24 systems in fiscal 2023. Meeting that goal will be a big boost, proving to industry and Congress that Army transformation is on a path to success.

Paying Attention

Some capabilities being developed are more challenging than others, but Wormuth does not seem worried. "I do not think any of the programs are in trouble," she said. Some need



closer attention than others as testing is underway, and some programs are more complex than others. She mentioned Future Vertical Lift as a program that is challenging and expensive when fielding begins. “We have to continually look [at] where we are, and what are our requirements,” she said.

It will be vital to look at requirements as the prototypes take shape, as well as the cost of the platforms

and the life cycle costs of maintaining and sustaining them. “I do not have concerns about any of the programs. But I think, particularly for the large-dollar programs, we have got to pay careful attention,” Wormuth said.

She acknowledged that the Army has the “burden of proof” that it can develop, acquire and field “large new weapons systems.” It is also important that the Army makes wise use

of relaxed authorities granted by Congress to move more quickly.

“Based on the feedback I’ve gotten from members of Congress, I think they are generally pleased with what they are seeing,” Wormuth said. It

Army Secretary Christine Wormuth poses for a photo with cadets attending Cadet Summer Training during a visit to Fort Knox, Kentucky.

U.S. ARMY



also appears that the Army has been successful in convincing lawmakers that the Army has a major role to play in the Indo-Pacific. “Compared to when I began as secretary of the Army, I hear more support and understanding of what we can do, and I get fewer questions about what is our role,” she said.

Wormuth credits the Operation Pathways series of exercises launched in 2014 by Gen. Charles Flynn, the U.S. Army Pacific commander, when Flynn was the two-star commander of the 25th Infantry Division, as helping make the case for why the Army has a crucial role in the Indo-Pacific.

“I think people have seen how the Army can provide valuable roles to the joint force,” the secretary said. “I think Gen. Flynn, in particular, is very compelling.”

The Russian invasion of Ukraine also helped the Army’s cause in

Congress. “With everything happening in Ukraine, there is a renewed appreciation for the importance of ground forces and for the challenges that Russia could someday pose for NATO,” Wormuth said.

Lessons from Ukraine are being studied and could have an impact on the Multi-Domain Operations doctrine the Army is developing. The Army envisions having multidomain task forces concentrated in specific regions. Europe and the Indo-Pacific each will have a dedicated Army task force.

There are rough seas for the Army on other issues, particularly dealing with personnel.

The Wormuth era at the Pentagon has included a lot of attention on soldier- and family-related programs to make life easier, tackle serious problems in an expedient manner and make soldiering feel rewarding. These issues are never fully resolved because they require continued attention.

She is satisfied with progress on many people-first initiatives such as

suicide prevention, reducing sexual harassment and assault, building cohesive and inclusive teams and treating soldiers, their families and Army civilians with dignity and respect.

Recruiting Concerns

Wormuth is concerned, though, about the fate of the all-volunteer Army in the face of serious recruiting challenges. Unable to fill the ranks with high-quality recruits, the Army chose to reduce troop levels rather than lower standards.

There is no quick-fix solution for a problem faced by all the services, she said.

“This is a departmentwide challenge, but it is most acute for the Army because, among other things, we are the largest force. We have got to recruit the most young Americans every year,” Wormuth said. “I think it is important to understand this did not happen overnight.”

The Army became an all-volunteer force in 1973, ending the Vietnam-era draft in a move that requires selling service-aged youth on signing up. One of the reasons the nation ended conscription was the pool of potential recruits was large compared with how many troops were needed. The Army also was unhappy with the discipline problems that came with draftees, believing volunteers would be easier to manage.

Challenging Times

Demographics have changed, Wormuth said. “The number of Americans who qualify for serving in the U.S. Army has been shrinking ... largely driven, unfortunately, by childhood obesity.”

The COVID-19 pandemic has not helped. It has been harder for Army recruiters to talk with high school students because of virtual schooling, she said. Another factor has been that many high school students have suffered “demonstrable learning loss” because virtual education was less effective for them. Scores are lower on the Armed Services

Secretary of the Army Christine Wormuth visits troops deployed to Riga, Latvia.
U.S. ARMY/STAFF SGT. TAE HARRISON

PROVEN SYSTEMS FOR U.S. **WARFIGHTERS**



SPIKE™ NLOS 6th Gen Missile
Stand-off Range
Beyond-Line-of-Sight

GAME CHANGER

RAFAEL  **USA**
RAFAEL USA INC.



See us at
AUSA 2022
Hall B, Booth 2224





Vocational Aptitude Battery. This standardized test reveals science, math and language strengths and determines whether someone is eligible to enlist and what MOS fits their qualifications. Physical fitness also is lower, Wormuth said: “Kids haven’t been playing sports for the last couple of years.”

Also making things harder for the military is competition from the private sector, which is looking to hire the same people sought by the Army. “We are all competing against each other for talent,” Wormuth said. “We used to be the only ones, for the most part, offering tuition benefits. Now you have companies like Amazon and Starbucks offering tuition assistance. You have \$20-an-hour jobs in a lot more places.”

Touting Benefits

The Army is trying many things. “We are taking steps already to try to start helping ourselves,” she said. One “very popular” incentive has been a bonus for quickly shipping to basic training. The Army also is

offering four-year enlistments, with two years on active duty and two in the reserve component. Also popular, she said, is offering new soldiers their choice of duty station. “Some kids want to go to Germany. Other kids find it more attractive to stay closer to home,” she said.

Wormuth knows this is not enough. “We are doing more marketing to try to get out there and better tell the Army story,” she said. The Army also wants to do more to explain the practical benefits of military service, like 30 days of paid leave, help with home mortgages, and family health care.

The Army’s diverse career fields are another feature to stress, Wormuth said. “We’ve tried to get the word out a little more about how many different things you can do in the Army that kind of speak to your passions,” she said. “We have 150 different career fields.”

Better medical screening is also planned to determine before enlistment if someone has a medical condition that could prevent them from finishing basic training and to also more quickly determine if someone could serve with a conditional enlistment waiver.

In July, the Army announced it would launch the Future Soldier Preparatory Course aimed at poten-

tial recruits who are falling just a little bit short of meeting physical or academic standards. Wormuth described it as “sort of a 90-day boot camp.” It is worth the effort, she said, saying it is “investing in young Americans who already know they want to serve.”

No Quick Fix

More action is needed in the long-term, she said. A new recruiting and retention task force will be created, separate from the U.S. Army Recruiting Command, to look at potentially bigger changes to recruiter selection and training, particularly focused on putting the right person in the right place.

As much as she’d like a quick fix, Wormuth said this is a challenge that will take more than just a year to overcome. It requires deeper thought on how Generation Z, those born between 1997 and 2012, think about the military and what it offers.

“We’ve got to be more effective at telling the Army story,” she said. That requires coming up with new ways to get soldiers into communities to talk “about what the Army really is” and “explaining what the Army offers.”

It is also important for the Army to tackle problems with harassment, assault, suicide and other harmful behaviors so potential recruits and their families feel better about the Army as an institution, Wormuth said.

Maintaining a strong and positive image of the Army as one of the nation’s most highly regarded institutions will help with recruiting, she said. Doing this requires an apolitical institution in which people take an oath to the Constitution and “serve the president, who is commander in chief, no matter what party that person belongs to. We need to make sure that we are keeping the Army out of politics,” she said.

The Army’s solution to filling the ranks “is going to take a few years to sort out,” she said. ★

Army Secretary Christine Wormuth visits with National Guard soldiers during an exercise at the Camp Grayling Joint Maneuver Training Center, Michigan.
U.S. ARMY/STAFF SGT. TAE HARRISON

Confidence where it counts

Precision under pressure

Delivering the precision you need, when it matters most. For more than 40 years we've innovated reliable, affordable precision-guided solutions. We're here to meet your needs today, tomorrow, and beyond.

baesystems.com/pgm

SYS : 001

0:2410 28580698522793244

295200 7030668786387213637

419630 466633468091629556

005976 294810664807728554

BAE SYSTEMS

No Letting Up

McConville Oversees Significant Changes

By Michelle Tan
Deputy Editor in Chief

Entering a pivotal year in the Army's energetic transformation effort, Army Chief of Staff Gen. James McConville is balancing the needs of a force that is very busy today with an urgent push to prepare for a future, more lethal battlefield.

This fall, the Army will unveil its new Multi-Domain Operations doctrine, and over the next 12 months, it plans to field or produce prototypes for 24 of its signature modernization programs. Together, these milestones could usher in significant changes to the way the Army trains and fights.

At the same time, the Army remains in high demand, with soldiers responding to the crisis in Europe, deploying to Iraq and Syria, conducting exercises and partner-building activities in the Indo-Pacific and Africa, deterring conflict in the Middle East and supporting disaster-relief and COVID-19 efforts at home.

It also is facing a serious recruiting challenge. The number of eligible and interested service-aged youth continues to shrink, and the Army sees increased competition from private-sector companies.

Delicate Balance

For McConville, maintaining this delicate balance comes down to taking care of people and investing in them. "We're in a war for talent right now, so I would say people are more important than ever," McConville said. "And when I talk about people, I don't talk about 'Soldiers First.' I talk about 'People First,' because they are what makes our Army the greatest army in the world."

This effort includes soldiers from all three components, their families,

Army civilians, veterans and retirees, McConville said. His focus on people and their importance has not wavered since he became the Army chief of staff in August 2019. People drive the Army, McConville said. "You can't execute strategy, you can't execute plans, unless you have great squads, platoons and companies, because they're the ones who actually do it," he said in July.

People also are critical to the Army's modernization plans. "You can have the world's best warfighting capabilities, but they're not worth much if you don't invest in the actual warfighters," McConville said then.

Attracting New Soldiers

Faced with a recruiting shortfall, the Army is looking for new ways to reach America's youth.

More than 80% of young people who join the Army today come from a military family or have a relative who served, McConville said. About 44% of them attended high schools with Junior ROTC programs.

"We're learning [that] exposure to the military is extremely important" when talking about getting young people interested in military service, McConville said. "So, we've got to work hard to expose young men and women to the military, and we're aggressively getting after that."

Army leaders also are concerned that only about 23% of American youth are qualified to serve. McConville and Army Secretary Christine Wormuth have pledged that quality is more important than quantity. "We are not going to lower standards, but what we're going to do is, we're going to invest in American youth so they can meet our standards," McConville said.

One such initiative is the Future Soldier Preparatory Course, which

was launched in August at Fort Jackson, South Carolina. "The intent of that program is to help young men and women meet the academic and physical standards of the United States Army within 90 days," McConville said. "We're very excited about this program."

McConville also has asked veterans and retirees for their help with the Army's recruiting challenges. "I've asked them to help us inspire young men and women to serve, and they're doing that for us, and it's making a difference," he said.

As the Army works to fill its ranks, those already serving remain busy and in high demand. But the Army's years of hard work, planning and investment in rebuilding readiness across the force have paid off, McConville said.

The Army's tactical readiness—its ability to deploy soldiers and units that are ready to fight and win—is high, and it was on full display earlier this year when tens of thousands of troops were rapidly deployed to bolster America's NATO allies in Eastern Europe, McConville said.

"We've seen that with the 82nd Airborne Division and many of these divisions that we've put around the world," he said. "They're highly trained, they're disciplined and fit. They're ready to fight."

The service's strategic readiness also is in good shape, McConville said, using as an example the deployment of the 1st Armored Brigade Combat Team, 3rd Infantry Division, to Europe from Fort Stewart, Georgia, earlier this year.

"They were able to get on a range in seven days as an armored brigade combat team mainly because we had pre-positioned equipment over there."

He added, "Not only was it pre-positioned, it was ready to go, and



the supporters that were over there were able to move it to [Grafenwoehr Training Area, Germany,] and have it all ready to go. We can never forget the importance of logisticians when it comes to making sure that we're ready to conduct combat operations."

To maintain those high levels of readiness, McConville said, the Army is using its Regionally Aligned Readiness and Modernization Model, a new force generation model designed to give soldiers and units predictable, dedicated periods for missions, training and modernization.

"When it comes to readiness, we're not going to send any soldiers into a combat situation where they're not

trained and ready to go," McConville said, adding that Army leaders are paying close attention to make sure soldiers also get much-needed dwell time.

McConville said he is concerned about the operations tempo placed on units such as the 82nd Airborne Division and Patriot air defense missile units, which are in "the highest demand."

"I do worry about the soldiers, I worry about the families, but many of those soldiers, that's why they're in the Army," McConville said. "They want to deploy. They want to go and do those types of things, but we don't want to wear them out, either."

This includes families. "Our families are absolutely critical," McConville said. "We enlist soldiers, but we retain families, and our retention is pretty good, but we should never take that for granted."

The Army could not successfully carry out its missions without family support, McConville said. That's why Army leaders continue to work on improving quality-of-life programs for Army families, whether it's housing, health care, child care, spouse

Army Chief of Staff Gen. James McConville addresses National Guard leaders in Columbus, Ohio.

ARMY NATIONAL GUARD/MASTER SGT. JIM GREENHILL



employment opportunities or smooth permanent change-of-station moves, he said. Gains are being made in all those areas, McConville said, but they are efforts that require long-term, continual attention.

On modernization, the Army continues to be “very aggressive,” McConville said.

“We are still on track to field 24 signature systems in [fiscal 2023],” he said. They include hypersonic missiles, the Precision Strike Missile, the Extended Range Cannon Artillery, Mobile Protected Firepower, the Armored Multi-Purpose Vehicle, the Robotic Combat Vehicle, the Future Tactical Unmanned Aircraft System,



Above: Lt. Gen. Xavier Brunson, left, commander of I Corps, greets Army Chief of Staff Gen. James McConville at Joint Base Lewis-McChord, Washington.

Below: McConville, left, calls the mother of a newly reenlisted soldier during his visit to the installation.

U.S. ARMY PHOTOS BY SPC. RICHARD CARLISI

Mobile-Short Range Air Defense and the Next-Generation Squad Weapon.

Many of the programs are “coming in at a very good pace, and we’re very pleased,” McConville said.

“To me, the proof is in the execution,” he said. “Success, to me, ... is these systems are in the hands of

soldiers on the battlefield, giving them a decisive advantage against their opponents.”

Just as Army leaders in the 1970s used lessons from the Arab-Israeli wars to develop AirLand Battle doctrine, McConville said, today’s Army is learning from the war in Ukraine



The choice between thinking you're mission ready and knowing you are.
DEFIANT X[®] gives you the edge.

www.lockheedmartin.com/defiantx

©2022 Lockheed Martin Corporation and The Boeing Company. All rights reserved.

Effort sponsored by the U.S. Government under Other Transaction number W9124P-19-9-0001 between AMTC and the Government. The U.S. Government is authorized to reproduce and distribute reprints for Governmental purposes notwithstanding any copyright notation thereon. The views and conclusions contained herein are those of the authors and should not be interpreted as necessarily representing the official policies or endorsements, either expressed or implied, of the U.S. Government.





as it finalizes its Multi-Domain Operations doctrine, scheduled for release in October.

The war has “given us insight, but it’s also given us insight into our modernization priorities and the concepts that we’re going to have,” McConville said.

“What we’re seeing is the importance of speed, range and convergence,” he said. “The speed and range of weapons systems matter.”

Some have called the High Mobility Artillery Rocket System, known as HIMARS, a game changer for Ukraine as it battles Russian forces, McConville said.

With its range of 70–90 kilometers, some are “describing that as long-range precision fires,” he said. But compare that to the Precision Strike Missile the Army is developing, which is going to be “500

kilometers that rides on the back of HIMARS,” and “you start to see the importance of having speed and range, and what it can do on a battlefield changes the whole framework of how we will fight in the future.”

With these newfound capabilities, the Army also must hone its targeting skills. “If you’re going to do long-range precision fires, you have to do long-range precision targeting,” he said.

“You have to have sensors that can find the targets throughout the battlefield, and then quickly move that data through an integrated command system to the appropriate lethal systems to allow you to conduct those types of combat operations,” McConville said.

Changing Environments

To put it all together, the Army is modifying its combat training centers so they’re ready to train soldiers on multidomain operations, “where they are contested in every single domain,” McConville said.

“If you’re a command post and you’re not dispersed and you’re

not moving, you’re going to have problems in the future,” McConville said. “The idea of having unmanned aerial systems that can see you on the battlefield, commanders are going to have to deal with that, and they’re going to get that opportunity at the [combat] training centers.”

Large-scale combat operations against a near-peer adversary are “a very different operation” than the counterinsurgency and counterterrorism operations the Army conducted over the past 20 years in Iraq and Afghanistan, he said.

“Our commanders have to learn to operate in this environment,” McConville said.

McConville said he is “extremely proud” of the force and all it has accomplished.

“This has been a rough couple of years,” he said. “This Army, and this military, has faced adversity around the world. It’s done everything it’s been asked to do and, quite frankly, I think they’ve done everything we’ve asked them to do extremely well. I’m very proud of them, proud to be the chief of staff of this Army.” ★

Chief of Staff of the Army Gen. James McConville signs a young fan’s baseball during Army Day with the Washington Nationals at Nationals Park in Washington, D.C.

U.S. ARMY/SGT. HENRY VILLARAMA



MAXIMIZE YOUR FLEET

Navistar Defense brings innovation to the battlefield with adaptable vehicles and life cycle support solutions to enable U.S. and allied forces to gain the competitive edge. Our vehicles combine proven common militarized platforms with advanced commercial technologies, resulting in superior capabilities at a lower cost. In addition to achieving improved mobility, payload, and production capabilities, technology adoption also results in massive improvements in fuel efficiency and ensures our platforms are ready for next generation drive-by-wire and autonomy requirements. Our current product offerings are highly common, scalable, and modular, and will handle the full spectrum of mission roles, from long-range highway logistics to navigating severe off-road trails.



COMMONALITY



COMMERCIAL
TECHNOLOGY



MOBILITY



MODULARITY



Working Hard

SMA Grinston Worries About Stress on Soldiers, Families

By Michelle Tan
Deputy Editor in Chief

Facing a recruiting crunch and unrelenting demands on the force, Sgt. Maj. of the Army Michael Grinston is concerned about taking care of soldiers and their families.

Now in his fourth year as the Army's senior enlisted adviser, Grinston continues, as he has throughout his tenure, to concentrate on building stronger, more cohesive teams. He also remains immersed in efforts to improve quality-of-life programs for soldiers and their families, and emphasizes caring, commonsense leadership from teams and squads on up.

He has kept this course as the Army responded to a devastating pandemic, crises in Europe and the Middle East, the fraught withdrawal from Afghanistan, civil unrest across the U.S. and natural disasters, all while training and preparing for the nation's next call.

"We have a lot of requirements for our Army. That is the stress that I worry about," Grinston said, expressing concern that the smaller force resulting from recruiting challenges could make things tougher for soldiers. "I don't see a whole bunch of things coming off the plate," he said, noting there are still soldiers in Iraq and Syria. Thousands more are in Europe and Korea, while others respond to forest fires, hurricanes and COVID-19.

"I think that's what is putting more stress on our soldiers, is that when we don't assess enough soldiers coming in, and the requirements or



the demand for our soldiers isn't less. That's the stress on soldiers and their families," Grinston said. He added that he hears "I need more people" wherever he goes.

"We have to have good quality of life. We have to put effort into our barracks, our housing, our health care, our child care, spouse employment," he said. "The soldiers we have, we've got to take care of, because they're under a huge strain."

Challenging Times

The Army's No. 1 resource is its people, Grinston said. Many now serving have only known an Army at war, serving back-to-back deployments to Iraq or Afghanistan. Others

are new to the force, and many are regularly tapped to serve rotations to Europe, Korea and Kuwait. There are also soldiers who are wounded, ill or injured, those who are moving duty stations, those who are retiring and those attending professional military education courses, and it adds up to a busy Army with not a lot of breathing room, Grinston said.

The requirements "put a huge demand on the Army, and it just hasn't let up at all," Grinston said. Even after last fall's withdrawal from Afghanistan, "we immediately send probably more troops than we had in Afghanistan, we send more than that to Europe, and they're still there."

Army leaders acknowledge that



there is no quick or simple fix to the service's recruiting challenges—caused by a combination of factors, including a low propensity to serve and a shrinking pool of qualified candidates. They also do not expect a substantial decline in the many missions and requirements demanded of the Army as it simultaneously works on its most ambitious modernization and transformation effort in four decades.

Grinston hears about the grind from soldiers and families during regular troop visits to posts across the country. “When I talk to families and soldiers, it’s ‘I just got back from Korea, now I’m going over to Europe, now I’m coming back, and I’m going to do this next mission,’” Grinston said. “My perception is they just know, ‘I’m doing these missions. How do I get off this merry-go-round?’”

Relief Efforts

For Grinston, the key is leadership, and leaders must be mindful of their soldiers and the stress the troops may be under.

It’s easy, Grinston said, to rely heavily on strong performers, putting them up for new or different assignments or calling on them for extra tasks or duties. “When you get somebody like that, you’ve got to make sure they have balance, and I think leaders have to control that,” Grinston said.

The Army can help with some policies. He cited as an example a directive, issued in April, on parenthood, pregnancy and postpartum policies that aims to ensure soldiers can progress in their careers while growing their families.

Army Directive 2022-06: Parenthood, Pregnancy and Postpar-

tum modifies six existing policies, including extending exemptions for postpartum body composition and physical fitness testing, and increasing family care plan flexibility. It also introduces six new policies, including policies related to professional military education, fertility treatment and pregnancy loss.

“You’ve got great men and women soldiers that are single parents, and they’re really good soldiers, [and] we have to have some balance in their lives,” Grinston said. “We can’t keep leaning on them without getting some

Opposite: Sgt. Maj. of the Army Michael Grinston speaks at an event in San Francisco. **Above:** Grinston addresses soldiers at the NCO Academy at Fort Drum, New York.

OPPOSITE: U.S. ARMY RESERVE/SPC. KENNETH RODRIGUEZ. ABOVE: U.S. ARMY/SPC. JOSUE PATRICIO



resiliency, some time to reset.”

But the Army cannot write a policy for “every scenario in the world,” Grinston said as he emphasized the importance of engaged and thoughtful leadership. “We can have a great policy, but without leaders knowing it or enforcing it, or just taking some action, it’s just a piece of paper,” he said. “Bottom line is, even if there is no policy, or it’s contradictory to a policy we have now, we have to put some common sense in how we manage our people.”

Familiarity, Teamwork

Grinston believes his message, which he has espoused since becoming sergeant major of the Army in August

2019, is permeating the force, particularly his work on the This is My Squad initiative, which aims to build strong, cohesive teams and encourage leaders to get to know their soldiers.

This is My Squad is now part of a forum in the Basic Leader Course, which is a requirement for soldiers preparing for promotion to sergeant. At the senior NCO level, Grinston and other senior enlisted leaders continue to mentor their fellow NCOs on the importance of leadership and building strong teams, and Grinston discusses these topics with nominative sergeants major during annual forums.

He also advocates for what he calls “leadership by walking around.” Being present, showing up and talking to soldiers—those actions have value, Grinston said, and it is something he’s done for much of his career.

“That’s been the way I’ve done stuff; I just don’t get to walk around

as much by myself anymore,” he said. “That’s what I miss about not being physically on a post.”

The challenge lies in what Grinston called the “frozen middle”—soldiers who have been around for a while, who have deployed to combat and who may not immediately embrace initiatives such as This is My Squad.

To tackle that population, the Army is launching an initiative Grinston called targeted counseling, where battalion sergeants major will receive counseling from their division command sergeant major, Grinston said.

“I want it to be positive,” Grinston said, and the goal is to help that NCO find ways to get to know soldiers in their formations. It could include discussions on how best to sponsor newcomers and how to conduct leader development and engagement more effectively.

“It’s not a gotcha, but what can I do

Sgt. Maj. of the Army Michael Grinston does some deadlifts during a visit to Camp Herkus, Lithuania.

U.S. ARMY

THE MAGPUL PMAG GEN M3 SAVES LIVES



In US Government testing with the M4A1 and M855A1, the PMAG GEN M3 exceeded 12K rounds between stoppages for all causes and 30k for magazine-related stoppages, vastly outperforming the USGI EPM.

The PMAG is superior in strength, durability, and reliability, and its visible indication of rounds remaining provides instant feedback to the soldier on his round count.

As an official Authorized Accessory List item, the PMAG is approved for US Army Purchase instead of the EPM magazine. You can procure the PMAG GEN M3 (Black: NSN 1005-01-615-5169 and MCT: NSN 1005-01-659-7086) through the Defense Logistics Agency, General Services Administration (GSA), or by Government Purchase Card (GPC).

To use your GPC to buy direct from Magpul, contact cpseagraves@magpul.com.

 **MAGPUL**
www.magpul.com

GSA



to help you ... to get to this culture of, it's OK to know your people, it's OK to share that you're having issues, and we can get you the help that you need," Grinston said.

Value in Mentorship

He also wants to increase mentorship across the force. "I think that's still the secret sauce we're missing to get after some of those other things,

Sgt. Maj. of the Army Michael Grinston on the range at Fort Bragg, North Carolina.
U.S. ARMY/PFC. LILLIANA FRASER

like really getting down to zero with suicide and sexual assault," he said. "With mentorship, you'll get less and less of that."

Another challenge is improving the alcohol culture in the ranks, Grinston said. Excessive drinking can lead to mishandling a gun or to sexual assault or domestic violence, he said. "How do we get to a culture [where we] not do away with alcohol, but if I have a better culture where I don't drink in excess, I get that downstream effect on those other things," Grinston said.

Ultimately, Grinston said, he is looking to play the long game, especially when it comes to taking care of soldiers. "Remember to treat our soldiers respectfully," he said. "Don't overuse them. If you're injured, go see Holistic Health and Fitness, go to the physical therapist, get that MRI, because the long game is I need them to recover properly and then come back. Don't go, 'Well, just suck it up.' We've probably heard that 1,000 times in the Army."

If you take care of soldiers, they'll stay and continue to contribute and be productive, Grinston said.

They can also be the Army's best ambassadors.

Positive Message

As the service struggles with recruiting, Grinston wants soldiers to tell their stories.

"Talk to somebody that's never met somebody in the military," he said. "I still think there are these urban legend stories about what the Army is, over what it isn't. We have great soldiers. You just have to get to know them."

The Army boasts enlisted soldiers with doctorate degrees, who are Harvard University-trained lawyers or graduates of the Massachusetts Institute of Technology, and so much more, Grinston said. "They just need to go out and say, 'Here's what I do, here's my job,'" he said.

Not every soldier story is going to be positive, but Grinston said that's OK, too.

"There may be some bad ... but contrary to what you read in the paper, most soldiers, when I talk to them about the Army, they do have positive things to say," he said. "I'm confident that there would be more positive than there would be negative. I have faith in our soldiers."

Ultimately, Grinston said he strives to make a difference—for the Army and in soldiers' lives. "What I'm concerned about is I'm doing what's right for the Army every day," he said. "Just head down, work hard. That's all I care about." ★



OUTAHEAD

NEW PLATFORMS

*New Categories and
New Classes of Technologies*

+ AUSA ANNUAL // OCT 10-12, 2022
WALTER E. WASHINGTON CONVENTION CENTER

VISIT US AT
BOOTH #851

avinc.com

AV
AeroVironment™

Transition Time

Guard Strives to Meet Challenges After Pandemic

By Gina Cavallaro
Senior Staff Writer

The Army National Guard is working to meet the challenges of motivating a new generation to serve while modernizing the force after weathering one of the busiest periods in its recent history.

Called upon time after time to support the nation's responses to floods, wildfires, storms, hurricanes, civil unrest and the COVID-19 pandemic, the National Guard stepped up during more than two years of overlapping missions, deferring some of its combat readiness to meet domestic operational requirements.

With demand for the National Guard back at a manageable pace, recruiting is in high gear, soldiers are catching up on education and leaders are moving out to modernize the capabilities of the Army's second-largest component.

Lt. Gen. Jon Jensen, the 22nd director of the Army National Guard, said the sustained pace of operations, brought on chiefly by the response to the pandemic, caused operational churn and a nosedive in the contact the National Guard enjoys with its local communities. Jensen became director of the Army National Guard in August 2020.

"There was an impact on readiness during [the pandemic], so we're recapturing capabilities, and we're on a path to grow new capabilities," Jensen said, calling the moment and the work ahead "a transition point."

With fewer than 300 National Guard soldiers on duty as of September supporting the pandemic response in their own states, compared





with the 16,000 soldiers who were on the pandemic mission in December across multiple states, the strain has eased, he said.

“We’ve been at this for a while,” Jensen said of the pandemic response, pointing out that state governments have since created their own capacity for dealing with COVID-19. “Many of the things that we were doing, [we] no longer need to do. You had to go somewhere to get a COVID test. Well, now you don’t have to go any farther than your drugstore.”

Return to Normalcy

Except for units that are mobilizing, training and deploying on rotational missions, Jensen said most National Guard soldiers are back to the component’s traditional requirement of training one weekend a month and two weeks a year.

Jensen acknowledged, though, that the National Guard could be called upon to augment the active-duty force as it struggles to attract new recruits and shrinks its troop strength.

“I think that’s the concern. As our Army is getting smaller, the demand on the Army is not getting smaller. In many ways, it’s increasing,” Jensen said. “So, what we potentially could see is ... if the demand remains the same or grows, and the Army gets smaller, that’s going to increase the [operational] tempo inside our formations.”

In its fiscal 2023 budget request, the Regular Army reduced its troop level to 473,000, which is 12,000 fewer soldiers than authorized for fiscal 2022. Declaring in a mid-July memo that the Army is in “a war for

Lt. Gen. Jon Jensen, right, director of the Army National Guard, presents awards for outstanding service to soldiers with the Washington Army National Guard’s 3rd Battalion, 161st Infantry Regiment, at Bemowo Piskie Training Area, Poland.

U.S. ARMY/SPC. OSVALDO FUENTES



talent,” Army Secretary Christine Wormuth and Army Chief of Staff Gen. James McConville laid out grim projections that could see the Army’s end strength sink to 445,000 troops by the end of fiscal 2023.

With a smaller active-duty force,

Above: Army National Guard Director Lt. Gen. Jon Jensen, left, speaks with 1st Lt. Edward Richardson, of the Mississippi Army National Guard’s 150th Engineer Battalion, at the National Training Center, Fort Irwin, California. **Below:** Jensen, right, greets a Minnesota Army National Guard soldier on duty in Washington, D.C.

ABOVE: MISSISSIPPI NATIONAL GUARD/STAFF SGT. CONNIE JONES. BELOW: MINNESOTA NATIONAL GUARD/SGT. SYDNEY MARIETTE

Jensen said, “every unit counts, every soldier counts, and readiness counts, and it all starts with filling in our [National Guard] formations.”

Meeting the Guard’s fiscal 2022 end strength goal of 336,000 was a priority for Jensen. “We’re going to continue to work it every day that I am the director, whether we’re on mission, not on mission, ahead of mission,” he said.

The National Guard faces the same recruiting hurdles as the Regular Army—a low national unemployment rate, competition from the private sector, the ripple effect of the pandemic and a lack of willingness among young people to serve.

“We’re not having as good a year this year as we were last year where we exceeded our end strength,” Jensen said on Aug. 29. “This year, we’re probably going to fall a little short of that.”

Pointing to the National Guard’s ability to leverage its community relationships in 54 states, territories and the District of Columbia, Jensen predicted that the Army National Guard will be “the first component and the first service that comes out of the recruiting dip.”

Making the Case

Still, he said, a different approach is needed to make Army service more appealing to young people.

The challenge has been “our inability to attract the attention of younger men and women right now,” he said. “It’s not that [they] don’t have a propensity to serve, because I see them very active in their local communities. We just have to make our case in our argument why serving in the Army National Guard is important.”

National Guard soldiers who had to defer their professional military education because of the high operational tempo during the pandemic are catching up at schools managed by the National Guard and the Regular Army. Starting Oct. 1, some of those soldiers deployed to Kuwait will be able to complete NCO professional development courses in-country with a mix of online work and in-person instruction by a small cadre of instructors who will travel to them.

“What we’re trying to do is maximize that time period when you’re mobilized,” Jensen said. “In many cases, when a soldier deploys, they put a school off.”

Organizational Shift

Expressing his confidence that “our organizations will be ready” if needed, Jensen said the Army National Guard is well into a plan that reorganizes it from a brigade-centric force into one that’s focused on the division. This transition will align it more closely with the Regular Army

 Crafted in Switzerland



PC-24
THE CRYSTAL CLASS



 **PILATUS** 

WHEN MISSION-FIT IS CRITICAL, CHOOSE THE AIRCRAFT DESIGNED FOR THEM ALL

The world's first Super Versatile Jet takes off! Its versatility is what turns a good tool into a great one. Legendary Swiss craftsmanship, a huge cabin and cargo door and a reconfigurable interior for any mission profile. And it can access thousands more runways than traditional jets. Fly multi missions with the PC-24 - contact us now!

pilatus-aircraft.com



and anticipates the transformation of some combat capabilities to meet the Army's modernization goals.

While the move to division-centric formations is "going exceptionally well," Jensen said, the National Guard is "waiting on the Army to make some force structure decisions in terms of how certain organizations are going to look."

As an example, Jensen said the Army is "looking at bringing back division-level cavalry or reconnais-

sance units," a decision that would impact the National Guard's reorganization plans.

"We're still kind of in a pause waiting for some of these decisions to be made," he said, explaining that the Army's 2014 decision to bring back division artillery is already coming into play.

"Extended Range [Cannon] Artillery is coming to the National Guard," Jensen said. "We're phasing that in." It means the Guard's self-propelled artillery capability will be converted to long-range precision fires, fulfilling one of the Army's six modernization priorities.

It's an important transition that Jensen said will help seal the National

Guard's inclusion in the Army's broad modernization strategy, but it also could bring problems if it moves too quickly.

"We think potentially it could be very disruptive, much like in the early 2000s when we went from division-centric to brigade-centric" formations, Jensen said. "It was very disruptive in the Guard, and every state was touched pretty dramatically. We are taking a little bit slower approach to this because this is a full modernization effort. It's going to take more than three or four years."

Staying Relevant

Modernizing along with the Regular Army, Jensen noted, goes beyond reorganizing a unit to accommodate new capabilities. It also helps reassure soldiers that as members of the Army National Guard, they will remain relevant to the Total Army.

Jensen said he has detected among soldiers "a little bit of stress out there" on the modernization issue. Many soldiers have told him that "they are afraid that their unit's going to be left behind, and they're not going to be modernized, therefore they're no longer relevant," Jensen said.

Jensen said he also detects a sense that junior leaders, warrant officers and NCOs "still want to contribute to the Army as part of a mobilization" should their units be called upon to augment the Regular Army, validating the Army National Guard's ultimate relevance to the total force.

Having pivoted from almost non-stop operations since 2020, today's Army National Guard is like a triathlete who is "coming out of the water," Jensen said.

"You're about to get on the bike, so you've got to get the wetsuit off, you've got to get your bike shorts on, and then you're going to get on the bike, and you're going to do that until it's time to run," he said. "I think that is where we are right now, where we're coming out of the water, and we're transitioning to the next key event for our organizations." ★

Army National Guard Director Lt. Gen. Jon Jensen, in cap, meets with Guard soldiers at Camp Grayling Joint Maneuver Training Center, Michigan.

MICHIGAN NATIONAL GUARD



ELECTRICAL WIRING MANAGEMENT, REIMAGINED

With the introduction of the world's first Electrical Health Usage and Monitoring System (e-HUMS™), United Aircraft Technologies is revolutionizing electrical wiring maintenance and monitoring by *reducing maintenance costs, downtime, and manhours.*

To learn more, visit us at *AUSA 2022 Hall B, Booth 2054.*



www.uairtek.com



Shaping the Future

Reserve Chief Daniels Reviews Critical Capabilities

By Gina Cavallaro
Senior Staff Writer

Shaping the force for tomorrow means training realistically today, said Lt. Gen. Jody Daniels, who is on a campaign to get more of her soldiers out to the field as she prepares the U.S. Army Reserve for big changes.

Daniels, who has been chief of the Army Reserve and commander of the U.S. Army Reserve Command since July 2020, is navigating a tough recruiting slump and what she calls a “COVID hangover” in parts of the force that has slowed a return to some full-scale training.

To get ahead of these challenges, Daniels said, she is overhauling the component’s recruiting effort to appeal to Americans of all walks. She also is working to enrich the Army Reserve experience for the current force by driving cultural change.

At the same time, as the Regular Army conducts a top-to-bottom review to prioritize critical combat capabilities for the decades ahead, Daniels is leading the Army Reserve through a review of its own capabilities to bring the component into the future apace with the Regular Army and the Army National Guard.

Except for one infantry battalion headquartered at Fort Shafter, Hawaii, the Army Reserve’s authorized



force of 189,500 soldiers provides most of the Army’s combat support and combat service support capabilities, including military police, signal, chemical, transportation, medical, legal, public affairs, civil affairs, chaplains, quartermaster, postal and military information support soldiers.

To meet the Total Army’s future needs, Daniels said, she is keen to get the component onto a “sustainable strategic path” forward, which could include taking on new capabilities that more closely complement combat arms formations.

As the process moves ahead, new ideas, creative thinking and hard questions are being encouraged by Daniels, who begins working with the Army National Guard this fall to assess what each component brings to the table.

“We know we are headed to multi-domain operations. We know there are these different types of priority units and capabilities the Army

wants to build as we look to 2030, 2040,” Daniels said. “But what does the Reserve look like?”

Taking Stock

That and other questions are being explored by Daniels and her staff as they envision what might be applicable to the future of the Reserve.

She is focused on identifying where the Reserve can make a difference, where it can be of the most use, and whether bolstering capabilities such as the Army’s cyber and information advantage strategy would mean changes in structure, training or people.

As an example, an initiative under discussion in the Army involves the possible creation of what officials are calling protection formations that could integrate some Reserve capabilities “that fall into that protection realm,” Daniels said. These could include specialties such as military police and chemical, biological, radiological, nuclear and explosives tech-

Above: U.S. Army Reserve Chief Lt. Gen. Jody Daniels talks to a soldier during an exercise at Fort Hood, Texas. **Opposite:** Daniels, second from left, meets with soldiers during an exercise at Fort McCoy, Wisconsin.

ABOVE: U.S. ARMY/STAFF SGT. FELIX FIMBRES. OPPOSITE: U.S. ARMY/SGT. 1ST CLASS GARY WITTE



nicians who protect friendly forces from the enemy in a multidomain environment.

"We're monitoring as that goes forward, and do we have a role on that front," Daniels said, suggesting that an Army discussion that took place in 1993 "about what ends up in each component might need a relook at this point."

A relook of sorts could see the Reserve further adapt by taking on some "combat arms-ish, if not combat arms itself" capabilities that don't involve supporting heavy formations such as brigade combat teams, she said.

These might include reconnaissance and counter-unmanned aerial systems capabilities, things that are "on the lightweight side" that can be easily accommodated geographically and mobilized in a tailored fashion when needed for the fight, Daniels said.

The assessment will consider every angle of the Army Reserve, including

skills resident in the force that can be leveraged to greater advantage, what role technology will play in networking, communications, engineering and artificial intelligence, and even theater logistics.

"It's not just about transportation," she said of theater logistics. "There's a lot of capabilities in there that the National Defense Strategy says that we, the Army, should be looking at, and the Army Reserve seems to have a bulk of that capability."

Daniels' suggestions for the future of the Army Reserve are "food for thought" at this point, she said, "because I really don't know what the answers are, but we're looking to sort of shape that future, to shape tomorrow, to look at where we can provide maximal value."

Back to the Field

While conversations about the future take place with her peers at the highest levels of the Army, Daniels continues to lead the force toward

meaningful culture change.

In an effort begun shortly after she took over as chief, Daniels has stepped up her campaign to instill a new ethos that gives junior leaders the go-ahead to focus more on "tough, realistic training done safely," and less on mind-numbing metrics reports that don't always paint an accurate picture.

Before the COVID-19 pandemic, Daniels said, the Army Reserve was "doing pretty good" supporting missions at home and overseas. But the force got "comfortable staying home in fuzzy slippers," teleworking and doing remote battle assemblies.

"The Army Reserve had gone into sort of a love of metrics. It's really easy to do metrics, unfortunately, way too many of them, and then people call that readiness," Daniels said.

Things in the Army Reserve don't change frequently enough to require weekly unit reports that measure administrative details, she said, describing such reporting as "interest-



ing but not relevant. ... It's not even interesting."

So passionate is her quest to flip the mire of metrics to time better spent on training, that Daniels penned and published a paper in April, "Changing Culture: Moving from Metrics to Readiness," a document she calls "a top cover paper that says, 'Go do training.'"

"Lower echelon leaders need to be able to focus on achieving readiness. Higher headquarters need to focus on enabling subordinates' training," she wrote, pointing out that company commanders "spend one or two nights a week" preparing metrics reports.

The "hyper-focus on achieving all green metrics," she wrote, "is distracting from what really matters: recruiting, developing, and retaining cohesive teams and units that are highly trained, disciplined, and fit to accomplish their wartime mission."

Above: U.S. Army Reserve Chief Lt. Gen. Jody Daniels testifies before a Senate subcommittee in Washington, D.C.

Below: Daniels, left, awards the Army Commendation Medal to Maj. Jonda Henderson in Paducah, Kentucky.

ABOVE: ARMY NATIONAL GUARD/SGT. 1ST CLASS ZACH SHEELY. BELOW: U.S. ARMY RESERVE/STAFF SGT. DAVID GRAVES



Monday War Stories

Daniels is hopeful that her drive to change the culture of measuring readiness with metrics will have collateral benefits, too.

When junior leaders and soldiers get hands-on training for the jobs they signed up to do, when equipment breaks and has to be fixed and leadership skills are developed, she

said, it foment Monday morning "war stories" people can tell when they're back at their civilian jobs, potentially piquing the interest of their co-workers.

"My objective is twofold. One, I believe it will increase retention because you're doing stuff worth doing, you're making a difference, it's interesting, you're learning and advancing your



CLASSIFIED PLACES TO GO. UNNAMED PEOPLE TO SEE.

When the going gets tough, the United States Military entrusts its protective hard-case needs to Gemstar. Gemstar hard cases are proudly manufactured in our fully modernized, state-of-the-art facility in Cannon Falls, Minnesota. And because our protective hard cases are manufactured right here on American soil, this makes Gemstar the ideal partner to help diversify and strengthen your supply lines. Standard and custom cases available. To start a project contact a packaging expert today at [GemstarMFG.com](https://www.GemstarMFG.com).



VISIT US AT AUSA 2022
BOOTH #8227 IN HALL E

GEMSTAR 
PROTECTIVE HARD CASES
TRUST FOR THE LONG HAUL



skills. The other is that, now you're talking about it, and it may help with accessions," Daniels said.

The Army Reserve is in the same recruiting hole as the Regular Army, struggling to attract young Americans whose eligibility to serve has nosedived because of obesity, substance abuse issues and a lack of proper education.

Add to that the propensity to serve, which has plummeted to 9%, the lowest level since 2007, according to the Army.

In addition to generating enthusiasm within the force, Daniels is overseeing development of a multimedia marketing campaign that she hopes will help the Reserve get past the recruiting woes that have affected all the services.

As the message trickles down to the force, Daniels said, more people are showing up for annual training events, but fewer are making it to weekend drills. She chalks this up to the sharp increase in travel costs, the "COVID hangover" effect and choices people have made in a tumultuous and changing world. Still, she's betting her efforts will infuse the momentum the Reserve needs to attract new people.

With enjoyable training, she said, the soldier's story isn't, "Oh, I hung out at the drill center. No, I was out driving a Humvee, or I was running a 500-pound washing machine, or I was running fuel samples through a purification system [or I was] putting down a concrete building form. I was doing something."

Pace to the End

Daniels and her husband, John McCarthy, also continue to engage Army Reserve families with quarterly town halls, Facebook Live meetings and spouse programs. The goal is to share

as much information as possible to a highly dispersed force.

With about two years left in her tenure as chief of the Army Reserve, Daniels turned to some of the Army's most experienced leaders—serving and retired senior officers, enlisted soldiers and warrant officers—to help her gauge her performance and the way forward.

"I'm calling it my midtour review," Daniels said of the three-day gathering in August in Chicago. "I don't want to get to the point where I enter into the fourth year and go into hysteria and drive the staff crazy."

The review considered objectives for the next 24 months, what should be continued, what should change, what's working, what's not and what the plan of action should be for the Army Reserve into 2030 and 2040.

"I've seen so many people [in command] hit that final year and just go into irreversible momentum," Daniels said. "I want to start now and just continue on a steady, consistent pace to the end." ★

Lt. Gen. Jody Daniels, chief of the U.S. Army Reserve and commander of the U.S. Army Reserve Command, hosts an Army Twilight Tattoo performance at Joint Base Myer-Henderson Hall, Virginia.

U.S. ARMY RESERVE/SGT. MARIA CASNEIRO

AIR | LAND | SEA | PROPULSION | WEAPON SYSTEMS | ELECTRONIC SYSTEMS | TEST, TRAINING & SIMULATION

WE ARE TEXTRON SYSTEMS

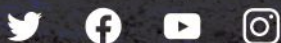
▶▶▶ JOIN US AT

AUSA 2022

ANNUAL CONFERENCE

- ▶ **OCTOBER 10-12 | BOOTH #3024**
- ▶ Walter E. Washington Convention Center Halls ABC

| TextronSystems.com



TEXTRON Systems

▶ PUSHING PAST POSSIBLE

© 2022 Textron Systems Corporation

Making a Difference

Dole Continues Service With Focus on Military Caregivers

Elizabeth Dole, a former U.S. senator, two-time Cabinet secretary, former leader of the American Red Cross and founder of a national organization focused on supporting military families and caregivers, was selected by the Board of Directors of the Association of the U.S. Army as the 2022 recipient of the George Catlett Marshall Medal for sustained commitment to the men and women of America's armed forces.

This award, AUSA's highest honor for distinguished public service, will be presented Oct. 12 at the George Catlett Marshall Memorial Dinner, the final event of the 2022 AUSA Annual Meeting and Exposition in Washington, D.C.

Established in 1960, the award is named for George Catlett Marshall, who served as Army chief of staff, secretary of state and secretary of defense.

A native of Salisbury, North Carolina, Dole served in the Senate from 2003 to 2009, after she had already held top administration jobs in the Johnson, Nixon, Ford, Reagan and George H.W. Bush administrations.

She spent eight years as president of the American Red Cross, leading a major transformation in the way the organization collects, tests and distributes half the nation's blood supply.

After leaving public office, she founded the Elizabeth Dole Foundation in 2012. It is dedicated to transforming how the nation supports the 5.5 million Americans caring for a wounded, injured or ill service member or veteran at home.

Her late husband, Bob Dole, a World War II veteran and former congressman and senator, received the Marshall Medal in 2001.

In this essay, Dole reflects on her work with military families and the importance of caring for those who have served.

By Elizabeth Dole

In 2016, my husband, Bob, and I traveled to Italy's Apennine mountains, south of Bologna. During World War II, Bob had been deployed there to lead a platoon from the U.S. Army's 10th Mountain Division.

On April 14, 1945, just weeks into his assignment, Bob led his soldiers up the heavily mined slopes of Hill 913. During the charge, he selflessly put himself in harm's way to retrieve his injured radioman. In doing so, he suffered devastating wounds. After laying paralyzed on the battlefield for 10 hours, he spent 39 months recovering in military hospitals. Bob had to fight his way back to health, and he never let his limitations stop him.

As we stood among those mountains so many years later, it was hard to imagine the serene landscape set ablaze by war, and the fate of the Continent hanging in the balance. Millions of Americans like Bob joined together to fight back tyranny, preserve freedom and restore peace.



Value of Service

I was only a young girl during World War II, though I remember learning what it meant for an entire nation to be at war. Those who did not wear the uniform supported those who did.

I also witnessed how the stress of war finds its way back home. My

brother, John, was 13 years my senior and eligible to serve. When he was sent off to the Pacific aboard the USS Windham Bay, my mother constantly interrupted my radio programs to turn on the news in hopes of being reassured, in some way, about John. She made so many trips to the



mailbox that I did my best to flood her with postcards when I went away to summer camp. I knew she wanted to hear from John, but I thought it might help lift her spirits.

Above all else, “the greatest generation” showed me what America can accomplish when we come together in service to our country. When we accept that public service is often hard, and that it so rarely comes with personal glory, we can focus on its higher purpose—to achieve something greater than us all.

I am deeply honored to receive the same Marshall Medal presented to some of the heroes of the generation that taught me the idea of unity through service: Gen. Dwight Eisenhower, President Harry Truman, President George H.W. Bush and, of course, the Hon. Bob Dole, just to name a few.

Cause for Unity

For the last decade, I have sought to inspire that unity through service around the crisis facing our military caregivers—the young spouses, mothers and fathers who care for wounded, ill and injured service members and veterans at home. It was a mission that started unexpectedly in 2011, after Bob had been hospitalized at the then-Walter Reed Army Medical Center for nearly 11 months.

As I spent time around the hospital, I visited with the other loved ones quietly looking after their wounded warriors. Each of them shared stories about the emotional shock of their veteran’s injuries, their confusion about the medical decisions now in their hands, their frustration with the bureaucracy of our health system and, in too many cases, a hopelessness about the future.

After Bob was released from the hospital, I established the Elizabeth Dole Foundation to learn more about the challenges facing our military caregivers and how our nation could effectively respond to them. I believed that this was a new phenomenon for our country. Battlefield medicine is so improved that many soldiers who would have died in former wars are surviving, thank goodness. But of that group of survivors, many were coming home with multiple wounds, illnesses and injuries.

Opposite: Bob and Elizabeth Dole share a laugh at an August 1996 campaign stop in Abilene, Kansas, during Bob’s presidential campaign. **Above:** Elizabeth Dole testifies before the U.S. Senate Special Committee on Aging in June 2017 in Washington, D.C.

OPPOSITE: DOLE INSTITUTE OF POLITICS. ABOVE: ELIZABETH DOLE FOUNDATION



ries requiring a caregiver for years.

We commissioned the Rand Corp. to provide the first nationwide, comprehensive, evidence-based research on those caring for the wounded at home. Rand informed us that 5.5 million Americans are caring for a service member or veteran; that caregivers are vital to the health of their veterans. In fact, a well-supported caregiver is the most important factor in the well-being of that wounded veteran. Rand also highlighted an alarming fact: These hidden heroes are not trained professionals, and our nation has left them utterly unprepared as they responsibly care for those who served.

Elizabeth Dole and military and veteran caregivers gather for the launch of the Elizabeth Dole Foundation's Hidden Heroes Campaign in September 2016 in Washington, D.C.

ELIZABETH DOLE FOUNDATION

The strenuous role of caregiving takes an enormous toll. Military caregivers report elevated rates of emotional anxiety, physical illness and chronic pain—higher than those reported by civilian caregivers. Frequently, they become socially isolated and experience strain within their families. Caregivers struggle to maintain at least some part-time employment, for they are often the sole breadwinner for the family. Tragically, some caregiving families have experienced hunger and homelessness.

Our foundation has recently built on the groundbreaking Rand report with additional evidence-based research regarding the effects of caregiving on children. An estimated 2.3 million kids live in a military caregiving home. These children, like their caregiver parents, are models of selflessness and compassion in their caregiving roles. Even the youngest

of these hidden helpers knows how to read their parents' moods, keep the house calm and assist mom or dad with their prosthetics. Unfortunately, also like their parents, they absorb enormous stress and anxiety, often withdraw from their friends and become hypervigilant about the wounded parent's emotional triggers.

Decade of Progress

In the 10 years since the Elizabeth Dole Foundation set out on our mission to recognize, honor and support America's hidden heroes, we have seen military caregivers indeed become a unifying cause for our nation.

By working with both sides of the political aisle, we have successfully championed multiple pieces of legislation, including the largest expansion of caregiver benefits in our nation's history with the 2018 Department of Veterans Affairs MISSION Act, as it is called.

PROTECT OUR SOLDIERS
WITH THE BEST.



IRONFIST

Iron Fist is the trusted Active Protection System responsible for safeguarding our nation's most valuable asset, the U.S. soldier.



Scan for more information regarding Iron Fist.

www.gd-ots.com

GENERAL DYNAMICS
Ordnance and Tactical Systems



We built a coalition of more than 300 partners, who have helped us develop scores of new caregiver programs and resources. Through our Hidden Heroes Cities—a network of more than 190 communities and growing—we have been able to localize many of these resources so caregivers do not have to travel far from home to receive the support they need.

Our foundation also has developed direct services to address the most urgent and pressing concerns of caregivers. They include our Campaign for Inclusive Care, developed with the Department of Veterans Affairs and the support of USAA. The campaign created a virtual training program that is coaching VA providers nationwide on how to incorporate caregivers into their veterans' health care teams from day one.

Our caregivers tell us their No. 1 need is respite. During the pandemic, we created a Respite Relief program

to send a professional into the home to care for the wounded, allowing the burned-out caregiver a bit of relief and time away. To date, we have arranged more than \$1 million worth of these no-cost professional care services.

Just this year, we teamed with the Bob & Dolores Hope Foundation to provide emergency relief grants to struggling caregivers. The Hope Fund for Critical Financial Assistance is rescuing caregiver families by covering unexpected bills that threaten to push them into a financial crisis.

I am proud that our foundation has been able to engage many well-respected TV and film personalities to join Tom Hanks, our Hidden Heroes Campaign chair, in assuring military caregivers that their service is recognized. As we raise awareness, they no longer face their challenges alone.

Let's Walk Together

I am often asked what our military and veteran communities need most. While there is certainly a list of practical services and resources, my answer increasingly has been that they need us to rediscover our sense

of unity in America. We will not have the fortitude to solve our toughest challenges—which include our military caregiver crisis—if we attempt to do so while divided.

Making a difference, a positive difference, in the lives of others has always been my inspiration. And what better way to do that than through public service? If we recommit ourselves to service—if we humbly place our faith in each other—we can restore unity in our nation.

The timeless notion that “together we rise, divided we fall,” reminds me of my favorite historical anecdote about one of the Army's most storied leaders. It involves a night in 1945 when Eisenhower was walking along the banks of the Rhine River, thinking of the crossing in which he would lead the Allied armies. He met a soldier and asked him why he wasn't sleeping. The young GI, who did not recognize Eisenhower, said, “I guess I'm just a little nervous.”

“So am I,” Eisenhower said. “Let's both walk by the river together, and we'll each draw strength from each other.”

For more than 247 years, the U.S. Army has exemplified the power of what Americans can accomplish when we work as one. Against all odds, the Army first secured our nation's freedom. As our young democracy grew, it preserved our independence and held the union together. In time, America's Army grew to become the world's most powerful fighting force, suppressing tyrants and violent dictators. Today, the Army stands as the greatest friend that freedom-loving people have ever known.

As a nation, we should let the example of the American soldier inspire us to rediscover our unity through a spirit of service. Together, we can be the source of strength our soldiers, Army families and caregivers need. For all they have given to our country, and for the lifetimes of sacrifices many will continue to make, they deserve to feel the eternal gratitude and support of a united nation. ★

Elizabeth Dole meets with Dole Caregiver Fellows during the Elizabeth Dole Foundation's 2017 national convention in Washington, D.C.

ELIZABETH DOLE FOUNDATION



MANUFACTURING MEETS **INNOVATION**

For over 50 years, General Dynamics Ordnance and Tactical Systems (GDOTS) has been the industry leader for the manufacturing of indirect fire artillery and mortar metal parts. Through the design, development, and production of extended range cannon artillery munitions, GDOTS is now a complete solutions provider for legacy and next generation artillery systems, delivering critical capabilities to the warfighter making us ***ready today, innovating for tomorrow.***



ONE MAST. INFINITE CONFIGURATIONS.

We build the world's most
advanced multi-purpose, portable
mast platforms for military
communications and surveillance.

Tested. Proven. Made in the U.S.A.



www.blueskymast.com





SPEED

Designed to enable warfighters to quickly and easily deploy the mast in any environment.



PORTABILITY

Patented tripod based, sectional mast designed to be independent of vehicles and shelters.



VERSATILITY

Patented tool-less accessories reduce set up time and help simplify field deployments.



DEPENDABILITY

Precision engineered components to achieve maximum performance and durability.



AER

A HAND-UP NOT A HAND-OUT

OFFICIAL NONPROFIT OF THE U.S. ARMY

AER provides zero-interest loans, grants and scholarships to Soldiers and Families.

Assistance is available worldwide 24/7.

Donations are tax-deductible.

Ninety cents of every dollar donated goes straight to Soldiers and Families in need.

Go to www.aerhq.org or scan the QR code for more information.



ARMY EMERGENCY RELIEF

SOLDIERS HELPING SOLDIERS SINCE 1942



YEAR IN REVIEW

Paratroopers of the 82nd Airborne Division walk to their aircraft at Pope Army Airfield, North Carolina, as they embark on a deployment to Europe.

U.S. ARMY/SGT. HUNTER GARCIA



OCTOBER 1

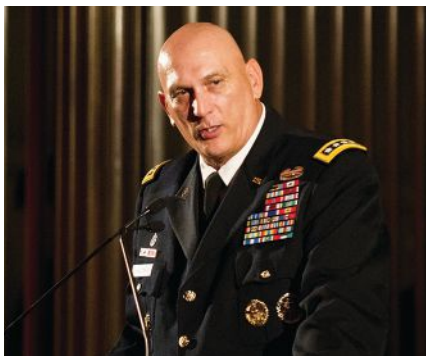
Retired Gen. Bob Brown becomes president and CEO of the Association of the U.S. Army, succeeding retired Gen. Carter Ham, who departed Sept. 30 after leading the association for five years. Brown, a former commander of U.S. Army Pacific who joined AUSA in January 2021 as executive vice president, says he is "so proud to be a part of AUSA." The Army needs AUSA "now more than ever," Brown says, adding that senior leaders including Army Secretary Christine Wormuth and Army Chief of Staff Gen. James McConville echoed that sentiment in a recent meeting. "We have a tremendous vision ... and we play a huge role as the voice of the Army," Brown says.

Retired Gen. Bob Brown, president and CEO of the Association of the U.S. Army.
AUSA



OCTOBER 8 ▲

Retired Gen. Raymond Odierno, the former Army chief of staff who commanded U.S. forces in Iraq, dies at age 67. A native of Rockaway, New Jersey, Odierno was commissioned as a cavalry officer upon graduation from the U.S. Military Academy at West Point, New York, in 1976. During more than 37 years of service, he commanded units at every echelon and served in Germany, Albania, Kuwait, Iraq and across the United States. He also led the Army through steep budget cuts and battled to maintain the service's troop strength and readiness under the threat of sequestration. "I began my career in a hollow Army. I am determined not to end my career in a hollow Army," Odierno told the Senate Armed Services Committee in February 2013.



Above: Then-Army Chief of Staff Gen. Raymond Odierno speaks to soldiers from the 2nd Battalion, 75th Ranger Regiment, at Fort Hunter Liggett, California, in January 2014. **Below:** Odierno speaks at the National Archives in Washington, D.C., in October 2011.

ABOVE: U.S. ARMY/STAFF SGT. STEVE CORTEZ. BELOW: U.S. ARMY/STAFF SGT. TEDDY WADE

OCTOBER 11

Army Secretary Christine Wormuth says in her keynote speech at the Association of the U.S. Army 2021 Annual Meeting and Exposition in Washington, D.C., that after an "extraordinary" year, the Army "has a lot to be proud of, but we also have a lot of work to do." With tough questions facing the force, she says, the Army must consider how and when enemies choose to fight, what that might mean for the future of land power and how the Army can best contribute to multidomain operations. While suggesting the Army hasn't "fully thought our way through all the challenges we may face in the future," Wormuth expresses confidence in the Army's abilities. "We aren't just any army. We are America's Army," she says.



Secretary of the Army Christine Wormuth delivers the keynote address at the 2021 Association of the U.S. Army Annual Meeting and Exposition in Washington, D.C.

AUSA/ROD LAMKEY



OCTOBER 11

Spc. Justin Earnhart, a human intelligence collector assigned to the 470th Military Intelligence Brigade at Joint Base San Antonio-Fort Sam Houston, and Sgt. Adam Krauland, a signals intelligence voice interceptor with the 25th Infantry Division at Joint Base Elmendorf-Richardson, Alaska, are announced as winners of the 2021 Army Best Warrior Competition. Earnhart is recognized as Soldier of the Year and Krauland as NCO of the Year during the Association of the U.S. Army 2021 Annual Meeting and Exposition. During the awards ceremony, Earnhart is promoted to corporal by Sgt. Maj. of the Army Michael Grinston. Krauland is promoted to staff sergeant by Grinston on Oct. 13.

The 2021 Soldier of the Year is Spc. Justin Earnhart, left, and the 2021 NCO of the Year is Sgt. Adam Krauland.

AUSA/MIKE MORONES

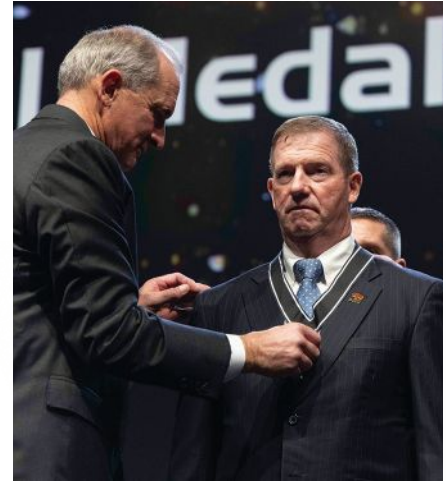


OCTOBER 12

In a keynote speech at the Dwight D. Eisenhower Presentation at the Association of the U.S. Army's Annual Meeting and Exposition, Army Chief of Staff Gen. James McConville says despite a busy and challenging year, the Army remains committed to its priorities as it transforms for the future. "This has been a uniquely challenging time for the Army, but each challenge and each crisis has only made us stronger," he says, adding, "This past year has reminded us time and time again why people are our No. 1 priority and why it's so important to get the right people in the right place at the right time."

Army Chief of Staff Gen. James McConville speaks at the 2021 Association of the U.S. Army Annual Meeting and Exposition.

AUSA/ROD LAMKEY

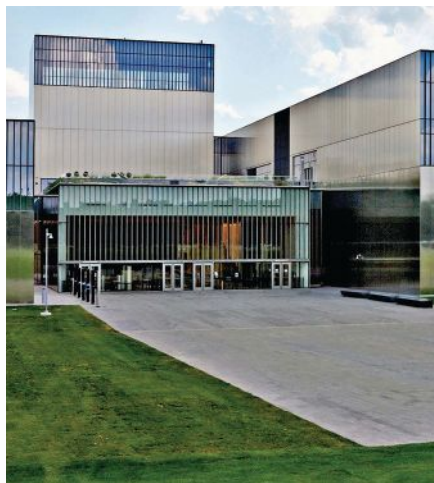


OCTOBER 13

The Association of the U.S. Army's highest award for dedicated and selfless service to the nation, the George Catlett Marshall Medal, is presented to retired Sgt. Maj. of the Army Kenneth Preston. During his time in uniform and his post-service career, Preston, a career cavalry soldier, dedicated himself to improving the military profession and making lives better for troops and their families. Preston, a former vice president for NCO and Soldier Programs at AUSA, retired from the Army with 36 years of service after a final assignment as senior enlisted adviser to two successive Army chiefs of staff. He is the first NCO to receive AUSA's top award.

Retired Gen. Bob Brown, left, president and CEO of the Association of the U.S. Army, awards the association's George Catlett Marshall Medal to retired Sgt. Maj. of the Army and former AUSA Vice President Kenneth Preston at the association's 2021 Annual Meeting and Exposition.

AUSA/MIKE MORONES



OCTOBER 15

The National Museum of the United States Army is awarded the 2021 Jinx Hazel Award, a prize given each year by ArtsFairfax, the arts agency of Fairfax County, Virginia, where the museum is located. The prize honors organizations and people "whose vision and commitment has helped shape local cultural life."

Museum Director Tammy Call notes that art has long been inextricable from conflict. "The Army has deployed artists in support of our soldiers in all of our conflicts since the Civil War," she says.

The National Museum of the United States Army at Fort Belvoir, Virginia.
NATIONAL MUSEUM OF THE UNITED STATES ARMY



OCTOBER 17

Retired Gen. Colin Powell, the first Black chairman of the Joint Chiefs of Staff and secretary of state, dies at age 84 due to complications from the COVID-19 virus. The son of Jamaican immigrants, Powell was raised in the South Bronx and attended City College of New York, where he joined the ROTC program. Powell served two tours in Vietnam, receiving a Purple Heart for wounds sustained on his first tour, and serving several roles within the 23rd Infantry Division. He also received a Soldier's Medal for repeatedly returning to a burning helicopter to rescue others, despite being injured. After Vietnam, Powell served in the Pentagon and Washington, D.C., then in Korea. He commanded the 101st Airborne Division's 2nd Brigade and was senior military assistant to the secretary of defense. He then commanded V Corps before serving as deputy national security advisor, then national security advisor, at the White House. He received his fourth star in April 1989 and, within months of commanding the U.S. Army Forces Command, was tapped to be the 12th chairman of the Joint Chiefs of Staff. His tenure coincided with the end of the Cold War and several crises, including the invasion of Panama in 1989 and Operation Desert Storm in 1991. Powell retired from the Army in 1993 and was nominated by President George W. Bush to be secretary of state, serving from 2001 to 2005.

Retired Gen. Colin Powell at the Vietnam Veterans Memorial in Washington, D.C., in November 2013.
DoD/LISA FERDINANDO



OCTOBER 29

Gen. Laura Richardson takes command of the U.S. Southern Command, becoming the first woman in the Army to lead a geographic combatant command. The trailblazing officer also is only the second Army woman to reach four-star rank. Southern Command, headquartered in Doral, Florida, is responsible for an area that encompasses 31 countries and 16 dependencies in Central and South America and the Caribbean, providing contingency planning, operations and security cooperation. Defense Secretary Lloyd Austin, who speaks at the ceremony, praises Richardson, saying, "There isn't a crisis that she can't handle."

Gen. Laura Richardson, commander of the U.S. Southern Command, speaks at Metropolitan State University of Denver.
METROPOLITAN STATE UNIVERSITY OF DENVER/ALYSON McCLARAN

SourceAmerica®

Meeting critical apparel demands.



When the U.S. Army needed a new uniform, our Apparel and Equipment Program delivered. Through our nationwide nonprofit network, we tested, manufactured, and distributed the all new Army Green Service Uniform. See how our motivated workforce of people with disabilities can provide you the highest quality products and services.

**SourceAmerica®, an AbilityOne®
Authorized Enterprise.**

Scan for exclusive Apparel
& Equipment services for
federal customers





NOVEMBER 2

Kate Rubins, a NASA astronaut who has logged 300 days in space and four spacewalks, becomes a direct-commissioned U.S. Army Reserve major during a ceremony at the Johnson Space Center in Houston. Army Reserve Chief Lt. Gen. Jody Daniels, who administers the oath, welcomes Rubins as “our newest citizen-soldier.” Rubins, a molecular biologist, was accepted into the NASA program in 2009 and thought about joining the Army Reserve during the COVID-19 pandemic. “You have some time to think in space. One of the things I really thought about was how lucky I was to be there and what my country had done for me,” she says. “I really wanted to give back.”

U.S. Army Reserve Chief Lt. Gen. Jody Daniels, left, administers the oath of office to NASA astronaut Kate Rubins.
U.S. ARMY RESERVE/SGT. 1ST CLASS JAVIER ORONA



NOVEMBER 5 ▲

An Army National Guard soldier becomes the first woman to graduate from the U.S. Army Sniper School at Fort Benning, Georgia. The soldier, who the Army is not publicly identifying, enlisted in the Montana Army National Guard as an infantryman in December 2020. During the infantry’s 22-week One-Station Unit Training at Fort Benning, her training cadre and chain of command recommended she attend the sniper course based on her qualification as an expert shooter.

A Colorado National Guard sniper puts in range time at Fort Benning, Georgia.
U.S. ARMY RESERVE/STAFF SGT AUSTIN BERNER

NOVEMBER 10

Military In Lasting Tribute, an online memorial honoring service members who died while serving honorably on active duty, is launched by the Defense Department. Ranging from 1985 to the present, it is the first DoD memorial to include peacetime deaths. Each service member on the site has a dedicated page with their name, branch of service, rank, date of death and photo. Tributes, photos and uploaded documents are reviewed before posting on <https://tribute.militaryonesource.mil>



Soldiers render funeral honors.
U.S. ARMY/ELIZABETH FRASER



NOVEMBER 11

Ten Weeks, a documentary series highlighting the experiences of five recruits going through basic training and their interaction with drill sergeants, is released on the Roku Channel. The docuseries is produced at Fort Jackson, South Carolina, and tells the stories of the recruits, who graduated from basic training in early 2020.

A screenshot from the *Ten Weeks* docuseries.

TEN WEEKS



NOVEMBER 11 ▲

The Tomb of the Unknown Soldier marks its 100th anniversary with a full honors procession that replicates the journey made in 1921 when an unknown soldier from World War I was brought to his final resting place at Arlington National Cemetery. Members of the public line the special route inside the cemetery as a joint service flyover soars overhead. Laying a wreath at the tomb, President Joe Biden says, "One hundred years ago today, an American soldier from the First World War, as the tomb says, 'Known but to God,' completed the voyage from an unidentified battlefield in France, over the rough Atlantic seas, here to Arlington National Cemetery."



Top: President Joe Biden places a wreath at the Tomb of the Unknown Soldier at Arlington National Cemetery during a Nov. 11 ceremony. **Below:** A soldier performs guard duty at the tomb.

TOP: WHITE HOUSE/ADAM SCHULTZ. BELOW: U.S. ARMY/ELIZABETH FRASER

NOVEMBER 29

The Black Knights, the football team of the U.S. Military Academy at West Point, New York, unveil the players' uniforms for the 2021 Army-Navy game. Continuing an annual tradition that recognizes and honors an Army unit, this year's uniforms pay tribute to the soldiers assigned to the 5th Special Forces Group (Airborne). Known as Task Force Dagger, the soldiers were among the first to deploy to Afghanistan and, on horseback, link up with the Northern Alliance following the 9/11 terrorist attacks on America.



A football player from the U.S. Military Academy, West Point, New York, wears the uniform for the 2021 Army-Navy game.

U.S. ARMY/MEGAN HACKETT



DECEMBER 3

The U.S. Army Futures Command bids farewell to Gen. Mike Murray and Command Sgt. Maj. Michael Crosby, who made up the first command team of the new organization. During a ceremony in Austin, Texas, Murray is honored as he prepares to retire after more than 40 years of service, while Crosby hands responsibility as senior enlisted leader of Futures Command to Command Sgt. Maj. Brian Hester. Headquartered in Austin, the command was activated in 2018 to advance the Army's modernization priorities in the service's first significant reorganization since 1973. "You gave birth to this command, and where it is today is just absolutely incredible," Army Chief of Staff Gen. James McConville says during the ceremony.

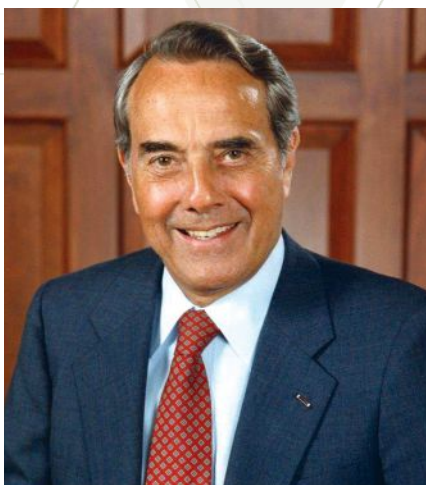
Gen. Mike Murray, left, and Command Sgt. Maj. Michael Crosby shake hands at a Dec. 3 ceremony in their honor at the U.S. Army Futures Command headquarters in Austin, Texas.

U.S. ARMY/PATRICK HUNTER



DECEMBER 5 ▲

Decorated World War II veteran and former U.S. Sen. Bob Dole dies in Washington, D.C., at age 98. Dole served in the Army from 1942 to 1948. While he was a platoon leader in the 10th Mountain Division in April 1945, he was seriously wounded during combat near Castel d'Aiano in Italy's Apennine mountains. He received two Purple Hearts and a Bronze Star with "V" device. Dole was medically discharged at the rank of captain and promoted to colonel in 2019 in a unanimous vote by the U.S. House of Representatives.



Above: Sen. Bob Dole rides in the bed of a pickup truck during a parade in Emporia, Kansas, in 1974. **Below:** Dole circa the 1980s.

WIKIPEDIA PHOTOS

DECEMBER 9

A letter written by 22-year-old Sgt. John Gonsalves to his mother on Dec. 6, 1945, is delivered by a U.S. Postal Service letter carrier to the soldier's widow, Angelina Gonsalves, 89, at the couple's home in Woburn, Massachusetts. The letter had been addressed to the soldier's mother from Germany at the end of World War II. The Gonsalveses met in 1949, married in 1953 and raised a family in Woburn until Sgt. Gonsalves' death in 2015 at age 92. The letter was inexplicably found at a postal facility in Pittsburgh, and postal workers tracked down the family and delivered it.



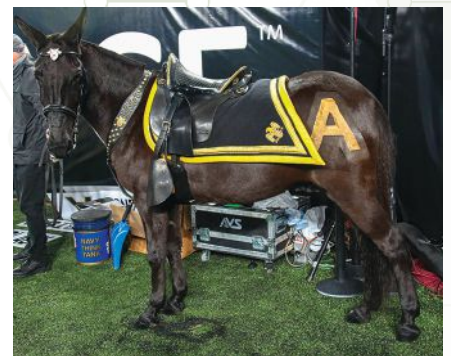
This 1945 stamp shows U.S. soldiers marching under the Arc de Triomphe in Paris as U.S. Army Air Forces planes fly overhead.

WIKIMEDIA COMMONS



DECEMBER 11

With a final score of 13-17, the Army Black Knights of the U.S. Military Academy at West Point, New York, are defeated by the U.S. Naval Academy's Midshipmen at the 122nd Army-Navy football game in East Rutherford, New Jersey.



Clockwise from top: Cadets from the U.S. Military Academy at West Point, New York, salute during pregame activities for the Dec. 11 Army-Navy football game in East Rutherford, New Jersey. Army Chief of Staff Gen. James McConville, right, speaks with Chief of Naval Operations Adm. Mike Gilday before the game. Army pride is on full display at the stadium. Army teammates prepare for kickoff. Army sophomore defensive back Quindrelin Hammonds catches a pass during pregame warmups.

CLOCKWISE FROM TOP: U.S. ARMY/MEGAN HACKETT. U.S. NAVY/MASS COMMUNICATION SPECIALIST 1ST CLASS SEAN CASTELLANO. U.S. ARMY/SGT. MICHAEL WILSON. U.S. ARMY/MEGAN HACKETT. U.S. ARMY/STAFF SGT. CHARLES BROCK





DECEMBER 12

Members of the Kentucky National Guard support recovery operations and provide help to law enforcement after a Dec. 10 tornado tears across more than 220 miles, most of it in Kentucky. Activated National Guard soldiers are "going door to door, but many of these communities don't have doors anymore. They are going rubble to rubble searching, hopefully for survivors," Kentucky Gov. Andy Beshear says. National Guard troops are also deployed to areas affected by the tornado in Arkansas, Illinois, Missouri, Mississippi and Tennessee.



Kentucky National Guard soldiers provide disaster assistance and humanitarian relief after a tornado ripped through their state.

ARMY NATIONAL GUARD AND KENTUCKY NATIONAL GUARD PHOTOS



DECEMBER 16

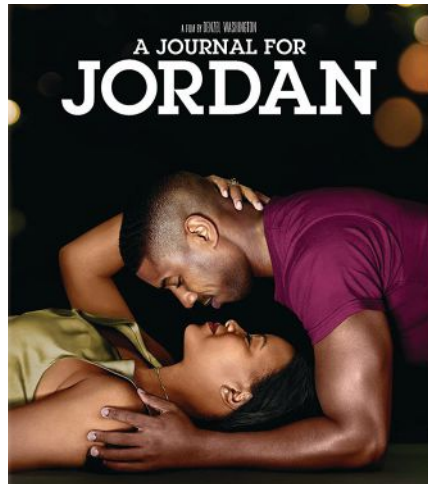
The Medal of Honor, the nation's highest award for valor, is given to three soldiers during a ceremony at the White House. Two of the soldiers—Sgt. 1st Class Alwyn Cashe and Sgt. 1st Class Christopher Celiz—are awarded posthumously. Cashe was with the 3rd Infantry Division's 1st Battalion, 15th Infantry Regiment, on his second deployment to Iraq on Oct. 17, 2005, when he saved six soldiers from a burning vehicle while severely burned himself. Cashe died at Brooke Army Medical Center, Texas, three weeks later. The Silver Star awarded to him was upgraded 16 years later to the Medal of Honor, making him the first Black soldier to receive the award since the Vietnam War. Celiz died on July 12, 2018, in Afghanistan while on his fifth deployment. A member of the 75th Ranger Regiment's 1st Battalion, Celiz was killed when his team was attacked in what the Army described as a "wave of bullets." He exposed himself to enemy fire to allow others in the unit

Above: Then-Staff Sgt. Alwyn Cashe. **Opposite above:** Sgt. 1st Class Christopher Celiz while on a domestic disaster relief mission. **Opposite below:** President Joe Biden presents the Medal of Honor to Master Sgt. Earl Plumlee during a ceremony at the White House.

ABOVE: U.S. ARMY. OPPOSITE ABOVE: COURTESY OF KATIE CELIZ. OPPOSITE BELOW: WHITE HOUSE



to reach cover, using his body to shield a wounded team member who was being medically evacuated. Celiz later died at a medical treatment facility. The third soldier, Master Sgt. Earl Plumlee, was recognized in person for his courageous actions in August 2013 near Ghazni, Afghanistan, when a car bomb blew a 60-foot hole in the perimeter wall of a forward operating base. As he and others rushed to plug the hole and stop other suicide bombers, Plumlee used his body to shield his driver as they provided cover for wounded soldiers. Finding himself outmanned and armed only with a pistol, Plumlee stopped one intruder with a grenade, then stopped another by firing at the insurgent's suicide vest, which detonated. Injured by another explosion and thrown against a wall, Plumlee didn't stop, firing his last two rounds at another intruder whose suicide vest also exploded. Like Cashe, Plumlee initially was awarded a Silver Star.



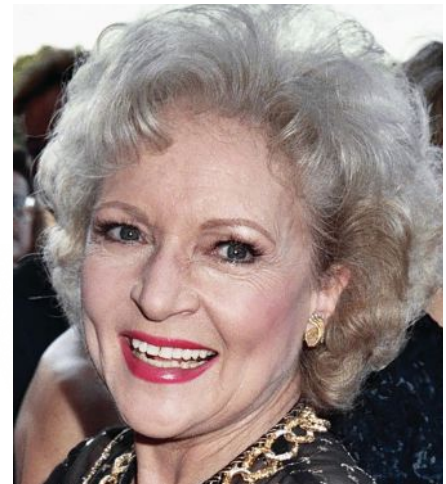
DECEMBER 25

A Journal for Jordan, a movie based on the unfinished journal of 1st Sgt. Charles Monroe King, is released in theaters. King, a former drill sergeant who was killed in Iraq on Oct. 14, 2006, while assigned to the 1st Battalion, 67th Armor Regiment, wrote the journal while he was deployed, filling it with messages of love and advice for his infant son. When he was killed, his fiancée, journalist Dana Canedy, wrote *A Journal for Jordan: A Story of Love and Honor*, a memoir upon which the movie is based.



Above: DVD cover art for the movie *A Journal for Jordan*. **Below:** First Sgt. Charles King, right, with his fiancée, Dana Canedy, and their son, Jordan.

ABOVE: AMAZON. BELOW: COURTESY PHOTO



DECEMBER 31

Legendary and beloved TV actress Betty White dies at the age of 99, prompting praise from the Army for her volunteer service during World War II. "We are saddened by the passing of Betty White. Not only was she an amazing actress, she also served during WWII as a member of the American Women's Voluntary Services. A true legend on and off the screen," the Army writes in a tweet.

Betty White at the 1989 Emmy Awards.
WIKIPEDIA



JANUARY 1

The Army expands its temporary promotion policy to all NCO ranks, allowing those who are otherwise qualified to move up before completing required professional military education. This gives soldiers more time to complete their education while the Army works through a backlog at NCO schools. "We want to make sure our best NCOs are being promoted while getting them to school as quickly as possible," Sgt. Maj. of the Army Michael Grinston says on Twitter. "This allows us to better manage talent while we bridge the gap between training and promotion requirements."

A soldier is laterally promoted from specialist to corporal during a Basic Leader Course graduation ceremony at Joint Base Lewis-McChord, Washington.

U.S. ARMY/SPC. PRESTON ROBINSON



JANUARY 3

As a rare amount of snow blankets the Washington, D.C., area, soldiers at the Tomb of the Unknown Soldier at Arlington National Cemetery faithfully keep watch without missing any of the 21-step sequences they perform 24 hours a day, 365 days a year.



A tomb guard from the 3rd U.S. Infantry Regiment (The Old Guard) maintains his watch at the Tomb of the Unknown Soldier even as snow blankets Arlington National Cemetery.

U.S. ARMY PHOTOS BY ELIZABETH FRASER



JANUARY 5

Former Pfc. Lawrence Brooks, the oldest known living World War II veteran, dies at the age of 112 in New Orleans. The son of sharecroppers, Brooks was drafted into the Army in 1940, completed a year of service and returned to work in New Orleans. In December 1941, after the attack on Pearl Harbor, Brooks was drafted again. He trained at Camp Shelby, Mississippi, and was assigned to the 91st Engineer Battalion, a unit filled with Black soldiers. Shipped to the South Pacific Theater, his unit worked in Australia, Horn Island, Papua New Guinea and the Philippines building airstrips, frame buildings, Quonset huts, roads, hospitals, housing and commercial centers. Brooks never saw combat but enjoyed relative freedom in the South Pacific, where he and his fellow soldiers found acceptance away from the segregated U.S. South. His unit departed the theater in 1944, and Brooks left the Army in 1945.



Above: Former Pfc. Lawrence Brooks with his 91st Engineer Battalion pin in New Orleans in November 2021. **Below:** Brooks during World War II.

ABOVE: MILITARY TIMES/KRISTINE FROEBA.
BELOW: WIKIPEDIA



JANUARY 12

The Army announces \$50,000 enlistment bonuses in a bid to entice new recruits in a competitive job market. Capped until now at \$40,000, the larger enlistment bonus is based on a combination of incentives offered for "the selected career field, individual qualifications, length of the enlistment contract and the ship date for training," the Army announces. "We are living with the implications of 2020 and the onset of COVID, when the school systems basically shut down. We lost a full class of young men and women that we didn't have contact with, face-to-face," Maj. Gen. Kevin Vereen, commander of the U.S. Army Recruiting Command, says in a media report.

Soldiers attending the U.S. Army NCO Academy in Hawaii stand in formation.
U.S. ARMY/SGT. CHRISTOPHER THOMPSON



JANUARY 24 ▲

Soldiers with the 82nd Airborne Division and the 101st Airborne Division (Air Assault) are among some 8,500 troops placed on heightened alert for possible deployment to Europe as Russia threatens to invade Ukraine.

JANUARY 28

Sgt. 1st Class David McAfee, the primary care NCO-in-charge at Weed Army Community Hospital, Fort Irwin, California, and Maj. Bryan Ahlborn, chief of optometry at Darnall Army Medical Center at Fort Hood, Texas, win the 2022 U.S. Army Best Medic Competition. The contest at Fort Hood begins with a road march, the Army Combat Fitness Test and a written exam. Using a map, the teams navigate to additional competition areas to complete tasks such as providing tactical combat casualty care in a simulated combat environment, donning chemical, biological, radiological and nuclear protective suits and completing basic medical and warrior tasks.



McAfee



Ahlborn

JANUARY 29

Retired Maj. Gen. John Singlaub, legendary special operations officer and decorated veteran of World War II, Korea and Vietnam, dies at the age of 100. Born in Independence, California, in 1921, he graduated from the University of California in 1943 and commissioned into the Army. He was recruited into the Office of Strategic Services, a precursor to the CIA and Special Forces. In 1944, he was part of the Jedburgh project, which saw special operators from the U.S. and Allied nations parachute behind enemy lines in southern France. In Korea, Singlaub served with the Joint Advisory Commission, Korea, recovering downed pilots and performing other clandestine operations. He led unconventional forces in Vietnam, where he led the Military Assistance Command, Vietnam-Studies and Observations Group. Singlaub retired in 1978. His awards include two Distinguished Service Medals and a Silver Star.

Paratroopers with the 82nd Airborne Division train during their deployment to Poland.

U.S. ARMY/SGT. CATESSA PALONE

Then-Col. John Singlaub circa the Vietnam War.

U.S. ARMY

WINCHESTER



AMERICA'S AMMUNITION

THE LARGEST SUPPLIER OF
SMALL CALIBER AMMUNITION
TO THE U.S. WARFIGHTER

Battle Tested. Battle Proven. Warfighter Ready.

As the nation's largest and most trusted small caliber ammunition supplier for the U.S. Military, Winchester continues to support the American Warfighter.

WinchesterMilitary.com



**PROUDLY DEVELOPING THE ARMY'S 6.8MM NEXT GENERATION SQUAD WEAPON
(NGSW) AMMUNITION MANUFACTURING CAPABILITY.**



FEBRUARY 1

President Joe Biden signs the Ghost Army Congressional Gold Medal Act, recognizing the famed World War II unit more than 75 years after it conducted visual, sonic and radio deception against German forces. The Army's 23rd Headquarters Special Troops, nicknamed the "Ghost Army," was activated in January 1944 with the sole mission of misleading the enemy. The group of 1,100 artists, engineers, professional soldiers and draftees used inflatable tanks and artillery, sent false radio transmissions and blasted audio recordings of troop movement and construction to create phantom forces, simulating two divisions—about 30,000 troops. The Ghost Army was the first mobile, multimedia, tactical deception unit in U.S. Army history and was instrumental in helping defeat the Axis powers.

A soldier holds up a decoy military vehicle at Fort Leavenworth, Kansas, circa World War II.

NATIONAL ARCHIVES



FEBRUARY 2

In a directive to commanders, Army Secretary Christine Wormuth orders involuntary administrative separation proceedings against soldiers who refuse the COVID-19 vaccine order and do not have an approved or pending request for exemption. "Army readiness depends on soldiers who are prepared to train, deploy, fight and win our nation's wars," Wormuth says. "Unvaccinated soldiers present risk to the force and jeopardize readiness."

A Utah National Guard medical detachment soldier prepares a dose of a COVID-19 vaccine at Camp Williams, Utah.

ARMY NATIONAL GUARD/SPC. ALEJANDRO LUCERO



FEBRUARY 5

Army modernization takes a step forward as a Sikorsky unmanned UH-60A Black Hawk helicopter flies for the first time. The 30-minute flight takes place at Fort Campbell, Kentucky.

In conjunction with the Defense Advanced Research Projects Agency, a UH-60A Black Hawk helicopter flies autonomously at Fort Campbell, Kentucky.

LOCKHEED MARTIN



FEBRUARY 10 ▲

Army Chief of Staff Gen. James McConville says the Army is “taking a hard look at everything” amid a high operational tempo and temporary funding that prohibits the service from starting new programs and holds funding at the prior year’s levels. In remarks during a virtual event hosted by the Heritage Foundation, McConville cites soldiers providing support for COVID-19 missions, security missions abroad, the short-notice mission to evacuate people from Afghanistan and the deployment of thousands of troops to Poland, Romania and Germany to bolster U.S. allies facing growing tensions with Russia. McConville says it’s important for the Army to stay committed to its six modernization priorities, but leaders are taking a hard look at the “31 plus four” priority programs. “We need these systems; we’re continuing to take a look at them,” he says, but the Army may need to adjust those that aren’t performing or are not on schedule or on budget. He pledges that he and Army Secretary Christine Wormuth remain “committed to modernizing the Army.”

Army Chief of Staff Gen. James McConville, center, visits soldiers at Joint Base Lewis-McChord, Washington.

U.S. ARMY/SPC. RICHARD CARLISI

FEBRUARY 11

In honor of Black History Month, the 16th Combat Aviation Brigade at Joint Base Lewis-McChord, Washington, posts to social media tributes to soldiers past and present by featuring current Black aviation soldiers in photos that re-create Black aviation soldiers from years past.



BLACK HISTORY MONTH 2022:
RECREATING HISTORY IN HIGH-DEFINITION



A soldier from the 16th Combat Aviation Brigade, below, re-creates a photo of another African American soldier, above, in this Facebook post.

U.S. ARMY



FEBRUARY 13

The story of World War II hero 1st Lt. Vernon Baker is told in *Medal of Honor: Vernon Baker*, the latest graphic novel published by the Association of the U.S. Army as part of its Medal of Honor series. Commissioned as a lieutenant in the 92nd Infantry Division, the “Buffalo Soldiers,” in April 1945, Baker and his troops were sent to assault Castle Aghinolfi, a German strongpoint in the Italian mountains. As they moved toward the castle, Baker came upon a German observation post tucked into the edge of a hill, crawled up, stuck his M-1 into the slit and fired, killing two Germans. Baker then killed two more enemy soldiers in a well-camouflaged machine-gun nest nearby. Shortly afterward, a German soldier hurled a grenade at the Americans. When it didn’t explode, Baker shot the enemy as he tried to flee. Baker then went down into the draw alone and used a grenade to blast open the concealed entrance of another dugout. He shot a German who ran out and tossed a grenade into the dugout, killing two more Germans. As Baker climbed out of the draw, machine-gun and mortar fire rained down on his soldiers. When reinforcements didn’t arrive, Baker volunteered to cover the soldiers’ withdrawal, destroying two more enemy machine-gun positions in the process. The next night, he led a second assault through enemy minefields and heavy fire toward the objective. The Distinguished Service Cross he was awarded was upgraded to the Medal of Honor, which he received at the White House in 1997.

From the cover of the AUSA graphic novel *Medal of Honor: Vernon Baker*.

AUSA



FEBRUARY 14

A ferry boat that travels between the New York boroughs of Staten Island and Manhattan is christened in honor of Staff Sgt. Michael Ollis, a native of Staten Island who was killed in Afghanistan. A member of the 10th Mountain Division's 2nd Battalion, 22nd Infantry Regiment, at Fort Drum, New York, Ollis, 24, was killed on Aug. 28, 2013, while shielding a Polish officer from a complex assault on Forward Operating Base Ghazni. Ollis, who served one tour in Iraq and two in Afghanistan, was posthumously awarded a Silver Star for his actions.

Staff Sgt. Michael Ollis.
U.S. ARMY



FEBRUARY 15

Sgt. Maj. of the Army Michael Grinston announces the Army's Best Squad Competition, a new event aimed at sharpening efforts to build strong, cohesive teams. The inaugural competition is set to kick off in September with five-soldier squads led by either a sergeant first class or staff sergeant, a team leader who is a sergeant or corporal, and three squad members who are specialists and below. Grinston says his goal is to assess squads on their technical and tactical proficiency, as well as their cohesiveness and ability to work as a team. Twelve teams, including one each from the Army National Guard and the U.S. Army Reserve, are to compete. A Soldier of the Year and an NCO of the Year, typically named at the conclusion of the annual Best Warrior Competition, also will be selected from the 60 competitors, Grinston said, but they will not necessarily be members of the winning squad. The winners will be announced during the Association of the U.S. Army Annual Meeting and Exposition in October.

Soldiers with the 2nd Infantry Brigade Combat Team, 25th Infantry Division, get directions during a live-fire exercise at Schofield Barracks, Hawaii.

U.S. ARMY/1ST SGT. LEKENDRICK STALLWORTH



FEBRUARY 17

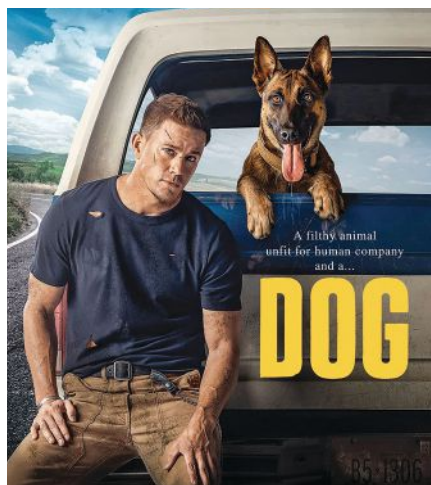
Paratroopers from the 82nd Airborne Division at Fort Bragg, North Carolina, arrive in Poland to bolster NATO allies as Russia threatens to invade Ukraine. This is followed by the arrival of soldiers from the 2nd Cavalry Regiment in Romania from their home station in Germany. Soon after, members of XVIII Corps from Fort Bragg are in Germany to oversee the influx of U.S. forces arriving in Europe, some 800 soldiers of an infantry battalion task force and 20 AH-64 Apache attack helicopters deploy from Italy and Germany to the Baltic region, and 12 Apache helicopters move from Greece to Poland.

Above: The first U.S. soldiers arrive in Europe to support American allies.

Opposite middle: Washington Army National Guard soldiers with the 3rd Battalion, 161st Infantry Regiment, stand in formation during a ceremony at Bemowo Piskie Training Area, Poland.

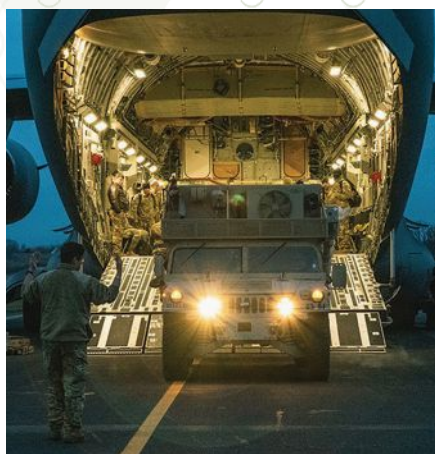
Opposite below: Soldiers disembark equipment from a cargo aircraft after landing in Europe to support NATO allies.

ABOVE: U.S. ARMY/SPC. JOSHUA COWDEN. OPPOSITE MIDDLE: U.S. ARMY/SGT. 1ST CLASS ADRIAN PATOKA. OPPOSITE BELOW: U.S. ARMY/SGT. STEPHEN PEREZ



FEBRUARY 18

Dog, a new movie about a medically retired Army Ranger and a military working dog, Lulu, is released in theaters. Starring Channing Tatum as Jackson Briggs, the story follows the journey of the former Ranger with a traumatic brain injury who is trying to get back to the action and the emotionally scarred Belgian Malinois as they embark on a road trip to a funeral and bond through a series of mishaps and adventures.



The Blu-ray and DVD cover of the movie *Dog*.

AMAZON

FEBRUARY 22

Nearly 105 years after 19 soldiers were executed for their alleged role in a 1917 race riot in Houston, a new sign is unveiled at the Fort Sam Houston National Cemetery in San Antonio acknowledging that the soldiers' trials "were flawed by serious irregularities." Known as the Camp Logan Mutiny of 1917, the riots began at the training site when tensions rose between the Black soldiers and the white Houston police and escalated over two hours, leaving four soldiers and several police officers and civilians dead. Following requests by family members and some retired general officers, the Army began a review of the events, Army Undersecretary Gabe Camarillo says. "Thanks to the very rich and deep historical record, there's ample documentation that they can currently undertake to review it to provide that broader context," Camarillo says. "At the conclusion of that process, the Board of Correction of Military Records will make recommendations to the secretary of the Army for any relief that would be appropriate."

Defendants on trial at Fort Sam Houston, Texas, in November 1917 after the Camp Logan Mutiny.

NATIONAL ARCHIVES



MARCH 2

Two years after the COVID-19 pandemic struck the U.S., DoD instructs commanders to follow new Centers for Disease Control and Prevention guidelines to determine whether troops, employees and visitors must wear masks indoors or be screened for the coronavirus. The new guidance states that masks and screening are not required for installations in counties where the CDC "community level" is considered to be low.

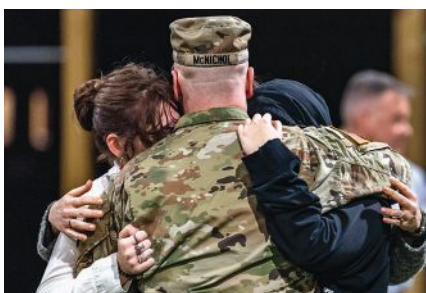
A soldier from the Oregon Army National Guard's 2nd Battalion, 162nd Infantry Regiment, 41st Infantry Brigade Combat Team, masks up en route to Morocco for a joint multinational exercise.

OREGON NATIONAL GUARD/1ST LT. ELIZABETH BIGGS



MARCH 7 ▲

Soldiers assigned to V Corps at Fort Knox, Kentucky, depart for Germany to join a rotation of forward-deployed soldiers in Eastern Europe. The soldiers will bolster the U.S. presence in the region as Russia's invasion of Ukraine intensifies. "V Corps will remain as long as we are needed by U.S. Army Europe and Africa to build readiness, interoperability, reinforce our allies and deter aggression against NATO," Maj. Gen. Robert Burke, deputy commanding general of V Corps, says in a news release. At the same time, hundreds of soldiers from the Kentucky National Guard and from III Corps at Fort Hood, Texas, deploy to support the NATO response force and augment units that have deployed from the 3rd Infantry Division, 101st Airborne Division (Air Assault), 1st Infantry Division and 82nd Airborne Division.



Above: Soldiers with V Corps at Fort Knox, Kentucky, stage their gear before deploying to Germany. **Below:** Lt. Col. Sean McNichol hugs his family at Fort Knox before leaving for Germany.

U.S. ARMY PHOTOS BY RENEE RHODES

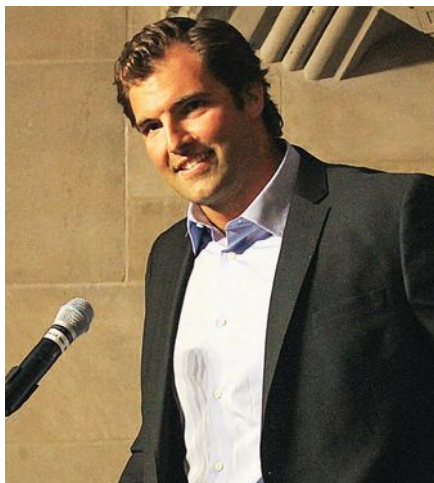
MARCH 8

Army Chief of Staff Gen. James McConville says the force has faced "a lot of challenges" over the years and now faces another in Russian President Vladimir Putin's "illegal" war in Ukraine. Speaking at an event hosted by the Association of the U.S. Army, McConville says the Army is ready, noting that the service has quickly moved highly trained and well-equipped units to Europe to stand ready for action, if needed, a feat made possible by years of training and close coordination with allies and partners. "We don't get to decide when we go," he says. "When it is time to go, we go with the Army we have."



Army Chief of Staff Gen. James McConville speaks at the Association of the U.S. Army's March 8 Coffee Series event at the National Museum of the United States Army, Fort Belvoir, Virginia.

U.S. ARMY/SGT. 1ST CLASS JOSEPH MOORE



MARCH 9

Former Army Ranger and West Point football player Alejandro Villanueva calls it quits from the NFL after seven years, during which he played for the Pittsburgh Steelers and the Baltimore Ravens. A 2010 graduate of the U.S. Military Academy at West Point, New York, Villanueva served in the 10th Mountain Division's 2nd Battalion, 87th Infantry Regiment, and deployed to Afghanistan with the unit as a rifle platoon leader in 2011, where he received a Bronze Star with "V" device for rescuing wounded soldiers trapped by enemy fire. He was later assigned to the 1st Battalion, 75th Ranger Regiment, deploying twice more to Afghanistan. He left the Army in 2015.

Alejandro Villanueva, a 2010 graduate of the U.S. Military Academy, West Point, New York, and a former NFL player, speaks to cadets during a Founders Day Dinner at the academy.

U.S. ARMY/JORGE GARCIA



MARCH 11 ▲

Soldiers with the 5th Special Forces Group (Airborne) race their Ground Mobility Vehicles 1.1 against vehicles built specially for off-roading in Primm, Nevada, during The Mint 400, an annual race that organizers describe as "the toughest, most spectacular off-road race in North America since 1968."

Army Green Berets drive across the finish line of The Mint 400 off-road race in Primm, Nevada.

U.S. ARMY/SGT. 1ST CLASS IMAN BROADY-CHIN

MARCH 13

Two Army veterans become three-time gold medalists after Team USA's sled hockey team comes out on top at the 2022 Paralympic Games in Beijing. Jen Lee, the goaltender, and Rico Roman, a forward, had previously won gold at the 2014 and 2018 Paralympics. Team USA's sled hockey team cements its dominance with a 5-0 victory over Canada to win the gold medal. This is the team's fourth consecutive and fifth overall Paralympic title. Sixty-seven athletes, including 12 military veterans, represent Team USA at the Games, earning 20 medals—six gold, 11 silver and three bronze.



Lee



Roman



MARCH 14

The "Six Triple Eight" Congressional Gold Medal Act is signed into law by President Joe Biden, clearing the way for members of the 6888th Central Postal Directory Battalion to receive the Congressional Gold Medal decades after their trailblazing service. The award honors the women of the battalion, the first and only all-female, all-Black American battalion to deploy overseas during World War II, for their pioneering service, devotion to duty and contributions to increase the morale of service members in the European Theater. During the war, as millions of pieces of undelivered mail and packages began to pile up in aircraft hangars in Birmingham, England, more than 850 women were

recruited from the Women's Army Corps, the Army Service Forces and the Army Air Forces to form the battalion, commonly known as the Six Triple Eight, according to information from the Army. Commanded by Maj. Charity Adams Earley, the battalion was tasked with clearing the floor-to-ceiling mail backlog. The battalion was given six months to do the job but finished in three by working in eight-hour shifts seven days a week and sorting 65,000 pieces of mail each day, according to the Army. After completing their mission in Birmingham, the soldiers were sent to Rouen, France, to clear two to three years of backlogged mail. They again completed their mission in three months.



Above: Members of the 6888th Central Postal Directory Battalion take part in a parade in France in May 1945. **Right above:** Battalion commander Maj. Charity Adams Earley, left, gets a soda from 2nd Lt. Freda le Beau at the battalion's snack bar in Rouen, France, in 1945. **Right below:** Members of the battalion pose for a photo.

ABOVE AND RIGHT ABOVE: WIKIPEDIA. RIGHT BELOW: U.S. ARMY



MARCH 17

After a two-year break because of COVID-19 restrictions, the New York National Guard's 1st Battalion, 69th Infantry Regiment, leads the New York City St. Patrick's Day Parade down Fifth Avenue in Manhattan. Known as the "Fighting 69th," the unit was organized in 1849 as an Irish-American militia and has led the parade every year since 1851. The soldiers play taps along with members of the New York Police and Fire departments to commemorate those who died in the World Trade Center attacks on 9/11.

Soldiers with the New York National Guard's 1st Battalion, 69th Infantry Regiment, march in the 2022 New York City St. Patrick's Day Parade.

NEW YORK NATIONAL GUARD/MASTER SGT. RYAN CAMPBELL

U.S. SPACE & DEFENSE

Different by design. Driven to deliver.

Cutting edge solutions for a modernizing Army
and our global partners.

Zephyr High
Altitude UAS

UH-72B
Multi-Mission
Helicopter

Ranger SATCOM
Terminal



APRIL 1

The Army implements the revised Army Combat Fitness Test, and soldiers begin taking diagnostic tests following a three-year evaluation and an independent review by the Rand Corp. The revised test incorporates new scoring scaled to age and gender, updated test events and a new implementation timeline allowing soldiers a minimum of six months to train before testing for the record. Gone is the leg tuck, which was found to have relied too heavily on upper body strength rather than the core strength it was intended to measure. Instead, soldiers will be tested with a plank event. The test still includes six events: the deadlift, standing power throw, hand-release pushups, sprint-drag-carry, the plank and a 2-mile run, with alternative aerobic events for soldiers with a permanent profile that prohibits the run.

Spc. Ashraf Fanidi, of the 2nd Assault Helicopter Battalion, 158th Aviation Regiment, takes the Army Combat Fitness Test during a Best Warrior Competition at Joint Base Lewis-McChord, Washington.

U.S. ARMY/STAFF SGT. SHATYRA REED



APRIL 2

The U.S. Army Sniper Compound at Fort Benning, Georgia, is renamed in honor of Silver Star recipient Maj. Willis Powell, creator of the sniper course at the U.S. Army Infantry School. Born in Wellston, Oklahoma, in 1930, Powell served two tours in Vietnam as commander of the Army Marksmanship Unit and developed and commanded the U.S. Army 9th Infantry Division Sniper School in South Vietnam. Powell had a hand in the modern-day sniper courses until his death in 2016.

Then-Capt. Willis Powell.

COURTESY PHOTO



APRIL 10

Capt. Joshua Corson and Capt. Tymothy Boyle of the 75th Ranger Regiment win the 2022 David E. Grange Jr. Best Ranger Competition at Fort Benning, Georgia. The two officers prevail over a 51-team field in the notoriously grueling three-day competition. They also are awarded the Capt. Russell B. Rippetoe Trophy for best ruck march time and the Moore-Van Aalst Marksmanship Award for attaining the top score in shooting.

Capt. Joshua Corson, left, and Capt. Tymothy Boyle of the 75th Ranger Regiment, winners of the 2022 David E. Grange Jr. Best Ranger Competition, pose at the Ranger Memorial at Fort Benning, Georgia.

U.S. ARMY/SGT. JONATHAN BRYSON



APRIL 18

Army Chief of Staff Gen. James McConville tests positive for the coronavirus and is "experiencing very mild symptoms similar to seasonal allergies," his spokeswoman, Lt. Col. Mary Ricks, says, adding that he is fully vaccinated and has received two COVID-19 boosters.

Army Chief of Staff Gen. James McConville greets paratroopers at Fort Bragg, North Carolina.

U.S. ARMY/PFC. ROGNIE ORTIZ VEGA



APRIL 20

The U.S. Army Parachute Team, known as the Golden Knights, drops into Nationals Park in Washington, D.C., as part of Military Appreciation Night before a game between the Washington Nationals and the Arizona Diamondbacks, and unwittingly winds up in the news for causing an evacuation of the U.S. Capitol a little more than a mile away. The Golden Knights land safely, and the scare is blamed on a communications breakdown between the Federal Aviation Administration and the U.S. Capitol Police.

Master Sgt. Jennifer Davidson of the U.S. Army Parachute Team comes in for a landing during training at Homestead Air Reserve Base, Florida.

U.S. ARMY/STAFF SGT. CHARLES BROCK



APRIL 22

The 3rd Battalion, 67th Armor Regiment, 2nd Armored Brigade Combat Team, 3rd Infantry Division, is the first unit to complete field-level maintenance and operator new equipment training on the modernized M2A4 Bradley Fighting Vehicle. The unit receives the U.S. Army First Unit Equipped award from Program Executive Office Ground Combat Systems at Fort Stewart, Georgia.

A modernized M2A4 Bradley Fighting Vehicle of the 3rd Battalion, 67th Army Regiment, 2nd Armored Brigade Combat Team, 3rd Infantry Division, at Fort Stewart, Georgia.

U.S. ARMY/PFC. DUKE EDWARDS



APRIL 28

Seventy-seven years after her birthday cake was stolen by U.S. soldiers during one of the final battles of World War II, Meri Mion receives a replacement from soldiers with the U.S. Army Garrison Italy, Italian troops, police and residents of Vicenza. Mion, who turns 90 the next day, wiped away tears as the troops sing happy birthday in English and Italian at the event in Giardini Salvi. According to the Army, Mion's mother had baked her a cake for her 13th birthday and left it to cool on the windowsill. During the battle, Mion and her mother spent the night hiding in the attic of their farm, and hungry American soldiers with the 88th Infantry Division who had fought their way into Vicenza on April 28, 1945, found the cake and took it.



Above: Sgt. Peter Wallis, right, and Col. Matthew Gomlak, second from left, commander of U.S. Army Garrison Italy, present a cake to Meri Mion in Vicenza, Italy, for her 90th birthday. **Middle:** Wallis prepares to present the cake. **Below:** The cake given to Mion 77 years after U.S. soldiers fighting through Italy during World War II pilfered her 13th birthday cake.

U.S. ARMY PHOTOS BY LAURA KREIDER



APRIL 29

More than a century after his death, Charles Young, the first African American colonel in the U.S. Army, is posthumously promoted to brigadier general. The long-overdue recognition takes place during an event hosted by Army Undersecretary Gabe Camarillo at the U.S. Military Academy at West Point, New York, where Young began his Army career and in 1889 became the third African American to graduate from the academy. A trailblazer throughout his almost 40-year military career, Young served in cavalry commands, rising from second lieutenant to lieutenant colonel by 1917. In 1903, Young led the Buffalo Soldiers as superintendent of Sequoia National Park, California, and was charged with protecting, building and preserving the historical landmark. He served as a military attaché to Haiti, the Dominican Republic and Liberia before he was prematurely medically retired as a colonel in 1917 because of the racial sentiment of the day. He would be recalled in 1920 to serve as a military attaché to Liberia for a second time. While visiting Nigeria in late 1921, Young became gravely ill and died at the British hospital in Lagos on Jan. 8, 1922. Army Secretary Christine Wormuth approved the honorary promotion on Oct. 6, 2021, to recognize Young's leadership, dedication to duty and determination.

Col. Charles Young in 1919.

WIKIPEDIA

UNMATCHED RANGE OF STORAGE SOLUTIONS FOR THOSE WHO PROTECT THE WORLD



CABINETS & TOOLBOXES

STORAGE CABINETS
MOBILE STORAGE
WEAPONS STORAGE
STATIONARY STORAGE



WORKBENCHES & WORKSTATIONS

INDUSTRIAL
WORKBENCHES
LIGHT ASSEMBLY
WORKSTATIONS
SEATING SOLUTIONS



VERTICAL STORAGE

HEAVY PALLET STORAGE &
RETRIEVAL SYSTEM (STAK)
VERTICAL CAROUSELS
VERTICAL LIFT MODULE (VLM)



ASSEMBLED & OTHER STORAGE

WALL SYSTEMS
(STORAGE WALL)
DRAWER ACCESSORIES
CABINET MEZZANINES



StanleyBlack&Decker



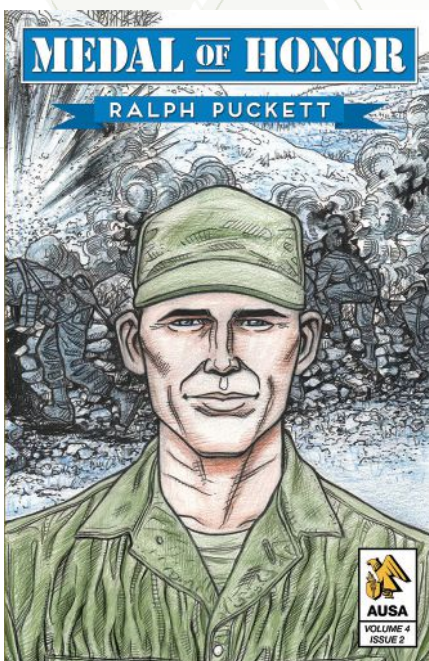
storage.stanleyblackanddecker.com

GSA



MAY 3

The story of retired Col. Ralph Puckett Jr., a revered Army Ranger who fought in Korea and Vietnam, is told in the latest graphic novel of the Association of the U.S. Army's Medal of Honor series. *Medal of Honor: Ralph Puckett*, the 14th graphic novel in the series, recounts Puckett's actions as commander of the 8th Army Ranger Company during the Korean War. He led his new unit to capture a frozen hilltop near the Chinese border and battled multiple counterattacks by a much larger enemy force, disregarding his own wounds to take the hill. Puckett, an inaugural member of the Ranger Hall of Fame at Fort Benning, Georgia, was awarded the Medal of Honor in May 2021, more than 70 years after the fight that originally earned him a Distinguished Service Cross. He retired from active duty in 1971 after 21 years of service, stayed active in the Ranger community and served from 1996 to 2006 as the first Honorary Colonel of the 75th Ranger Regiment. His book, *Ranger: A Soldier's Life*, an AUSA title, tells the story of his service.



Above: Now-retired Col. Ralph Puckett Jr. on the radio in Vietnam. **Middle:** President Joe Biden presents Puckett with the Medal of Honor during a May 2021 ceremony at the White House. **Below:** The cover of the AUSA graphic novel about Puckett.

ABOVE: COURTESY PHOTO. MIDDLE: U.S. ARMY/SPC XaVIERA MASLINE. BELOW: AUSA



MAY 4

A CH-47F Chinook helicopter flown by a crew from the New York National Guard hoists a 3,900-pound steel pontoon from the Niagara River, where it had been floating since 2019 about 100 yards from the lip of Niagara Falls. The pontoon had broken away from an ice dam where the river meets Lake Erie and threatened to crash into the "Cave of the Winds" section of Bridal Veil Falls. After a New York State Park Police Swiftwater Rescue Team waded into the river and attached cables to the pontoon from the hovering helicopter, it took the Chinook from the 3rd Battalion, 126th Aviation Regiment, five minutes to lift the pontoon from the river to a parking lot on Goat Island. The same helicopter, nicknamed "Big Noise III," flew missions in Jalalabad, Afghanistan, during the unit's deployment in 2017.

A CH-47F Chinook from the New York National Guard removes a 3,900-pound steel pontoon from the Niagara River.

COURTESY OF LT. COL. ERIC FRITZ



MAY 5

America's Army: Proving Grounds, the service's free first-person video game, is discontinued after 20 years as a recruiting tool. Launched in 2002, it was the first use of game technology by the U.S. government for strategic communications and recruitment, and was intended to give young people an opportunity to explore the Army virtually. Several versions of the game released over the years include titles such as *Special Forces*, *Proving Grounds* and *Rise of a Soldier*.

A screen grab from the trailer for *America's Army 3*, which was released in 2009.

WIKIPEDIA



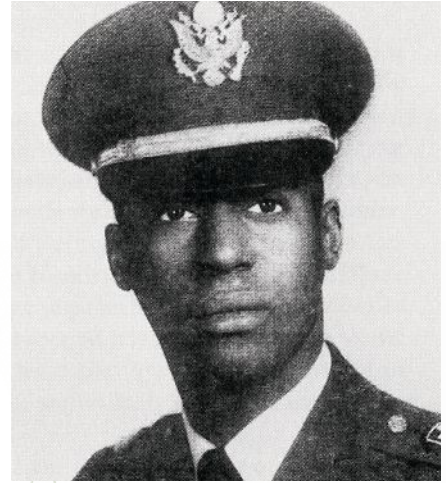
MAY 6

Twelve crews from across the Army wrap up the grueling technical, physical and mental challenges of the biennial Sullivan Cup Best Tank and Bradley Competition. Hosted by the U.S. Army Armor School at Fort Benning, Georgia, the competition is named for retired Gen. Gordon Sullivan, a former Army chief of staff and former president and CEO of the Association of the U.S. Army. The weeklong contest pits crew against crew for bragging rights as the best in the Army. Staff Sgt. Julian Gaitor, Spc. Tyler McGinnis and Pfc. Patrick Sullivan from the 3rd Infantry Division's 3rd Battalion, 67th Armor Regiment, come in first place as the most lethal M2A3 Bradley Fighting Vehicle crew. Staff Sgt. William Catalan, Spc. Frankie Maynes, Spc. Nikolai Krusenstjerna and Spc. Tyler Winklebleck from the 4th Infantry Division's 1st Battalion, 66th Armor Regiment, are the top M1A2 Abrams tank crew. This is the first year women participate in the competition.



Above: The winners of the 2022 Sullivan Cup Best Tank and Bradley Competition pose for a photo at Fort Benning, Georgia. **Below:** An M1A2 Abrams tank is fired during the competition at Fort Benning.

ABOVE: U.S. ARMY/PATRICK ALBRIGHT. BELOW: U.S. ARMY/SPC. JOSHUA TAECKENS



MAY 20

A street at Fort Hamilton, New York, is renamed for Vietnam hero and Medal of Honor recipient 1st Lt. John Earl Warren Jr. The Brooklyn native was 22 when he died on Jan. 14, 1969, in Tay Ninh province after throwing himself onto a grenade to save his fellow soldiers. The street had been named General Lee Avenue after Confederate Gen. Robert Lee, who served at Fort Hamilton in the 1840s. While serving as a platoon leader, Warren and his soldiers were on patrol in a rubber plantation when they came under intense enemy fire. With several of his men, Warren began moving toward hostile positions. As he prepared to toss a grenade into a bunker, the enemy threw a grenade at Warren's team. Warren did not hesitate to shield his men, covering the grenade with his own body. Warren was posthumously awarded the Medal of Honor on Aug. 6, 1970.

First Lt. John Earl Warren Jr.

WIKIPEDIA



MAY 21

In his commencement address to the 2022 graduating class at the U.S. Military Academy at West Point, New York, Joint Chiefs of Staff Chairman Gen. Mark Milley says the potential for great-power war "is increasing, not decreasing." The overmatch the U.S. held for more than 70 years "is closing quickly," he says. Milley, a former Army chief of staff, says future military leaders will be required to make difficult decisions under intense pressure, and he encourages the new officers to be adaptive, resilient and of high moral character.

Joint Chiefs of Staff Chairman Gen. Mark Milley addresses the graduating Class of 2022 at the U.S. Military Academy, West Point, New York.

U.S. ARMY/CADET TYLER WILLIAMS



MAY 23

The 2022 Spc. Hilda I. Clayton Best Combat Camera Competition wraps up at Fort A.P. Hill, Virginia. The demanding five-day contest is a joint multinational event in which visual information specialists, public affairs mass communication specialists and combat photographers are tested on physical, tactical and technical skills. For the first time in the competition's nine-year history, a team from the Air Force Reserve wins first place. Hosted by the 55th Signal Company of Fort Meade, Maryland, the competition is named in honor of Clayton, a combat camera soldier who died on July 2, 2013, in Afghanistan.

Spc. Joshua Cowden of the 22nd Mobile Public Affairs Detachment, XVIII Airborne Corps, competes in the 2022 Spc. Hilda I. Clayton Best Combat Camera Competition at Fort A.P. Hill, Virginia.

U.S. ARMY/SGT. HENRY VILLARAMA



MAY 24

Fort Moore, Fort Liberty, Fort Eisenhower, Fort Johnson and Fort Cavazos are among the names recommended by the commission tasked with renaming the nine Army posts currently named for Confederate generals. The recommendations come after a monthslong effort that yielded 34,000 submissions. The eight-member Naming Commission, which includes two retired Army general officers and a former drill sergeant, reviewed the list, aided by extensive research by a team of historians, to narrow the options to fewer than 100 names. After providing a final report to Congress by Oct. 1, the defense secretary must implement the plan by Jan. 1, 2024.

The Naming Commission recommends naming Fort Polk, Louisiana, after World War I Medal of Honor recipient Sgt. William Henry Johnson.

WIKIPEDIA



MAY 25

Nearly eight decades after their heroic actions during World War II, the Army's famed Merrill's Marauders are honored during a virtual Congressional Gold Medal ceremony. The Marauders "answered the call for the most dangerous missions" and "faced the most brutal conditions in the jungles of Burma," Army Chief of Staff Gen. James McConville said during the ceremony. Named after their commander, then-Brig. Gen. Frank Merrill, the 2,997 Americans who served in the 5307th Composite Unit were known as Merrill's Marauders. The soldiers marched and fought through the jungles and mountains in Burma, now known as Myanmar, and defeated the Japanese 18th Division in five major and 30 minor engagements. Of the nearly 3,000 Marauders who fought in 1944, just two remain at the time of the ceremony—Russell Hamler and Gabriel Kinney.



Above: Brig. Gen. Frank Merrill, center, makes plans with interpreters. **Right, from top down:** Natives guide American troops along a trail in Burma, now called Myanmar. Some of Merrill's Marauders take a break on a Burmese trail. A machine-gunner fires on Japanese troops during the fight for Myitkyina, Burma.

ABOVE: NATIONAL ARCHIVES. RIGHT, FROM TOP DOWN: U.S. ARMY. U.S. ARMY. DoD



MAY 28

The U.S. Army Esports Team earns a silver medal at the inaugural Armed Forces Sports Championship, the first DoD-sanctioned esports event to feature teams from all six services. The Army team members are Staff Sgt. Jared John Santos, Sgt. Christopher Caudillo, Staff Sgt. Anthony Kanelos and Sgt. Jacob Swancott. The competition at the Tech Port Center and Arena in San Antonio features *Halo Infinite*, a first-person shooter game testing soldiers' skills in communication, teamwork, problem-solving and strategy.

Members of the U.S. Army Esports Team show off their hardware after winning a silver medal at the Armed Forces Sports Championship in San Antonio.

U.S. ARMY/SGT. 1ST CLASS DAVID CAMACHO



JUNE 1

Retired Lt. Gen. Leslie Smith becomes vice president for Leadership and Education at the Association of the U.S. Army, succeeding retired Lt. Gen. Guy Swan III. Smith, who retired from the Army in August 2021, says he joined AUSA "because it was a great fit that allows me to continue to serve our Army and our nation." An Atlanta native, Smith graduated in 1985 from Georgia Southern University. His early assignments include serving with the 82nd Airborne Division and the 23rd Chemical Battalion. In 2001, Smith assumed command of the 83rd Chemical Battalion, and elements of the unit deployed in support of operations Enduring Freedom, Iraqi Freedom and New Dawn. He commanded the 3rd Chemical Brigade at Fort Leonard Wood, Missouri, and from 2008 to 2010, Smith was the 25th chief of chemical and commandant of the U.S. Army Chemical, Biological, Radiological and Nuclear School. He commanded the 20th Support Command in 2010, and in 2013 became the first chemical officer to command the Army's Maneuver Support Center of Excellence and Fort Leonard Wood. He was the Army inspector general from February 2018 until his retirement.

Retired Lt. Gen. Leslie Smith.
AUSA/LUC DUNN



JUNE 2

Retired Gen. Carl Stiner, a legend in the Army's special operations community, dies at age 85. A lifelong member of the Association of the U.S. Army, Stiner retired in 1993 after a 35-year career, serving his last assignment as commander of the U.S. Special Operations Command. He was a veteran of the Vietnam War, Operation Just Cause and Operation Desert Storm, and he commanded at every level, including the XVIII Airborne Corps, the 82nd Airborne Division and the Joint Special Operations Command. Born on Sept. 7, 1936, in LaFollette, Tennessee, Stiner was commissioned in the infantry upon graduating from Tennessee Polytechnic Institute in 1958. After a tour of duty with the 3rd Special Forces Group, he attended the Army Command and General Staff College before serving in Vietnam with the 4th Infantry Division. As XVIII Airborne Corps commander during Just Cause in Panama in December 1989, Stiner was operational commander for all deployed forces. During Desert Storm, as commander of Special Operations Command, he had operational control of the joint special operations force. After his retirement in 1993, Stiner co-wrote the 2002 book *Shadow Warriors: Inside the Special Forces* with author Tom Clancy. He was inducted into the Ranger Hall of Fame in 2004, and he remained involved with the Special Forces community until his death.

Gen. Carl Stiner.
U.S. ARMY



JUNE 6

The historic 11th Airborne Division is reactivated in a pair of ceremonies at Alaska's Fort Wainwright and Joint Base Elmendorf-Richardson to focus on operations in extreme cold weather and high altitudes. Commanded by Maj. Gen. Brian Eifler, it is the Army's only Arctic airborne division, and it takes the place of U.S. Army Alaska. With a "proud history of valor during World War II" and a "proud history of experimentation," the 11th Airborne Division will lead the way as the Army sharpens its Arctic warfighting capabilities, Army Chief of Staff Gen. James McConville says. "We expect them to live up to the legacy of those who've gone before, we expect them to be masters of their craft, [and] we expect them to develop innovative ways of operating," he says.

Above: Soldiers stand in formation during the activation ceremony for the 11th Airborne Division at Fort Wainwright, Alaska. **Opposite middle:** Maj. Gen. Brian Eifler, 11th Airborne Division commanding general, stands at parade rest during the ceremony. **Opposite below:** Staff Sgt. Ryan Carter, of the 2nd Brigade, 11th Airborne Division, on Colony Glacier, Alaska.

U.S. ARMY PHOTOS BY JOHN PENNELL



JUNE 8

After 25 years of Army service as the Caisson Platoon's Riderless Horse in the 3rd U.S. Infantry Regiment (The Old Guard), Sgt. York, a 15-hand, 900-pound gelding, retires. Born in 1990, Sgt. York's first job was as a buggy racing horse. He became part of the Old Guard platoon at Fort Myer, Virginia, in 1997 and took part in thousands of high-profile funeral processions, including that of former President Ronald Reagan. After a full health screening, Sgt. York travels to his retirement destination in Valatie, New York, where he will be a "pasture buddy" for horses rescued by Equine Advocates.

Sgt. York, the 3rd U.S. Infantry Regiment (The Old Guard) Caisson Platoon's Riderless Horse, during the state funeral for former President Ronald Reagan.

WIKIPEDIA/U.S. AIR FORCE/STAFF SGT. SHANE CUOMO

JUNE 15

The U.S. Military Academy at West Point, New York, and the U.S. Naval Academy in Annapolis, Maryland, jointly announce that the Army-Navy football game will be played in five cities over the next five years beginning with the 2023 game, which will be in Foxborough, Massachusetts. After that, the games will be played in Landover, Maryland, in 2024; Baltimore in 2025; East Rutherford, New Jersey, in 2026; and Philadelphia in 2027.

U.S. Military Academy football players celebrate a touchdown during the December 2017 Army-Navy football game in Philadelphia.

U.S. ARMY/ZANE ECKLUND



JUNE 17

The enduring relationship between U.S. and Japanese troops is symbolized in a new uniform patch that combines both countries' flags. The patch is presented during a ceremony that caps a week of events marking the Army's 247th birthday. "You are all part of history being made today in the most consequential region at the most consequential time," says Maj. Gen. Joel "JB" Vowell, commander of U.S. Army Garrison Japan. "[The patch shows] our resolve to stand with our partners in all aspects to maintain a free and open Indo-Pacific with our anchoring allies and friends in Japan."



Above: Maj. Gen. Joel 'JB' Vowell, left, commander of U.S. Army Japan, places a new patch on a Japan Ground Self-Defense Force member during a ceremony at Camp Zama, Japan. **Below:** The new patch.

ABOVE: U.S. ARMY/KEI SASAKI. BELOW: U.S. ARMY



JUNE 21

Capt. Tom Custer, the first soldier in U.S. history to earn two Medals of Honor, is the subject of the latest graphic novel in the Association of the U.S. Army's series on recipients of the nation's highest award for valor. *Medal of Honor: Tom Custer* tells of Custer's actions during two Civil War battles in April 1865. The younger brother of famed Civil War Gen. George Custer, Tom Custer lied about his age to enlist in the infantry. On April 3, 1865, Custer was leading a charge over an enemy barricade at Namozine Church in Willicomack, Virginia, when he grabbed the Confederate flag out of the hands of its bearer and secured the capture of 14 prisoners. Three days later, at the Battle of Sailor's Creek in Deatonville, Virginia, Custer captured two more flags—one of which he stole while charging the color bearer on his horse. His animal shot out from under him, Custer was wounded in the face, but he managed to shoot and kill the enemy soldier and take the flag. Custer continued to serve after the war. He was commissioned as a first lieutenant in the 7th U.S. Cavalry—where his brothers George and Boston were also serving—and fought in the Dakota and Montana territories. On June 25, 1876, Custer and his brothers died during the Battle of the Little Bighorn. Initially buried where he fell, Custer was reinterred in 1877 at Fort Leavenworth National Cemetery, Kansas.

Tom Custer.

WIKIPEDIA



JUNE 22

In a bid to bolster flagging recruiting efforts and retain talent, Secretary of the Army Christine Wormuth issues an updated policy on tattoos, easing restrictions on body art on the hands, the back of the neck and behind the ears. Recruits and soldiers are now permitted to have one tattoo on each hand not exceeding 1 inch in size; one tattoo no bigger than 2 inches on the back of the neck; and a 1-inch tattoo behind each ear. The expanded policy also allows tattoos between fingers, provided they are not visible with closed fingers. The policy was last updated in 2015.

A soldier from the 3rd Infantry Brigade Combat Team, 25th Infantry Division, poses after physical readiness training at Schofield Barracks, Hawaii.

U.S. ARMY/SGT. RACHEL CHRISTENSEN



JUNE 28

Gen. Darryl Williams assumes command of U.S. Army Europe and Africa in a ceremony in Wiesbaden, Germany, succeeding Gen. Christopher Cavoli. Williams, who receives his fourth star for the new assignment, arrives in Europe after serving as the 60th commandant of the U.S. Military Academy at West Point, New York, where he graduated in 1983 and commissioned into field artillery. In his remarks, Williams emphasizes the Army's commitment to America's allies and partners. "We continue to stand by you, as you have stood by us for decades," he says. Williams previously commanded NATO Allied Land Command in Izmir, Turkey, and was commander of U.S. Army Africa in Vicenza, Italy, before it was consolidated with Army Europe. He also was deputy chief of staff for operations for Army Europe.

Gen. Darryl Williams, left, the new commander of U.S. Army Europe and Africa, accepts the guidon from Air Force Gen. Tod Wolters, commander of the U.S. European Command and NATO's Supreme Allied Commander Europe, during a change-of-command ceremony in Wiesbaden, Germany.

U.S. ARMY/STAFF SGT. AMANDA FRY



JUNE 29

President Joe Biden announces a significant increase in the U.S. military presence in Europe. In Poland, V Corps headquarters will be a forward command post, an Army garrison headquarters and a field support battalion to improve command and control capabilities, interoperability with NATO and management of pre-positioned equipment. In addition, a new brigade combat team will rotate to Romania and the Baltic region.

A soldier with the 3rd Armored Brigade Combat Team, 4th Infantry Division, aims his M4A1 carbine during an exercise in Drawsko Pomorskie, Poland.

U.S. ARMY/SGT. ANDREW GREENWOOD



JUNE 30

After more than 10 years, retired Lt. Gen. Guy Swan III retires from the Association of the U.S. Army. A 1976 graduate of the U.S. Military Academy at West Point, New York, and career armor officer, Swan retired from the Army in December 2011. He joined AUSA in January 2012 as vice president of Education and executive director of what was known as the Institute of Land Warfare. Swan will continue his relationship with AUSA by serving as a senior fellow. "I've learned more about the U.S. Army here in this job than I did in 35 years in uniform. I think for those that have served, you probably see that as well, that you see the breadth and depth of the United States Army here unlike what you see when you've got the nose to the grindstone trying to do your job in uniform," Swan says during a farewell gathering at AUSA.

Retired Lt. Gen. Guy Swan III speaks during his farewell event at the Association of the U.S. Army headquarters in Arlington, Virginia.

AUSA/LUC DUNN



JULY 1

Gen. Christopher Cavoli takes over as commander of the U.S. European Command during a ceremony in Stuttgart, Germany, succeeding Air Force Gen. Tod Wolters. He also becomes Supreme Allied Commander Europe for NATO a few days later. As commander of more than 64,000 permanently assigned military and civilian personnel in Europe, Cavoli assumes responsibility for U.S. military operations across Europe, portions of Asia and the Middle East, the Arctic and the Atlantic Ocean. Cavoli previously commanded U.S. Army Europe and Africa for two years and was commanding general of U.S. Army Europe for two years before that.

Gen. Christopher Cavoli speaks during his change-of-command ceremony in Stuttgart, Germany, where he became commander of the U.S. European Command.

U.S. ARMY/SGT. PATRIK ORCUTT



JULY 3

Former Pfc. Bradford Freeman dies at the age of 97. He was a mortarman in the 101st Airborne Division's Company E, 2nd Battalion, 506th Parachute Infantry Regiment, a unit immortalized in the HBO miniseries *Band of Brothers*. Freeman, the last surviving member of the company, jumped with his fellow soldiers behind Utah Beach during the June 6, 1944, invasion of Normandy, France, and fought the Germans in battles in France and the Netherlands, and in the Battle of the Bulge in Belgium.

Former Pfc. Bradford Freeman at the 70th anniversary reunion of Company E, 2nd Battalion, 506th Parachute Infantry Regiment, in September 2016 in Chicago.

U.S. ARMY/SGT. AARON BEROGAN



JULY 5

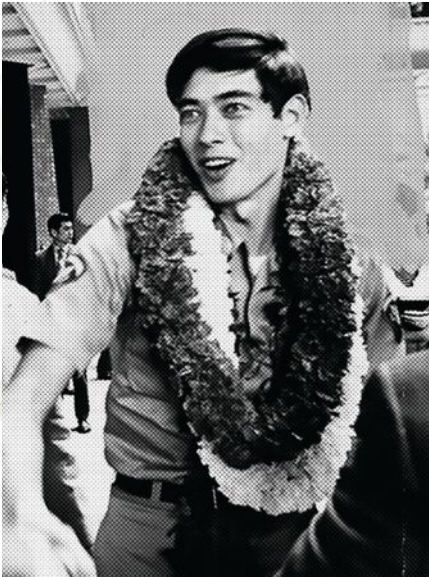
More than 50 years after their heroic combat actions, four soldiers who fought in the Vietnam War are awarded the Medal of Honor. Spc. 5 Dwight Birdwell, Spc. 5 Dennis Fujii and retired Maj. John Duffy receive the nation's highest award for valor from President Joe Biden during a White House ceremony. Staff Sgt. Edward Kaneshiro, who was killed in action in Vietnam, is honored posthumously. His award is accepted by his son, John. All four soldiers previously received awards for their actions in Vietnam. Kaneshiro, Fujii and Duffy received the Distinguished Service Cross. Birdwell was awarded the Silver Star.



Kaneshiro

Above: John Kaneshiro, son of the late Staff Sgt. Edward Kaneshiro, accepts the Medal of Honor on his father's behalf from President Joe Biden during a White House ceremony. **Opposite, from top down:** Spc. 5 Dwight Birdwell, standing left, poses for a photo in South Korea in 1967. Spc. 5 Dennis Fujii returns to Hawaii from Vietnam in 1971. Maj. John Duffy in Vietnam in 1972.

ABOVE: U.S. ARMY/SGT. HENRY VILLARAMA. OPPOSITE, FROM TOP DOWN: COURTESY PHOTOS



JULY 9 ▲

The Sac and Fox Nation Veterans Memorial dedicates a decommissioned UH-60A Black Hawk helicopter on display at its home on the Sac and Fox Nation Reservation in Stroud, Oklahoma. It is the first Army helicopter transferred to the federal Bureau of Indian Affairs in U.S. history. Brig. Gen. Doug Lowrey, commander of the U.S. Army Mission and Installation Contracting Command and the only Native American general officer serving on active duty in the Army, says during the ceremony that "this helicopter served with distinction and flew soldiers into and out of harm's way. This Black Hawk is a credit to the name, and it belongs right here."

The UH-60A Black Hawk helicopter donated to the Sac and Fox Nation in Stroud, Oklahoma.

EDDIE GRIMSLEY

JULY 16

Soldiers with Battery B, 1st Battalion, 158th Field Artillery Regiment, of the Oklahoma Army National Guard's 45th Field Artillery Brigade, receive the 2021 Alexander Hamilton Award honoring the best field artillery battery in the Army National Guard. Awarded annually since 2002, the recognition is given based on a yearlong evaluation of physical readiness, safety, soldier care, unit strength, weapons qualification and other readiness and training achievements. The soldiers of Battery B were selected from among some 140 National Guard artillery batteries, says Brig. Gen. Andrew Preston, commandant of the U.S. Army Field Artillery School at Fort Sill, Oklahoma.



Brig. Gen. Andrew Preston, commandant of the U.S. Army Field Artillery School, Fort Sill, Oklahoma, holds the Alexander Hamilton Award before presenting it to the winning battery.

OKLAHOMA NATIONAL GUARD/SPC. CALEB STONE



JULY 25

On-screen legend and Army veteran Paul Sorvino dies at age 83. Known for his roles as mobster Paulie Cicero in the blockbuster movie *Goodfellas* and Sgt. Phil Cerreta in the TV series *Law & Order*, Sorvino served in the Army and was a member of American Legion Post 43 in Hollywood. According to a Post 43 spokesman, Sorvino enlisted in 1962 and trained for six months at Fort Bliss, Texas, before serving for two years in the New York National Guard.

Paul Sorvino at the 2010 Tribeca Film Festival in New York City.

WIKIPEDIA



JULY 27

On the 69th anniversary of National Korean War Armistice Day, a 380-foot Wall of Remembrance bearing the names of the fallen is unveiled at the Korean War Veterans Memorial in Washington, D.C. The new wall is inscribed with the names of more than 36,000 U.S. soldiers and over 7,000 Korean augmentees who fought alongside the Americans.



Above: A soldier with the 3rd U.S. Infantry Regiment (The Old Guard) salutes during the Korean War Veterans Memorial Wall of Remembrance dedication ceremony in Washington, D.C. **Below:** A family member transfers a loved one's name onto paper while visiting the wall.

ABOVE: U.S. ARMY/SGT. JOSUE PATRICIO. BELOW: U.S. AIR FORCE/STAFF SGT. JAMES THOMPSON



JULY 28

Hundreds of National Guard soldiers from Kentucky, Tennessee and West Virginia deploy to eastern Kentucky after deadly flash floods sweep away entire communities and kill at least 37 people. Among those helping with the effort are medevac crews from Kentucky and UH-60 Black Hawk helicopters and crews from Tennessee that carry out dozens of search-and-rescue and evacuation missions, and additional medevac Black Hawks from West Virginia, which also deploys two UH-72 Lakota aircraft with hoist capability.



Top: A Kentucky National Guard soldier surveys flood damage in eastern Kentucky. **Below:** Kentucky National Guard soldiers assist flood-relief efforts.

ARMY NATIONAL GUARD PHOTOS BY SGT. JESSE ELBOUAB



OPERATOR INTERFACE SOLUTIONS BUILT AS TOUGH AS THE SERVICE MEN AND WOMEN WHO RELY ON THEM

**WHEN THE MILITARY AND GOVERNMENT REQUIRE OPERATOR INTERFACES
THAT CAN STAND UP TO THE MOST SEVERE VEHICLE, SHIPBOARD AND
AIRBORNE CONDITIONS, THEY TURN TO THE ORBIT ELECTRONICS GROUP.**

Orbit custom electronic solutions and subsystems are designed to withstand the rigors of shock, vibration, temperature, extreme altitudes and more. For over half a century, when solutions with the ultimate quality and reliability are required and downtime is not an option, Orbit Electronics is the supplier of choice.



**JOIN US AT
AUSA SHOW
BOOTH #7347**

☎ : 631-435-8300

@ : info@orbitintl.com

💻 : www.orbitintl.com



AUGUST 1

A supersized Garuda Shield exercise involving U.S. and Indonesian troops gets underway in Baturaja, Indonesia. The more than 4,000 participants include forces from Singapore and Australia, and, for the first time, Japanese troops. Eight countries send observers to what is now one of the biggest joint multinational exercises in the Indo-Pacific.

Soldiers with the 25th Infantry Division and their Indonesian counterparts wave as their M119A3 howitzer is flown away by a U.S. helicopter during the supersized Garuda Shield exercise in Indonesia.

U.S. ARMY/SPC. DARBI COLSON

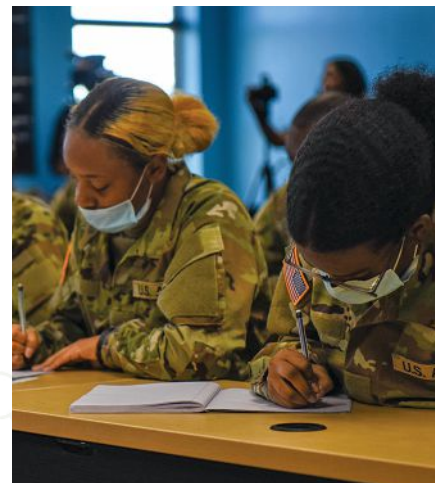


AUGUST 5

Gen. Randy George becomes the 38th vice chief of staff of the Army, succeeding Gen. Joseph Martin, who retires after 36 years of service. A native of Alden, Iowa, and a 1988 graduate of the U.S. Military Academy at West Point, New York, George previously commanded I Corps at Joint Base Lewis-McChord, Washington, and the 4th Infantry Division at Fort Carson, Colorado. He served multiple deployments to Iraq, and as division commander, he led the 4th Infantry Division headquarters to Afghanistan in support of Operation Freedom's Sentinel. As a brigade commander with the 4th Infantry Division, he led soldiers on a deployment to Afghanistan. Before taking over as vice chief, George was the senior military assistant to Defense Secretary Lloyd Austin.

Gen. Randy George, the 38th vice chief of staff of the Army.

U.S. ARMY



AUGUST 8

The Army launches the Future Soldier Preparatory Course at Fort Jackson, South Carolina, a pilot program aimed at preparing recruits for the rigors of basic training and helping them meet the academic and physical fitness standards required for becoming a soldier. Developed in response to the most challenging recruiting environment since the 1973 start of the all-volunteer force, the program is slated to be reviewed in early fiscal 2023 to determine its effectiveness and potential for becoming permanent.

Students in the Army's new Future Soldier Preparatory Course pilot program at Fort Jackson, South Carolina.

ARMY NATIONAL GUARD/PFC. ANA-GRACE CATOE



AUGUST 10

President Joe Biden signs the Sergeant First Class Heath Robinson Honoring our Promise to Address Comprehensive Toxics Act, a bill supported by the Association of the U.S. Army that will help veterans exposed to toxic burn pits. Known as the PACT Act, the measure is named for Sgt. 1st Class Heath Robinson, a Kosovo and Iraq veteran who was 39 when he died in 2020 from a rare form of lung cancer. The measure establishes a presumption in favor of veterans with certain forms of cancer and respiratory illnesses and makes them eligible for veterans' health care and disability pay. This is similar to the presumption provided to Vietnam veterans who have health issues linked to the toxic herbicide Agent Orange.

President Joe Biden signs the Sergeant First Class Heath Robinson Honoring our Promises to Address Comprehensive Toxics Act into law at the White House.

WHITE HOUSE



AUGUST 18 ▲

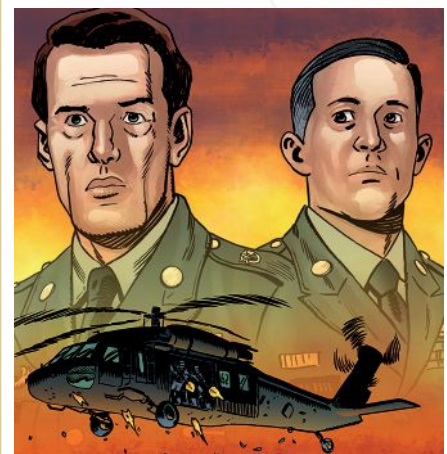
After a record-breaking 64 days and almost 35,000 miles aloft, the Zephyr 8, a solar-powered, ultralong endurance drone being tested by the Army, crashes. Launched June 15 from Yuma Proving Ground, Arizona, by the U.S. Army Futures Command's Assured Positioning, Navigation and Timing/Space Cross-Functional Team, the unmanned aircraft system climbs to over 60,000 feet into the stratosphere before executing its flight plan over the southern portion of the U.S., the Gulf of Mexico and South America. The flight marked several firsts for the aircraft, including its departure from U.S. airspace, flight over water and in international airspace, data collection and direct downlink while outside U.S. airspace, and the demonstration of resilient satellite command and control from three locations—Huntsville, Alabama; Yuma; and Farnborough in the U.K.

An artist's rendering depicts Zephyr unmanned aircraft systems in flight.

AIRBUS

AUGUST 23

A graphic novel illustrating the heroic actions of Master Sgt. Gary Gordon and Sgt. 1st Class Randy Shughart, who gave their lives to save their fellow soldiers during the fierce Battle of Mogadishu, Somalia, in October 1993, is released by the Association of the U.S. Army, the 16th in its series about recipients of the nation's highest award for valor. *Medal of Honor: Gary Gordon & Randy Shughart* tells of the two special operations soldiers' actions during the battle made famous by the book and subsequent movie *Black Hawk Down*. During the battle, Gordon and Shughart volunteered to be inserted at the site of a downed helicopter to protect the pilots and crew, losing their lives to a mob that closed in on the site.



The cover image from the Association of the U.S. Army's graphic novel about Medal of Honor recipients Master Sgt. Gary Gordon, left, and Sgt. 1st Class Randy Shughart.

AUSA



SEPTEMBER 1

The Army takes delivery of a first batch of the Integrated Visual Augmentation System. Made by Microsoft Corp. and known as IVAS, the goggle system provides a heads-up display with real-time information, thermal and low-light sensors and target identification and acquisition capabilities. Douglas Bush, assistant secretary of the Army for acquisition, logistics and technology, "cleared the Army to begin accepting" some of the 5,000 sets of goggles following rigorous testing. The IVAS was developed to increase soldier lethality, one of the Army's six modernization priorities.

A soldier with the 1st Stryker Brigade Combat Team, 2nd Infantry Division, wears the Integrated Visual Augmentation System goggles during training at Joint Base Lewis-McChord, Washington.

U.S. ARMY/SPC. CHANDLER COATS



SEPTEMBER 8

Gen. Gary Brito becomes the first Black commanding general of the U.S. Army Training and Doctrine Command, one of the Army's four major commands. Brito, who is promoted to four-star general by Army Chief of Staff Gen. James McConville, transitions to TRADOC following two years as the Army deputy chief of staff for personnel. Before that, he commanded the Maneuver Center of Excellence and Fort Benning, Georgia. A native of Hyannis, Massachusetts, Brito was commissioned into the infantry through Penn State University and entered active duty in March 1987. He succeeds Gen. Paul Funk, who retires after 38 years of service. "Victory. It is the most essential thing that an army exists to do, to fight and win our nation's wars. We owe it to our country, we owe it to the American people and to the soldiers, civilians and families who fill its ranks. We must, and will, turn every challenge into an opportunity in order to prevail," Brito says after taking command.

Gen. Gary Brito, new commander of the U.S. Army Training and Doctrine Command, speaks during his change-of-command ceremony at Fort Eustis, Virginia.

U.S. ARMY/STAFF SGT. GEORGE PRINCE



SEPTEMBER 11

Former Pfc. Jim "Pee Wee" Martin, a beloved and celebrated veteran of World War II who jumped into Normandy, France, on D-Day with the 101st Airborne Division's 506th Parachute Infantry Regiment, dies at age 101. One of the last paratroopers who trained at Camp Toccoa, Georgia, he jumped into Operation Market Garden in the Netherlands and fought in the Battle of the Bulge in Bastogne, Belgium. He kept jumping out of airplanes until the age of 99. Of serving with soldiers, he said, "You develop a bond like no other."



Above: Pfc. Jim 'Pee Wee' Martin in Mourlemon, France, in 1944. **Below:** Martin salutes from Currahee Mountain, Georgia, near where he trained to be a paratrooper during World War II.

COURTESY PHOTOS

HUMVEE®

THE ENDURING PLATFORM FOR ANY SITUATION



COMING SOON
HYBRID ELECTRIC POWERTRAIN

MISSION READY. FUTURE DRIVEN.

Visit www.amgeneral.com to learn more.



AUTOMOTIVE ENHANCEMENTS



SOFT RECOIL TECHNOLOGY



GLOBAL FORCE

SYMPOSIUM & EXPOSITION

//////////////////// A Professional Development Forum



28-30
MARCH
2023

HUNTSVILLE, AL



**EXHIBIT SPACE &
SPONSORSHIPS AVAILABLE**

EXHIBITS
Jamie Woodside, CEM
GlobalForceExhibits@ausa.org

SPONSORSHIPS
Gaye Hudson
Sponsorships@ausa.org



COMMAND & STAFF

Col. Whitney Gardner, facing camera at center, U.S. Army Aviation Center of Excellence chief of staff, salutes during a change-of-command ceremony at Fort Rucker, Alabama.

U.S. ARMY/KELLY MORRIS

ARMY SECRETARIAT



Hon. Christine Wormuth
Secretary of the Army



Hon. Gabe Camarillo
Undersecretary of the Army/Chief
Management Officer



Hon. Douglas Bush
Assistant Secretary
(Acquisition, Logistics and Technology)



Hon. Michael Connor
Assistant Secretary (Civil Works)



Hon. Rachel Jacobson
Assistant Secretary
(Installations, Energy and Environment)



Ms. Yvette Bourcicot
Assistant Secretary
(Manpower and Reserve Affairs) (Acting)



Hon. Caral Spangler
Assistant Secretary
(Financial Management and Comptroller)



Hon. Carrie Ricci
General Counsel

Information is current as of Sept. 7

OFFICE OF THE CHIEF OF STAFF



Gen. James McConville
Chief of Staff



Gen. Randy George
Vice Chief of Staff



Sgt. Maj. of the Army Michael Grinston
Sergeant Major of the Army



Lt. Gen. Stuart Risch
Judge Advocate General



Lt. Gen. R. Scott Dingle
Surgeon General



Maj. Gen. Thomas Solhjem
Chief of Chaplains



Maj. Gen. Duane Miller
Provost Marshal General



**Chief Warrant Officer 5
Yolondria Dixon-Carter**
Senior Warrant Officer Advisor to
Chief of Staff of the Army

THE ARMY STAFF



Lt. Gen. Walter Piatt
Director, Army Staff



Lt. Gen. Douglas Stitt
DCS, G-1



Lt. Gen. Laura Potter
DCS, G-2



Lt. Gen. James Rainey
DCS, G-3/5/7



Lt. Gen. Charles Hamilton
DCS, G-4



Lt. Gen. John Morrison Jr.
DCS, G-6



Lt. Gen. Erik Peterson
DCS, G-8



Mr. Daniel Klippstein
DCS, G-9 (Acting)



Lt. Gen. Scott Spellmon
Chief of Engineers

Introducing **Kite-Strike II** Next-Gen Edge AI Computing

Kite-Strike II is the future of edge AI computing. Integrating the **NVIDIA Jetson AGX Orin**, the world's most powerful AI computer for edge-deployed autonomous machines, Kite-Strike II is a small-form-factor embedded mission computer, **fully rugged and highly configurable** for any requirement in any environment. MIL-SPEC Rugged. SWaP-Optimized. Single LRU. MOSA. GCIA.

DMFV CONCEPT



Product Introduction 10.10.2022
See it at **AUSA 2022 Systel Booth 1733**

#ksii
#jetsonorin
#systelatausa
#systelrugged
sales@systelusa.com
systelusa.com/products/kite-strike-ii

NATIONAL GUARD AND U.S. ARMY RESERVE



Gen. Daniel Hokanson
Chief, National Guard Bureau



Lt. Gen. Jon Jensen
Director, Army National Guard



Lt. Gen. Jody Daniels
Chief, Army Reserve



**Chief Master Sgt.
Tony Whitehead, USAF**
Senior Enlisted Advisor,
National Guard Bureau



**Command Sgt. Maj.
John Raines**
Command Sergeant Major,
Army National Guard



**Command Sgt. Maj.
Andrew Lombardo**
Command Sergeant Major,
Army Reserve



**Chief Warrant Officer 5
Patrick Nelligan**
Command Chief Warrant Officer,
Army Reserve

The moment to connect domains is now

Our open systems-based sensors and networks securely connect every edge of the battlespace, delivering the intelligence and insights needed to make the right decision at the right moment — across every domain.

Learn more at [RTX.com/AUSA](https://www.rtx.com/AUSA)



COLLINS AEROSPACE | PRATT & WHITNEY | RAYTHEON INTELLIGENCE & SPACE | RAYTHEON MISSILES & DEFENSE

ARMY SECRETARIAT PRINCIPAL AND SPECIAL STAFF



Mr. Mario Diaz
Deputy Undersecretary of
the Army



Mr. Mark Averill
Administrative Assistant to the
Secretary of the Army



Lt. Gen. Paul Chamberlain
Mil. Dep. for Budget, OASA
(Financial Mgmt. and Comptroller)



Lt. Gen. Donna Martin
Inspector General



Lt. Gen. Robert Marion
Mil. Dep./Dir., Army Acquisition
Corps, OASA (ALT)



Ms. Anne Richards
Auditor General



Ms. Karen Durham-Aguilera
Executive Director,
Office of Army Cemeteries



Mr. Robin Swan
Director, Office of Business
Transformation, OUSA



Maj. Gen. Rodney Faulk, USAR
Chairman, Army Reserve Forces
Policy Committee



Ms. Kimberly Buehler
Director, Small Business
Programs



Maj. Gen. Trevor Bredenkamp
Chief, Legislative Liaison



Maj. Gen. John Rafferty Jr.
Chief, Public Affairs



SHREDS TOUGH TASKS AND RED TAPE

VISIT [BOBCAT.COM/GOVERNMENT](https://www.bobcat.com/government) TO REQUEST A CALL.

When it comes to government projects, turn to Bobcat for the most capable construction equipment and people. Request your meeting with the Bobcat Government Sales team, and we'll help you get more done with fewer headaches.



Bobcat

One Tough Animal

Bobcat Company is a member of the Doosan Group. Doosan is a global leader in construction, grounds maintenance and material handling equipment, power and water solutions, and engineering that has proudly served customers and communities for more than a century.

Bobcat®, the Bobcat logo and the colors of the Bobcat machine are registered trademarks of Bobcat Company in the United States and various other countries.

©2022 Bobcat Company. All rights reserved. | 1522

STATE ADJUTANTS GENERAL

The senior National Guard leader in each U.S. state and some territories serves as the adjutant general and is the senior military leader of the state's or territory's defensive forces. Some adjutants general are members of the Army National Guard (ARNG) and some are members of the Air National Guard (ANG). The following list of adjutants general was current as of Aug. 25:

Alabama

ARNG Maj. Gen. Sheryl Gordon

Alaska

ANG Maj. Gen. Torrence Saxe

Arizona

ANG Maj. Gen. Kerry Muehlenbeck

Arkansas

ARNG Maj. Gen. Kendall Penn

California

ARNG Maj. Gen. Matthew Beevers (Acting)

Colorado

ARNG Brig. Gen. Laura Clellan

Connecticut

ARNG Maj. Gen. Francis Evon

Delaware

ARNG Maj. Gen. Michael Berry

District of Columbia

ANG Maj. Gen. Sherrie McCandless
(Commanding General)

Florida

ANG Maj. Gen. James Eifert

Georgia

ARNG Maj. Gen. Thomas Carden

Guam

ARNG Lt. Col. Esther Aguigui

Hawaii

ARNG Maj. Gen. Kenneth Hara

Idaho

ARNG Maj. Gen. Michael Garshak

Illinois

ANG Maj. Gen. Richard Neely

Indiana

ARNG Maj. Gen. Roger Lyles

Iowa

ARNG Maj. Gen. Benjamin Corell

Kansas

ANG Maj. Gen. David Weishaar

Kentucky

ARNG Maj. Gen. Haldane Lamberton

Louisiana

ARNG Maj. Gen. Damian Waddell

Maine

ANG Maj. Gen. Douglas Farnham

Maryland

ARNG Maj. Gen. Timothy Gowen

Massachusetts

ANG Maj. Gen. Gary Keefe

Michigan

ARNG Maj. Gen. Paul Rogers

Minnesota

ARNG Maj. Gen. Shawn Manke

Mississippi

ARNG Maj. Gen. Janson Boyles

Missouri

ARNG Maj. Gen. Levon Cumpton

Montana

ANG Maj. Gen. John Hronek

Nebraska

ANG Maj. Gen. Daryl Bohac

Nevada

ANG Maj. Gen. Ondra Berry

New Hampshire

ARNG Maj. Gen. David Mikolaities

New Jersey

ARNG Brig. Gen. Lisa Hou

New Mexico

ARNG Brig. Gen. Miguel Aguilar

New York

ARNG Maj. Gen. Raymond Shields

North Carolina

ARNG Maj. Gen. Marvin Hunt

North Dakota

ARNG Maj. Gen. Alan Dohrmann

Ohio

ARNG Maj. Gen. John Harris

Oklahoma

ARNG Brig. Gen. Thomas Mancino

Oregon

ANG Maj. Gen. Michael Stencel

Pennsylvania

ARNG Maj. Gen. Mark Schindler

Puerto Rico

ARNG Maj. Gen. Jose Reyes

Rhode Island

ARNG Maj. Gen. Christopher Callahan

South Carolina

ARNG Maj. Gen. Roy McCarty

South Dakota

ARNG Maj. Gen. Jeffrey Marlette

Tennessee

ARNG Maj. Gen. Jeffrey Holmes

Texas

ANG Maj. Gen. Thomas Suelzer

Utah

ARNG Maj. Gen. Michael Turley

Vermont

ARNG Maj. Gen. Gregory Knight

Virginia

ARNG Maj. Gen. Timothy Williams

Virgin Islands

ARNG Maj. Gen. Kodjo Knox-Limbacker

Washington

ARNG Maj. Gen. Bret Daugherty

West Virginia

ARNG Maj. Gen. William Crane

Wisconsin

ANG Maj. Gen. Paul Knapp

Wyoming

ARNG Maj. Gen. Gregory Porter

**GLOBAL EXCELLENCE,
PRECISELY FOCUSED.**

AMERICAN RHEINMETALL

DELIVERING EXCELLENCE WITH NEXT-GENERATION SOLUTIONS

Rheinmetall has an enduring record of delivering defense solutions to global customers that are marked by precision, advanced technology, efficiency and leap ahead innovation. Built on this highly regarded foundation, American Rheinmetall Defense delivers next-generation capabilities addressing today's highest modernization priorities including advanced direct and long-range precision fires, soldier lethality, and combat vehicles – solutions that ensure our military achieves not just overmatch on the battlefield today, but for years to come.

AMERICAN RHEINMETALL DEFENSE – RESTON, VA

AMERICAN RHEINMETALL MUNITIONS – STAFFORD, VA, CAMDEN, AR, WINDHAM, ME

AMERICAN RHEINMETALL SYSTEMS – BIDDEFORD, ME

AMERICAN RHEINMETALL VEHICLES – STERLING HEIGHTS, MI

CIVILIAN AIDES TO THE SECRETARY OF THE ARMY

The U.S. Army selects Civilian Aides to the Secretary of the Army (CASAs) to advocate for and help with recruiting for the Army in their communities.

These community leaders are volunteers. They are chosen in part for their interest in military affairs, and the Army provides them with regular briefings and talking points on Army programs.

The offshoot of a World War I program initiated in Plattsburg, New York, to support experimental training camps for college-age men, the War Department in 1922 adopted the idea with Civilian Aides to the Secretary of War. In 1940, it became an Army-managed effort requiring some influential civilians to take on confidential missions on behalf of military leaders.

The secretary of the Army has appointed CASAs as civilian liaisons since 1950. CASAs help explain and obtain support for Army programs while providing feedback to military leaders about what communities think of the Army.

CASAs, who work without pay but receive travel reimbursements and per diems, often represent the secretary of the Army at public events, speak to civic groups and organize public visits to Army installations. They are appointed to two-year, renewable terms. There is a 10-year term limit on service that may be waived.

CASAs by the states and territories they represent, current as of Aug. 25, are:

Alabama

Albert "Joe" Fitzgerald (North)
Michael "Schmitt" Schmitz Sr. (South)

Alaska

Timothy "Tim" Jones (North)
Kevin Robinson (South)

American Samoa

Joseph "Toloa'i" Ho Ching II

Arizona

Ben Coronado (South)
Linda Denno (South)
Mario Diaz (North)

Arkansas

Ronald "Ron" Chastain (South)
G. Brynt Parmeter (North)

California

Mark Benton Sr. (San Francisco)
Bridget Blehm (Southeast)
M. Janet Chin (Coastal-South)
Mario Guerra (Greater Los Angeles)
Sonki Hong (Los Angeles)
Lance Izumi (Sacramento)
Charles "Chuck" Pattillo (Sacramento)
Lorenzo Rios (Central)
Gilbert "Gil" Sanborn (Pacific North-Sierras)

Colorado

William "Bill" Hanzlik (North)
Dana "Mike" Kopp (North)
Terrance "Mac" McWilliams (South)

Connecticut

John Stull II

Delaware

Terry Wiley

District of Columbia

Lillian "Anita" Dixon

Florida

Allie Braswell Jr. (Central)
Landy Dunham (Central)
Jeraline Johnson (South)
Luis Martinez-Monfort (Tampa Bay)
Victor Olshansky (South)
Peter "Pete" Tan (North)
James "Don" Tyre (Northeast)

Georgia

John Hargrove (West)
Peter Hoffman (Coastal Region)
Angela Odom (North)
John Phillips (North)

Guam

Noel Enriquez

Hawaii

D. Noelani "Noe" Kalipi (East)
Gilbert "Gil" Tam (West)

Idaho

Thomas "Tom" Shuler

Illinois

James "Jim" Bland (North)
Steven "Steve" Herman (North)
John Moulton (South)
Vacant (West)

Indiana

Stanton "Stan" Soderstrom

Iowa

C. Dana Waterman III (East)

Kansas

Michael "Mike" Hockley (East)
David "Scott" Stuckey (West)
Patrick "Pat" Warren (Greater Kansas City)

Kentucky

James "Jim" Iacocca (North)
Kelli Pendleton (West)

Louisiana

Peter Crean Sr. (South)
Rodney Ellis (North)

Maine

Brenda Pennels

Maryland

Guy Filippelli (Central)
Bobby Henry Jr. (South)
Mary Jane Jernigan

Massachusetts

Brian "Boomer" Concannon
Nicole Gilmore

Michigan

Tammy Carnrike

Minnesota

Eric Ahlness
Donald "Mark" Ritchie

Mississippi

Augustus "Leon" Collins

Missouri

E. Tracy Beckett (East)
Keith Pritchard (West)

Montana

Julie "Jules" Vacura

Nebraska

James "Jim" Cada

Nevada

Daryl Keithley

New Hampshire

Peter "Pete" Burdett

New Jersey

Richard "Rich" Eastman Jr. (North)
Erica Purdo

Auxiliary cooling and power for extreme military environments

Meggitt has developed cooling and power solutions for ground vehicles in extreme environments. Our Auxiliary Cooling and Power System (ACPS) is designed to provide cooling for crew comfort and electronic packages in addition to auxiliary power. The ACPS is a rugged, self-contained system ready for today's modern fighting vehicles.

Our thermal management solutions are proven and ready to meet the challenge of the more electronic platform and battlefield.

**Meggitt Defense Systems**

9801 Muirlands Blvd.

Irvine, CA 92618

Tel: +1 949 465 7700

E-mail: gerry.janicki@meggitt.com

www.meggittdefense.com

CIVILIAN AIDES TO THE SECRETARY OF THE ARMY

New Mexico

Richard "Rick" Jackson
Jeffrey "Jeff" Younggren (North)

New York

Joseph "Joe" Butler Jr. (North)
Steven "Steve" Castleton (South)
Elizabeth "Beth" Kubala (Mid-State)
Pamela Newman (South)

North Carolina

Danny "Dan" Dedrick (East)
Mabry "Bud" Martin (Central)
Blair Shwedo (West)

North Dakota

Shelly Sizer

Northern Mariana Islands

Michael "Mike" Sablan

Ohio

Susan Green (Central)
Babe Kwasniak (North)
Stephen "Steve" Lee (South)
Eric Mansfield (North)

Oklahoma

Michael "Mike" Brown (South)
Jill Castilla (North)
Kevin Offel (North)

Oregon

Craig Wilhelm

Pennsylvania

Rory Cooper (West)
Carol Eggert (Central)
Doc Parghi (East)
Dr. Paul Urban (West)
Kenneth "Ken" Wong (East)

Puerto Rico

Luis Soto

Rhode Island

Laurie Ludovici

South Carolina

Kevin Shwedo

South Dakota

Raymond "Ray" Carpenter

Tennessee

John "Phil" Harpel (North)
Ralph Schulz Jr. (South)

Texas

Darcy Anderson (North)
Joseph "Joe" Bray (South)
Kendall "Ken" Cox (Central)
Joseph "Joe" DePinto (North)
Edgar "Ed" Fuentes (Central)
Timothy "Tim" Kopra (East)
Daniel "Danny" Pugh Sr. (Brazos Valley)
Gustavo "Gus" Rodriguez Jr. (West)
Abdul Subhani (Capital Region)
Myrna Trevino (East)

Utah

Jennie Taylor

Vermont

Michael "Mike" Popowski

Virginia

Michael "Mike" Flanagan (South)
Nancy Jean-Louis (North)

Virgin Islands

Beresford Edwards

Washington

David Condon (East)
Tay Yoshitani (West)
David "Dave" Zeeck (West)

West Virginia

Kenneth "Ken" Boggs III

Wisconsin

Marcia Anderson

Wyoming

Dr. Mark Johnson



Civilian Aide to the Secretary of the Army Steven Castleton, second from left, of New York (South), engages with leaders and mission partners during a visit to Fort Hamilton, New York.

U.S. ARMY/AMANDA HAY



Innovation Mode.

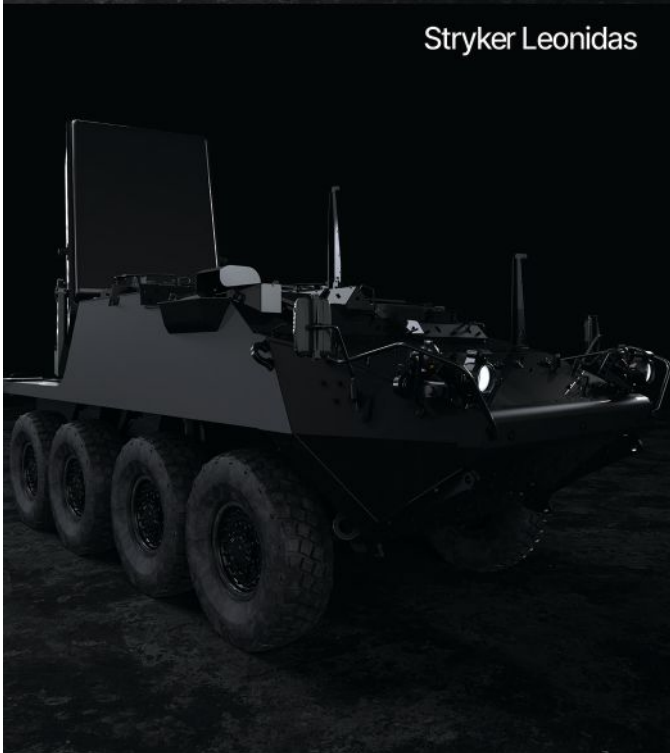
Next Generation Innovation for the Army of 2030



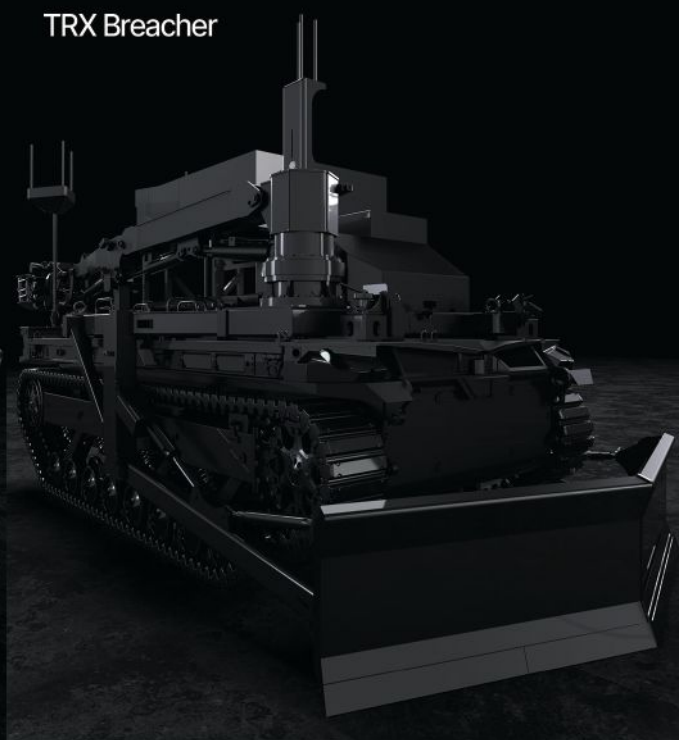
AbramsX



StrykerX



Stryker Leonidas



TRX Breacher

Reach out to us at: innovation@gdls.com

gdls-nextgen.com

gdls.com

ARMY RESERVE AMBASSADORS

Army Reserve Ambassadors are the community and business leaders who volunteer to serve as liaisons between their communities and the U.S. Army Reserve.

Established in 1998, the program links the ambassadors, Reserve leadership and local communities and businesses. Ambassadors work with state and local governments, military and veterans' groups. They use their experience, relationships and community access to build support for Reserve programs. They also provide feedback concerning local opinions about Reserve programs. Ambassadors, many of whom are retired soldiers, are appointed to three-year terms.

Ambassadors are aligned under the four Army Reserve readiness divisions. As of Aug. 25, ambassadors and ambassadors emeritus by state and territory are:



Stephan Murphy, Army Reserve Ambassador from Delaware, speaks with students and parents at Valley Forge Military College, Pennsylvania, about the benefits of combining higher education with uniformed service.

U.S. ARMY/SAL OTTAVIANO

Alabama

Thomas Adams
Phillip Jolly
William Lee

Alaska

None Assigned

Arizona

Patrick Kuykendall

Arkansas

Thomas Anderson (Emeritus)
Terry DeWitt

California

Jim Bernet
Joseph Boscacci
Daniel Furtado (Emeritus)
Richard "Phil" Stage
William Wenger

Colorado

Peter Krieg

Connecticut

Beth Pritchard

Delaware

Stephan Murphy

District of Columbia

Phillip Churn
Wendall McClellan

Florida

William Beard
Mary Burnham
Don Slesnick (Emeritus)
Michael Teilmann (Emeritus)
Roger Trout

Georgia

David Bockel (Emeritus)
Luis Carreras (Emeritus)
William Johnson (Emeritus)
Lindsey Streeter

Hawaii

None Assigned

Idaho

Dianne Nordhaus (Emeritus)

Illinois

Paul Hettich
Julie Johnson

Indiana

James Bauerle
Arthur Leak

Iowa

Dale Andres
Gary Wattnem (Emeritus)

Kansas

John Schoen

Kentucky

Michael Hauser
Troy Kok

Louisiana

Lionel Magee

Maine

Jeffrey Morton

Maryland

Edna Cummings
Jayson Spiegel
Phyllis Wilson

FIXED-WING MODERNIZATION LEADER



PROVIDING CRADLE-TO-GRAVE LIFECYCLE SERVICES

The Vertex Company delivers performance excellence through high-quality services and solutions that keep you flying safely. Our approach to aviation maintenance encompasses O-level maintenance performing day-to-day operations, I-level services on components and equipment, and D-level maintenance providing MRO expertise. Using established repair processes, perfected logistics, and continuous management and controls, we offer customers a reduced risk of downtime ultimately accelerating mission-control readiness.

In July 2022, Vertex merged with Vectrus to create V2X, a leading provider of critical mission solutions globally which builds on more than 120 combined years of successful mission support.

VTXCO.COM

BDSALES@VTXCO.COM



**VISIT US AT AUSA 2022
BOOTH #8204**

SMALL ENOUGH TO BE AGILE. LARGE ENOUGH TO BE GLOBAL.

Use of U.S. DoD imagery does not imply or constitute DoD endorsement.

ARMY RESERVE AMBASSADORS

Massachusetts

Edward Pesce
Lewis Vasquez

Michigan

Steven Kenyon

Minnesota

Steven Baer
Raymond Elderder
Christie Nixon

Mississippi

Margarett Barnes (Emeritus)

Missouri

Brett Cox
William Layman (Emeritus)
Peter Tabacchi

Montana

Michael "Mike" McKee

Nebraska

Nelson Ildefonso-Cruz

Nevada

Christopher Schroeder

New Hampshire

James Normand (Emeritus)
Robert Steiner

New Jersey

Steven Hashem (Emeritus)
Arthur Maggs

New Mexico

None Assigned

New York

Myron Berman (Emeritus)
Robert Kasulke (Emeritus)
Daniel MacLaughlin (Emeritus)
Gary Port

North Carolina

Bobby Ervin
Marsha Lilly (Emeritus)

North Dakota

David Becker
Robert Black (Emeritus)

Ohio

John Lendrum
Robert Stall
Ralph Veppert

Oklahoma

None Assigned



French Brig. Gen. Jean-Pierre Fagué, left, deputy commanding general for readiness at the 3rd Infantry Division, and Army Reserve Ambassador Emeritus Luis Carreras of Georgia pose during a Bastille Day commemoration at Fort Stewart, Georgia.

U.S. ARMY/PFC. SUMMER PARISH

Oregon

William Crist
Dennis Klein (Emeritus)

Pennsylvania

Matt Lissner
Paul McCullough
Robert Pleczkowski

Puerto Rico

Rene Berlingeri-Otero
Fernando Fernandez

Rhode Island

Ernest Almonte

South Carolina

Samuel Brick (Emeritus)
James Cardo (Emeritus)
Jeffrey Jacobs

South Dakota

None Assigned

Tennessee

Travis Burchett
John Dyess (Emeritus)
Douglas Gilbert
Andrew Oppmann
Leslie Purser

Texas

Frank Archuleta
Olin Brewster (Emeritus)
Alvin Jones (Emeritus)
Lance Lehr
Robert Perez

Utah

Dawn Flynn
Richard Folkerson (Emeritus)

Vermont

Keith Baranow

Virginia

Lettie Bien
Sonja Brewer
Michael Buscher

Washington

Kurt Hardin
Brian Newberry

West Virginia

Johnnie Ross

Wisconsin

Rhonda Smillie

Wyoming

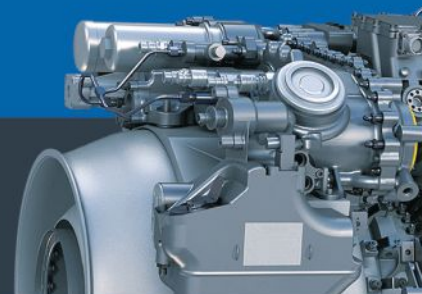
Robert Fitton



Experience has inspired our future

**T901 First Engine To Test (FETT)
22 March 2022**

Decades of experience makes the T901 engine the
right choice to power the future of Army aviation



geaviation.com

AUSA SENIOR FELLOWS

The Association of the U.S. Army established its Senior Fellows program to assist with strategic communications, develop policy positions and promote Army professional development and education in accordance with AUSA's charter as an educational and professional association.

This program supports and elevates the influence of AUSA by informing and educating the association's membership; local, regional and national leaders; and the American public on the critical nature of land warfare and the importance of the U.S. Army.

Association of the U.S. Army Senior Fellows are:



**Lt. Gen. (Ret.)
Daniel Bolger**



**Maj. Gen.
Janson 'Durr' Boyles**



**Maj. Gen. (Ret.)
James 'Red' Brown**



**Command Sgt. Maj. (Ret.)
Thomas Capel**



**Maj. Gen. (Ret.)
Raymond Carpenter**



Hon. Erin Conaton



**Lt. Gen. (Ret.)
James Dubik**



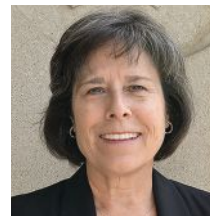
**Lt. Gen. (Ret.)
Karen Dyson**



**Command Sgt. Maj.
(Ret.) Daniel Elder**



**Command Sgt. Maj. (Ret.)
W. Douglas Gibbens**



Karen Halverson



**Lt. Gen. (Ret.)
Patricia Horoho**



**Maj. Gen. (Ret.)
Mark MacCarley**



**Lt. Gen. (Ret.)
Sean MacFarland**



**Lt. Gen. (Ret.)
Patricia McQuiston**



Hon. Patrick Murphy



FUTURE FOCUSED

Mission Capable. Mission Ready.

Designed to meet rigorous mission requirements, our next generation communications & surveillance products feature adaptive noise cancellation and GPS Denial of Service Detection & Reporting.

Visit exhibit 7533 during AUSA to learn more.

TTM Technologies

TELEPHONICS

AUSA SENIOR FELLOWS



Gerald O'Keefe



Gen. (Ret.) David Perkins



Sgt. Maj. of the Army (Ret.)
Kenneth Preston



Lt. Gen. (Ret.) Darsie
Rogers Jr.



Command Sgt. Maj. (Ret.)
Jimmie Spencer



Lt. Gen. (Ret.)
Theodore Stroup Jr.



Lt. Gen. (Ret.)
Guy Swan III



Donald Tison



Lt. Gen. (Ret.)
Richard Trefry



Gen. (Ret.)
Dennis Via



Gen. (Ret.)
Louis Wagner Jr.



Chief Warrant Officer 5 (Ret.)
Phyllis Wilson



Lt. Gen. (Ret.)
Terry Wolff



Tina Wright



WALK THIS WAY

**COOL, CONFIDENT
and COVERT
with your
combat-multiplying
Phantom Warrior®
Flashlight.**



Phantom Products, Inc.

474 Barnes Blvd., Rockledge, FL. 32955

PH: (888) 533-4968

ISO9001:2015 CERTIFIED

SMALL BUSINESS

American Lights - American Jobs

©2022 - Phantom Products, Inc.

careers@phantomlights.com

NSN 6230-01-562-3691

www.PhoantomLights.com

AUSA LEADERSHIP FELLOWS

The Association of the U.S. Army's Center for Leadership, established on Oct. 1, 2021, by AUSA President and CEO retired Gen. Bob Brown, educates, inspires and connects leaders of character and cohesive teams across the Total Army.

To expand its reach, the Center for Leadership has a distinguished chair for leadership and a senior NCO leadership chair. It also has established the AUSA Leadership Fellows Program, which provides experts to guide important leadership discussions for AUSA's chapters, ROTC units and Army units across the country and around the world.

The chairs of the Center for Leadership and the AUSA Leadership Fellows are:



Gen. (Ret.)
David Perkins
Distinguished Chair for Leadership



Command Sgt. Maj. (Ret.)
David Clark
Senior NCO Leadership Chair



Maj. Gen. (Ret.)
Chuck Anderson



Maj. Gen. (Ret.)
Pete Bayer



Brig. Gen. (Ret.)
Jennifer Buckner



Command Sgt. Maj. (Ret.)
Eric Buonopane



Command Sgt. Maj. (Ret.)
Jimmy Carabello



Maj. Gen. (Ret.)
K.K. Chinn



Command Sgt. Maj. (Ret.)
Mike Clemens



Lt. Gen. (Ret.)
Bruce Crawford



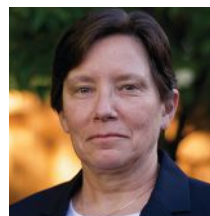
Maj. Gen. (Ret.)
Ed Dorman



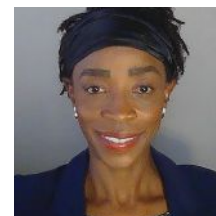
Lt. Gen. (Ret.)
Jason Evans



Brig. Gen. (Ret.)
Kim Field



Maj. Gen. (Ret.)
Robin Fontes



Command Sgt. Maj. (Ret.)
Tabitha Gavia

SERVING & SUPPORTING US MISSION IN CENTCOM



KRH has been providing the underlying groundwork for the US Army mission in the Middle East since 1991. Our full Life Support and HR Solutions, enable the mission custodians to achieve all aspired success.

Over the years, we have employed thousands of highly efficient calibers for various USG projects, and provided them with all required logistics so they can go out there and accomplish the mission without obstacles.

KRH is a "Home Away from Home" to our Employees, and a "Value-Driven Partner of Choice" to our US Business Partners.



KRH SERVICES:

HR SOLUTIONS

1. LEGALIZATION & NORMALIZATION
2. PAYROLL MANAGEMENT
3. RECRUITMENT SERVICES
4. ADVICE & ASSISTANCE
5. MASS DEPLOYMENT
6. MEDICAL & LIFE INSURANCE
7. TRAVEL MANAGEMENT

LIFE SUPPORT SERVICES:

1. HOUSING SOLUTIONS
2. CATERING & MEALS SUPPLY
3. MANAGEMENT & SUPERVISION
4. ONSITE PM SERVICES
5. LAUNDRY SERVICES
6. VEHICLES & EQUIPMENT
7. PPE SUPPLY



CONTACT INFO:

AL GHAWALI TOWER, AL SHUHADA STREET
SHARQ, KUWAIT

+965 22320113

BD@KRHKW.COM

KRHKW.COM



KRH REGIONAL OFFICES:



KRH



SCAN FOR MORE



AUSA LEADERSHIP FELLOWS



**Lt. Col. (Ret.) Tim
Gilhool**



**Maj. Gen. (Ret.) John
Gronski**



**Lt. Gen. (Ret.) Mark
Hertling**



**Lt. Gen. (Ret.) Tom
James**



**Col. (Ret.) Chris
Kennedy**



**Lt. Gen. (Ret.)
Steve Lanza**



**Lt. Gen. (Ret.)
Mary Legere**



**Maj. Gen. (Ret.)
Viet Luong**



**Maj. Gen. (Ret.)
Todd McCaffrey**



**Maj. Gen. (Ret.)
Tim McGuire**



**Col. (Ret.)
David Miller**



**Maj. Gen. (Ret.)
Mark O'Neil**



**Command Sgt. Maj. (Ret.)
Steven Payton**



**Col. (Ret.)
Adam Rocke**



**Command Sgt. Maj. (Ret.)
Scott Schroeder**



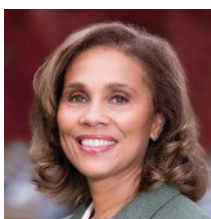
**Command Sgt. Maj. (Ret.)
James Sims**



**Col. (Ret.)
Scott Taylor**



**Lt. Gen. (Ret.)
J.T. Thomson**



**Lt. Gen. (Ret.)
Nadja West**



**Maj. Gen. (Ret.)
Cedric Wins**



**Command Sgt. Maj. (Ret.)
Jeffrey Wright**



**Brig. Gen. (Ret.)
Irene Zoppi**



rolls-royce.com



BELL V-280 VALOR

Superior speed and range for Army modernization

Optimum capability requires propulsion excellence. The Rolls-Royce propulsion solution for the Bell V-280 Valor features a proven, low-risk engine and a fully integrated system design. Backed by an experienced American workforce in a modernized, advanced manufacturing facility, the Rolls-Royce propulsion system is **ready now** for the U.S. Army.

POWER TO PROTECT



LANPAC

SYMPOSIUM & EXPOSITION

A Professional Development Forum



SAVE THE DATE


16-18 MAY 2023
HONOLULU, HI

EXHIBITS

Jamie Woodside, CEM
LANPACExhibits@ausa.org

SPONSORSHIPS

Gaye Hudson
Sponsorships@ausa.org



This page: An M1A2 Abrams tank assigned to the 3rd Armored Brigade Combat Team, 4th Infantry Division, is readied for a platoon live-fire exercise at Drawsko Pomorskie, Poland. **Next page:** Soldiers with the 3rd Armored Brigade Combat Team, 1st Cavalry Division, exit their M2 Bradley Fighting Vehicles during a rotation at the National Training Center, Fort Irwin, California.

THIS PAGE: ARMY NATIONAL GUARD/SPC. HEDIL HERNÁNDEZ. NEXT PAGE: U.S. ARMY/SGT. HUNTER XUE

WEAPONS & EQUIPMENT

By Scott Gourley, Contributing Editor

Innovation is about more than materiel. Armies win or lose through a combination of doctrine, organization and equipment. All three start with the U.S. Army Futures Command, where eight cross-functional teams, supported by experts from across the Army and the joint services, develop concepts that become doctrine, design future organizations and develop requirements for materiel—all based on assessments of the future operational environment and emerging threats and technologies. The interviews in this section capture moments in modernization and offer examples of ongoing efforts to ensure that soldiers have the capabilities they need tomorrow and into the future. *ARMY* magazine appreciates the support provided by the teams in developing this section.



TABLE OF CONTENTS

I.
Long-Range Precision Fires

124

II.
Air and Missile Defense

130

III.
Future Vertical Lift

136

IV.
Soldier Lethality

144

V.
Next-Generation Combat Vehicle

150

VI.
Network

156

VII.
Assured Positioning, Navigation and Timing/Space

162

VIII.
Synthetic Training Environment

168

Celebrating Freedom...



and Those Who Defend It.

Poongsan Corporation salutes members of the U.S. armed forces for your service and sacrifice. Like you, we recognize that eternal vigilance is the price of freedom, and to preserve peace, we must stand ready to defend it.

A supplier of military munitions with four decades of experience, ultra-modern technology and a commitment to setting a new global standard for product quality, Poongsan supports your mission of defending freedom, wherever it is threatened. We are dedicated to advancing human progress through superior products, exceptional people and uncompromising service.

That's the Poongsan way.



POONGSAN

www.poongsan.co.kr

Long-Range Precision Fires



Developing long-range, deep-strike capabilities that can attack and destroy targets from miles away remains a top modernization priority for the Army as it prepares for more lethal future battlefields.

Using lessons learned from the war in Ukraine, the Army is sharpening its focus on capabilities such as the Extended Range Cannon Artillery and the Precision Strike Missile. In efforts led by the U.S. Army Futures Command's Long-Range Precision Fires Cross-Functional Team, the service also is expanding its sensor-to-shooter targeting capabilities by optimizing cloud technologies.

Extended Range Cannon Artillery

The Army continues to make progress on the Extended Range Cannon Artillery (ERCA). One of the cross-functional team's signature systems, the program seeks to develop a system capable of accurately firing at targets more than 70 kilometers away, according to an essay by instructional leader Latashia Bates published in June by the Association of the U.S. Army, "Army Readiness and Modernization in 2020."

ERCA features an improved howitzer platform, new projectiles, new propellant and new fuses. The team continues to refine the technology and seek soldier feedback on ERCA, said Col. Rory Crooks, who became direc-

tor of the Long-Range Precision Fires Cross-Functional Team in May after serving as chief of staff for V Corps, where he got a close look at lessons learned from the Russia-Ukraine war.

"We've had three soldier touch points [this year]," he said. "We have also had multiple touch points on the enabling systems that are part of that whole program, so with those soldier touch points and several iterations of tests, we have really refined our technology on the platform."

With testing involving seven prototype platforms at Yuma Proving Ground, Arizona, and Aberdeen Proving Ground, Maryland, Crooks said the program is on track to deliver a battalion set of ERCA by the first




quarter of 2023, to be used in operational assessments of the platform, and associated ammunition.


The soldier touch points are “having real-time influence on system design,” said Lt. Col. Todd Mueller, product manager for ERCA at Program Executive Office Ground Combat Systems. “We’re not doing it just to get feedback,” he said. “Rather, it has been implementing and driving change to provide a better capability to the war-fighter.”

ERCA will give the Army much-needed long-range capabilities. “What we’re seeing today and into the future is that range does matter,” Crooks said. “Achieving effects at maximum range really preserves the force. I think that’s intuitive. But it also pro-

Opposite: An Extended Range Cannon Artillery prototype is readied for testing at Yuma Proving Ground, Arizona. **Above:** A Precision Strike Missile is fired from a High Mobility Artillery Rocket System during testing at White Sands Missile Range, New Mexico.

U.S. ARMY PHOTOS



**SCEPTER®**



**Lighter.
Better.
Safer.**

Modernize, lighten the load and save costs throughout the defense budget with strong, lightweight and soldier-friendly advanced packaging solutions for fuel, water, and ammunition.

SCEPTER.COM





vides the force with maximum freedom of maneuver to secure positions of advantage.”

It’s a capability that enables commanders to shape the battlefield. “Having range and having range overmatch means that we can seize the initiative early in a [large-scale combat operations] fight,” Crooks said. “If we can seize the initiative, we can secure those positions of relative advantage, and we can win. We can decide the fight before direct-fire contact.”

Precision Strike Missile

In the Precision Strike Missile (PrSM), the Army is seeking a surface-to-surface, all-weather, precision-strike guided missile fired from the M270A1 Multiple Launch Rocket System and the M142 High Mobility Artillery Rocket System, according to the service.

So far, the Army has met all its “technology test gates” for the program’s first increment, Crooks said. The service is on track to dedicate \$260 million of its fiscal 2023 budget to furthering the program, he said.

Maj. Shaun Bailey, PrSM requirements officer for the cross-functional team, credits six test events the Army conducted early in the program for helping to “set the conditions to go ahead early and accelerate the program.”

Coupled with supporting contract actions and industry efforts, “the successful test events are letting us buy down risk and then move ahead to get the missiles out to the warfighter,” Bailey said. As the work progresses, Bailey said, the focus will turn to additional capabilities, extended range and enhanced lethality.

“We feel like we’re in a good, solid position right now with our development of PrSM,” Crooks said.

Advanced Field Artillery Tactical Data System

In addition to enhanced range and performance features, the Army is seeking to optimize the capabilities of these weapons systems by focusing on “sensor-to-shooter” targeting. “In the future, we want to leverage [artificial intelligence] and machine learning, as

well as autonomy and robots,” Crooks said. “However, to achieve that leverage, a prerequisite is for a resilient and robust network.”

One system the Army is focused on is a cloud-based Advanced Field Artillery Tactical Data System. In its current version, the system provides fully automated support for planning, coordinating, controlling and executing fires and effects such as mortars, field artillery cannons, rockets and missiles, close air support, attack aviation and naval surface fire-support systems, according to an Army description.

The system works with more than 80 battlefield systems and is the primary command and control system for the cross-functional team’s initiatives, according to the Army.

A cloud-based Advanced Field Artillery Tactical Data System takes the current version and puts a “virtual machine image into a cloud environment,” said Dan Elliott, an operations and integrations specialist for the cross-functional team.

In the future, the Army must be able to access and manipulate the data



needed to drive artificial intelligence (AI) and machine learning, Crooks said. With the right data, units can be predictive on and off the battlefield, he said.

For example, for maintenance purposes, predictive data can give early indications that a part in one of the Army's systems is about to fail, he said. "That's where we want to be," Crooks said. "It's going to keep our readiness where it needs to be. It's going to save us money."

On the battlefield, predictive data can help commanders better learn an enemy's habits and patterns. "If the enemy is showing us, through the data that we're collecting off of our sensors, that he tends to fire his artillery from high positions in this sort of pattern, we want to be able to pick up on that and allow AI and machine learning to help us very quickly identify those patterns," Crooks said.

Even in a direct firefight, the data can help commanders decide how best

to use their fire control measures to engage the enemy, he said. "That data, if it's leveraged the right way with AI and machine learning, will get us where we want to be," Crooks said.

The Army is already testing the cloud-based Advanced Field Artillery Tactical Data System, particularly

A missile is test-fired from an Autonomous Multi-Domain Launcher at Fort Sill, Oklahoma.

U.S. ARMY/CHRIS WILSON

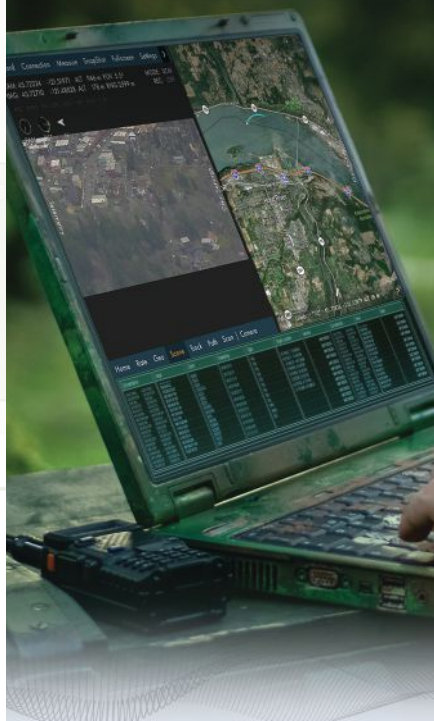


Lighter. Better. Safer.

Modernize, lighten the load and save costs throughout the defense budget with strong, lightweight and soldier-friendly advanced packaging solutions for fuel, water, and ammunition.

[SCEPTER.COM](https://www.scepter.com)





WHEN YOUR MISSION DEPENDS ON REAL-TIME, ACTIONABLE IMAGERY.

We understand the importance of real-time, situational awareness in conflict zones. Actionable ISR imagery is critical for making go-time decisions, and Trillium's HD camera systems continue to deliver in the battlefield. Designed to fit the small to large UAS, each camera system locates, tracks and follows targets—offering day and night visibility to warfighters.

Get Details at trilliumeng.com



with the XVIII Airborne Corps, the 82nd Airborne Division and the 101st Airborne Division (Air Assault), Elliott said.

"They have been very tenacious," he said. "They accomplished six months of objectives in about two weeks and really proved that [the] cloud [Advanced Field Artillery Tactical Data System] can be multiscalable, which means they can do multiechelon integration simultaneously across widely dispersed network areas, as well as overcome some gaps in environments where there is degradation in network capability."

Above and below: Representatives of the Long-Range Precision Fires Cross-Functional Team and the Army Applications Laboratory host industry partners at Yuma Proving Ground, Arizona, to share information about the Extended Range Cannon Artillery. **Opposite:** The Extended Range Cannon Artillery at Yuma Proving Ground.

U.S. ARMY PHOTOS

In November 2021, the 101st Airborne Division established an "over-the-horizon" cloud environment that connected its home station of Fort Campbell, Kentucky, with the 56th Artillery Command in Wiesbaden, Germany, Elliott said. This past February, the XVIII Airborne Corps deployed to Europe with the cloud Advanced Field Artillery Tactical Data System pilot project.

While the XVIII Airborne Corps was in Europe, it experienced a failure in the current version of the Advanced Field Artillery Tactical Data System, Elliott said. When the software froze, the corps was able to connect to the cloud-based system and continue its operations, he said.

Looking Ahead

In the coming year, the cross-functional team plans to continue developing and testing the cloud-based Advanced Field Artillery Tactical Data System, including its planned par-

ticipation in the Project Convergence 2022 exercise late this fall.

The Army also plans to start production on the first operational Precision Strike Missiles to be fielded to warfighters and begin a yearlong operational assessment of the Extended Range Cannon Artillery.

“The operational assessment will make sure that we’re really delivering a capability that will ... provide a division with the capabilities [it] needs to fight at ranges that are relevant to a division, [which is] out to 70 kilometers,” Crooks said. “That operational assessment will look at not only how well the machine performs, but how well soldiers are able to utilize the equipment and, very importantly, how well we can sustain ourselves and [the] rates of fire that we anticipate with that equipment.”

There are many opportunities for “learning and growth,” and not just within the ERCA program, Crooks said. “We’re going to learn a



ton [about] how we fight—and how we fight with this new capability—through that yearlong operational assessment.”

The cross-functional team is focused on its mission, Crooks said.

“What we’re doing through all of our capabilities ... is to allow us to leverage that maximum range and leverage it at echelon and in ways that are meaningful for those commanders to set the right conditions to win.” ★

CEIA GROUND SEARCH METAL DETECTORS

Working in conjunction **with International Armed Forces, CEIA has developed a series of detectors** that can detect all kinds of Mines, IEDs, and Command Wire.



CMD SERIES

LIGHTWEIGHT, COMPACT METAL DETECTOR FOR MINES, IEDs, AND COMMAND WIRES

- ▶ Extremely Easy to Compensate and Operate
- ▶ Built in Battery Charger, Fully Digital Design
- ▶ Extreme Immunity to EMI, Industry-Leading Reliability and Durability



DSMD

DEEP SEARCH METAL DETECTOR FOR UXO TARGETS INCLUDING CLUSTER MUNITIONS, BOMBS AND OTHER ERWs

- ▶ Easy Operations with Pinpointing Capability
- ▶ Differential GPS with Data Tracking Capability
- ▶ Single Person Operation with Built-in Battery Charger and Easy to Understand Display



CWD

LIGHTWEIGHT, COMPACT WIRE DETECTOR

- ▶ Fast and Easy Start-up and Operations
- ▶ Can Easily Detect/Track Command Wires in All Environments while Approaching at Any Orientation
- ▶ Automatic GPS with Data Tracking



For more information, contact your CEIA USA representative at gsmd@ceia-usa.com or call us today at 833-224-2342

Air and Missile Defense



Efforts to modernize the Army's air and missile defense capabilities are already producing results as the service begins a critical operational test and starts fielding new equipment.

The Army was able to achieve these "consequential" milestones over the past two years because of "increasing momentum," said Maj. Gen. Brian Gibson, then-director of the U.S. Army Futures Command's Air and Missile Defense Cross-Functional Team.

Tasked with one of the Army's top modernization priorities, the team has seen "increased and strengthened" progress on several fronts, Gibson said.

"It is not only on the materiel side where the Army has made significant progress on the things that matter to us and our future capabilities, but it's been coupled more tightly over this past year with capacity and future growth potential for forces," he said. "So, the alignment of capacity and capability has become much closer over the last year, and it's really allowed

us to get more soldiers involved at the point in time where we need our soldiers involved for those things that we're developing."

Major Achievement

One major achievement is the fielding of the first Maneuver-Short Range Air Defense (M-SHORAD) vehicles to U.S. troops in Europe.

"That was a program where, last year, we talked about how quick it was for us to go from design to prototype to test," Gibson said. "And now it's out there, being used in the field. I think

that's emblematic of the momentum over the past year."

In addition to equipping the first M-SHORAD air defense battalion, the Army is on track to field four of those battalions in the next few years.

The Army also has started the Integrated Air and Missile Defense operational test, which aims to link sensors and shooters across the battlefield by integrating current and future air and missile defense sensors, weapons and Mission Command technologies, according to information from the Army. If successful, it could change the way the service's air and missile defense formations fight, according to the Army.

Additionally, the service bought two Iron Dome batteries, deploying one for an exercise on Guam; launched Indirect Fire Protection Capability

prototyping efforts; and is continuing with Lower Tier Air and Missile Defense Sensor prototyping efforts to eventually replace the Patriot radar, Gibson said.

The first prototype of the Lower Tier Air and Missile Defense Sensor



Above: The Terminal High Altitude Area Defense system is tested at White Sands Missile Range, New Mexico. **Opposite:** A Patriot missile is launched during an Integrated Battle Command System flight test at White Sands.

ABOVE: MISSILE DEFENSE AGENCY. OPPOSITE: U.S. ARMY/DARRELL AMES

YOUR PARTNER FOR SUCCESS

SURVIVABILITY: MORE THAN JUST ARMOR

ALL-TERRAIN ELECTRIC MISSION MODULE

ATEMM
All-Terrain electric Mission Module

**ELECTRIFYING
THE TACTICAL EDGE**

Multi-Domain - Multi-Mission - One POWERFUL Solution

▶ MORE Power

▶ MORE Fuel Savings

▶ MORE Mobility

▶ MORE Autonomy

▶ MORE Payload

▶ MORE Range

EXPERIENCE THE ATEMM
AT AUSA 2022
OCT. 10-12th, BOOTH #1925

Find the solution at www.plasan-na.com/ATEMM

PLASAN NORTH AMERICA
INNOVATE. DELIVER. PROTECT.

was located at White Sands Missile Range, New Mexico, as of June, and units will conduct testing until October, he said.

“We continue to take advantage of the authorities that Congress gave us for more flexible approaches and acquisition processes. ... That’s important,” he said. “So, it’s really a combination of teamwork and flexible authorities that have allowed us to go fast with a prudent risk approach.”

Building on that momentum, Gibson said the Army is coupling new future formations with the new hardware capabilities.

“We are on a path to provide those capabilities, more than just on design and paper, but physically, with either kit in the hands of warfighters today or on ranges, testing our prototypes at the very front end of future programs,” he said.

Feedback, Teamwork

Along the way, soldier feedback has been critical to the cross-functional team’s work, Gibson said. “Depending on the maturity of the effort or program we’re doing, with the frequency, number and type of soldiers that we put on those pieces of equipment, we have sought to maximize where we can put in the operators from the field,” he said.

As an example, he pointed to testing for the M-SHORAD, which integrates guns, missiles, rockets and sensors onto Stryker vehicles. Soldiers from the unit that was slated to receive the first systems “were the ones actually testing it out at White Sands Missile Range,” he said.

“The soldier-centered design is essential, I think, in anything that we do. It’s deliberate and it’s intentional,” Gibson said. It also gives industry direct feedback “from a soldier or an expert or an operator,” he said. “That direct feedback that they receive is clear, and it’s to the point from a sol-

An Iron Dome Defense System-Army is fired while at White Sands Missile Range, New Mexico.

U.S. ARMY/DARRELL AMES



dier's perspective and includes what the soldier thinks should be considered for change."

Gibson also stressed the importance of close cooperation and support from organizations such as Program Executive Office Missiles and Space, Futures Command and the other cross-functional teams.

Using M-SHORAD as an example again, Gibson cited the close work between his team and the Synthetic Training Environment Cross-Functional Team. "Our role is to help the Army speed capability to the operational force in a manner that is different, so the [Synthetic Training Environment Cross-Functional Team] helps us in the training aids and devices in the virtual environment that are going to be necessary for operators to use our pieces of equipment to help facilitate that capability," he said.

Futures Command's Project Convergence exercises are another venue for the cross-functional teams to come

together, Gibson said. "As part of that, the Army uses both current and future technologies to provide things like better sensor-to-shooter and command and control options for our warfighter," he said.

Project Convergence 2021, which took place in October and November 2021, included joint partners, and the Air and Missile Defense and Long-Range Precision Fires Cross-Functional teams worked with the Navy, Marine Corps and Air Force "in how we execute joint fires," he said as an example.

Technology Challenges

The Air and Missile Defense Cross-Functional Team also continues to look for ways to integrate or take advantage of new, emerging technologies.

For example, the team is working with the Army Rapid Capabilities and Critical Technologies Office on the best way to integrate directed-energy technologies into air and missile de-

fense, Gibson said. "The age of lasers has been upon us for quite a while, although technology at some points along the way has been an impediment, but I firmly believe that those days are quickly coming to an end," he said, adding that Lt. Gen. L. Neil Thurgood, the Army's director for hypersonics, directed energy, space and rapid acquisition, is leading a "rapid effort" to bring lasers to the battlefield.

"As there always are with new technologies, there will be challenges along the way as we adapt that into prototypes and then put them in the hands of soldiers," Gibson said. "But our first Maneuver-Short Range Air Defense directed-energy lasers will be in the hands of Army air defense operational soldiers starting this fall, with those soldiers providing direct feedback."

As technologies become more complex, "the ability to decide and understand becomes more critical," Gibson



STREAMLIGHT®
SIDEWINDER
STALK™

Ultimate Maneuverability.

This dual-fuel, low profile light comes with multiple mounts and a flexible stalk so you can put the light right where you need it. Light options include visible white and colored LEDs plus IR high and low modes. And a separate IFF switch lets you use both the flexible stalk light and IFF when needed.

76 LUMENS | DUAL FUEL | FLEXIBLE STALK | MULTIPLE MOUNTING OPTIONS

 [STREAMLIGHT.COM/SIDEWINDERSTALK](https://www.streamlight.com/sidewinderstalk) © 2022 STREAMLIGHT, INC. ALL RIGHTS RESERVED.



said, so the cross-functional team also focuses on “decision-making technologies and command and control systems.” Specifically, the team is looking at how artificial intelligence can enable “the necessary understanding and decision-making to occur, but not at the expense of a soldier or leader being in the loop to make that decision,” he said.

Above: A Maneuver-Short Range Air Defense system-equipped Stryker from the 5th Battalion, 4th Air Defense Artillery Regiment, engages targets during an exercise in Poland. **Opposite:** The Integrated Battle Command System at Redstone Arsenal, Alabama.

ABOVE: U.S. ARMY/MAJ. ROBERT FELLINGHAM. OPPOSITE: U.S. ARMY

The team also is looking for opportunities to address “more advanced threats,” including new hypersonic and supersonic space threats, Gibson said.

“Air and missile defense certainly has a role in that, and we’re part of a broader effort across the Army and Department of Defense in the joint force to get after how we can have outcomes that matter in support of hypersonic defense,” he said.

Future Activities

Looking ahead to the next year or so, Gibson said he expects the team will complete the initial operational test and evaluation of the Integrated Battle Command System. Part of Army

Integrated Air and Missile Defense, the system is the fire control and operational center capability that gives greater defense effectiveness than what can be provided in the current single sensor fire unit construct, according to the Army. Once completed, the test’s findings can be presented to senior leaders for decisions on an initial operational capability and fielding.

In terms of the Maneuver-Short Range Air Defense capability, the Army will complete fielding the systems to the 5th Battalion, 4th Air Defense Artillery Regiment, in Europe and start fielding to the next battalion, Gibson said.

Gibson, who spoke as he prepared to complete his tenure at the cross-func-

**DEPLOYABLE. LIGHTWEIGHT.
RELIABLE. EXPEDITIONARY
COMMS SIMPLIFIED.**

AUSA ‘22 Booth #8337
www.pts-inc.com



PTS

Expeditionary Communications

tional team, also said he believes the Army will start integrating 50-kilo-watt directed-energy prototypes into some Army air defense formations, providing soldiers the opportunity to learn more about the technology.

Gibson's successor, Col. Patrick Costello, who took over in May, said he is looking forward to continuing the cross-functional team's efforts.

"The Army transformation that we're undergoing right now is the biggest in many, many years; bigger than any of us in this room have kind of witnessed during our careers," Costello said. "The capabilities that we're bringing forward right now will fundamentally change the way that we are designed and how we will employ these capabilities in support of the warfighters out there. So, it's an exciting time to be here at the [cross-functional team] and an exciting time to be part of the air defense modernization efforts."

Gibson agreed. "This is the great-



est and most complex modernization that we've undertaken since the Cold War, but we can't do it without the warfighter," he said. "Their input is invaluable. It's necessary, and it's essential."

The cross-functional team is focused on delivering to soldiers the capabilities they need, Gibson said. "We

are absolutely focused on delivering capabilities that matter and delivering capabilities that give them better flexibility and the ability to choose differently between sensors, shooters and Mission Command," he said. "It's not about just giving them a whole bunch of new things that are stove-piped and don't work together." ★

UNCOMPROMISING PERFORMANCE



RAIDX 



[LEARN MORE](#)

- SMALLER, LIGHTER, STRONGER LASER AIMING DEVICE
- ULTIMATE BEAM CLARITY & UNIFORMITY
- INCREASED OPERATOR EFFECTIVENESS & AWARENESS



WILCOX[®]

Future Vertical Lift



Greater speed, range and convergence remain top priorities for the Army as it pursues next-generation aircraft to replace its fleet of helicopters.

From the Future Attack Reconnaissance Aircraft to the Future Long-Range Assault

Aircraft, the Army wants to fly faster, farther and smarter to keep up with future battlefield demands.

To achieve these goals, the service not only is developing new aircraft, but it also is experimenting on several

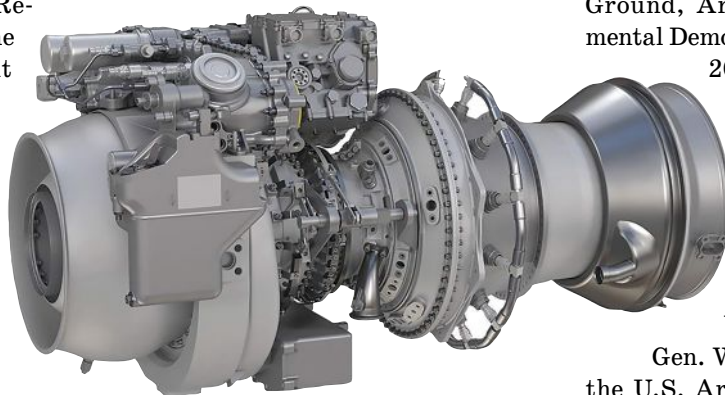
fronts to achieve interoperability with its intelligence, fires and maneuver forces. Most recently, the Army put its work to the test during the Project Convergence 2021 exercise in November 2021 at Yuma Proving Ground, Arizona, and the Experimental Demonstration Gateway Event 2022, which took place in May at Dugway Proving Ground, Utah.

“Those two signature events really culminated all of our efforts in science and technology for Future Vertical Lift,” said Maj.

Gen. Walter Rugen, director of the U.S. Army Futures Command’s

Above: Soldiers with the 2nd Assault Helicopter Battalion, 158th Aviation Regiment, 16th Combat Aviation Brigade, train during an annual exercise in Indonesia. **Right:** The developmental Improved Turbine Engine.

ABOVE: U.S. ARMY/SPC. CHRISTOPHER WILKINS. RIGHT: U.S. ARMY





DISTRIBUTED MISSION COMMAND IN MULTI-DOMAIN OPERATIONS



gdmissionsystems.com



GENERAL DYNAMICS
Mission Systems



Future Vertical Lift Cross-Functional Team. “We had about 123 technical objectives and over 50 first-time technological achievements completed between the two events.”

The exercise at Dugway Proving Ground also featured seven NATO partners, so “it was an international enclave,” Rugen said.

During the exercises, the Army was able to demonstrate greater speed, range and convergence across key domains, including digital, radio frequency and lower tier of the air—the airspace where Army aviation typically operates.

Above: Helicopters from the 16th Combat Aviation Brigade are ready to be folded into shipping configuration at the Port of Tacoma, Washington. **Opposite:** A Modular Effects Launcher is attached to a Future Attack Reconnaissance Aircraft surrogate for testing.

ABOVE: U.S. ARMY/CAPT. KYLE ABRAHAM. OPPOSITE: U.S. ARMY

“That lower tier of the air domain is where our rotorcraft fight and win, giving the biggest punch for the Army,” Rugen said. “We are really proud of what the team has done. We’re seeing great advances in our network capability, great advances in our cross-domain solutions; taking things from different partners and getting them into the message formats we need to fight faster.

“We are using surrogates for the aircraft, but what we’re seeing, especially in the drone swarming that we did, and in our air-launched effects, is an ability to do a number of things so much better on a future battlefield than we ever thought.”

Dovetailing Efforts

As it moves forward with its aircraft programs, the cross-functional team is working closely with Program Executive Office (PEO) Aviation.

For the Future Attack Reconnaissance

Aircraft (FARA), which is meant to close the gap left by the retirement of the OH-58 Kiowa helicopter, the Army has “ongoing competitive prototyping,” said Brig. Gen. Robert Barrie, program executive officer for Aviation. “The focus there has really been on continuing to build prototypes and then to determine, on the rest of the attributes, how we proceed forward as we enter into a program of record,” he said.

PEO Aviation also is developing the Improved Turbine Engine Program, the engine that will power FARA in the near term, and, eventually, the Army’s UH-60 Black Hawk and AH-64 Apache helicopters, Barrie said. “We’re targeting November of this year for delivery of those engines to our two competing FARA contractors in the competitive prototype space,” Barrie said.

The Future Long-Range Assault Aircraft, which will replace part of the Black Hawk fleet, is undergoing



THANK YOU FOR YOUR SERVICE... AND SACRIFICE.

Gorman-Rupp has been providing portable pumping solutions to the U.S. Military for over 70 years. We have a reputation for manufacturing the most dependable fuel and water transfer pumps in the Military. These pumps have played an integral role in the advancement of troops throughout the world.

> For more information on the pumps that support our troops and Military, call Gorman-Rupp at 419-755-1011 or visit GRpumps.com.



*Pump photo by
Maj. John Adams*

GR
GORMAN-RUPP
PUMPS

The Pump People®

575 © 2022 The Gorman-Rupp Company.



source selection, Barrie said. The two competitors are Bell's V-280 Valor and the Defiant X by Sikorsky and Boeing. No decision had been announced as of Sept. 8.

"We're very proud of the work that the teams—between the cross-functional team and the PEO and, really, across the entire enterprise—have done with flying demonstration systems, then using those demonstration systems to evolve the attributes, so that prior to entry into our programs of record, we have a good understanding of performance, cost, manufacturability and where our technical risks reside, all of that allowing development of very informed paths on our

programs," Barrie said.

Work also continues on the Future Tactical Unmanned Aircraft System and Modular Open Systems Architecture.

The Future Tactical Unmanned Aircraft System seeks the latest unmanned aerial system technology to develop a replacement for the Army's Shadow unmanned aerial system, Barrie said. The Army continues to put potential replacements in soldiers' hands for testing and feedback.

Through Modular Open Systems Architecture, the Army is seeking a strategy designed to create and implement affordable and adaptable technologies through a widely supported system interface or architecture, according to DoD. The plug-and-play system "really ties everything together," Barrie said.

Leveraging Technology

The Modular Open Systems Architecture (MOSA) approach has been key in the experiments and demonstrations over the past year that explored 51 technologies, both hardware

and software, on a Gray Eagle unmanned aircraft system test bed, Rugen said.

"We used that to prove out the [MOSA] concept," he said. "Seeing how quickly those hardware and software technologies go on and off Gray Eagle, separated from the flight-critical systems, was very surprising to me in a good way."

The cross-functional team also has enjoyed some initial success with its experimentation involving interactive drone swarms. "I think we have come to a pretty good place," Rugen said. "I don't want to oversell it, but seeing behaviors within our swarm that are automated, that were developed working in conjunction with [the Defense Advanced Research Projects Agency], and that we were able to demonstrate at Dugway last May, was surprisingly good. It was great to see the team tackle that."

Some of the Army's new technology demonstrations seek to enhance both the enduring and future aviation fleets. As an example, Rugen said the cross-functional team is looking at

Above: Soldiers with the 12th Combat Aviation Brigade stand next to their CH-47 Chinook helicopter during a media event in Finland. **Opposite:** Pfc. Terry Hollywood, with the 224th Military Intelligence Battalion, works on a Gray Eagle unmanned aircraft system before Project Convergence 2021 at Yuma Proving Ground, Arizona.

ABOVE: ARMY NATIONAL GUARD/SGT. AGUSTIN MONTANEZ. OPPOSITE: U.S. ARMY/SGT. MARITA SCHWAB



load stabilization on the UH-60 series medical evacuation helicopters as well as early prototyping of the medevac cabin that will go in the Future Long-Range Assault Aircraft.

“We have over 540 medevac aircraft in our fleet,” Rugen said. “Some of the work we did at Project Convergence 21 with load stabilization, being able to bring in a litter to medevac a wounded soldier, showed almost a 500% improvement on time in and out. So, again, speed is our friend, range is our friend and just seeing those technologies demonstrated was surprisingly good.”

Feedback, Cooperation

One of the keys to the cross-functional team’s success so far has been obtaining soldier feedback, Rugen said. The team “partnered heavily” with the 82nd Airborne Division during Project Convergence 21 and the Experimental Demonstration Gateway Event (EDGE) 22. “It’s still very much a soldier-centered design effort, this pioneering acquisition strategy we’re on,” Rugen said, adding, “From the requirements and

Make the most of your skills and experience in an innovative, diverse, and rewarding workplace.

Chenega is a leading government services contractor supporting defense, intelligence, and federal civilian customers.

Find your opportunity at chenega.com/careers.

CHENEGA

MILITARY FRIENDLY
2022 GOLD
TOP 10 EMPLOYER

MILITARY FRIENDLY
2022
SERIOUS EMPLOYER



the concept work that the [cross-functional team] does, we very much value it more than nearly anything.”

Working closely with other agencies and organizations across the Army also has been critical, Rugen and Barrie both said. “At Project Convergence, for example, we were working with all of the [cross-functional teams], the [Army Intelligence, Surveillance and Reconnaissance] Task Force and the Army Artificial Intelligence Integra-

tion Center, and we had them almost all out at EDGE 22 as well,” Rugen said. “We also had 23 partner organizations, plus seven allied partners, plus the additional PEOs that we work with, so the huddle is far bigger than what you would normally think.”

In the coming months, the Army is scheduled to conduct flights of the competitive Future Attack Reconnaissance Aircraft prototypes, Rugen said. “That will be a significant milestone for us, as we very much enjoy flying before we buy and informing our requirement going forward with what is achievable and affordable,” he said. “When you talk about budget, affordability is very much on our mind, and obviously, we want something that’s viable on the future battlefield.”

The first quarter of fiscal 2023 also will feature a shoot-off of new Long-Range Precision Munitions, “a big activity that will inform that program of record,” Rugen said.

The cross-functional team is focused on its mission, Rugen said. “We very much believe that this leap-ahead capability is needed for the future force and future Army aviation force,” he said.

Ultimately, the Army wants to bring and deliver “transformational capability,” Rugen said. “We are going to be faster and more precise in all domains in the future, and what that’s going to provide to our future soldiers is the overmatch they need to fight and win against a peer competitor in a really tough neighborhood.” ★

Future Long-Range Assault Aircraft candidates are the Sikorsky-Boeing Defiant X, above left, and the Bell V-280 Valor, below left. Candidates for the Army’s Future Attack Reconnaissance Aircraft are the Sikorsky Raider X, above right, and the Bell 360 Invictus, below right.

COMPANY IMAGES AND PHOTOS



Gray Eagle ER



THE MULTI-DOMAIN SOLUTION

Gray Eagle Extended Range provides the warfighter persistent and reliable mission support in Multi-Domain Operations. Providing over 40 hours of endurance with an open system architecture that integrates multiple advanced payloads for standoff in a contested environment. Gray Eagle Extended Range is a combat-proven system that teams with Army forces today and into the future.

ga-asi.com

©2021 GENERAL ATOMICS AERONAUTICAL SYSTEMS, INC.



Airborne Situational Awareness
24/7, Worldwide

 **GENERAL ATOMICS**
AERONAUTICAL

Soldier Lethality



From the Next-Generation Squad Weapon to the Integrated Visual Augmentation System, the Soldier Lethality Cross-Functional Team continues to focus on soldiers' equipment needs, delivering new, leap-ahead capabilities to the force.

One of those capabilities is the Enhanced Night Vision Goggle-Binocu-

lar (ENVG-B), said Brig. Gen. Larry Burris, director of the cross-functional team, the Army's chief of infantry and commandant of the U.S. Army Infantry School.

Delivered to soldiers in just 23 months, the Army has fielded more than 9,000 ENVG-Bs to brigade combat teams across the force, Burris said. The goggle allows users to see

in all light levels, through smoke and fog, and it picks up on heat signatures, giving soldiers better visibility on the battlefield.

More soldiers are slated to receive the ENVG-B in fiscal 2023 through the Maneuver Capabilities Development and Integration Directorate at Fort Benning, Georgia.

The cross-functional team handed



off the program to the directorate in September 2021, Burris said. “Now they own that requirement as well as the responsibility for coordinating the fielding and things like that,” he said. “We were the first [cross-functional team] to spin off a program like that.”

Another critical breakthrough for the cross-functional team was the selection of a vendor to produce the Ar-

my’s Next-Generation Squad Weapon family—the XM5 rifle, which is slated to replace the M4 and M4A1 carbine; the XM250 automatic rifle to replace the M249 Squad Automatic Weapon; and a new 6.8 mm-caliber family of ammunition.

The Army announced in April that it had awarded the contract for the Next-Generation Squad Weapon

family to Sig Sauer after a 27-month prototyping and evaluation effort. Burris credited the Army for moving forward in its efforts to better equip

The Next-Generation Squad Weapon XM5 rifle, left, and the XM250 automatic rifle, right, are coming soon to combat arms troops.

SIG SAUER PHOTOS



the service's close-combat force.

"The fact is that we did it in a very short amount of time relative to what acquisition programs used to be," he said. "In the past, it would be 10–15 years before we fielded a new 'something' to a soldier." Instead, the Army plans to field the weapons to the first unit in fiscal 2023, he said.

Significant Upgrades

The Next-Generation Squad Weapon program is also significant because it's the "first new weapon that's been developed in 60 years," Burris said. "It's the first time in six decades that the Army will have developed a new caliber and fielded it in a totally new weapon like that. I think the capability that we're going to give our soldiers in a very short amount of time is game changing."

He also said he is pleasantly surprised by the new 6.8 mm ammunition for the XM5 rifle and XM250 automatic rifle, and the capability it provides over the 5.56 mm and 7.62 mm ammunition fired by the M4 and M249, respectively. "I think that's pretty amazing, and it is going to be another game changer for us," he said.

The Integrated Visual Augmentation System (IVAS), another priority effort by the cross-functional team, continues to see improvements, Burris said. "If you recall, IVAS took a pause for about 45 days so that we could evaluate where we were, because we weren't where we needed to be in terms of reliability and in terms of visibility through the [heads-up display]," he said. "But now we're on the right trajectory, with IVAS recently completing an operations demonstra-

tion at Fort Bragg, [North Carolina,] in late June."

IVAS integrates next-generation situational awareness tools and high-resolution digital sensors for soldiers in a single platform, providing them with improved sensing, decision-making, target acquisition and target engagement, according to an Army description.

Moving Fast

Burris, who has led the Soldier Lethality Cross-Functional Team since August 2021, said he is pleased with the progress that's been made. "All of our programs have progressed significantly, and I think it's pretty awesome to see how fast things have moved," he said.

The team also continues to prioritize soldier feedback. For example, soldiers

spent more than 20,000 hours testing and providing feedback throughout development of the Next-Generation Squad Weapon, he said.

"As vendors produced a prototype, we'd give it to soldiers, and they would provide feedback," he said. "What's interesting is that it wasn't a comparison against one another. It wasn't a comparison against an M4 or an M249. It was, 'Hey, here's a piece of kit or a rifle. Go shoot it and give us feedback on it.'"

All that input would then go back to the vendors for changes, upgrades or other improvements, he said.

Similar soldier touch points are taking place for the IVAS, which has experienced hiccups. "The IVAS design, in its current configuration, is based on soldier feedback," Burris said. "Is it where it needs to be right now? No. But it continues to evolve as we go through soldier touch points, and they provide feedback on reliability, form and fit, things that they don't

necessarily like or things that could be changed."

Burris also credits the touch points with providing opportunities for units to maximize a system's capabilities by finding creative ways to use it and exploit its benefits.

"Soldier-centered design has enabled us to field a weapon that soldiers will be much more satisfied with, compared to something we developed in a vacuum, produced, purchased and handed to them," he said.

Working Together

Another critical element of the cross-functional team's efforts is teamwork, Burris said. The team works closely with the other cross-functional teams, Program Executive Office Soldier and its subordinate program managers, organizations across the U.S. Army Futures Command and other groups throughout the Army.

As an example, Burris cited a recent visit to Lake City Army Ammunition

Plant in Missouri to view the work being done to prepare the plant to produce the new 6.8 mm ammunition. "In a very short amount of time, they've been able to repurpose an existing space and put together an interim facility while the actual facility has got to be constructed," he said.

The plant also is already producing its first contract order of 6.8 mm general-purpose rounds, Burris said. "They are not producing the complete bullet, just the projectile, but they are already producing on the first contract order for [more than 5 million] projectiles."

Opposite: A soldier with the 3rd Battalion, 75th Ranger Regiment, participates in Integrated Visual Augmentation System testing at Camp Santiago, Puerto Rico.

Inset above: The Black Hornet Soldier Borne Sensor is used with the IVAS.

Inset below: Soldiers test the IVAS with a Bradley Fighting Vehicle at Camp Roberts, California.

U.S. ARMY PHOTOS BY COURTNEY BACON



Best In Class Military Touch Screens

It is no secret that the World's Premier Avionics & Military Companies prefer Mildex Optical for their Touch Screen requirements.

Military applications require special solutions to comply to the tough rugged specifications.

Our MIL-Enhanced Touch Screens are designed for MIL Standard performance:

Failure is not an option.

We have been servicing the Avionics & Military Markets for over the past 15 years.



Mildex Optical, Inc.

480-379-2802

www.mildex.com.tw

The Soldier Lethality Cross-Functional Team also works closely with other cross-functional teams, including the Synthetic Training Environment Cross-Functional Team. “They are the requirement owner for the Squad Immersive Virtual Trainer, in which IVAS plays a critical role,” Burris said.

The team also is working with the Future Vertical Lift Cross-Functional Team, including to integrate the ENVG-B and IVAS into the aircraft, he said. The goal is to connect the wireless router inside the aircraft to the IVAS, which then connects to cameras outside of the aircraft. This allows a soldier in the back to “maintain situational awareness of what is outside of the aircraft” and “see the landing zone on approach,” Burris said.

Experimentation on this effort will continue at the upcoming Project Convergence 2022 event at the National Training Center at Fort Irwin, California, late this fall.

Other partners include Project Manager Stryker Brigade Combat Team.

“As we look at maintaining situational awareness, we’ve been able to do the same thing I just described with the Stryker family of vehicles,” Burris said. “We mount cameras on the outside, connected via a wireless router, and if I’m sitting in the back of the Stryker and I look around with my IVAS, I don’t see the armor. All I see is what the camera sees outside of the vehicle.”

The U.S. Army Natick Soldier Systems Center, the U.S. Army Combat Capabilities Development Command Armaments Center and the C5ISR

(Command, Control, Communications, Computers, Cyber, Intelligence, Surveillance and Reconnaissance) Center also are regular partners of the cross-functional team. “It’s important that we maintain these relationships as we move forward,” Burris said. “All of us benefit from it.”

Emerging Technology

As the team works to provide soldiers, particularly those in the Army’s close-combat force—about 120,000 soldiers in the infantry and other combat arms MOSs—with better, more lethal capabilities, powering that new equipment continues to be a challenge.

With technology comes growing energy and power needs, Burris said. “Soldier power is something that we’ve got to continue to work on,” he said. “You don’t want a soldier carrying a lot of batteries around, because it’s just extra weight. So, how do you recharge? That’s just one example of the types of challenges being faced.”

The Army also must be able to adapt and evolve its new systems to keep up with evolving technological advances and threats. “As technology contin-

ues to mature, how do we continue to make improvements to IVAS, for example?” Burris said.

Army Chief of Staff Gen. James McConville has likened the current IVAS to the “iPhone Version 1,” Burris said. “So, as technology matures and better capabilities come on line, we’ve got to continue to develop IVAS 1.1 and 1.2 and 1.3 and get that into the hands of our soldiers.”

Staying Focused

Looking ahead to the coming year, Burris said the Soldier Lethality Cross-Functional Team will remain heavily involved with the IVAS and Next-Generation Squad Weapon programs, particularly as the new rifles and automatic rifles are slated to be issued to the first unit in the fourth quarter of fiscal 2023.

As both cross-functional team director and chief of infantry, Burris said he is committed to pursuing “capabilities that make the close-combat force more lethal, more mobile and more effective on the future battlefield.”

“We want soldiers that are more lethal, that can move better, that are more survivable and better prepared than our opponents, and every single individual on the [cross-functional team] is committed to that,” he said. “Our focus is strictly on the close-combat force and the close-combat soldier, those soldiers who have sustained 80% of the casualties over time, equipping and ensuring that they have the best capabilities possible.”

While modernization efforts often focus on items such as ships, planes, tanks and other large programs, the Army can’t accomplish its mission without putting boots on the ground, Burris said.

“Tanks and all those other things don’t clear ground, don’t seize terrain and don’t seize built-up areas,” he said. “It takes soldiers on the ground, dismounted, supported by those other capabilities, to do our nation’s bidding and to help our Army fight and win our nation’s wars.” ★



Right: Developmental bullet and casing technologies use polymers or combinations of brass and stainless steel. **Opposite:** A soldier with the 3rd Infantry Brigade Combat Team, 25th Infantry Division, conducts weapon qualification with the Enhanced Night Vision Goggle-Binocular and the Family of Weapon Sights-Individual at Schofield Barracks, Hawaii.

RIGHT: U.S. ARMY. OPPOSITE: U.S. ARMY/1ST LT. ANGELO MEJIA




WHY dfYOUNG?

Aerospace and Defense Logistics

Purpose-built to increase operational readiness for the aerospace and defense industry, dfYOUNG has delivered specialized logistics solutions for leading aerospace and defense manufacturers, suppliers, and service providers across the globe for nearly 70 years.



dfYOUNG is committed to reducing cyber security risk throughout our customers' supply chains through the OUSD(A&S) CMMC framework.

Experience

- Founded in 1903 – 100+ years of innovation, tailored logistics solutions, and superior business results.
- Transportation and logistics of the industry's leading systems – military and commercial aircraft platforms, air defense systems, missiles and munitions, and more.
- Innovations and best practices gained from other award winning business units serving Fortune 500 Automotive, Life Sciences, and Food and Beverage Clients.
- Long-term business relationships with our customers, some dating over 100 years.
- Dedicated operations team, accessible leadership, and single point of accountability.

Scan this QR Code for a detailed overview





Next-Generation Combat Vehicle

From the Optionally Manned Fighting Vehicle to Mobile Protected Firepower, the Army is making critical progress in its efforts to modernize its combat vehicles.

Led by the U.S. Army Futures Command's Next-Generation Combat Vehicle Cross-Functional Team, the Army is working on several new vehicles. At the top of the list is the Optionally Manned Fighting Vehicle (OMFV),

which is slated to replace the Bradley Fighting Vehicle that was first fielded in 1981.

After briefly pausing the program to adjust requirements, the Army is working with five contracted industry partners to refine and update their OMFV proposals, said Maj. Gen. Ross Coffman, then-director of the Next-Generation Combat Vehicle Cross-Functional Team. "This process is unique, and it is one of the things

that we are most proud of," he said. "The Army has changed how we do vehicle-requirement development and changed the way we'll do armored vehicle procurement in the future."

For the Optionally Manned Fighting Vehicle, the Army is starting with "broad characteristics" that it has refined into "vehicle specifications over time, while understanding that we're not omniscient, that we don't know exactly what is possible, or even what we might want seven years from the date," Coffman said, referring to the fact that before the rise of cross-functional teams, acquisition programs traditionally took seven years or more.

In the past, the Army would develop a requirement, then years later, when the vehicle was delivered, "We'd say,



‘Well, that’s not what we want,’” Coffman said. “So now, we’ve been very deliberate to not make any decision before it’s time.”

Coffman, who has been tapped to be the next deputy commander of Futures Command, credited the new process for allowing development of a Modular Open Systems Architecture and the use of digital engineering “to get the vehicle design better before bending metal.”

The Modular Open Systems Approach is designed to create and implement affordable and adaptable technologies through a widely supported systems interface or architecture, according to DoD. Coffman described it as “game changing.”

“Now we can change out sensors or

weapons or effectors without having to pay additional money to an [original equipment manufacturer] to integrate it,” he said. “It provides the ‘USB port’ of vehicle development. As long as it can go into the USB port and it’s compatible with the system ... we can just plug it in and go. That’s huge.”

Mobile Protected Firepower

Another key program is the Army’s competition for Mobile Protected Firepower (MPF). In late June, the Army announced it had awarded a \$1.14 billion contract to General Dynamics Land Systems for production and fielding of up to 96 Mobile Protected Firepower vehicles.

Designed for infantry brigade com-

bat teams, Mobile Protected Firepower is designed to give soldiers greater survivability, the ability to identify threats earlier and at greater distances, and the ability to move quickly over tough terrain, according to the Army.

“This is the first major combat vehicle program to have success since the Big Five,” Coffman said, referring to the introduction four decades ago of the Abrams tank, Bradley Fighting Vehicle, Apache attack helicopter,

Left: The Armored Multi-Purpose Vehicle.

Right: Soldiers with the 3rd Infantry Division move M113 armored personnel carriers onto truck trailers at Fort Stewart, Georgia.

LEFT: U.S. ARMY. RIGHT: U.S. ARMY/SGT. AALIYAH CRAVEN



Black Hawk utility helicopter and Patriot air defense system.

The Army undertook a deliberate and accelerated process to obtain Mobile Protected Firepower vehicles, Coffman said, beginning with a pilot program with the 82nd Airborne Division at Fort Bragg, North Carolina. During the pilot, the Army equipped paratroopers with Marine Corps Light Armored Vehicles (LAVs) and worked on tactics, techniques and procedures for a lightweight platform like Mobile Protected Firepower.

Paratroopers also worked on how such a platform would bolster a light division, Coffman said. “The LAVs were surrogates, and those surrogates informed doctrine and informed requirements,” he said.

At the same time, Army leaders made “a very sound decision to move fast and set requirements that were achievable with the technology avail-

able,” Coffman said. That decision allowed industry to develop prototypes quickly, which then allowed the Army to have “very extensive soldier touch points with two vendors’ prototypes and put them through their paces,” he said.

Armored Multi-Purpose Vehicle

Work also continues on the Armored Multi-Purpose Vehicle (AMPV), which replaces the M113 family of armored personnel carriers within the Army’s armored brigade combat teams. The AMPV gives the force additional capabilities, Coffman said. “Unlike the M113, the AMPV can keep pace with the formation,” he said. “Additionally, it is many times more survivable on the battlefield than the M113.”

The AMPV platforms entered operational testing at Fort Stewart, Georgia, in June, Coffman said. “In the next 12 months, we will begin full-rate production and fielding of this vehicle to the formations, so now our soldiers are going to be better protected and able to keep up with the other vehicles in the formation,” he said, adding that

“each of the five variants has done very, very well thus far in testing.”

Robotic Combat Vehicle

Another focus area for the Next-Generation Combat Vehicle Cross-Functional Team is the Robotic Combat Vehicle. Plans call for the Army to develop three variants—light, medium and heavy—and the Army envisions employing these robotic vehicles as scouts and escorts for manned fighting vehicles to deter ambushes and guard the flanks of mechanized formations, according to the Congressional Research Service.

Over the past 12 months, the cross-functional team has “tested purpose-built robots,” Coffman said. “Never have we had large, purpose-built robots to experiment with, and so we’ve put the Robotic Combat Vehicle-Light and Robotic Combat Vehicle-Medium through testing so they can operate safely around soldiers.”

The robots are “payload-agnostic,” Coffman said, so they can be equipped for the mission at hand. “They can have chemical detectors on them.

An artist’s rendering of General Dynamics Land Systems’ Mobile Protected Firepower vehicle.

GENERAL DYNAMICS LAND SYSTEMS



STRENGTH OF PURPOSE

Entrust your most sensitive missions to Gulfstream. With more than five decades of high performance, flexible platforms and proven reliability, there is no other choice for civilian and military operations over land and sea.



A General Dynamics Company



They can have smoke machines on them. They can have a weapon or a sensor or electronic warfare jammer or whatever you want,” he said.

These robotic vehicles have the potential to change how soldiers fight. “We can see, through current events in Ukraine, how robots will expand the battlespace and reduce risk to our soldiers,” Coffman said.

Working With Industry

As the cross-functional team has pushed forward with its programs, Coffman said he is pleased with industry’s ability and willingness to be creative and work with the Army. “Everyone always thought that industry would just pull whatever they had off the shelf and give it to you no matter what your requirements are,” Coffman said. “But what we’ve seen through the OMFV program is that if you give industry a lot of maneuver space ... they will come up with extremely innova-

tive solutions to the problems you’re trying to solve.”

That innovation also has extended to ancillary equipment, such as radios, Coffman said. “We have radio companies that have allowed our robots to operate at three to four times [the] range we thought possible when we started this,” he said. “So, if you communicate early and often to industry on the problem you’re trying to solve, they will come back to you, and it will pay off in spades.”

Coffman also highlighted the importance of cooperation and coordination across the Army, using the service’s Project Convergence exercises as an example of how the eight cross-functional teams collaborate on solutions to common problems.

“It was apparent when we stood up the [cross-functional team] four years ago in Detroit that the aviation community and the ground community were trying to solve the same prob-

lems, but they weren’t hand in hand. They were solving it in their own sandbox,” Coffman said. “So, we work a lot with the aviation community through the Future Vertical Lift [Cross-Functional Team], working to solve common problems, because we both have active protection systems, we both have sensors, and we both have weapons.”

The Army also works closely with its sister services. “We’re working with the Marine Corps on our robotics efforts so that we don’t have two services trying to solve the same problem,” Coffman said.

Looking Ahead

In the coming months, the Army expects to maintain the momentum it has gained in its combat vehicle programs. But it also continues to seek new technology and innovation.

“How do you get something that can withstand an enemy tank round but is still lightweight? That’s a wicked

problem,” Coffman said. “Material science moves so slowly. You can build something that’s 1-inch-by-2-inches that can really take a punch, but when you start to try to weld it and scale it across a large surface area, it’s not holding up. That’s the biggest technology challenge that I have.”

In the more immediate future, the Army is preparing to move the Optionally Manned Fighting Vehicle into the next phases. On July 1, the Army issued the formal request for proposal for the vehicle’s detailed design and prototype build and test phases—also known as Phases 3 and 4 of the five-phase program.

“That’s where we will have a down-select to choose up to three OMFV vendors to actually prototype vehicles that then will allow us to move into Phase 5, where we will go ... down to one [vendor],” Coffman said.

The Army also is moving forward with low-rate initial production for Mobile Protected Firepower, preparing to equip its first unit with the Armored Multi-Purpose Vehicle, and looking to issue a request for proposal for the Robotic Combat Vehicle-Light sometime next year, Coffman said.

The Next-Generation Combat Vehicle Cross-Functional Team remains focused on its mission and the future, Coffman said. “We’re not focused on what the Russians and the Chinese have today. We’re looking at what they’re going to have tomorrow and developing technologies that can defeat their reaction to our efforts,” he said.

While the team’s work is “being informed by what’s going on in Ukraine and what’s going on elsewhere in contentious areas, we’re not looking backward,” he said. “We’re not even looking at today. We’re clearly focused on tomorrow.” ★

Opposite: Soldiers sit in a mock-up of the crew compartment of a potential future Optionally Manned Fighting Vehicle.

Above: A Robotic Combat Vehicle-Light prototype is tested with a tethered unmanned aerial vehicle.

U.S. ARMY PHOTOS BY DAN HEATON





Visit Booth #640 and
Register to Win Premium
Tickets to the 123rd
Army-Navy
Game!

Defying Reliability, Ruggedization, and SWaP Demands

Sealevel Systems, Inc. is the leading provider of critical communications hardware and software to all major defense and aerospace contractors. We are committed to a first-in-industry lifetime warranty on I/O and long-term availability of all products, **beyond the life of your mission.**

SEALEVEL
sealevel.com

COTS & Full Custom Critical Communications Design and Manufacturing

The appearance of U.S. Department of Defense (DoD) visual information does not imply or constitute DoD endorsement.

Network

A resilient, secure and expeditionary network that can withstand attacks and keep soldiers connected on a complex, datacentric battlefield remains the top priority for the U.S. Army Futures Command's Network Cross-Functional Team.

This means homing in on four “focus priorities,” said Brig. Gen. Jeth Rey, the cross-functional team's director, as the team works to keep soldiers in the loop and enable them to reliably communicate anywhere, anytime, in all domains and against any adversary.

One priority is to be transport-agnostic, which acknowledges that the future network must be resilient and ubiquitous to the user while supporting high throughput, low latency, multipath transport capabilities. The more pathway options for data to travel through, the more resilient the network becomes, according to the Army.

Key technologies aligned with this priority include geostationary, medium- and low-Earth-orbit satellite communications, protected waveforms and advanced data radios, and leveraging commercial cellular networks where permissible.

Next, Rey is focused on being data-centric. “I really wanted to focus on getting out of a network-centric environment and moving into a datacentric environment as far as cloud-enabled capabilities across the board,” he said.

Third, the cross-functional team is focused on modern security. Rey noted the importance of starting to look at some type of “zero trust” architecture, saying the new architecture would involve shifting from traditional perimeter-based security to datacentric, attribute- and role-based access in which users and devices are continuously authenticated. Zero trust is a cybersecurity strategy and framework that embeds security throughout the architecture to prevent malicious



actors from accessing the most critical assets, according to a description from the Defense Information Systems Agency.

Finally, Rey said, the fourth priority, cybersecurity, “has to be baked in up front as part of what we do.”

Aligning Capability Sets

Among the cross-functional team's achievements is fielding the Army's Capability Set 21 network equipment, all while aligning it with those four priorities. “We aligned our capability sets towards those goals, in terms of [science and technology] activities, prototyping and experimentation, and in demonstration toward our objectives,” Rey said.

He noted that Capability Set 21, designed to provide an expeditionary and intuitive network capability that includes a range of smaller, lighter and faster interoperable systems, focuses on the infantry brigade combat team. The subsequent Capability Sets 23, 25 and beyond will integrate a modernized network capability for mounted formations, including

Stryker and armored brigades.

Rey pointed to recent milestones to illustrate successful alignment of goals and capability sets, beginning with the observation that Army efforts toward a datacentric environment are on track and on target to field a data fabric in Capability Set 23. Data fabric refers to technology that weaves together information sources and data formats from different systems, providing a common layer to improve interoperability and quickly send the right data to the right operator, according to an Army description.

At the same time, deliveries of Capability Set 21 to infantry brigade combat teams continue across the Army, Rey said. “Our fielding now is about 70% complete on that, and we continue to transition those capabilities into an enduring requirement for the Army and then [moving] into sustainment after that,” he said.

The team also completed a critical design review for Capability Set 23, which aligns more than 40 systems—from soldier radios and satellite ter-

minals to Mission Command software and network operations tools—into a system of systems that increases network resiliency, capacity and convergence, according to the Army.

“I thought it was a very, very successful event,” Rey said. “We finalized that design and authorized the limited production of some of the systems in that capability set.”

Another milestone saw the Army transition its “unit of action” from brigade combat teams to divisions, Rey said. One result of that switch has been exploring the movement of network complexity to that higher level, he said.

Rey acknowledged that the Army pursued “a kind of boxology” in Capability Set 21, where the primary focus was “one piece or item at a time.” As it moves to Capability Sets 23, 25 and eventually 27, “we’re looking more into systems of systems. That’s the approach we’re trying to take going forward,” he said.

Work is underway on future capability sets, Rey said, with the 2nd Cavalry Regiment in Vilseck, Germany, executing some of the preliminary phases. “We have those soldiers actually doing some demonstrations on some of the capabilities,” he said.

There also will be functional reviews as the Army works to make sure it aligns requirements, enabling technologies, acquisition and funding “to ensure that we help be successful in our transition from [a science and technology] piece to a program of record,” Rey said.

The Army also has reached out to industry. In June, during a technical



Opposite and above right: Soldiers with the 3rd Squadron, 2nd Cavalry Regiment, use the Integrated Tactical Network during a live-fire exercise at Grafenwoehr Training Area, Germany. The newly fielded ITN is said to provide a more secure, resilient network.

U.S. ARMY PHOTOS BY SPC. RYAN PARR



CUSTOM TENSION FABRIC BUILDINGS INNOVATIVE SOLUTIONS THAT WITHSTAND THE TOUGHEST CONDITIONS



- Fully Customizable
- Fast-Track Construction
- In-House Engineering
- Concept to Installation
- Patented Attachment System
- Relocatable

Call for more information, or to receive a quote
877.259.1528 | LEGACYBUILDINGSOLUTIONS.COM



exchange meeting in Philadelphia, the service informed potential vendors of the design goals for Capability Sets 25 and 27. “We are starting to receive some white papers submitted in specific areas, like data fabric and our Modular Open Systems Architecture, that we’re looking forward to implementing soon,” Rey said.

In the past year, the cross-functional team also has supported the Army’s Project Convergence exercises, which test new and emerging technologies in the field, and its work to develop the Joint All-Domain Command and Control concept, which aims to enable the joint force and its partners to continuously and rapidly integrate

efforts across all domains in real time, according to an Army description.

“We have the overarching responsibility for the network in Project Convergence,” Rey said, adding that the team is building on the progress that was made during the 2021 iteration of the exercise to not only incorporate joint partners but also coalition partners.

“We do have some coalition partners that are going to be part of this from the U.K. and Australia, and then we are going to have other [partners] observing on the outside to see how they might be part of our future [Project Convergence] capabilities across the board,” he said.

He added, “Our goals include data-sharing, operational synchronization and integration across the joint and multinational partners, so that includes how we share some parts of intel that we can share, some parts of fires and how we support, from a logistics perspective. Obviously, we’re looking at ongoing operations, trying

to see whether our logistics tail is going to be any better than what we’ve seen in some ongoing operations.”

Rey said it is amazing to see how commanders are thinking through how they will fight in the future and learning from the current war in Ukraine. “It is a very big learning environment for us right now,” he said. “We didn’t think we would have that opportunity to learn from someone else’s operations as others have learned from us in the last 20 years.”

Soldier Feedback

Embedded in the cross-functional team’s efforts is getting feedback from the troops who will use the network. “I think it is so important that we continue to execute soldier touch points, focusing on the wide range of modernization capabilities, including commercial components,” Rey said. “I just think we get so much incredible feedback from those touch points that informs what our modernization capabilities should look like.”

Recently, the team had events in Germany; at Fort Bragg, North Carolina; and at the Joint Readiness Training Center at Fort Polk, Louisiana. “We learned new things from soldiers touching equipment in different ways,” Rey said. “You have infantry, you have armor, and you have others, actually touching the equipment and giving immediate feedback to us that we could take back to the [science and technology] environment, iterate on that, and then make sense of how we should improve these capabilities before we put them back into the [soldiers’ hands] or they become a program of record.”

Rey described a recent visit to Army units where he was joined by Maj. Gen. Robert Collins, then-program executive officer for Command, Control and Communications-Tactical, and others for discussions with representatives from V Corps, the XVIII Airborne Corps and U.S. Army Europe and Africa.

In addition to discussing the equipment that units had on hand, the leaders also talked about some experimentation XVIII Airborne Corps is doing

Soldiers with the 63rd Expeditionary Signal Battalion, 35th Signal Corps Brigade, partner with the 3rd Combat Aviation Brigade to insert two Terrestrial Transmission Line Of Sight radios by air at Fort Stewart, Georgia. These radios increase the robustness of the tactical network, the Army says.

U.S. ARMY/SGT. MAXINE BAEN

The Mission Continues

Join the WM family and continue your mission of protecting our tomorrow.



Apply now: wm.com/careers

As an EEO/Affirmative Action Employer, all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, age, national origin, disability, or veteran status.



Triman
INDUSTRIES

CTG

**Brighton
Cromwell**
MISSION READY™



Triman Holdings supplies the Government, Defense, and Commercial markets with tech-enabled scalable supply chain solutions throughout platform life cycles. From consumables and systems to parts obsolescence management, we keep fleets operational, ready and safe.

Acquisition & Sustainment Support

- Hard-to-Find and Obsolete Parts
- Production Line Support
- Counterfeit Prevention Program
- DMSMS & Obsolescence Management
- Warehousing & Staging Optimization
- Custom Kitting

Why Us?

- Expertise in Sourcing Hard-to-Find and Obsolete Parts
- Extensive OEM Partnerships
- Contract Agility and Procurement Streamlining
- SEDNA™ Proprietary Data Analytics Tool provides unprecedented Market and Supply Chain Insights
- Unparalleled Quality Assurance Program and Counterfeit Detection Lab

Visit us at AUSA Annual Meeting - Booth #1343

©2022 Triman Industries Inc., Crestwood Technology Group LLC, Brighton Cromwell, LLC are part of Triman Holdings.

Triman Industries, Inc., 1500 Mt. Kemble Ave., Morristown, NJ 07960 | trimanindustries.com
CTG LLC., 1 Odell Plaza Suite 139, Yonkers, NY 10701 | ctgnow.com

in areas such as machine learning and artificial intelligence, as well as how V Corps is using some program of record systems on the ground, Rey said.

"I think the future calls for us to have the best and most robust training on our program of record systems to ensure that our soldiers are well-versed on those systems, just like their weapons," he said.

Team Approach

Recent discussions with units in Europe also highlight the foundational team approach that applies across network modernization.

"If you look at the Network Cross-Functional Team, we are the 'what,' or the capability that the network must deliver," Rey said. Program Executive Office Command, Control and Communications-Tactical "is leading the 'how' we will actually acquire and deliver those capabilities," he said.

Additionally, the team's science and technology partner is Joseph Welch, director of the Command, Control, Communications, Computers, Cyber, Intelligence, Surveillance and Reconnaissance Center, which is part of the U.S. Army Combat Capabilities Development Command. He's the one "exploring the art of the possible in how we look at the future and inform the future state of the network," Rey said.

The three entities, particularly when it comes to Rey, Collins and Welch, are "as tight as you can ever believe," Rey said. "We know our lanes, but we also know where we actually overlap and support each other along the way."

Challenges, Plans

Asked about technology challenges facing the cross-functional team, Rey said one rapidly evolving area involves commercial technologies.

"It is incumbent on us to figure out,



how do we see what requirements the military will need and how we scale those particulars," he said, offering examples ranging from "5G, from both terrestrial and space perspectives," to satellites in low-Earth orbit that could "thicken" Army data transport capabilities.

There also are military-specific challenges, Rey said. They include "maintaining the security posture that we'll need, the coverage and spectrum issues," he said. Spectrum refers to the invisible radio frequencies that wireless signals travel over, according to CTIA, a trade association representing the U.S. wireless communications industry and related companies. For the Army, that includes soldiers' radio emissions and how they can be detected by adversaries.

"We're concerned about spectrum, not only because we're training here in [the continental U.S.], but once we go overseas, there are spectrum issues that we have to address in our host nation," Rey said.

Looking ahead, Rey said the cross-functional team aims to build on the momentum it has gained with a two-phase Capability Set 23 operational demonstration. With the first phase conducted in June by the 2nd Cavalry Regiment, and the second phase slated for early next year, the demonstration will help inform fielding decisions scheduled for fiscal 2023.

Soldier pilot events are planned for Capability Sets 25 and 27, which will focus on the Army's armored forma-

tions, Rey said. One key capability will be enabling mechanized units to operate on the move. "The armored formation wants to continue to move across the battlefield but still keep their communications up and running as they move," Rey said. "So, it is going to be important that we validate those design goals going forward."

The team is planning another technical exchange meeting with potential vendors in December, and it will continue to adjust support to the division as the unit of action, explore command post concepts and continue supporting Project Convergence, Rey said.

"We are delivering capabilities today with the warfighter at the center of this process, and by the end of [fiscal 2022], we would have delivered our modernization network equipment to eight brigade combat teams, six Expeditionary Signal Battalions-Enhanced and two multidomain task force units," he said.

There also are plans to deliver to more than 300 units modernization network enabling technology such as the upgrades of Mission Command fires applications, he said.

"We understand that access to data is the most important thing right now," Rey said.

"We're all flooded with data, and people want to make sense of that data, and I believe that moving from a network-centric environment to a datacentric environment is the focal point." ★

A soldier with the 25th Infantry Division works to connect battlefield sensors with a joint fires network during training at Schofield Barracks, Hawaii.

U.S. ARMY/SPC. JESSICA SCOTT



OUTFIGHT

WITH CUSTOM-ENGINEERED COMPUTING

From facility access points to
In-Vehicle MIL SPEC Displays to
Ruggedized AI on the Edge

Visit us at #AUSA2022, booth #3855

Trust built in.

COMARK
A SOURCE CODE COMPANY

Assured Positioning, Navigation and Timing/Space



The Army continues to make strides in its efforts to maintain overmatch in the critical areas of space, navigation and electronic warfare.

Led by the U.S. Army Futures Command's Assured Positioning, Navigation and Timing/Space Cross-Functional Team, the service is partnering more closely with its sister service, the U.S. Space Force, and developing new systems and capabilities for soldiers.

The Army is the military's largest

user of space capabilities. Soldiers rely on space capabilities every day to enhance their ability to see, shoot, move and communicate. This includes intelligence, surveillance and reconnaissance capabilities, GPS, satellite communications and the more than 2,500 pieces of space-enabled equipment in every brigade combat team.

To bolster the Army's space readiness, Army Chief of Staff Gen. James McConville and Gen. John "Jay" Raymond, chief of space operations for the Space Force, earlier this year signed a memorandum of agreement to ex-

pand the Army's "sensor-to-shooter campaign," said Michael Monteleone, director of the Assured Positioning, Navigation and Timing/Space Cross-Functional Team.

"That means the two services will align closer on their capability development, on experimentation and on demonstrations and capability going forward, and we're very, very encouraged by that, because Space Force is the lead force now for just about everything space, and more and more capability from other services and even in parts of the intel-

ligence community are falling under Space Force,” Monteleone said. “It’s great to have that solidified partnership at the very top levels of the two services.”

The cross-functional team also received approval for the Tactical Space Layer Abbreviated Capabilities Development Document (CDD). Approval of such a document enables rapid prototyping and experimentation for future requirements and materiel development.

“That’s a critical document,” Monteleone said. “Any of these abbreviated CDDs allow us, as a community ... to move very rapidly to start prototyping and experimentation in soldier touch point activities.”

With the approval in hand, efforts will focus on the tactical commander’s use of space-based sensors and assets, Monteleone said. The goal is to get commanders and their staffs the information they need in the format they need to decide and react more quickly and accurately.

DAPS

Also approved is a capabilities development document for the Dismounted Assured Positioning, Navigation and Timing System (DAPS). “That means the formal program of record has stood up and is in full swing,” Monteleone said. “Actually, we are in a very good space right now as far as being on schedule.”

DAPS is a small, lightweight solution that acquires, protects and distributes secure positioning, navigation and timing to the dismounted

soldier, according to an Army description. The system supports communications, command and control, logistics, targeting and effects, and it is designed to replace the Defense Advanced Global Positioning System Receiver and commercial GPS for the Nett Warrior Ensemble, according to the Army.

The service is getting “great feedback” on the system, Monteleone said, using as an example a soldier touch point in June at Fort Campbell, Kentucky, with troops from the 101st Airborne Division (Air Assault). “Anytime a soldier can give us very candid feedback, it will make the end item better as it proliferates out to the

force,” he said.

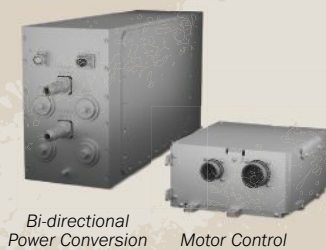
Progress also is being made in Army programs focused on mounted capabilities, including efforts to replace the Defense Advanced GPS Receiver, which is a handheld GPS receiver, and some other legacy capabilities.

MAPS

The Mounted Assured Positioning, Navigation and Timing System, known as MAPS, is designed to allow soldiers to operate in GPS-contested environments by giving them better anti-spoof and anti-jam capabilities.

The first generation of the system was fielded to the 60 Stryker combat

ELECTRIC VEHICLE SOLUTIONS



Bi-directional Power Conversion Motor Control

- Innovative power and cooling solutions for military ground vehicle electric and hybrid-electric systems
- Flexible and durable designs for the harshest environments
- Solving your high density power, voltage and packaging requirements

MORE INNOVATIVE. MORE RUGGED. MORE ELECTRIC.



Learn More
www.craneae.com



A soldier conducts a technological assessment during an exercise supporting the Army’s modernization initiatives.

U.S. ARMY



vehicles in the 2nd Cavalry Regiment as well as other units—and other types of combat vehicles—in 2020. Now, MAPS Generation II is “the capability that’s going to proliferate out through the Army, with the first systems starting to go out in 2024,” Monteleone said.

MAPS Generation II will provide M-Code capability—a powerful, jam-resistant and highly accurate GPS signal—and other advanced capabilities. It also will set the groundwork for separate next-generation sensors in positioning, navigation and timing, Monteleone said. Ultimately, “there will be more opportunities to upgrade and pace the threat, over time, once we start laying these ... capabilities into the Army’s platforms,” he said.

Advancing Technology

In the navigation warfare and electronic warfare portfolio, the cross-functional team in February 2021 received approval of the Navigation Warfare Situational Awareness Abbreviated CDD, which validates the operational need and enables experimentation and rapid prototyping of navigation warfare capabilities for the warfighter.

Navigation warfare consists of deliberate offensive and defensive actions to assure friendly use and prevent adversary use of positioning, navigation and timing information, according to an Army description. It enables precision fires, movement and maneuver, force tracking and a host of data networks that tie together personnel and weapon systems, according to the Army.

Together, navigation warfare and situational awareness provide soldiers with the ability to detect, identify and locate sources of interference



This page: Crews test the Zephyr, a solar-powered unmanned aircraft system, at Yuma Proving Ground, Arizona. **Opposite:** A technician integrates equipment into a Stryker vehicle at Redstone Arsenal, Alabama, for soldier testing and feedback.

U.S. ARMY PHOTOS



that deny or degrade reception of positioning, navigation and timing, the Army said.

The Assured Positioning, Navigation and Timing/Space Cross-Functional Team also continues its work

on high-altitude platforms, including, recently, a solar-powered unmanned aircraft system called Zephyr. The aircraft is launched from a runway and can reach what Monteleone called “pretty significant” altitudes.

“We’re really looking at understanding the endurance and duration to which these aircraft can fly, and we’re experimenting with a variety of different payloads,” he said.

As early as 2010, the Zephyr stayed aloft for two weeks above Yuma Proving Ground, Arizona, according to the Army. In 2018, an upgraded Zephyr returned to Yuma Proving Ground and flew for more than 25 days. Additional tests took place in 2021, and this summer, the Zephyr was airborne for a record-breaking 64 days.

Hand-launched from Yuma Proving Ground on June 15, the Zephyr ascended to more than 60,000 feet into the stratosphere before executing its flight plan over the southern portion of the U.S., the Gulf of Mexico and South America, the Army said Aug. 23.

“We really want to understand a few things, from where one of these can be launched, to when it can become operationally relevant for an Army unit,” Monteleone said.

Mission-Led Innovation

Robotics & Autonomy

ISR Solutions

Technical, Intelligence & Mission Solutions

Information Solutions & Cyber

Test & Evaluation

Training & Simulation

Learn more about how our technologically advanced services and products deliver key aspects of the modernization required to address our customers’ needs at www.qinetiq.com/en-us

QINETIQ

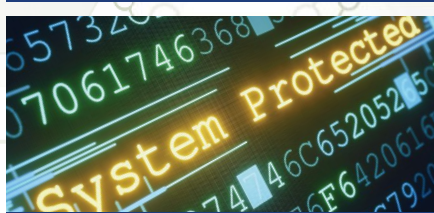


Concurrent
Technologies
Corporation

A Non-Traditional /
Nonprofit Organization



Systems engineering



Software engineering



Rapid design, prototyping,
integration, and test

**Delivering advanced
technologies and
overmatch capability to
our clients, our nation,
and coalition partners.**

**Concurrent Technologies
Corporation (CTC)** has successfully
executed 3000+ contracts for
industry and government agencies,
including all DoD departments.

Together with our affiliated small
business, **Enterprise Ventures
Corporation**, CTC delivers
innovative, affordable technology
and fulfills statutory requirements for
DoD sourcing.

www.ctc.com

1-800-CTC-4392

CTC is an equal opportunity employer.



Unique Environment

As the cross-functional team continues its work, it faces a “very rare” global environment where every day brings news or reports of developments that are relevant to its mission space, Monteleone said. This includes watching potential adversaries exercise their threats in an environment where the Army can observe and learn, he said.

“I would argue that there are a lot of lessons learned about what’s going on in Ukraine and in Europe right now, and we are working with all the units that are out there and plugged into that enterprise,” Monteleone said. From electronic warfare capabilities to determining where the Army should be investing its efforts, “it’s an opportunity to really learn a lot for what’s going on over there,” he said.

Looking ahead, the cross-functional team will participate in the Army’s Project Convergence 22 exercise this fall. It also was testing new capabilities during the annual Positioning, Navigation and Timing Assessment Exercise, where Army programs of record, science and technology laboratories, other government agencies, industry and academic partners unite to conduct a live demonstration using mission threat scenarios to support system and capability analysis and requirement development.

A soldier works on a piece of equipment during a Positioning, Navigation and Timing Assessment Exercise at White Sands Missile Range, New Mexico.

U.S. ARMY

Also, scheduled for the first quarter of fiscal 2023 is a limited user test for the Dismounted Assured Positioning, Navigation and Timing System, Monteleone said. “We are ... involved anywhere where there are opportunities to gain more value out of these experiments and activities,” he said, adding, “I think there will always be opportunities to ... continue learning across the board.”

On the Horizon

Beyond the nearer-term experiments, Monteleone said his team is always looking toward “what the future is going to look like.”

“I think we have a great handle on what’s going to happen here in the near term ... but there’s always, ‘What’s next?’ ” he said. “We are laying the groundwork now to be able to insert future technologies. I’m canvassing the community and pushing the community right now to talk to me about what’s in the realm of the possible for next-generation [positioning, navigation and timing].”

The cross-functional team is proud to enable critical warfighting functions and capabilities, Monteleone said. It also wants soldiers to have confidence in the capabilities they have. “If they have a high confidence level, they don’t have to second-guess their equipment, second-guess where their buddies are on the battlefield, second-guess where that munition is going to fall or second-guess the route they plan to take,” Monteleone said. “Then, we have a win for the whole team.” ★

THE POWER TO TAKE ON ANY MISSION.

Whatever your objective, Cummins gives you rugged and dependable power to achieve it. Our fully modernized V903 powerpacks provide up to 560 kW of reliable power for tanks, armored personnel carriers, armored earthmovers, mobile rocket launchers and more. Plus, we offer multiple ways to keep command centers, mobile hospitals, forward operating bases and weapons systems up and running. In the field or on base, Cummins gives you the power to succeed.

Find out more at
cummins.com/defense



**FOR
A WORLD
THAT'S
ALWAYS ON™**



Synthetic Training Environment

The Army is moving closer to its goal of providing soldiers with an immersive and challenging training environment that accurately simulates the complex challenges of the future battlefield.

“We feel we’re right on the cusp on delivering the Army’s first holistic training solution that will finally be able to replicate the complexities of this multidomain environment that’s coming out in doctrine,” said Brig. Gen. William Glaser, director of the U.S. Army Futures Command’s Synthetic Training Environment Cross-Functional Team.

The efforts span the individual soldier up to the Army’s divisions and corps, Glaser said, as the cross-functional team works on not just allowing commanders to better see where they might fight in the future, but also to give soldiers virtual or simulated training options that are both demanding and realistic.

As one of two Army cross-functional teams that cut across the six teams aligned with the Army’s six modernization priorities, the Synthetic Training Environment Cross-Functional Team is tasked with enabling units to conduct tough, dynamic training before even setting foot in the field. It also is in the critical position of helping guide the Army’s future training environment.

Glaser credited the team’s mission partners—including Program Executive Office Simulation, Training and Instrumentation and the U.S. Army Combined Arms Center-Training—for the progress the team has made over the past 12 months. “Modernization is absolutely a team sport,” Glaser said, citing a refrain often used by Lt. Gen. James Richardson, acting commander of Futures Command.

The core of the cross-functional



team’s work is called the Synthetic Training Environment-Information System, and it has three parts, Glaser said: One World Terrain, a 3D terrain data set used for simulation and training; Training Simulation Software, which is the game engine that drives everything; and the Training Simula-

tion Management Tool, which is used to set up exercises more efficiently.

One World Terrain

While the cross-functional team has made “progress on quite a few fronts,” One World Terrain is where there has been the most success, Glaser said.



In One World Terrain, the Army is working to build a realistic, common, accessible and automated 3D terrain data set that can be used for simulation, training, mission rehearsal and execution on the battlefield, according to the Program Executive Office Simulation, Training and Instrumen-

tation website. Using One World Terrain, commanders and soldiers will be able to see the ground they'll operate on before they set foot on the dirt.

"In the past, we had all these stove-piped solutions, with 57 different terrain formats out there, and we were constantly rebuying the same piece



of terrain, just in a different format," Glaser said. "But with One World Terrain, we have a holistic strategy where we can have a single terrain format that can be ingested by multiple systems, to where we build it once and use it often. And that's huge."

A key part of One World Terrain is the potential to spin out training capabilities into areas like rehearsal, visualization and war-gaming. For example, One World Terrain "capture kits," comprising small unmanned aircraft systems and software, have been deployed to U.S. Special Operations Command, corps and divisions, "giving them the ability to see 3D terrain in real time," Glaser said. "It's already proven itself to be a very effective tool for planning contingency missions across the world. In fact, over the last two years, we've developed 3.5 million square kilometers of 3D terrain."

User feedback also has been encouraging, Glaser said. The XVIII Airborne Corps' fire support coordinator

Soldiers use the Synthetic Training Environment-Information System to simulate ground and air operations during a soldier touch point in Orlando, Florida.

U.S. ARMY PHOTOS BY NATHAN SNOOK



was an early skeptic, he said. The officer was “a little doubtful” when he first saw the capability, but has since praised it as “astonishing and groundbreaking,” Glaser said.

Training Simulation and Training Management

To develop the Training Simulation Software and the Training Management Tool, which are the other elements of the Synthetic Training Environment-Information System, the cross-functional team recently conducted three soldier touch points over a six-month period, Glaser said.

“It’s all about soldier-centered design so that we can ensure that we’re continually doing iterations and touch points,” Glaser said, adding that the cross-functional team works closely with its Army and industry partners, but “most importantly, the soldiers in the field putting their hands on it and telling us what is good about this system and, even more importantly, where are we falling short and need to improve.”

Once completed, the Training Simulation Software will enable scalable, immersive and realistic simulation and training, according to the cross-functional team website. The Training Management Tool will help commanders and planners plan, pre-



pare, execute and assess a holistic training solution, the website says.

As the team continues its work, soldier touch points are critical. One example is the feedback the team has sought on the Squad Immersive Virtual Trainer, the training capability within the Army’s Integrated Visual Augmentation System.

“We’ve done a soldier touch point there, and the feedback was tremendously positive,” Glaser said, even though the cross-functional team is only providing soldiers with the ability to train on room-clearing proce-

dures and an after-action review capability.

“Basically, the soldiers said it’s good enough to use now, but they want more of it, to where they can use it for all battle drills, day and night, indoor and outdoor,” Glaser said. “And so we’re working toward that, but the initial steps there have been pretty successful.”

To meet soldiers’ needs, Glaser said the team is in “technology discovery,” adding that the cross-functional team has set out the requirements, and Program Executive Office Simulation,



Training and Instrumentation has begun contacts with industry.

“We’re seeing that there are multiple different solutions to get at solving these requirements,” Glaser said. “And so I’m pretty confident, as we’ve looked at all of these, that we’ll be able to take the best of breed of all these technologies and put together a capable solution for our soldiers in the field.”

The cross-functional team also is building relationships beyond soldiers. With headquarters in Orlando, Florida, the team is located near multiservice training organizations and

capabilities, Glaser said, including the U.S. Special Operations Command in Tampa, Florida. Also, the U.S. Marine Corps’ Expeditionary Modular Autonomous Vehicle program used One World Terrain to assist in navigation and location of robotics systems at Yuma Proving Ground, Arizona, during Project Convergence 2021.

Technology Challenges

In the short-term, Glaser said, technology challenges could impact the timeline of the Synthetic Training Environment-Information System.

For example, the Maneuver Short-

Range Air Defense (M-SHORAD) system “currently does not have a collective training capability associated with it,” Glaser said, “and as we

Clockwise from opposite top: Capt. Benjamin McFarlin demonstrates an augmented reality headset prototype at Fort Stewart, Georgia. Soldiers from the 2nd Battalion, 6th Air Defense Artillery Regiment, use the Stinger Training Dome at Fort Sill, Oklahoma. A soldier tests the Synthetic Training Environment-Information System in Orlando, Florida.

CLOCKWISE FROM OPPOSITE TOP: U.S. ARMY PHOTOS BY SGT. JOSE ESCAMILLA, MONICA WOOD, DONNIE RYAN



SEILER

PRECISION MANUFACTURING

Seiler Precision Manufacturing is a full service contract manufacturer of complex instruments, machined parts, assemblies, and subassemblies.

- OEM - Artillery & Mortar Fire Control
- Testing To Military Specifications
- Instrument Repair And Refurbishment

(800) 489-2282 • www.seilerinst.com





have been focused on the close-combat force, we have been asked to get with our air defense partners out at the Fires [Center of Excellence] to figure out how we can incorporate that M-SHORAD collective training capability into the [synthetic training environment].”

Medical training also was identified as an area where the cross-functional team could more broadly incorporate new capabilities.

“I will tell you that one of the more challenging issues that we’ve got out there, as we’ve expanded into MDO, multidomain operations, is how you train in a cyber and space environment. Because that’s all new,” Glaser said. “What are the technologies that are going to be required in order to provide that capability?”

In the past, he said, efforts to replicate cyber effects in a synthetic training environment have led many training audiences to wrongly think they

were encountering a simulation error.

“We need to be able to provide that clear stimulus to force the commander to understand that there’s an issue, and they need to do the mission analysis, provide courses of action and make a decision, and replicate that into the simulation,” he said.

Reiterating the importance of cooperation across the service, Glaser used as an example the modernization changes that might take place inside an aircraft cockpit.

“When they change something inside the cockpit, we need to change our simulators in order to reflect that or we’re going to get negative training, because soldiers would be training on a system that’s not like the real thing,” Glaser said.

In Soldiers’ Hands

Glaser emphasized the importance of an operational assessment of the Synthetic Training Environment-In-

formation System in the new Reconfigurable Vehicle Collective Trainer (RVCT), which aims to provide virtual collective training on ground, dismounted and aviation platforms.

The August event put capabilities into the hands of soldiers at Fort Hood, Texas, to explore the application in ground platforms such as the Bradley Fighting Vehicle, Abrams tank, Stryker vehicle and Humvee.

“They will basically validate the work that we have been doing over the last two years to provide that RVCT capability,” Glaser said before the event. He called the assessment “incredibly important” because it brought together the cross-functional team, Program Executive Office Simulation, Training and Instrumentation, soldiers and outside observers from the U.S. Army Test and Evaluation Command and the U.S. Army Operational Test Command, he said. “They will provide an unbiased, outsider’s

view, reflected in a report identifying whether we are meeting the standard or falling short,” Glaser said.

The results of that report could be key in allowing the Army to move from using research dollars for the project to “start using procurement dollars, in order to start and get this capability in the hands of soldiers,” Glaser said. “So, that’s the biggest thing that we’ve got going on right now. There’s no doubt about that.”

Looking Ahead

A significant effort that the cross-functional team has planned over the next year builds on the fact that One World Terrain has been used successfully in the operational environment for visualization and planning.

“The whole reason we stood up the capability to begin with was the ability to bring this digital 3D terrain into training simulations,” Glaser said, “and we’re working that really, really hard right now to make sure that we can.”

Anytime the Army can “converge a training capability with an operational capability, we’re winning,” Glaser said. “Where those two really meet is in rehearsal capability, and what traditionally has stood in the way of using simulations to do rehearsals at the lowest tactical level has been the ability to rapidly generate the operational environment, specifically the terrain ... to where the company commander could actually get in there



and do their virtual reconnaissance using One World Terrain, then eventually being able to put some [opposing force] inside of that simulation to rehearse and war-game will be a huge, huge, huge step forward. And that’s the direction that we want to eventually take.”

Glaser cautioned that none of this future vision will be possible if simulations in platforms such as the RVCT are restricted to a simulation center at home station. “That’s why the point-of-need requirement is so incredibly important, so that we can deploy this to camps, posts and stations, the National Guard in their armories and, most importantly, when soldiers are deployed, so that they could have it on hand in order to use it as a rehearsal capability,” he said.

The goal of the cross-functional team is to empower commanders to train for war, Glaser said. “Training is our initial push, and then eventually to prepare for war, because I think we’ll be able to use our capability for visualization, rehearsals, war-gaming and so forth,” he said.

Glaser then cited what he said is an “old quote from the 1980s.”

“In everything that we do, we do it so that no soldier’s soul shall ever cry out, ‘If only I had the proper training.’ That’s what drives us to provide the capability to the force,” he said. ★

Opposite and above: Soldiers use and provide feedback on Synthetic Training Environment prototypes at Fort Hood, Texas.

U.S. ARMY PHOTOS BY AUSTIN THOMAS

When it's MISSION CRITICAL

For over **50 years**, primes and suppliers serving those who serve, choose MERRILL. Let us show you why we say, **MERRILL has your six.**



FIND YOUR SOLUTION AT
MERRILLTG.COM

M MERRILL
DESIGN • FABRICATE • MACHINE • INTEGRATE



USA PAVILION

ORGANIZED BY THE ASSOCIATION OF THE UNITED STATES ARMY

EUROSATORY 2024

17-21 JUNE / PARIS, FRANCE

SOFEX 2022

OCTOBER 31-NOVEMBER 3
AQABA, JORDAN

**WE'LL INTRODUCE YOU TO THE
GLOBAL DEFENSE MARKET**



Full-Service
Support



Global
Visibility



Valuable
Connections

WWW.AUSA.ORG/MEET



**ASSOCIATION OF THE
UNITED STATES ARMY**

EXHIBITS

Michael Cerami
mcerami@ausa.org

SPONSORSHIPS

Gaye Hudson
ghudson@ausa.org



POSTS & INSTALLATIONS

Helicopters from the 4th Combat Aviation Brigade, 4th Infantry Division, fly over Founders Field at Fort Carson, Colorado, during a demonstration for the public.

U.S. ARMY/SPC. TYLER BROCK

POSTS AND INSTALLATIONS

This section includes posts and installations primarily supporting the active Army in the continental U.S., Hawaii, Alaska and Puerto Rico. Ammunition plants and installations in caretaker or inactive status have been excluded.

- Acreages reflect real estate under Department of the Army control.
- The DSN and commercial telephone numbers listed are for operator assistance.
- Data is current as of Aug. 25 and is based on information supplied by each post or installation.

Aberdeen Proving Ground, MD 21005 and 21010. Established 1917; encompasses six centers of excellence in research and development; test and evaluation; chemical and biological defense; command, control, communications, computers, cyber, intelligence, surveillance and reconnaissance (C5ISR); public health sciences; and personnel security investigations; home of U.S. Army Communications-Electronics Command; U.S. Army Combat Capabilities Development Command; U.S. Army Test and Evaluation Command; U.S. Army Futures Command Network Cross-Functional Team; Aberdeen Test Center; 20th Chemical, Biological, Radiological, Nuclear and Explosives Command; U.S. Army Chemical Materials Agency; U.S. Army Medical Research Institute of Chemical Defense; Army Public Health Center; Army Research Laboratory; and program executive offices (PEOs), including Command, Control and Communications-Tactical; Intelligence, Electronic Warfare and Sensors; Assembled Chemical Weapons Alternatives; and Joint PEO Chemical, Biological, Radiological and Nuclear Defense; 22,000 personnel; 72,500 acres, 23 miles northeast of Baltimore. DSN: 298-5201; 410-278-5201.

Anniston Army Depot, AL 36201. Opened 1941; repairs and retrofits combat tracked vehicles, artillery, small-arms weaponry, components and locomotives; provides distribution services;

manages, issues, stores, demilitarizes and ships conventional ammunition; 2,500 civilians, including tenants and contractors; 15,000 acres adjacent to Pelham Range, 10 miles west of Anniston. DSN: 571-1110; 256-235-7501.

Fort A.P. Hill, VA 22427. Established 1941; winner of Army Communities of Excellence Award in 2008, 2013, 2014, 2015 and 2019; supports challenging, realistic training for special operations, conventional active-duty, National Guard and Reserve units from across the joint force, as well as other organizations and activities; 76,000 acres, 27,000-acre live-fire range complex, 45,000-acre light and heavy maneuver complex, 40 miles northeast of Richmond. DSN: 578-8324/8120; 804-633-8585.

Fort Belvoir, VA 22060. Established 1912; supports nation's military leaders worldwide in critical intelligence, medical, logistical, administrative and command and control functions fulfilled by more than 150 mission partners and satellite organizations; largest installation of U.S. Army Military District of Washington; major tenants include National Geospatial-Intelligence Agency; Fort Belvoir Community Hospital; Defense Logistics Agency; U.S. Army Cyber Command; U.S. Missile Defense Agency; U.S. Army Legal Services Agency; Office of Chief of



Soldiers with the 3rd U.S. Infantry Regiment (The Old Guard) fire cannons during a performance of the *1812 Overture* at the National Museum of the United States Army, Fort Belvoir, Virginia.

U.S. ARMY/SPC. BRANDON MUNIZ

Sonon 300L & 300C

Sonon is a portable, wireless ultrasound device that provides a powerful and convenient solution to your medical imaging needs. It provides the same image quality as traditional ultrasound machines at a fraction of the cost. Ideal for doctor's offices, clinics, emergency response teams, and field medic units. Connects to any mobile device using an application downloaded from the app store. The software is safe and secure with presets, measuring capabilities, and all the tools required for your imaging needs.



STS Corporation

STS Corporation is a service disabled, veteran-owned, small business founded in 2008 to move America forward with innovative technology. STSC develops, designs, manufactures, and distributes high-quality medical products for the government, military, and commercial health care markets. Our products cover various medical applications including: diagnostic imaging equipment, rapid diagnostic test kits, personal protective equipment, and many more. STSC also provides government contracting and group purchasing organization contracting throughout the United States. In addition, we offer consultation services that generate business stability, rapid growth, and increased revenue streams. www.stschq.com



Mine ALNU Portable X-Ray

The Mine ALNU is the evolution of X-Ray technology. It provides a mobile solution in an emergency situation when every second counts. Producing far less radiation than a traditional X-Ray, while providing the same image quality. The AI software aids in the diagnosis of medical conditions using X-ray images and clinical information. Ideal for doctor's offices, clinics, smaller hospitals, field medics, and emergency first responders. Also available, the **Mine 1** which provides portable solutions for dental X-Rays.



Senior enlisted leaders from the Regional Health Command-Atlantic validate lanes on Fort Benning, Georgia, ahead of the command's Best Leader Competition.

U.S. ARMY/JOHN TONGRET

Army Reserve; Defense Contract Audit Agency; Defense Threat Reduction Agency; Defense Acquisition University; U.S. Army Intelligence and Security Command; Defense Intelligence Agency; Night Vision and Electronics Sensors Directorate; Davison Army Airfield; 29th Infantry Division, Virginia Army National Guard; National Museum of the United States Army; approximately 10,000 military, 40,000 civilians; 8,656 acres; controls 3 noncontiguous properties in Virginia: Main Post at Mount Vernon, Belvoir North Area in Springfield and Rivanna Station near Charlottesville. DSN: 685-5001; 703-805-5001.

Fort Benning, GA 31905. Established 1918; home of Maneuver Center of Excellence, which provides trained, combat-ready soldiers and leaders, develops doctrine and capabilities for future maneuver force; home of Armor and Infantry schools; 194th Armor Brigade; 316th Cavalry Brigade; 197th Infantry Brigade; 198th Infantry Brigade; Airborne and Ranger Training Brigade; 199th Infantry Brigade; tenants include 75th Ranger Regiment; 1st Security Force Assistance Brigade; Maneuver Capabilities Development and Integration Directorate; Western Hemisphere Institute for Security Cooperation; Benning Martin Army Community Hospital; 1st Battalion, 28th Infantry Regiment; U.S. Army Marksmanship Unit; Soldier Lethality Cross-Functional Team; 98th Training Division (Reserve); 31,499 military, 10,053 civilians; 182,464 acres, 9 miles south of Columbus. DSN: 835-2011; 706-545-2011.

Fort Bliss, TX 79916 and 79918. Established as post opposite El Paso del Norte (present-day Ciudad Juarez), Mexico, 1849; ranked No. 1 in military value by 2006 Base Realignment and Closure Commission; largest joint mobilization station in DoD; front-runner in green technologies and energy efficiency; most energy-efficient

homes in Army; home of world's largest inland desalination plant; home of 1st Armored Division; 1st, 2nd and 3rd Brigade Combat Teams; 1st Armored Division Combat Aviation Brigade; 1st Armored Division Artillery; 1st Sustainment Brigade; U.S. Army Sergeants Major Academy; Joint Modernization Command; U.S. Northern Command's Joint Task Force North; William Beaumont Army Medical Center; 32nd Army Air and Missile Defense Command; 11th Air Defense Artillery Brigade; 5th Armored Brigade; 402nd Field Artillery Brigade; Freedom Crossing Shopping Mall PX complex; approximately 35,240 military, 12,126 civilians; largest U.S. Army Forces Command installation at 1.2 million acres; largest training area in Army at nearly 1 million acres. DSN: 978-2121; 915-568-2121.

Blue Grass Army Depot, KY 40475. Established 1941; conventional ammunition depot with primary mission of performing standard depot operations (storage, receipt, inspection, maintenance, demilitarization) of conventional munitions, missiles, nonstandard ammunition and chemical defense equipment for all services; tenants include Blue Grass Chemical Activity; Blue Grass Chemical Agent-Destruction Pilot Plant; approximately 2,500 personnel, 2 military; 14,500 acres, 4 miles south of Richmond. DSN: 745-6941; 859-779-6941.

Fort Bragg, NC 28310. Established as field artillery site, 1918; nation's premier power projection platform; home of Airborne and special operations forces, and Pope and Simmons Army Airfields, enabling worldwide deployment of rapid deployment forces; U.S. Army Forces Command; U.S. Army Reserve Command; XVIII Airborne Corps; U.S. Army Special Operations Command; Joint Special Operations Command; 82nd Airborne Division; 1st, 2nd and 3rd Brigade Combat Teams; 82nd Combat Aviation

WE ACCELERATE IMPACT



ATI is passionate about our nation and those who defend it.

That's why we bring together the nation's most innovative thinkers, brightest researchers, and most advanced manufacturers to deliver technological superiority.

We manage the collaborations that deliver on the battlefield.

Learn more at ati.org | Follow us on Twitter: @ATI_ORG

VISIT ATI at AUSA 2022
ANNUAL MEETING AND EXPO

HALL DE, BOOTH #7815





Soldiers conduct a Combat Water Survival Assessment at Sabalauski Air Assault School, Fort Campbell, Kentucky.

U.S. ARMY/SPC. ROBERT FAISON

Brigade; 82nd Sustainment Brigade; 82nd Airborne Division Artillery; Security Force Assistance Command; 3rd Expeditionary Sustainment Command; 1st Special Forces Command; 3rd Special Forces Group (Airborne); U.S. Army John F. Kennedy Special Warfare Center and School; U.S. Army Civil Affairs and Psychological Operations Command; U.S. Army Special Operations Aviation Command; 43rd Air Mobility Operations Group; 4th Training Brigade (ROTC); 20th Engineer Brigade; 108th Air Defense Artillery Brigade; 44th Medical Brigade; 16th Military Police Brigade; 525th Battlefield Surveillance Brigade; U.S. Army Parachute Team (Golden Knights); Womack Army Medical Center; 49,000 military, 71,000 family members, 14,600 civilians; 162,816 acres, 10 miles northwest of Fayetteville, 50 miles south of Raleigh. DSN: 236-0011; 910-396-0011.

Fort Campbell, KY 42223. Opened 1942 as Camp Campbell; home of 101st Airborne Division (Air Assault); 1st, 2nd and 3rd Brigade Combat Teams; 101st Combat Aviation Brigade; 101st Division Sustainment Brigade; 101st Airborne Division Artillery; 5th Special Forces Group (Airborne); 160th Special Operations Aviation Regiment (Airborne); 52nd Ordnance Group; Blanchfield Army Community Hospital; 27,000 active-duty military, nearly 50,000 family members, more than 6,000 DoD civilians; straddles Kentucky-Tennessee border on more than 105,000 acres, 15 miles south of Hopkinsville, 5 miles northwest of Clarksville, Tennessee, 50 miles northwest of Nashville, Tennessee. DSN: 635-9467; 270-798-9467.

Carlisle Barracks, PA 17013. Established 1757; home since 1951 of U.S. Army War College, which enhances national and global security by developing ideas and educating U.S. and international leaders to serve at strategic level and by delivering strategic-level education to Army general officers, to joint/combined student body of majors, to colonels and to Army strategists. Examines strategic issues and creates strategic ideas through Strategic Studies Institute, Center for Strategic Leadership; supported by military history archives, research and analysis of Army Heritage and Education Center. Only full-service installation in Pennsylvania for military community of 26,000; tenants include Dunham Army Health Clinic, dental clinic, commissary/exchange; 615 military, 1,000 family members, 838 civilians; 473 acres, 18 miles southwest of Harrisburg. DSN: 242-3131; 717-245-3131.

Fort Carson, CO 80913. Established 1942; home of 4th Infantry Division; 10th Special Forces Group (Airborne); 4th Security Force Assistance Brigade; 4th Engineer Battalion; 627th Hospital Center; 759th Military Police Battalion; 71st Ordnance Group (Explosive Ordnance Disposal); Medical Department Activity-Fort Carson; Evans Army Community Hospital; Dental Health Activity; Army Field Support Battalion; World Class Athlete Program; Colorado National Guard Regional Training Institute; 13th Air Support Operations Squadron; 1st Space Brigade; 26,500 military, approximately 39,200 family members, 6,600 civilians; 137,000 acres adjacent to Colorado Springs; 236,000 acres at Piñon Canyon Maneuver Site near Trinidad. DSN: 691-5811; 719-526-5811.

Corpus Christi Army Depot, TX 78419. Opened 1961; sustains rotary-wing aircraft, engines and components, including AH-64, CH-47, UH-60 and HH-60 for joint operations; supports Army accident investigations; assesses, evaluates and repairs forward-deployed aircraft and components; provides hands-on helicopter maintenance training for active-duty, U.S. Army Reserve and National Guard; 7 military, approximately 2,760 civilians, 225 contractors, 12 Personnel Force Innovation Reservists; 158 acres with 2.3 million square feet of industrial space at Naval Air Station Corpus Christi. DSN: 861-3627; 361-961-3627.

Fort Detrick, MD 21702. Established 1943; more than 50 tenant organizations representing five Cabinet-level agencies and all armed services; major areas are medical research, strategic communications (signal) and defense medical logistics; approximately 1,900 military, 8,500 civilians; 1,341 acres at main post in Frederick and Forest Glen Annex in Silver Spring. DSN: 343-8000; 301-619-8000.

U.S. Army Garrison-Detroit Arsenal, MI 48397. Established 1971; provides support services for Detroit Arsenal tenant organizations, including U.S. Army Tank-automotive and Armaments Command; U.S. Army Ground Vehicle Systems Center; PEO Ground Combat Systems; PEO Combat Support and Combat Service Support; PEO Integration; and Combat Capabilities Development Center Ground Vehicle Systems Center; Next-Generation Combat Vehicle Cross-Functional Team; 230 military, 7,800 civilians; 169 acres, 10 miles north of Detroit, 20 miles southwest of Selfridge Air National Guard Base. DSN: 786-5000; 586-282-5000.

Fort Drum, NY 13602. Established 1907; home of 10th Mountain Division; 15,656 military, 15,832 family members, 3,912 civilians; 108,733 acres, 8 miles north of Watertown, 78 miles north of Syracuse. DSN: 772-5461; 315-772-5461.

Dugway Proving Ground, UT 84022. Established 1942; nation's leading test center for chemical and biological defense; empowers nation's defenders by countering emerging chemical, biological, radiological and nuclear threats; 30 military, 2,500 civilians; 800,000 acres, 90 miles southwest of Salt Lake City. DSN: 789-2929; 435-831-2929.

Joint Base Elmendorf-Richardson, Alaska. See Joint Bases.

U.S. Army Engineer Research and Development Center (ERDC), MS 39180. Established 1929 by U.S. Army Corps of Engineers (USACE) as Waterways Experiment Station; now serves as ERDC Headquarters; home of 4 of 7 USACE/ERDC laboratories: Coastal and Hydraulics, Geotechnical and Structures, Environmental, and Information Technology; provides innovative technology solutions for warfighter, military installations, water resources and environmental issues for USACE, DoD and nation; home of USACE Reachback Operations Center, supporting all contingency operations worldwide; home of 1 of 5 major DoD high-performance computing centers; 12 military, 1,785 civilians; 694 acres in Vicksburg. DSN: 312-446-3111; 601-634-3111.

U.S. Army Engineer Research and Development Center-Cold Regions Research and Engineering Laboratory, NH 03755. Established 1961; 1 of 7 ERDC laboratories; home of USACE



Alaska Army National Guard soldiers 1st Lt. Kyle Johnson, left, and Sgt. David Lowry inspect the flight controls of a UH-60 Black Hawk helicopter during aviation support training at Corpus Christi Army Depot, Texas.

U.S. ARMY/DELLA ADAME

Remote Sensing/Geographic Information System Center of Expertise and unique cold facilities, including world's largest Permafrost Research Tunnel at Fairbanks, Alaska; solves interdisciplinary, strategically important problems for nation, warfighter and USACE by advancing and applying science and engineering to complex environments, materials and processes in all seasons and climates; maintains unique core competencies related to Earth's cold regions; 241 civilians; 30 acres at Hanover; staff field office in Fairbanks, Alaska. 603-646-4100.

U.S. Army Engineer Research and Development Center-Construction Engineering Research Laboratory, IL 61822.

Established 1968; 1 of 7 ERDC laboratories; conducts research and development for USACE and Army programs in military facilities construction, operations, maintenance, energy conservation and environmental quality, including pollution prevention, compliance and natural resource management; 2 military, 340 civilians; 33 acres at Champaign. 217-352-6511.

U.S. Army Engineer Research and Development Center-Geospatial Research Laboratory, VA 22315. Established 1960; 1 of 7 ERDC laboratories; conducts geospatial research, development, technology and evaluation of current and emerging geospatial technologies to help characterize and measure phenomena within physical (terrain) and social (cultural) environments encountered by Army; 1 military, 96 civilians; offices at Fort Belvoir. DSN: 312-328-6655; 703-428-6655.

Gillem Enclave, GA 30297. Opened 1941 as Atlanta Army Depot; site of 3rd Medical Command; Defense Forensic Science Center; military entrance processing station; 2,200 members of active Army, Reserve and National Guard, 700 civilians; 260 acres at Forest Park, 18 miles southeast of Atlanta. 404-469-5000.

Fort Gordon, GA 30905. Opened 1941; home of U.S. Army Cyber Center of Excellence, which includes cyber, signal and network; mission partners include Dwight David Eisenhower Army Medical Center; Army Southern Regional Dental and Veterinary Commands; Army's only remaining dental laboratory; Naval Information Operations Command; joint strategic intelligence operations; communications and military intelligence units; Army Reserve/ National Guard training; Air Force Air Reserve heavy-drop and Department of Homeland Security training; 15,900 military, 13,900 civilians, 66,000 retirees and family members; 55,596 acres, 12 miles southwest of Augusta. DSN: 780-9747; 706-791-9747.

Fort Hamilton, NY 11252. Established 1825 as part of New York Harbor battery defense system; headquartered by U.S. Army Installation Management Command, Directorate of Training; home of New York City Recruiting Battalion; USACE, North Atlantic Division headquarters; New York Military Entrance Processing Station, responsible for processing more than 27,000 applicants per year; 1179th Deployment Support Brigade; New York National Guard Task Force Empire Shield; serves as secure federal location providing administrative and logistical support for Army, other U.S. military branches and federal intelligence and counterterrorism agencies. DSN: 232-4780; 718-630-4780.

Fort Hood, TX 76544. Opened 1942; home of III Corps; 1st Cavalry Division, including 1st, 2nd and 3rd Armored Brigade Combat Teams, 1st Air Cavalry Brigade, Division Artillery and Sustainment Brigade; First Army Division West; Operational Test Command; 13th Sustainment Command (Expeditionary); 1st Medical Brigade; 3rd Cavalry Regiment; 3rd Security Force Assistance Brigade; 36th Engineer Brigade; 48th Chemical Brigade; 89th Military Police Brigade; 504th Military Intelligence Brigade; 407th Field Support Brigade; 418th Contracting Support Brigade; 69th Air Defense



A view of Fort Gordon, Georgia.

U.S. ARMY

GET THE MONEY YOU NEED FOR COLLEGE

College Ave Student Loans and AUSA understand that college is a big investment for its members and their families and that where they borrow from matters.

This student loan program shows our commitment to helping families further their higher education goals while delivering member benefits.

AUSA Members are eligible for a special 0.25% interest rate discount.¹



nerdwallet
Best-Of
Awards
2022

**Best Private
Student Loan**
Overall

After 11 years of cumbersome loan apps, we've discovered College Ave! My son and I were blown away by the quick, easy app.

-RICHARD



LEARN MORE?

Check out College Ave Student Loans for great private student loan rates.

AUSA.ORG/STUDENTLOANS

©2017 - 2022 and TM, NerdWallet, Inc. All Rights Reserved.

College Ave Student Loans products are made available through Firsttrust Bank, member FDIC, First Citizens Community Bank, member FDIC, or M.Y. Safra Bank, FSB, member FDIC.

¹ AUSA members receive a 0.25% rate reduction on Undergraduate loans that are opened through AUSA. The AUSA member discount will be applied to your loan account after the initial disbursement occurs.

All loans are subject to individual approval and adherence to underwriting guidelines. Program restrictions, other terms, and conditions apply.

© 2022 College Ave Student Loans. All Rights Reserved



**ASSOCIATION OF THE
UNITED STATES ARMY**

College AVE
STUDENT LOANS

Artillery; 11th Signal Brigade; Carl R. Darnall Army Medical Center; 37,130 military, 4,533 civilians; 342 square miles adjacent to Killeen, 60 miles north of Austin, 160 miles south of Dallas-Fort Worth. DSN: 737-1110; 254-287-1110.

Fort Huachuca, AZ 85613. Opened 1877; home of U.S. Army Intelligence Center of Excellence; U.S. Army Network Enterprise Technology Command; U.S. Army Electronic Proving Ground; U.S. Army Information Systems Engineering Command; Joint Interoperability Test Command; 4,580 military, 3,572 civilians; 80,912 acres, 75 miles southeast of Tucson. DSN: 821-7111; 520-533-7111.

Hunter Army Airfield, GA 31409. Established 1940; one of the Army's largest airfields with a runway 11,375 feet long; supports 3rd Combat Aviation Brigade; 3rd Infantry Division; 1st Battalion, 75th Ranger Regiment; 3rd Battalion, 160th Special Operations Aviation Regiment; 224th Military Intelligence Battalion; 6th ROTC Brigade; 3rd Military Police Group; U.S. Marine Corps Reserve Center; U.S. Coast Guard Air Station Savannah; Tuttle Army Health Clinic; 117th Air Control Squadron; Georgia Army National Guard; 4,911 military, 17,793 retirees and dependents, 821 civilians and contractors; 5,370 acres at Savannah. DSN: 912-977-7947; 912-315-2588.

Fort Irwin and National Training Center, CA 92310. Established 1940; largest of Army's 3 combat training centers; home-station units include 11th Armored Cavalry Regiment; 916th Support

Brigade Operations Group; U.S. Air Force 12th Combat Training Squadron; 4,712 military, 6,646 family members, 4,900 civilians; 768,000 acres, 37 miles northeast of Barstow. DSN: 470-3369; 760-380-3369.

Fort Jackson, SC 29207. Established 1917; conducts Basic Combat Training and combat support Advanced Individual Training; home of 165th and 193rd Infantry Brigades, which train 45,000 basic trainees annually; Leader Training Brigade; 369th Adjutant General Battalion; 81st Readiness Division; Soldier Support Institute; Institute for Religious Leadership; National Center for Credibility Assessment; U.S. Army Drill Sergeant Academy; Moncrief Army Health Clinic; 3,200 military, 5,000 civilians; 51,285 acres adjacent to Columbia. DSN: 734-1110; 803-751-1110.

Fort Knox, KY 40121 and 40122. Opened 1918; home of U.S. Army Cadet Command; U.S. Army Human Resources Command; U.S. Army Recruiting Command; V Corps Headquarters; U.S. Army Recruiting and Retention College; First U.S. Army Division East; 4th Cavalry Brigade; 1st Theater Sustainment Command; 84th Training Command; 100th Division; 83rd Army Reserve Readiness Training Center; U.S. Army Reserve Aviation Command; U.S. Army Garrison Command; Army Reserve Careers Group; Public Health Activity; 19th Engineer Battalion; U.S. Army Marketing and Engagement Brigade; Ireland Army Health Clinic; U.S. Army Mission and Installation Contracting Command; Gen. George S. Patton Museum of Leadership; 12,134 military, 4,500 family members,



Fort Huachuca, Arizona, and the city of Sierra Vista collaborate for an Independence Day celebration at Veterans Memorial Park on-post.

U.S. ARMY/ENRIQUE VASQUEZ



Ricky Pine, a mechanic at Letterkenny Army Depot, Pennsylvania, works on an engine component.

U.S. ARMY/JOSH SHINN

9,626 civilians; 108,955 acres, 35 miles southwest of Louisville. DSN: 464-1000; 502-624-1000.

Joint Base Langley-Eustis, VA. See Joint Bases.

Fort Leavenworth, KS 66027. Established 1827; home of U.S. Army Combined Arms Center; Army University; Mission Command Center of Excellence; Combined Arms Center-Training; U.S. Army Command and General Staff College; Mission Command Training Program; Center for Army Lessons Learned; Combined Arms Doctrine Directorate; 35th Infantry Division (Army National Guard); U.S. Disciplinary Barracks; Midwest Joint Regional Correctional Facility; 3,523 military, 5,082 civilians, 113 international military students, 652 inmates; 5,634 acres adjacent to Leavenworth, 20 miles northwest of Kansas City International Airport. DSN: 552-4021; 913-684-4021.

Fort Lee, VA 23801. Opened 1917 as Camp Lee; home of U.S. Army Combined Arms Support Command and Sustainment Center of Excellence, headquarters component that provides oversight of U.S. Army Quartermaster, Ordnance and Transportation schools; Army Logistics University; Soldier Support Institute; major tenant organizations include headquarters of Defense Commissary Agency and Defense Contract Management Agency; 2,469 military, 4,450 family members, 5,073 civilians, 1,749 contractors, 9,490 military students/trainees; 5,907 acres, adjacent to Petersburg. DSN: 687-7451; 804-734-7451.

Fort Leonard Wood, MO 65473. Opened 1941; designated U.S. Army Maneuver Support Center of Excellence, which includes U.S. Army Engineer, Chemical, Biological, Radiological and Nuclear, and Military Police schools and respective brigades; most diverse and one of largest NCO academies; U.S. Army Reserve Division headquarters-102nd Training Division (Maneuver Support);

Missouri's 35th Engineer Brigade; hosts and trains with largest Marine Corps detachment on any Army installation as well as an Air Force squadron and large Navy construction detachment; home of USACE's Prime Power School; approximately 6,700 military, 7,600 civilians, more than 80,000 military and civilians for training, approximately 450 international students per year; more than 62,000 acres, 88 miles northeast of Springfield, 135 miles southwest of St. Louis. DSN: 581-0131; 573-596-0131.

Letterkenny Army Depot, PA 17201. Opened 1942; Army's premier maintenance depot in air and missile defense and long-range precision fires systems, supporting systems for DoD, foreign partners and industry; supports soldiers in the field by repairing and modernizing air and missile defense and precision fires systems; recognized as a Center of Industrial and Technical Excellence for Air and Missile Defense and tactical missile ground support equipment, mobile electric power generation equipment, route clearance vehicles and Patriot missile recertification; better-than-new refurbishment and rebuilds of Patriot, generators, high-mobility artillery rocket systems, force provider and route-clearance vehicles; 1,250 civilians, 500 contractors; over 18,600 acres, 5 miles north of Chambersburg, 50 miles southwest of Harrisburg. DSN 570-8300; 717-267-8300.

Joint Base Lewis-McChord, WA. See Joint Bases.

Joint Expeditionary Base Little Creek-Story, VA. See Joint Bases.

Fort McCoy, WI 54656. Established 1909; provides Reserve, National Guard and active-component forces with networked, integrated, interoperable training resources required to support Army training strategies using a full spectrum of facilities, ranges and training areas; strategic mobility, access and training with interstate, rail, air (Volk Field Air National Guard Base) and



Federal firefighters extinguish flames during training at Pohakuloa Training Area, Hawaii.

ARMY NATIONAL GUARD/SPC. MARIAH-ALEXSANDRA MANANDIC-KAPU

Mississippi River port access; urban training sites with Combined Arms Collective Training Facility and 17 villages with more than 300 buildings; home to Fort McCoy Airport and Young Air Assault Strip; Total Force Training Center with capabilities to train all branches of service; a Mobilization Force Generation Installation; approximately 800 active-duty soldiers and 1,700 civilians; averages 125,000 people trained annually; 60,000 acres, including 46,000 acres contiguous live-fire and maneuver areas and 8,000-acre impact area, approximately 105 miles northwest of Madison. DSN: 280-1110; 608-388-2222.

Fort Meade, MD 20755. Established 1917; national platform for intelligence, information and cyber operations; home of more than 120 installation partners, including U.S. Cyber Command, National Security Agency, Defense Information Systems Agency, Defense Media Activity, Defense Information School, Environmental Protection Agency Science Center and Architect of the Capitol Library of Congress storage facility; approximately 22,000 military, 30,000 civilians and 14,000 contractors; 5,067 acres, approximately 30 miles northeast of Washington, D.C., and 17 miles south of Baltimore. DSN: 622-2300; 301-677-2300.

Joint Base Myer-Henderson Hall, VA. See Joint Bases.

Picatinny Arsenal, NJ 07806. Established 1880; researches and develops advanced technology armament and munitions systems for joint military services and provides life cycle engineering support for munition systems; known as Joint Center of Excellence for Guns and Ammunition; portfolio comprises nearly 90% of Army's lethality and all conventional ammunition for joint warfighters; home of Combat Capabilities Development Command Armaments Center; Joint PEO Armaments and Ammunition; Army Contracting Command of New Jersey; Network Enterprise Center Picatinny; Project Manager Soldier Lethality; Naval Warfare Center, Indian

Head Division; 6,400 military, civilians and contractors; 6,500 acres, 32 miles west of New York City. DSN: 880-4021; 973-724-6364.

Pine Bluff Arsenal, AR 71602. Established 1941; produces, stores and demilitarizes conventional ammunitions; center for illuminating and infrared munitions; produces smoke munitions; U.S. Army Center for Industrial and Technical Excellence for chemical/biological defense products, smoke ammunition and textile manufacturing; produces, repairs and stores chemical/biological defense products; 1 military, approximately 650 civilians; 13,500 acres, 8 miles northwest of Pine Bluff. DSN: 966-3000; 870-540-3000.

Pohakuloa Training Area, HI 96720. Established 1956; supports multilateral combined training for all active and reserve components, federal/state and joint/combined forces in Pacific Theater; 5 military, 8 family members, 297 civilians and contractors; 20,000 military and civilians trained annually; 131,888 acres, 36 miles northwest of Hilo. DSN: 315-456-7110; 808-449-7110.

Fort Polk and Joint Readiness Training Center, LA 71459. Established 1941 to support Great Louisiana Maneuvers; home of 3rd Brigade Combat Team, 10th Mountain Division; Joint Readiness Training Center Operations Group; 32nd Hospital Center; Bayne Jones Army Community Hospital; 46th Engineer Battalion; 519th Military Police Battalion; 1st Battalion, 5th Aviation Regiment; 13,257 military, 12,412 military family members, 3,735 civilians, 2,882 contractors; up to 5,000 rotational soldiers per month; 241,777 acres, 2 miles south of Leesville. DSN: 863-1344; 337-531-1344.

U.S. Army Garrison-Presidio of Monterey, CA 93944. Established 1847; home of Defense Language Institute Foreign Language Center, with each military service providing members as students, faculty and staff; military housing, post exchange and commissary located at Ord Military Community, part of former

OUR **NATIONAL**
PARTNERSHIP OFFERS
EXCEPTIONAL **OPPORTUNITIES**



AUSA IS YOUR **PROFESSIONAL** EDGE

www.ause.org/nationalpartner



**ASSOCIATION OF THE
UNITED STATES ARMY**

PROGRAM MANAGER
Lynette Nichols
lnichols@ause.org

Fort Ord; 75 miles south of San Jose International Airport. DSN: 768-6604; 831-242-6604.

Pueblo Chemical Depot, CO 81006. Established April 1942; safely secures, stores and monitors the chemical stockpile while protecting workforce, public and environment; prepares for and supports stockpile elimination; transitions depot and workforce for closure; tenants include Pueblo Chemical Agent-Destruction Pilot Plant; PuebloPlex; 1 military, 400 government personnel, approximately 1,600 contract personnel; 23,000 acres at Pueblo. DSN: 749-4135; 719-549-4135.

Red River Army Depot, TX 75507. Established 1941; repairs, overhauls, remanufactures and converts variety of combat and tactical wheeled vehicles; operates DoD's road wheel and track-shoe rebuild/manufacturing facility; home of Defense Distribution-Red River (Defense Logistics Agency); approximately 1,700 civilians, 650 contractors, 1,200 tenant employees; 15,000 acres, 18 miles west of Texarkana, 80 miles northwest of Shreveport, Louisiana. DSN: 829-4446; 903-334-4446.

Redstone Arsenal, AL 35898. Established 1941; home of more than 70 federal and DoD organizations, including U.S. Army Materiel Command; U.S. Army Aviation and Missile Command; U.S. Army Space and Missile Defense Command; Missile Defense Agency; U.S. Army Security Assistance Command; U.S. Army Contracting Command; PEO Missiles and Space; PEO Aviation; FBI Hazardous Devices School; FBI Terrorist Explosive Device Analytical Center; Bureau of Alcohol, Tobacco, Firearms and Explosives National Center for Explosives Training and Research; U.S. Army Combat

Capabilities Development Command Aviation and Missile Center; Redstone Test Center; Missile Defense Agency; Defense Intelligence Agency-Missile and Space Intelligence Center; U.S. Army Rapid Capabilities and Critical Technologies Office; Future Vertical Lift Cross-Functional Team; Assured Positioning, Navigation and Timing/Space Cross-Functional Team; NASA's Marshall Space Flight Center; 42,000 employees; 38,000 acres adjacent to Huntsville. DSN: 746-2151; 256-876-2151.

Fort Riley, KS 66442. Established 1853; home of 1st Infantry Division, known as "Big Red One," which includes 1st and 2nd Armored Brigade Combat Teams, 1st Combat Aviation Brigade, 1st Infantry Division Artillery, 1st Infantry Division Sustainment Brigade; 14,959 military, 15,177 family members, 5,439 civilians; 101,733 acres, 125 miles west of Kansas City, Missouri. DSN: 856-3911; 785-239-3911.

Rock Island Arsenal, IL 61299. Established 1862; home of Headquarters, U.S. Army Sustainment Command; Headquarters, First Army; Headquarters, Joint Munitions Command; Rock Island Arsenal Civilian Personnel Advisory Center; Rock Island Arsenal Joint Manufacturing and Technology Center; Army Contracting Command-Rock Island; 510 military, 485 reserve, 5,320 civilians; 946-acre island in Mississippi River between Rock Island and Davenport, Iowa. DSN: 793-6001; 309-782-6001.

Fort Rucker, AL 36362. Established 1942; home of U.S. Army Aviation Center of Excellence; U.S. Army Aviation Museum; U.S. Army Warrant Officer Career College; U.S. Army Combat Readiness Center; U.S. Army Aeromedical Center; U.S. Army Aeromedical



Soldiers from the U.S. Army Aviation Center of Excellence and Fort Rucker, Alabama, mark the Army's 247th birthday with an on-post run.

U.S. ARMY/LT. COL. ANDY THAGGARD



ASSOCIATION OF THE
UNITED STATES ARMY

Take care of legal matters

LawAssure uses smart technology to prepare wills, powers of attorney, healthcare directives and other essential legal documents.



AUSA now provides you with completely free access to LawAssure. There are no hidden costs or upsells. Visit www.ausa.org/lawassure to get started.



Step 1 - Select your document

Select the document you need and the state or territory you live in.



Step 2 - Create your document

Our service will present you with a series of questions. As you answer them your document will be created using pre-programmed intelligence.



Step 3 - Print your document

Export your document to word or pdf format. Print your document and then follow the instructions to make it legally binding.

There are other documents included in the service such as leases, consumer complaint letters and a debt recovery suite. For small business members, there are a wealth of business-related documents provided including consultancy agreements, non disclosure agreements and invoices.



Ease of use — simply complete a series of questions to customize a document.



Convenience — prepare documents quickly and instantly on any device.



High quality — same technology trusted by law firms around the world.



Free — provided to you by AUSA as an additional member benefit.

Research Laboratory; U.S. Army School of Aviation Medicine; 5,121 military, 9,219 civilians; 63,660 acres, 80 miles south of Montgomery. DSN: 558-1110; 334-255-1110.

Joint Base San Antonio-Fort Sam Houston, TX. See Joint Bases.

Schofield Barracks, HI 96857. Established 1909; home of 25th Infantry Division; U.S. Army Garrison Hawaii, located at Wheeler Army Airfield, which supports 22 installations and various tenant units; 17,085 military, 25,442 family members, 4,712 civilians; 55,580 acres, 17 miles northwest of Honolulu. DSN: 315-456-7110; 808-449-7110.

Fort Shafter, HI 96858. Established 1907; home of U.S. Army Pacific; 8th Theater Sustainment Command; 311th Signal Command (Theater); 9th Mission Support Command; 196th Infantry Brigade; U.S. Army Installation Management Command-Pacific Region; U.S. Army Corps of Engineers-Pacific Division; various tenant units; 2,765 military, 4,090 family members, 6,945 civilians; 1,898 acres near Honolulu. DSN: 315-456-7110; 808-449-7110.

Sierra Army Depot, Herlong, CA 96113. Established 1942; provides variety of long-term life cycle sustainment solutions for joint services, including equipment receipt, asset visibility, long-term care, storage and sustainment; repairs and resets Army fuel and water systems; on-demand rapid deployment from organic airfield; dry climate and moderate desert temperatures allow low-cost outdoor or indoor storage without need for energy-sponsored controlled environments; 1,500 civilians and contractors; 36,000 acres, 55 miles northwest of Reno, Nevada. DSN: 855-4343; 530-827-4343.

Fort Sill, OK 73503. Established 1869; home of Fires Center of Excellence; U.S. Army Air Defense Artillery School; U.S. Army Field Artillery School; 428th and 434th Field Artillery Brigades; 75th Field Artillery Brigade; 30th Air Defense Artillery Brigade; 31st Air Defense Artillery Brigade; 95th Training Division; Long-Range Precision Fires Cross-Functional Team; Air and Missile Defense Cross-Functional Team; NCO Academy; Medical and Dental Activities; 77th Army Band; Network Enterprise Center; Marine Artillery Detachment; 8,333 military, 25,597 family members/dependents, 6,121 civilians; 35,974 annual student throughput; 93,633 acres adjacent to Lawton. DSN: 639-4500; 580-442-4500.

U.S. Army Soldier Systems Center, Natick, MA 01760. Established 1952 as Quartermaster Research Facility; now known as Natick Soldier Systems Center; performs research and development in core technologies for all services, including textile technology, interactive textiles, nanotechnology, biotechnology, airdrop technology, food science, human physiology and warrior systems integration; develops, manages, fields and sustains products and systems to support all military services; 90 military, nearly 1,200 civilians, 220 contractors; 20 miles west of Boston. 508-206-4023.

Fort Stewart, GA 31314. Established 1940; home of 3rd Infantry Division and premier joint training; approximately 16,800 military, 3,500 civilians; 288,000 acres at Hinesville, 40 miles southwest of Savannah. DSN: 475-9879 or -9874; 912-435-9879 or -9874.

Military Ocean Terminal-Sunny Point, Southport, NC 28461. Established 1955; this Army-owned port is home of 596th



Students at Murray Elementary School, Fort Stewart, Georgia, are greeted on the first day back to school after summer break.

U.S. ARMY/SPC. MICHAEL UDEJIOFOR



ASSOCIATION OF THE
UNITED STATES ARMY



A SPECIAL MEMBER DISCOUNT FOR AUSA



geico.com/mil/ausa

AUSA and GEICO have teamed up to help you save money on insurance with a special member discount.

It's easy – simply get a quote now, and mention your AUSA affiliation to get started.

Some discounts, coverages, payment plans, and features are not available in all states, in all GEICO companies, or in all situations. GEICO contracts with various membership entities and other organizations, but these entities do not underwrite the offered insurance products. Discount amount varies in some states. One group discount applicable per policy. Coverage is individual. In New York a premium reduction may be available. GEICO may not be involved in a formal relationship with each organization; however, you still may qualify for a special discount based on your membership, employment or affiliation with those organizations. GEICO is a registered service mark of Government Employees Insurance Company, Washington, DC 20076; a Berkshire Hathaway Inc. subsidiary. © 2022 GEICO



A view of Tobyhanna Army Depot, Pennsylvania.

U.S. ARMY/THOMAS ROBBINS

Transportation Brigade, under whose command are two additional units and locations: 833rd Transportation Battalion (Joint Base Lewis-McChord, Washington) and Military Ocean Terminal-Concord (Concord, California), which was established in 2008 and is home of 834th Transportation Battalion; the two terminals provide 75% of DoD's common user surface ammunition throughput capability; 45 military, 440 civilians; approximately 26,000 acres. DSN: 488-8000; 910-457-8000.

Tobyhanna Army Depot, PA 18466. Established 1953; DoD's premier facility for full life cycle support for all command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR) weapon systems, including overhaul, repair, modification, test, design and fabrication, along with software and hardware integration for C4ISR systems, missile guidance and control, and other specialized systems; designated Army Center of Industrial and Technical Excellence for C4ISR, and electronics, avionics and missile guidance and control systems; Air Force Technology Repair Center for rigid wall shelters and tactical missiles; DoD's worldwide C4ISR readiness provider; manages and operates 39 forward repair facilities worldwide; 2,789 civilians, 332 contractors; 1,336 acres, 20 miles southeast of Scranton. DSN: 795-7000; 570-615-7000.

Tooele Army Depot, UT 84074. Established 1942; DoD's Western region conventional ammunition hub and ammunition peculiar equipment center supporting warfighter readiness through receipt, storage, issue, demilitarization and renovation of conventional ammunition; and design, manufacture, fielding and maintenance of ammunition peculiar equipment; 2 military, 497 civilians; 43,300 acres with 1,376 buildings, storage capacity of 2.7 million square feet; 3 miles south of Tooele City, 35 miles southwest of Salt Lake City. DSN: 790-2211; 435-833-2211.

Tripler Army Medical Center, HI 96859. Established 1907; largest and only tertiary military medical treatment facility in Pacific Basin; performs inpatient and outpatient medical services; more than 4,500 military, civilians and contractors; 360 acres near Honolulu. 808-433-6661 or -6662.

Fort Wainwright, AK 99703. Established 1961 on site of Ladd Field; set up in 1940 as cold-weather test station; home of 1st Brigade Combat Team, 11th Airborne Division; 1st Battalion, 52nd Aviation Regiment; 1st Battalion (Attack), 25th Aviation Regiment; Medical Department Activity-Alaska; U.S. Army Garrison, Alaska; 16,000 active-duty and reserve military, family members and civilians; 1.6 million acres adjacent to Fairbanks. DSN: 317-353-1110; 907-353-1110.

Watervliet Arsenal, NY 12189. Nation's oldest operating arsenal; production began in 1813; known as "America's Cannon Factory"; named by Army secretary as Center of Industrial and Technical Excellence and is ISO 9001:2015-certified; with partner, U.S. Army Combat Capabilities Development Command Armaments Center Benet Laboratories, is DoD's manufacturer of choice specializing in artillery, tank and mortar systems in addition to other complex machined products for U.S. and foreign militaries; houses 21 military and civilian tenant organizations, 72 buildings, more than 2 million square feet of manufacturing space; 143 acres about 7 miles north of Albany. DSN: 374-5111; 518-266-5111.

West Point, NY 10996. Oldest continuously occupied military installation in U.S.; first occupied by Continental Army in January 1778; home of U.S. Military Academy since 1802, when it was established as nation's first school of engineering; home of West Point Museum, considered oldest and largest diversified public collection of militaria in Western Hemisphere; designated National

Visit the
**AUSA
PAVILION
#307**

NEW PREMIUM & BASIC MEMBERSHIPS

PREMIUM 2-YR

~~\$40~~ **\$30**

PREMIUM 5-YR

~~\$75~~ **\$50**

BASIC 2-YR

FREE



**ASSOCIATION OF THE
UNITED STATES ARMY**

Join AUSA today!

www.ausa.org/join



The appearance of U.S. Department of Defense (DoD) visual information does not imply or constitute DoD endorsement. Premium prices expire 10/31/22.

Historic Landmark in 1960; home of state-of-the-art Fred Malek Visitors Center and 28 research centers, including Combating Terrorism Center and Army Cyber Institute; 14,000 cadets, military and civilians; 16,000 acres on Hudson River, 55 miles north of New York City. DSN: 312-688-2022; 845-938-3808.

White Sands Missile Range, NM 88002. Established 1945; national test range; 179 military (transient military 616), 1,370 civilians, 1,290 contractors, 1,968 other civilians (including tenant organizations, nonappropriated fund and DoD employees); 3,200 square miles, 27 miles east of Las Cruces, 40 miles north of El Paso, Texas. DSN: 258-2121; 575-678-2121.

Yakima Training Center, WA 98901. Established 1941; subinstallation of Joint Base Lewis-McChord, Washington; supports joint and combined arms maneuver training and ranges for active and reserve component units and allies; 150 military, 400 civilians; 327,000 acres, 8 miles northeast of Yakima, 168 miles southeast of Tacoma. DSN: 638-3205; 509-577-3205.

Yuma Proving Ground, AZ 85365. Established 1943; plans, conducts, assesses, analyzes, reports and supports developmental tests, experiments, production tests and integrated developmental/operational tests; provides training support to Army and other services, DoD, federal government, international and commercial entities in accordance with Army modernization priorities; 1,123 DOD civilian/NAF employees, 1,345 family members, 1,265 contract employees, 10,203 retirees; 1,300 square miles, 26 miles northeast of Yuma. DSN: 899-2151; 928-328-2151.

U.S. Army Futures Command

Headquarters, U.S. Army Futures Command, Austin, TX 78701. Phone: 512-726-4117. Established 2018. The Army's fourth major command engages with experts and innovators from academia, industry and government to envision future battlefields, draft informative concepts, requirements and designs, accelerate transformational science and technology gains and converge advanced capabilities across the joint force, enabling overmatch against any adversary in any domain. Activities, groups, centers and team members include:

- U.S. Army Combat Capabilities Development Command, Aberdeen Proving Ground, Maryland.
- Medical Research Development Command, Fort Detrick, Maryland.
- Futures and Concepts Center, Joint Base Langley-Eustis, Virginia.
- Artificial Intelligence Integration Center, Pittsburgh.
- Long-Range Precision Fires Cross-Functional Team (CFT) and Air and Missile Defense CFT, Fort Sill, Oklahoma.
- Future Vertical Lift CFT, Redstone Arsenal, Alabama.
- Soldier Lethality CFT, Fort Benning, Georgia.
- Next-Generation Combat Vehicle CFT, Warren, Michigan.
- Network CFT, Aberdeen Proving Ground, Maryland.
- Assured Positioning, Navigation and Timing/Space CFT, Redstone Arsenal.
- Synthetic Training Environment CFT, Orlando, Florida.



Soldiers unload ammunition from a C-17 Globemaster aircraft using an M142 High Mobility Artillery Rocket System resupply vehicle at Yakima Training Center, Washington.

U.S. ARMY/SGT. JOSHUA OH



Pfc. Joseph Lehmann of the 11th Airborne Division inspects his gear after a 12-mile ruck march on Joint Base Elmendorf-Richardson, Alaska.

U.S. ARMY/STAFF SGT. CHRISTOPHER DENNIS

Joint Bases

This listing includes active joint posts and installations. Army elements appear in **bold**.

Joint Base Elmendorf-**Richardson**, AK 99505 and 99506. Established 1940; became a joint base in 2010; managed by Air Force's 673rd Air Base Wing; home of 11th Air Force; Alaskan Command; 11th Airborne Division; 2nd Brigade Combat Team (Airborne), 11th Airborne Division; Alaska National Guard Headquarters; approximately 10,500 active-duty soldiers and airmen, 2,150 National Guard and Reserve personnel, 3,900 civilians; approximately 73,000 acres. DSN: 317-552-1110; 907-552-1110.

Joint Base Langley-**Eustis**, VA 23604. Established 1918; home of Headquarters, U.S. Army Training and Doctrine Command; Joint Task Force Civil Support; 7th Transportation Brigade (Expeditionary); 128th Aviation Brigade; 93rd Signal Brigade; 597th Transportation Brigade; U.S. Army Center for Initial Military Training; Army Training Support Center; Technology Development Directorate-Aviation Technology, Systems Integration and Demonstration; McDonald Army Health Center; Army's Futures and Concepts Center; approximately 20,000 military, family members, civilians and retirees; 8,248 acres adjacent to Newport News, 11 miles southeast of Williamsburg. DSN: 826-1212; 757-878-1212.

Joint Base **Lewis**-McChord, WA 98433. Established 1917; home of I Corps; Headquarters, 7th Infantry Division; 62nd Airlift

Wing; 446th Airlift Wing; 593rd Expeditionary Sustainment Command; 1st Brigade, 2nd Infantry Division; 2nd Brigade, 2nd Infantry Division; 5th and 6th Military Police Groups (Criminal Investigation Command); 16th Combat Aviation Brigade; 17th Field Artillery Brigade; 22nd Signal Brigade; 201st Expeditionary Military Intelligence Brigade; 62nd Medical Brigade; 42nd Military Police Brigade; 555th Engineer Brigade; 1st Special Forces Group (Airborne); 2nd Battalion, 75th Ranger Regiment; 1st Multi-Domain Task Force; 5th Security Force Assistance Brigade; 66th Theater Aviation Command; 4th Battalion, 160th Special Operations Aviation Regiment (Airborne); 22nd Special Tactics Squadron; 404th Army Field Support Brigade; U.S. Army Cadet Command's 8th ROTC Brigade; Regional Health Command-Pacific; Madigan Army Medical Center; Public Health Command Region-West; Western Air Defense Sector; 38,000 military, approximately 15,000 civilians; more than 90,000 acres plus 327,000-acre Yakima Training Center, 10 miles southeast of Tacoma. DSN: 357-1110; 253-967-1110.

Joint Expeditionary Base Little Creek-**Story**, VA 23459. Established 1914; serves as the expeditionary and logistics-over-the-shore training site for active and reserve Army, Marine Corps and Navy components; national joint training asset; home of 131 resident commands; 16,799 military, 3,224 civilians; 3,947 acres between both properties. DSN: 253-7385; 757-462-7385 or -7386.

Joint Base McGuire-**Dix**-Lakehurst, NJ 08641. Established 2009, this is DoD's only triservice base; hosted by 87th Air Base Wing and

home of Army Reserve's 99th Regional Support Command, 174th Infantry Brigade, Army Support Activity-Fort Dix; federal, state and local agencies including New Jersey National Guard, Departments of Homeland Security, Justice, Veterans Affairs and Agriculture; installation management provides support for 3,933 facilities; home to more than 80 mission partners and 40 mission commanders; more than 45,000 troops, civilians and families; spans more than 20 miles east to west with 42,000 contiguous acres, 18 miles southeast of Trenton. DSN: 650-1100; 609-754-1100.

Joint Base **Myer**-Henderson Hall, VA 22211. Established 1861; home of 3rd U.S. Infantry Regiment (The Old Guard); U.S. Army Band, Pershing's Own; 270 acres adjacent to Arlington National Cemetery. Joint base command includes **Fort McNair**, Washington, DC 20319. Established 1791; home of Joint Task Force-National Capital Region/U.S. Army Military District of Washington, National Defense University, Inter-American Defense College, Center of Military History; 108 acres in Southwest Washington, D.C. Total 2,884 military, 3,153 civilians. DSN 426-3283; 703-696-3283.

Joint Base San Antonio-**Fort Sam Houston**, TX 78234. Established 1876; home of Headquarters, U.S. Army Medical Command; U.S. Army North/Fifth Army; U.S. Army South; 5th Recruiting Brigade; 12th ROTC Brigade; San Antonio Military Entrance and Processing Station; 937th Air Force Training Readiness Group; U.S. Army Installation Management Command; U.S. Army Veterinary Command; U.S. Army Medical Center of Excellence; San Antonio Military Medical Center; Brooke Army Medical Center; Headquarters, Dental Command; U.S. Army Institute of

Surgical Research; Defense Medical Readiness Training Institute; 470th Military Intelligence Brigade; 106th Signal Brigade; 410th Contracting Brigade; Center for Health Promotion and Preventive Medicine; DoD Medical Education and Training Campus; Navy Medical Training Support Center; U.S. Army Mission and Installation Contracting Command, including 410th and 412th Contracting Brigades; Regional Health Command-Central (Provisional); Battlefield Health and Trauma Center; Public Health Command-South Region; Tri-Service Research Laboratory; 502nd Air Base Wing; more than 40,000 military and civilians; approximately 3,000 acres at San Antonio; 28,000 acres at subinstallation Camp Bullis, 35 miles northwest. DSN: 471-1211; 210-221-1211.

Walter Reed National Military Medical Center, MD 20889. Established 2011; integrated National Naval Medical Center and Walter Reed Army Medical Center on grounds of former National Naval Medical Center campus in Bethesda, Maryland; largest joint military medical center in U.S. with 1.05 million patient visits per year; tertiary care destination providing services in more than 100 clinics and specialties; a Joint Commission-accredited medical facility; home of Murtha Cancer Center, DoD's only Center of Excellence for cancer, accredited by American College of Surgeons' Commission on Cancer as an Academic Comprehensive Cancer Program; American College of Surgeons-verified Level II trauma center; World Health Organization-accredited baby-friendly hospital; American Nurses Association's Pathway to Excellence-designated; more than 6,500 staff; 2.4 million square feet of clinical space. 301-295-4000.



Soldiers of the 3rd U.S. Infantry Regiment (The Old Guard) participate in a change-of-command ceremony at Joint Base Myer-Henderson Hall, Virginia.

U.S. ARMY/SGT. JOSUE PATRICIO



9-11 OCTOBER | WASHINGTON, DC



Jamie Woodside, CEM
AnnualExhibits@ausa.org

Gaye Hudson
Sponsorships@ausa.org



Soldiers from the 63rd Chemical, Biological, Radiological and Nuclear Company out of Fort Campbell, Kentucky, conduct search-and-recovery operations during an exercise at Muscatatuck Urban Training Center, Indiana.

U.S. ARMY/SPC. DARIA JACKSON

Major Reserve Component Training Sites

This listing does not include active posts maintained by the Army primarily for reserve component training; these can be found in the directory of active Army posts and installations. Reserve component units also conduct a portion of their annual training on federal posts that are continuously occupied by active Army units.

Commercial telephone numbers are for operator assistance at sites listed; DSN numbers are for military points of contact.

Atterbury-Muscatatuck Training Center, Edinburgh, IN 46124. DSN: 569-2499; 812-526-1499.

Camp Blanding Joint Training Center, Starke, FL 32091. 904-682-3355.

Camp Bowie, Level 3 Training Center, Brownwood, TX 76801. 325-643-3055.

U.S. Army Garrison-Fort Buchanan, PR 00934. DSN: 740-4486; 787-707-4486.

Fort Chaffee Joint Maneuver Training Center, Fort Chaffee, AR 72905. DSN 312-962-2121; 479-484-2121.

U.S. Army Garrison, Fort Devens, MA 01434-4424. 978-615-6021. Joint Base McGuire-Dix-Lakehurst, NJ. See Joint Bases.

Camp Edwards, Joint Base Cape Cod, MA 02542. 339-202-9309.

Camp Grayling Joint Maneuver Training Center (Heavy), MI 49739. 989-344-6100.

Camp Gruber Training Center, Braggs, OK 74423. 918-549-6001.

Camp Guernsey Joint Training Center, Guernsey, WY 82214. DSN: 344-7810; 307-836-7834.

U.S. Army Garrison-Fort Hunter Liggett, CA 93928. 831-386-2530.

Fort Indiantown Gap-Army National Guard Training Center, Annville, PA 17003. DSN: 491-2000; 717-861-2000.

Camp James A. Garfield Joint Military Training Center, Ravenna, OH 44444. 614-336-6660.

Camp Joseph T. Robinson (Robinson Maneuver Training Center), North Little Rock, AR 72199. DSN: 318-962-5098; 501-212-5098.

Joint Forces Training Base, Los Alamitos, CA 90720. DSN: 972-2090; 562-795-2090.

Parks Reserve Forces Training Area, CA 94568. 925-875-4398.

Camp Perry Joint Training Center, Port Clinton, OH 43452. 419-635-4021.

Fort Pickett-Army National Guard Maneuver Training Center, Blackstone, VA 23824. DSN: 441-8621; 434-292-8621.

Camp Rilea, Warrenton, OR 97146. DSN: 355-4052; 503-836-4052.

Camp Ripley-Minnesota National Guard Training Center, Little Falls, MN 56345. DSN: 871-2709; 320-632-7000.

Camp Roberts Maneuver Training Center, San Miguel, CA 93451. DSN: 949-8356; 805-238-8356.

Camp Santiago Joint Training Center, Salinas, PR 00751. 787-289-1400, ext. 7001, 7002, 7004.

Camp Shelby Joint Forces Training Center, MS 39407. DSN: 558-2000; 601-558-2000.

Camp Sherman Joint Training Center, Chillicothe, OH 45601. 614-336-6460.

Camp Swift, Level 3 Training Center, Bastrop, TX 78602. 512-321-4122.

Camp W.G. Williams, Bluffdale, UT 84065. DSN: 766-5400; 801-878-5400.

ADVERTISERS IN THE ISSUE

AeroVironment.....	27	Merrill Technologies Group.....	173
Airbus.....	71	Mildex.....	147
AM General.....	91	Navistar Defense.....	21
Army Emergency Relief.....	48	Orbit Electronics Group.....	87
ATI-Advanced Technology Intl.....	179	Oshkosh Defense.....	Cover 2
BAE Systems.....	15	Phantom Products Inc.....	115
Bell.....	Cover 3	Pilatus Aircraft.....	31
BlueSky Mast.....	46-47	Plasan.....	131
Bobcat.....	101	Poongsan.....	123
CEIA USA.....	129	PTS.....	134
Chenega.....	141	QinetiQ.....	165
College Ave Student Loans.....	183	Rafael USA Inc.....	13
Collins Aerospace.....	7	Raytheon Technologies.....	99
Crane Aerospace & Electronics.....	163	Rheinmetall.....	103
CTC.....	166	Rolls-Royce Defense.....	119
CTG.....	159	Scepter.....	125, 127
Cummins.....	167	Sealevel.....	155
dfYoung.....	149	Seiler.....	171
Diehl Defence.....	3	SourceAmerica.....	53
GD Land Systems.....	107	Source Code.....	161
GE Aviation.....	111	Stanley Black & Decker Inc.....	75
Geico.....	191	Streamlight.....	133
Gemstar.....	37	STS Corp.....	177
General Atomics Aeronautical.....	143	Systel USA.....	97
General Dynamics Mission Systems.....	137	Telephonics.....	113
General Dynamics Ordnance and Tactical Systems.....	43, 45	Textron Systems.....	39
GM Defense.....	9	Trillium Engineering.....	128
Gorman-Rupp Pumps.....	139	United Aircraft Technologies.....	33
Gulfstream.....	153	Vectrus.....	Cover 4
KRH.....	117	Vertex Aerospace.....	109
Legacy Building Solutions.....	157	Waste Management.....	158
Lockheed Martin.....	19	Wilcox Industries.....	135
Magpul.....	25	Winchester Ammunition.....	63
Meggitt.....	105		


FINAL SHOT

Fire Away!

Soldiers with the 2nd Brigade Combat Team, 2nd Infantry Division, fire a 60 mm mortar during a bilateral exercise in Thailand.

U.S. ARMY/STAFF SGT. TIMOTHY HAMLIN





BELL V-280 VALOR

BUILT FOR THE SOLDIER

We're empowering every warfighter with a **flight-proven** weapon system more capable and versatile than ever before.

Learn more at bellflight.com



Unparalleled Speed

Exceeding 280kts speed



Unmatched Reach

200nm in under 45min




Efficient Sustainment

Maintainer-influenced digital design



Improved Logistics and Range

Most fuel-efficient high-speed assault aircraft



OPERATIONAL CONTINUITY. RAPID DEPLOYMENT.

Vectrus provides smart, agile solutions that help the Army navigate change and meet its readiness, efficiency, and modernization goals for Building the Army of 2030. Our Army solutions include base operations support, supply chain and logistics, IT and network operations, engineering and digital integration, security, and MRO.

From the U.S. to Europe to the Middle East and the Asia-Pacific region, we support Army warfighters worldwide. Whether it's operating the world's largest combat network, rapidly deploying logistic support services as part of LOGCAP V, or helping the Army meet environmental sustainability goals, Vectrus delivers innovative solutions that balance performance and affordability and mission needs.

In July 2022, Vectrus merged with Vertex to create V2X, a leading provider of critical mission solutions globally which builds on more than 120 combined years of successful mission support.

Mission Connected. Mission Committed.

VISIT US AT AUSA 2022: BOOTH #1713

2424 Garden of the Gods Road
Colorado Springs, CO 80919
719.591.3600

[vectrus.com](https://www.vectrus.com)

