DEFENSE LOGISTICS AGENCY

LOGLINES

The Nation's Logistics Combat Support Agency

Volume 2026, Issue 1

Digital Transformation & Data Acumen

Monster Transformation

Managing change with emphasis on effectiveness, not just performance

A Conversation with the CIO

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History Spotlight

Information has long needed to be arranged, but databases are relatively new

WARFIGHTER ALWAYS!

Army Lt. Gen. Mark T. Simerly
Director, Defense Logistics Agency

LOGLINES

THE OFFICIAL FLAGSHIP PUBLICATION OF THE DEFENSE LOGISTICS AGENCY

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THE DIRECTOR'S MESSAGE

This issue of Loglines is dedicated to a topic at the very heart of our modernization efforts: "Digital Transformation and Data Acumen." In today's rapidly evolving strategic landscape, the ability to harness the power of data and digital technology is imperative. How we manage, analyze and leverage information directly impacts our ability to deliver world-class logistics support to the warfighter.

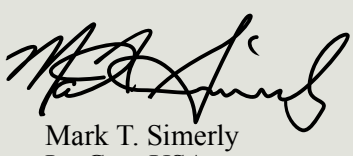
Transformation is a complex web, a concept that DLA Human Resources Director Dr. Charles Barber explores in his insightful review of the book "Monster Transformation*," relating its lessons to our own strategic plan. This issue is filled with powerful examples of that plan in action. From a conversation with our Chief Information Officer Adarryl Roberts about our digital and artificial intelligence strategies, to the landmark launch of our Enterprise Resource Planning Transformation program, DLA is building a digital architecture designed for the challenges of tomorrow.

Modernization is taking place in every corner of our agency. You will read about how DLA Energy is optimizing petroleum logistics with its Petroleum Logistics Utilization Tool and Optimization system, known as PLUTO, and how DLA Disposition Services is saving time and money through a new AI platform. At DLA Weapons Support, our workforce has become a hub of innovation, with citizen programmers building robotic process automation bots to streamline data-intensive tasks and free up employees' time to focus on other priority efforts. DLA Distribution has reached a major milestone in modernizing warehousing operations with the Warehouse Management System, and DLA Troop Support is replacing legacy analog processes with integrated digital capabilities to ensure the joint force is sustained through any crisis. These advancements are a testament to the talent and dedication of our people.

This drive to modernize is part of America's DNA. As Army Maj. Riley Kramer reminds us in his article on General Patton's early armored maneuvers, the U.S. military has always embraced innovation to maintain its advantage. Patton's charge through Texas was a symbol of a modernizing force, and today, our digital transformation is our charge forward, ensuring we remain the most advanced and responsive logistics organization in the world.

This edition of Loglines showcases the remarkable progress happening across the DLA enterprise. I hope you read these articles with pride, curiosity and a commitment to action. Our future as a combat support agency will be defined by how boldly we embrace digital transformation and how effectively we turn data into decisive advantage. Digital transformation is our path to victory!

Warfighter Always!



Mark T. Simerly
Lt. Gen, USA
Director, DLA

* "Monster Transformation: Conquer Your Digital Fears, Be AI Ready, and Focus on What Matters to your Organization" by Ari Lightman, Gary Hirsch and Rafeh Masood

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Mission: Loglines' mission is to publish timely, accurate information about how the Defense Logistics Agency, as the nation's logistics combat support agency, delivers agile logistics support in all domains during peace and war. It provides a forum for agency employees, military and industry customers, defense professionals and the Joint Logistics Enterprise to learn about DLA's vision, operating principles and imperatives to provide global logistics solutions in support of the military services along with the combatant commands, other federal agencies, and partner and allied nations.

Air Force Capt. Joshua O'Donnell, left, and Army Capt. David Jeong, both operations officers for Defense Logistics Agency Energy, use the Petroleum Logistics Utilization Tool and Optimization system to discuss scenario analysis.

– DLA photo by Ebony Gay

Agile adjustments: Tool aids Joint Petroleum Enterprise planning, decisions

By Ebony Gay,
DLA Energy Public Affairs

Keeping up with the pace of the joint petroleum enterprise is no easy feat, but the Defense Logistics Agency Energy team has a tool capable of delivering real-time situational awareness for energy solutions as global missions and threat dynamics evolve.

DLA Energy deployed the Petroleum Logistics Utilization Tool and Optimization, or PLUTO, an artificial intelligence platform delivering near-real-time awareness across the petroleum logistics supply chain. PLUTO provides DLA Energy and Joint Petroleum Enterprise stakeholders with actionable data required to master strategic planning, anticipate threats, and ensure mission readiness in an increasingly contested logistics environment.

The launch of PLUTO aligns with an agencywide call to action from DLA Director Army Lt. Gen. Mark Simerly to sharpen data acumen. He challenged the workforce to use data more effectively, emphasizing that adaptability, decision advantage and resiliency are the keys to our success.

PLUTO's capabilities include geospatial mapping for global supply chain visualization, risk management to ensure defense fuel support points meet demand targets, and scenario-based modeling for proac-

tive decision-making. The system also uses artificial intelligence and machine learning analytics to forecast consumption risks, identify vulnerabilities and optimize inventory. By centralizing data, PLUTO provides near-real-time insights to allow for more informed decisions.

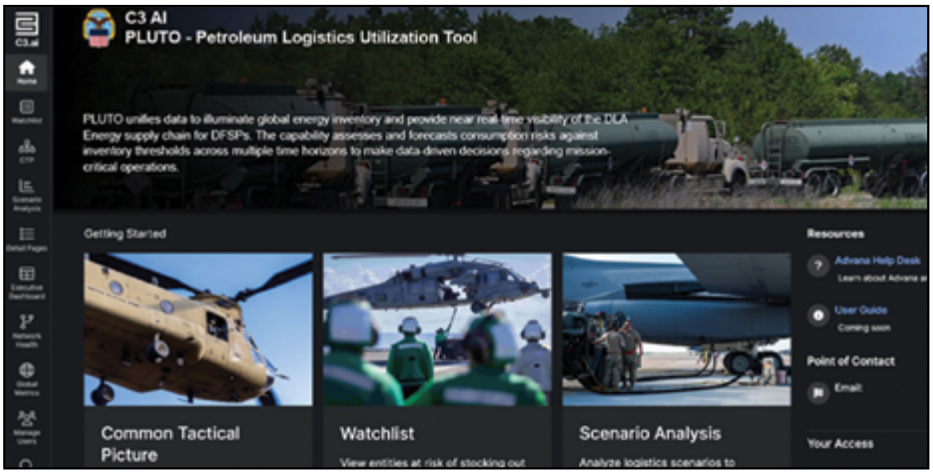
"The development of the artificial intelligence tool was driven by DLA Energy's commitment to innovation, digital transformation and operational excellence," said Toka Trau-Massey, a supervisory business process analyst in the DLA Energy Business Process Support Directorate. "This isn't just an upgrade; it's a shift to further tackle logistics hurdles while proactively shaping desired outcomes."

Global logistics environment adaptation

"In today's global environment, the flow of energy is no longer guaranteed," said David Friedler, director of the DLA Energy Business Process Support Directorate. "Supply chains are stretched across vast distances, vulnerable to everything from geopolitical instability and cyberattacks to natural disasters. Before PLUTO, managing this complexity often involved piecing together information from disparate, siloed systems — static spreadsheets, manual data calls and dense reports that were often outdated by the time they reached a decision maker."

Trau-Massey emphasized that the contested landscape was the primary driver for PLUTO, noting that this reality demanded a more modern solution.

Released in October 2024, PLUTO is powered by the agency's Enterprise Advanced Analytics program, or EA2, which provides the foundational data architecture



The homepage for the Petroleum Logistics Utilization Tool and Optimization system provides a centralized platform to manage and communicate fuel logistics information. The system integrates data, visualization and analytics to enhance situational awareness and support data-driven decision-making.

– Courtesy of DLA Energy

for these types of tools. Michael LeBreton, the EA2 program manager, said he sees PLUTO as a prime example of the program's purpose.

"PLUTO is a key project that helps to operationalize DLA Energy's mission by providing advanced analytics and AI tools," he said. "It is a testament to our commitment to delivering data-driven solutions to the warfighter."

PLUTO in action: From strategic exercises to real-world crises

PLUTO has proven to be impactful in military exercises and daily operations where speed and accuracy are paramount. The AI-powered scenario analysis allows users to predict outcomes based on near-real-time inventories and visualize everything from shipping lanes to storm tracks on a single, dynamic map.

This capability was put to the test during Global Thunder 26, U.S. Strategic Command's annual exercise. When USSTRATCOM issued a directive during the exercise to fill specific fuel points to maximum capacity, the DLA Energy team didn't need to make a dozen phone calls. Instead, they turned to PLUTO.

Army Capt. David Jeong, chief of operations at DLA Energy, described the tool as essential for visualizing primary, alternate and derived transportation lanes connecting between refineries and defense fuel support points. Jeong explained that having this information available instantly in a contingency, rather than buried in documents, allowed leaders to map out alternate supply routes in seconds.

"PLUTO gave planners an immediate inventory snapshot, enabling them to calculate needs and identify the closest vendors in minutes," Jeong said.

The system has also transformed how DLA Energy prepares for and responds to natural disasters, said Air Force Capt. Joshua O'Donnell, a plans and operations officer. By overlaying hurricane forecast tracks on a map of DLA's fuel assets, operators can immediately identify at-risk facilities. This allows them to adjust inventories, pre-position resources, or reroute shipments to ensure asset protection and mission continuity.

"PLUTO's capabilities can be leveraged to help an agency ... anticipate resource availability by quickly identifying which DFSPs are at risk, assessing inventory sufficiency and allocating resources to maintain readiness," Trau-Massey said.

An evolution driven by users

"PLUTO's success stems from its agile development methodology, which relies on a continuous feedback loop with the people who use it every day," Friedler said. "This approach ensures the platform evolves in lockstep with the needs of the field and aligns with DLA's core mission priorities: to set the globe, set the agency and set supply chains.

"The proof is in the numbers," he continued. "Since its launch, the number of active users has surged by 650%, a clear indicator of its real-world value."

Brian Rogers, deputy director of the DLA Energy Business Process Support Directorate, explained that the platform provides shared visualizations for partners across the Joint Petroleum Enterprise, including U.S. Transportation Command and the Joint Staff's logistics directorate. The tool helps break down information silos

"PLUTO enables DLA Energy commanders and leaders to view near-real-time inventory, understand current and future risk levels, and make informed decisions quickly," Rogers said.

This capability has even rendered static slideshows obsolete in high-level meetings. Regional commanders brief the DLA Energy commander on an interactive map rather than slides.

The way ahead: A smarter, more predictive supply chain

PLUTO extends even further into the realm of predictive and cognitive analytics. The platform goes beyond a rear-view mirror showing past and current events; it is being built into a forward-looking telescope.

"PLUTO's future focuses on digital transformation, predictive analytics and enterprisewide collaboration," Trau-Massey said. "The system is expanding its use of AI and machine learning to do more than just display data."

The next leap will involve generative AI.

"Generative AI capabilities will allow users to ask questions in plain language and receive instant, actionable insights, streamlining decision-making," Trau-Massey said.

By integrating data, visualization and analytics, PLUTO represents advancement in how DLA Energy manages and communicates fuel logistics information. Bridging this technology with the institutional expertise of its users enhances situational awareness and supports data-driven decision-making across the joint petroleum enterprise.

Toka Trau-Massey, a supervisory business analyst with the Defense Logistics Agency Energy Business Process Support Directorate, navigates the Petroleum Logistics Utilization Tool and Optimization system.

– DLA photo by Ebony Gay

Bot boost: Citizen developers drive automation gains at DLA

By Natalie Skelton, DLA Weapons Support Public Affairs

A team of citizen developers at Defense Logistics Agency Weapons Support is using automated processes to save thousands of work hours on repetitive tasks.

The Robotic Process Automation Bots Team — a group of trained DLA Weapons Support experts operating at Richmond, Virginia, and Columbus, Ohio — identifies routine, time-consuming processes and constructs "bots" to handle them. These software-coded bots operate continuously, processing data and completing tasks, which frees employees for higher-value activities.

The citizen-developer approach integrates automation directly into business operations. Team members, who are experts in their respective fields, are trained in software development to create, test and maintain these automated solutions. This model has improved efficiency and strengthened the accuracy of supply chain operations.

Before creating a bot, the team works directly with an organization to map out current processes, workflows, applicable policies and system interactions to determine where bots could help. This preparatory work, which also includes structured interviews with workers, helps ensure each bot serves the desired business outcome.

Before the bots are deployed, citizen developers run them through a battery of tests to ensure they function as intended under a wide variety of conditions. Documentation like test plans and demonstration videos support the governance, auditability and sustainment of deployed bots.

Bobby Porter, Tracy Ruland and Marcus Miller collaborate on automation timelines during a citizen developer working session between Business Process Support and Procurement Process Support at Defense Logistics Agency Weapons Support in Richmond, Virginia, Jan. 20, 2026.

– DLA photo by Nicholas Pilch

Marcus Miller, a demand and supply chain analyst, described how learning to design and build automation reshaped his understanding of organizational workflows.

"Working as citizen developers, we have had to step outside of our own functional areas and really understand how different parts of DLA connect to support the warfighter," Miller said. "Mapping processes with employees — whether in procurement, supply or customer support — gave us a much more detailed view of how people use our systems and how dependent everything is on clean data and clear policy.

"As we dug into these workflows, it became obvious how important it is to have a well-defined, consistently followed process before you can automate anything," he continued.

Miller explained the process helped identify areas where steps could be made clearer and streamlined. Sometimes that leads to improving the process itself before ever building a bot. Incorporating new tools and automations offer a better appreciation for how data flows

and how technology can strengthen accuracy and efficiency.

"Overall, learning to build automations has given us a much broader understanding of how the organization works, and a sharper eye for how to make processes better — not just for automation's sake, but for the mission," Miller said.

The bots team delivered automation across 20 use cases during the award period, completing more than 75,000 records and saving about 18,000 hours of human productivity for DLA Weapons Support by removing manual workload from routine processes.

Bots are used today in acquisition support, supplier notifications, technical and quality support, and customer operations. Automation has reduced the need for manual intervention by routing referrals, generating reports, notifying suppliers, retrieving proof of delivery and cleaning up post-award actions.

Bobby Porter, a procurement analyst in the Business Process Support Directorate, described the effect of automation on workforce focus.

"With bots taking on high-volume repetitive tasks, employees are now able to focus their time on higher-value work outputs that fully leverage their expertise," Porter said. "Instead of spending hours on manual data entry, record processing or system-to-system transfers, the workforce can concentrate on analysis, problem-solving, customer engagement and continuous process improvement. This shift improves data accuracy and decision making, and it allows employees to apply their skills where they have the greatest impact on supporting the warfighter."

Collaboration is central to the bots team's execution model. Citizen developers operate and coordinate across the agency with industry partners, military services and other fourth-estate organizations. The team adheres to coding standards and uses commercial off-the-shelf tools, standardized templates, checklists and playbooks to ensure consistency and repeatability while executing automation efforts.

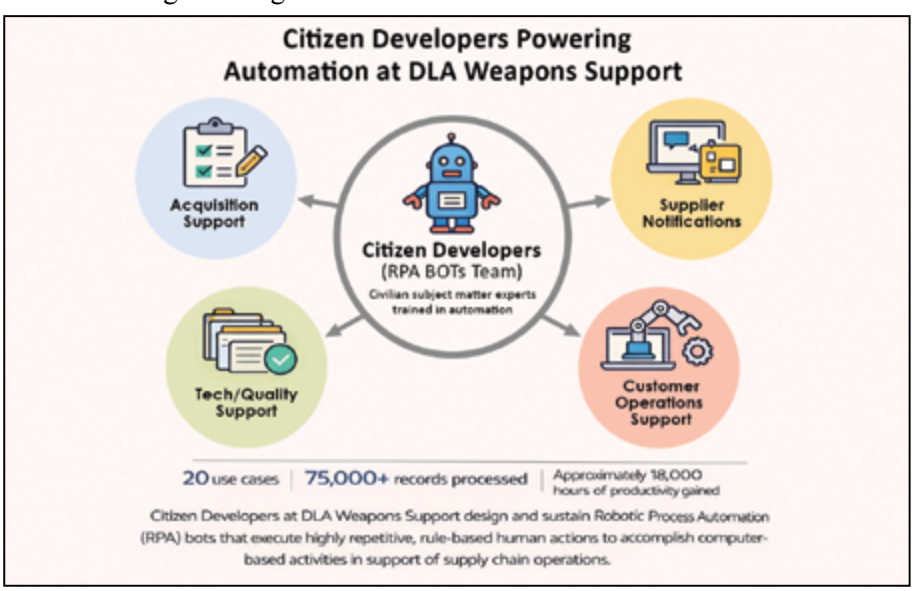
The automation pipeline reflects increasing workforce engagement with data flows and system interactions. Tracy Ruland, branch chief of Business Process Support in Richmond, described this shift.

"We're seeing more ideas coming from the workforce, more people are thinking in terms of data flows and system interactions, and there seems to be a growing comfort with identifying processes that are good candidates for automation," Rutland said. "As the pipeline expands, it reflects a real shift in digital and data acumen. Employees are getting better at spotting inefficiencies, understanding how data moves through our systems, and recognizing where automation can strengthen accuracy and mission support. The conversations we're having now are more technical, more forward-leaning and much more focused on long-term digital transformation.

"The pipeline isn't just a list of future bots; it is a sign that the organization is becoming more digitally fluent, more data-aware and more confident in using automation as a tool to enhance DLA Weapons Support and overall warfighter readiness," she continued.

The RPA citizen-developer program at DLA Weapons Support demonstrates how operational expertise combined with structured automation development can produce measurable productivity gains while strengthening process consistency and auditability. The RPA Bots Team supports this by automating repetitive, rule-based workflows and redistributing workforce effort toward analysis, problem solving and continuous process improvement.

The team's work earned the Innovation Excellence Award during the 58th Annual DLA Employee Recognition Awards event in January. While the award reflects prior accomplishments, the sustained application of citizen-developed automation continues to support DLA Weapons Support operations and warfighter readiness.



– DLA graphic by Natalie Skelton

Defense Logistics Agency Chief Information Officer Adarryl Roberts speaks during the Defense Logistics Agency Transformation Summit, May 20-22, 2025, at the National Museum of the United States Army in Fort Belvoir, Virginia.

– DLA Photo by Chris Lynch

A Conversation with the Chief Information Officer

In this interview, the Defense Logistics Agency's Chief Information Officer Adarryl Roberts discusses the agency's digital transformations, emphasis on data acumen and artificial intelligence strategies.

The DLA Strategic Plan emphasizes building resilience and accelerating digital transformation to operate in a contested logistics environment. How is the digital transformation effort, including the adoption of cloud-based computing and enhanced cyber security measures, directly contributing to DLA's ability to maintain a secure and resilient supply chains in the face of evolving threats?

As we started our digital transformation journey in 2020, we were focused on accelerating our transformation efforts to meet those evolving needs and create the resiliency we need throughout our supply chains. As we've matured in our transformation efforts over the past five years, we've really shifted that focus from sustaining to accelerating the implementation of these tools. That means building an architecture and a framework that allows us agility and flexibility as technology changes so we're more aligned and able to adapt as technology enhances.

Paired with that, we're focused on our talent management and our workforce. We are ensuring that they have the data acumen and understand the role technology plays in the success of our agency moving forward at the various levels throughout the agency.

When you put the technical acumen with the data acumen, that creates the digital acumen that allows us to have that more secure, resilient supply chain because the workforce understands how to enhance the mission effectiveness and increase efficiency.

Are there any new capabilities or platforms that you are most excited about?

I would say DLA Connect, the agency's single sign-on employee portal, is the most exciting because it allows us to have an integration with our customers, with our suppliers and with our partners.

Beyond that, the other capability that I'm excited

about is our AI virtual assistant capability and Loggie, and how they integrate with DLA Connect to allow users to access self-services

For example, a lot of our customers call to ask, "Where's my stuff?" Or, "When can I expect delivery? What's the status of my order?"

And we want them to be able to find that information with a commercial look and feel. And creating DLA Connect along with the customer portal allows our customers to come in to DLA with their questions and get status of their orders, cancel orders, etc., similarly to the commercial sector.

That's probably what I'm most excited about — the ability for customers to perform self-care without the delay of waiting to talk to someone or going through email.

Modernizing DLA's Enterprise Resource Planning system is a major component of daily digital transformation. Can you discuss the key challenges and successes encountered in this modernization journey, particularly in balancing the need for standardization with the unique and complex requirements of the agency?

I would say the most challenging part of our ERP transformation has been the speed by which we like to accomplish it, and competing priorities.

Our day-to-day business does not stop because we're modernizing, and a lot of the support required wasn't just technical transformation; it was also business transformation. Attempting to conduct business process reengineering, along with trying to streamline our processes to utilize out-of-the-box capabilities without customizing the code — based on what we've done in the past — that's probably been the most challenging part of our ERP transformation.

I say we could always do more business process engineering, though. As we migrate our ERP through lifecycle management, how do we continue the opportunities for reengineering our business process? Be it local DLA policies or working to change Department of War policies for things impacting our ability to fully leverage commercial technology.

How are emerging technologies like AI and machine learning being integrated into DLA as operations to improve efficiency and fortify the supply chain against disruption?

I don't look at AI, machine learning and even automation as technologies — I know that's how they're defined. But I would call these enabling tools and capabilities that we're integrating in the agency to enhance the effectiveness of our people — really building a force multiplier within our workforce to further enhance our efficiency and effectiveness with the mission.

What does that mean for DLA? Throughout our history, DLA has done an outstanding job of providing

Defense Logistics Agency Chief Information Officer Adarryl Roberts speaks during DLA's Collider Day event, Sept. 3, 2025, at the Hilton Alexandria Mark Center in Alexandria, Virginia.

– DLA Photo by Chris Lynch

Defense Logistics Agency Chief Information Officer Adarryl Roberts has a discussion during the Assassin's Mace wargame at the McNamara Headquarters Complex on Fort Belvoir, Virginia, in August 2025.

– DLA Photo by Chris Lynch

support to our country at various stages, either in conflict, disaster relief or competitive logistics.

Our analysts spend a lot of time gathering data from the disparate data sources. And then there's also gaps in data. If we had access to certain data, we could make better-informed decisions.

That's where automation and AI are really going to enhance our mission. Effectiveness and efficiency are bringing those disparate data sources together natively through AI so that our analysts, our procurement specialists, our procurement officers, our human resources representatives and major subordinate commands can focus on mission execution as opposed to data gathering.

And moving forward, there is going to be what I would call a digital employee. How do we train AI? How do we provide a digital assistant to our workforce to enhance what they're doing today? AI is not going to be doing anything that we're already not doing.

We can create efficiencies throughout the government, which is why people seek out DLA.

But now we're trying to enhance that based on speed of relevance and the rate and speed that the nation and the department requires.

Why do you believe investing in the data acumen of every employee is a strategic advantage and fundamental necessity for modernizing logistics and supporting the warfighter effectively?

I believe if we don't do that, we're doing a disservice to our employees. That's showing a lack of investment in your people and your talent, and not understanding the skill set and training opportunities we need to provide them to be successful in their careers.

It is a strategic imperative for us to focus on the data literacy and the technical acumen of our workforce because I see this as the investment that we make in our employees — the same investment the department's made in the warfighter.

As our warfighters train, they not only train on the components of war, but also their specialties. They also are trained in the use of technology and the execution of that mission.

Also, this is no different than when our new employees graduated. We'd ask if they know Microsoft Excel, do you know PowerPoint, right? Those are just basic components. You had to have that skill in this type of organization to be considered for hiring because of the advancement of technology, not just here at DLA, but commercially in the world. Data acumen has now become a base component to be employable in the future, in terms of how we recruit, how we train, and how we upscale our workforce.

DLA's data analytics and AI strategy highlights the goal of fostering a data-literate workforce beyond general training. What methods has DLA employed to cultivate deep-rooted data acumen, ensuring that every employee from the warehouse to the executive level understands data and can competently use it to drive decisions?

I'm excited to be partnered with DLA Human Resources in terms of our data acumen training. We started with some basic online courses at each level that we've made available for employees through our learning management system.

We are also piloting, at the executive level, college and university courses where we create DLA-specific scenarios to work on with our cohorts. These will be professional-quality products that illustrate situations that happen in our day-to-day workspaces.

We plan to expand that to the entire echelon, even down to the intern level.

The other thing that we've done is to develop our Innovation Navigators Course, which is really focused on giving folks the tools, such as design thinking, to spur innovative thought. The next stage of that course is how we wrap AI and automation as a focus area and help employees tackle problems from an innovative perspective as well.

Have you heard any concerns from DLA's customers about using AI or about the agency's modernizations? What are those concerns, and how is DLA addressing them?

I think the biggest, most common concern that I typically hear is the timing and complexity of modernization and what we're doing in terms of automation in AI. With an organization as complex as the Department of War, as well as the relationship with our industry partners and some of our NATO relationships, that complexity of coordination is needed to make sure you don't break an existing relationship.

Business process as you modernize is a key component across the agency. Our intent is to calm the fears and educate our partners, our customers and ourselves because many organizations are actually attempting to do the same thing.

You can never over-communicate your strategy and your modernization efforts.

Having that open conversation about your mitigation strategy and how you're managing risk is important as well. I think we've done a great job as we rolled out the new Warehouse Management System, as we get ready to roll out the Federal Logistics Information System transformation and as we complete our S/4 HANA migration.

We've done a great job at each level within DLA of communicating the change we're making, why we're making the change and how that change is going to benefit the department and our partners.

Is there anything else you would like to add?

It's a very exciting time to be at DLA with this transformation. I often describe this as generational transformation.

I truly do think AI and automation and how we incorporate that into our logistics and business operations allows us to set the agency up for success for the next decade.

Plus, we're aligning our efforts with the commercial world and how they use that from a business operations perspective. It's not often you get to have a generational impact in your career.

I'm proud of the agency and how we've come together to take this journey. But while taking this journey, we haven't compromised our day-to-day support of the warfighter.

It's a busy and important time for DLA, and I appreciate everyone understanding the role we play in moving this nation forward.

Defense Logistics Agency Chief Information Officer Adarryl Roberts talks with members of the DLA workforce during the Assassin's Mace wargame at the McNamara Headquarters Complex on Fort Belvoir, Virginia, in August 2025.

– DLA Photo by Chris Lynch

Ronald Clunk, a material examiner and identifier, operates material handling equipment at the Defense Logistics Agency Disposition Services site at Fort Meade, Maryland. The agency operates multiple types of MHE at all of its locations, which are essential to its operations. An artificial intelligence data analytics platform now helps manage the readiness of these assets.

– DLA courtesy photo

Days to minutes: AI application enables agency to make rapid decisions with data

By Jeff Landenberger, DLA Disposition Services

Defense Logistics Agency Disposition Services is embracing artificial intelligence to evaluate material handling equipment, and that is leading to potential broader adoption among the agency's other major subordinate commands.

A commercially available AI data analytics platform, initially used at agency property disposal sites since early 2024, is now being tested as a scalable tool to support more accurate and timely logistics decisions within DLA.

Timothy Zweng heads DLA Disposition Services' equipment management and training branch. He oversees more than 2,000 pieces of equipment worldwide, including 867 wheeled assets. He said that before using this platform, MHE fleet management relied on printed spreadsheets generated from the Enterprise Logistics Management System, a process that was time-consuming and limited in scope.

"In the past, we were not making educated decisions," Zweng said. "We basically went off paper reports from our fleet management system. Now, we can combine multiple data sources and automate the reports we need to make informed decisions."

That shift has changed how decisions are made.

Zweng said the data allows his team to evaluate average time between failures, average time to repair, total maintenance costs and overall availability, helping to identify underperforming assets and unnecessary replacements.

"Reports that used to take us about 45 days to build can now be done in two to three minutes, and that visibility allowed us to avoid about $10 million in equipment purchases we simply didn't need to make," Zweng said.

The application is helping identify data-entry errors, improve budgeting accuracy and support a shift toward condition-based maintenance.

At property disposal field locations, the data allows equipment specialists to identify issues before they become failures, said Don Richards, the lead equipment specialist for DLA Disposition Services' Northeast region.

Richards said this AI information helps regional teams quickly identify trends, compare equipment performance across sites and drill down to determine whether issues stem from training, maintenance practices or specific equipment types. That insight helps prevent unnecessary spending, reduces downtime and addresses potential safety concerns.

In one instance, Richards said the application assisted with identifying abnormal downtime trends tied to a mast alignment issue affecting multiple pieces of equipment. By recognizing the trend early and sharing the information, regional sites were able to inspect and repair affected equipment before failures occurred.

In another case, Richards said data revealed a recurring issue that led to changes in maintenance contract requirements, helping prevent future equipment damage and improving safety. He also praised it for allowing specialists to compare experiences and address problems collectively, rather than in isolation.

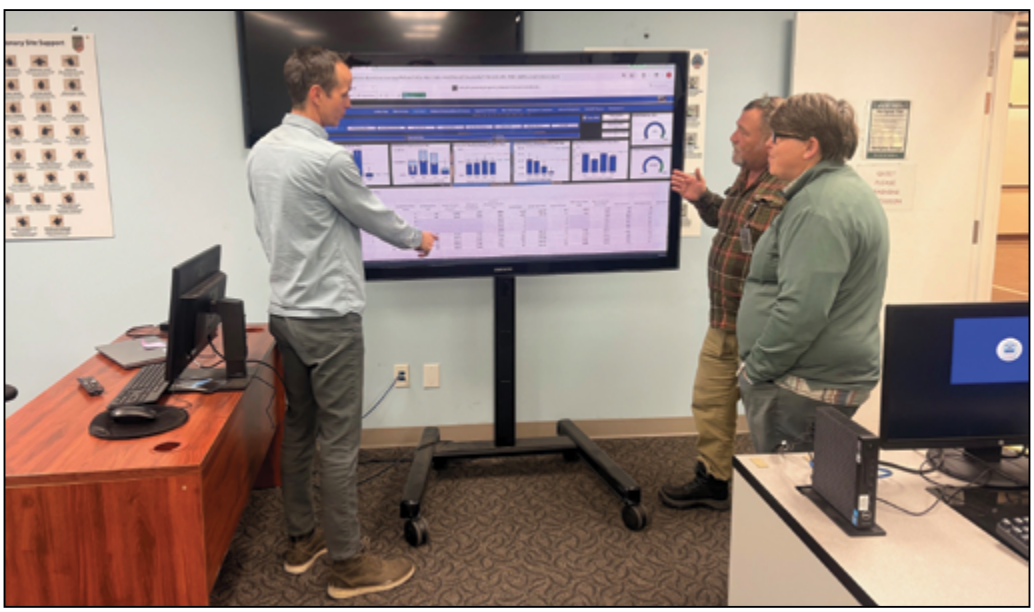
"This gives leaders a common operational picture built on reliable data, something we were not capable of doing before," Zweng said.

Zweng said he predicts adoption across the agency will be incremental due to differences in fleet size, mission and data maturity. But within the agency's reverse logistics arm, the tool demonstrably improved readiness, reduced costs and strengthened decision making.

For DLA Disposition Services' Data Team, the AI application has become more than a reporting tool. Lorenzo Lopez is the team's lead property disposal specialist, and said the application now serves as the analytical engine behind daily, data-driven decision-making.

The team adopted the AI application during the transition from the Distribution Standard System to the Warehouse Management System, Lopez explained. As the new system produced larger and more complex data sets, the organization needed a way to consolidate, analyze and interpret operational and production metrics. Initially, the team used the application for basic reporting. As internal expertise grew, the team custom-built a dedicated stream of applications. Those applications allowed analysts to quantify performance, calculate complex operational figures and present results through detailed visualizations.

Lopez said the result is broader access to actionable data across the organization. Analysts can conduct deep dives into trends, while managers can quickly assess enterprise wide conditions. That shared visibility has fostered a more proactive culture, enabling leaders to respond quicker to challenges or reinforce strong performance.



Cory Bobo, area manager for Defense Logistics Agency Disposition Services at Columbus, Ohio, receives a brief on Material Handling Equipment readiness status from Don Richards, lead equipment specialist, instructor and certifying official for DLA Disposition Services' Northeast region, and Megan Hughes, operations supervisor at DLA Disposition Services at Columbus.

– DLA courtesy photo

Navy Rear Adm. Julie Treanor, commander of Defense Logistics Agency Weapons Support (Columbus), recognizes members of the DLA Weapons Support team who assisted with DLA Distribution Susquehanna, Pennsylvania, Warehouse Management System implementation during a tour the Eastern Distribution Center at DLA Distribution Susquehanna in New Cumberland Nov. 21, 2025.

– DLA photo by Dorie Heyer

Nearing completion: WMS implementation enhances data-driven DLA Distribution operations

As a cornerstone of its digital transformation strategy, Defense Logistics Agency Distribution is entering the final stages of a multi-year, enterprisewide Warehouse Management System implementation effort to modernize warehousing operations.

Over the past five years, DLA Distribution has successfully replaced its legacy system with a more modern software system in a collaborative, end-to-end effort. Beginning with a pilot in Corpus Christi, Texas, in June 2018, the project expanded across Army, Navy and Marine Corps support sites, with each implementation providing valuable lessons for future rollouts. Today, WMS is operational at 21 of 24 DLA Distribution locations, including major hubs in Susquehanna, Pennsylvania; San Joaquin, California; and overseas in Europe and South Korea.

The transition to WMS is a component of DLA's broader modernization goals designed to take advantage of industry best practices, enhance auditability, and streamline processes. This modernization directly supports the agency's response to the challenges of modern contested logistics. As noted in a recent DLA paper on the topic, the current landscape is far more complex than in the past, with adversaries aiming to disrupt and degrade U.S. logistical capabilities.

From 'just-in-time' to 'just enough,' WMS transforms DLA's logistics strategy

WMS moves DLA Distribution to a single software platform, aligning it with the DLA Enterprise Business System to streamline processes and reduce complexities to create a unified digital ecosystem. This transition moves DLA beyond siloed, legacy platforms into an interconnected environment, enabling a level of data sharing and operational cooperation that was previously unattainable, said Army Brig. Gen. Kevin Cotman, DLA Distribution commander. This digital leap forward is foundational to building a more agile and responsive logistics network.

In line with DLA goals, WMS will provide real-time data and predictive analytics necessary to accurately forecast warfighter needs, shifting from an outdated "just-in-time" model to a more flexible "just enough" approach that prioritizes operational adaptability, Cotman added.

"This marks a significant step forward in modernizing our distribu-

tion network and enhancing our ability to rapidly and accurately support the warfighter," Cotman said during the go-live event at DLA Distribution Susquehanna. "The transition to Warehouse Management System … demonstrates the dedication and resilience of our workforce, and I'm incredibly proud of the teamwork displayed in preparing us for this change."

A collaborative, agencywide effort at DLA Distribution Susquehanna

WMS implementation throughout DLA Distribution relied heavily on teamwork and collaboration throughout the organization. One of the new initiatives to support implementation was the creation of the WMS Task Force, a 275-member group representing various DLA components and providing round-the-clock support to address challenges and ensure smooth operations. Beginning in early 2025, the task force developed comprehensive preparation efforts, including on-site engagements, working groups and training exercises.

"The value has been decisive," said Army Maj. James Marley, commander of the WMS Task Force. "Because the site made physical, procedural and staffing adjustments in advance, the rollout began from a position of stability rather than reaction. WMS coaches, IT support staff members, and process experts are integrated daily with the workforce, reinforcing correct behaviors, troubleshooting in real time, and accelerating the learning curve."

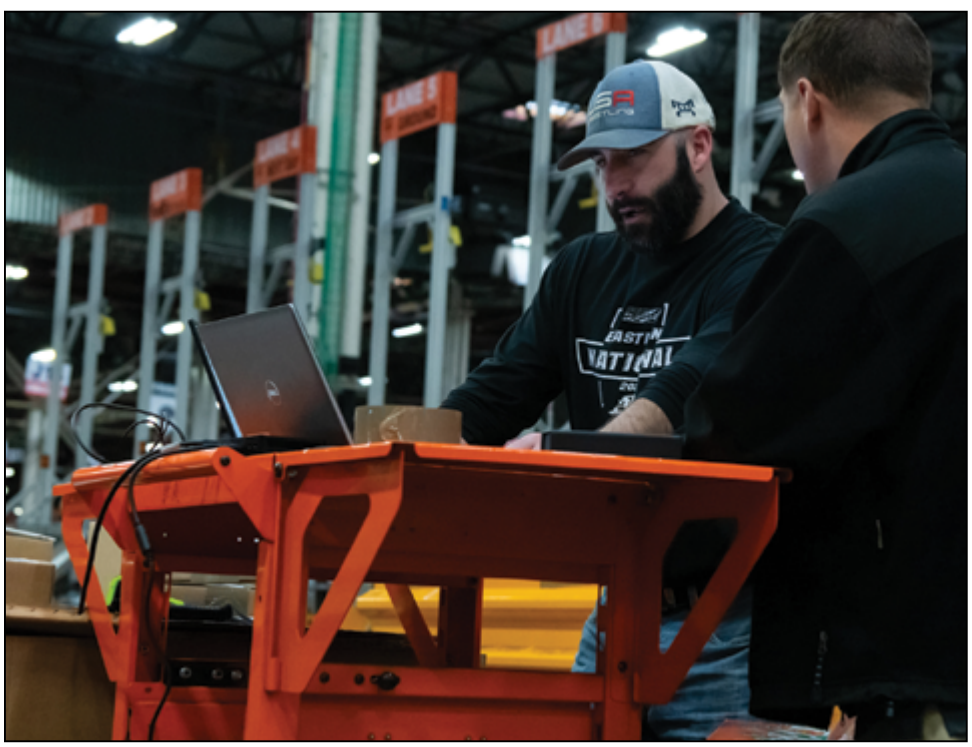
Jim Hooper, deputy commander of DLA Distribution's Susquehanna facility, hailed the strong teamwork throughout the entire process.

"I am very impressed with the team effort. We knew coming into go-live that WMS would require significant system changes or upgrades, and that we'd encounter problems as our processes are different than other depots in terms of scale and scope," Hooper said. "The entire DLA team, including DLA Information Operations, DLA Distribution Network Process Management Directorate, DLA Weapons Support, the WMS Task Force; and our contractor partners, trainers and coaches from around the Distribution network have really come together to 'swarm' and fix problems or develop workarounds to ensure our customers are supported."

Modernization across the Pacific: DLA Distribution Korea

DLA Distribution Korea successfully launched the new WMS in late summer 2025, a step in modernizing logistics for U.S. Forces Korea and the broader Pacific theater. Within 48 hours, the site was scheduling and processing shipments, demonstrating immediate system stability.

The transition was the result of months of planning, which included sending "power users" to other sites like DLA Distribution Anniston, Alabama, and DLA Distribution Yokosuka, Japan, for hands-on



Defense Logistics Agency Distribution employees participate in hands-on, over-the-shoulder Warehouse Management System training as part of the WMS go-live at DLA Distribution Susquehanna, Pennsylvania in New Cumberland, Nov. 25, 2025. After months of training, coordination, exercises and support from across the DLA enterprise, DLA Distribution Susquehanna, Pennsylvania operations went live using the Warehouse Management System Nov. 10, 2025.

– DLA photo by Dorie Heyer

training and knowledge transfer. This strategy produced training plans and fostered a culture of digital fluency. The resulting instructional videos helped overcome language barriers to ensure U.S. employees and local-national Korean staff members could effectively use the new system. This demonstrated a commitment to building data acumen across a multifaceted workforce.

Strengthening European logistics: DLA Distribution Europe

In July 2025, DLA Distribution Europe, located in Germersheim, Germany, went live with WMS, enhancing its ability to support warfighters across Europe, Africa and the Middle East. The launch followed a meticulous four-month preparation period, which included sending key leaders to observe the go-live at DLA Distribution San Joaquin, California. Given the complexity of shipping to customers across three combatant commands, the team faced challenges with transportation logistics but was able to approach normal daily outbound shipping volume shortly after the transition.

Implementation enters final stages with efforts at Air Logistics Centers and the Richmond site

The final phase of the WMS rollout will focus on the complex environments of the DLA Distribution Air Logistics Centers and DLA Distribution Richmond, Virginia. In February, DLA Distribution Warner Robins, Georgia, became the first ALC to implement the system, with anticipated fielding at DLA Distribution Oklahoma City, Oklahoma, in May, and DLA Distribution Hill, Utah, in July. A non-ALC site, DLA Richmond, Virginia, will implement WMS in April.

The future of WMS: Fostering digital advancement and data acumen

The DLA Distribution WMS journey doesn't end with the final implementation at DLA Distribution Hill, Utah — it evolves. The fielding process is designed for continuous improvement, with retrofits planned for deployment to sites as needed. This ongoing effort allows DLA to address emergent requirements and resolve complex issues that could not be tackled during the initial implementation phase. This iterative approach ensures that WMS remains a dynamic and responsive tool, continuously adapting to the evolving needs of the warfighter and the contested logistics environment.

WMS is expected to enhance DLA's support for global warfighters by providing powerful data-driven capabilities. WMS provides real-time visibility and traceability of inventory, allowing for more accurate tracking of the quantities and locations needed for operational efficiency and financial accountability.

The system also serves as an engine for insight. By investing in comprehensive training, DLA is cultivating a culture of data acumen, empowering the workforce to transition from executing transactions to analyzing trends. This data visualization enables logisticians to interpret real-time data, anticipate disruptions, and optimize warehouse performance with evidence-based decisions. The system's advanced analytics and machine learning capabilities will enable smarter demand planning and resource allocation.

This modernization effort is not just a technological upgrade, it represents a fundamental shift in DLA's operational philosophy, embedding digital advancement and data acumen into the core of its mission, Cotman said. By transforming the technological backbone and empowering the workforce with data-driven insights, DLA ensures that logistical support is not just efficient, but strategically superior, providing a decisive edge to the warfighter.

Defense Logistics Agency Vice Director Brad Bunn addresses the DLA Distribution Susquehanna, Pennsylvania, Warehouse Management System Task Force during a visit to DLA Distribution Susquehanna in New Cumberland, to observe WMS implementation progress Nov. 25, 2025.

– Photo by Dorie Heyer

Transforming the mission: Initiative builds DLA's digital backbone

By Michael Molinaro, DLA Information Operations Communications

The Defense Logistics Agency's Enterprise Resource Planning Transformation program modernizes the agency's logistics and financial systems, and updates technology to build a digital advantage. The program helps ensure warfighters are always equipped for mission success in a rapidly evolving global landscape.

The imperative for change: A legacy system burden

For years, DLA has relied on its Enterprise Business System to manage supply chain logistics, financial transactions and other procurement functions. However, legacy systems like the ERP Central Component, Supplier Relationship Management, and Advanced Planning Optimization are nearing the end of their lifespans.

Remaining on these outdated systems would stifle innovation, hinder the adoption of new supply chain technologies, and increase maintenance costs, said DLA Chief Information Officer Adarryl Roberts.

More critically, these aging systems lack the speed, agility and data analytics capabilities required to effectively operate in a dynamic and contested logistics landscape, he added.

"Our legacy systems, while reliable for their time, simply can't provide the real-time visibility and predictive analytics needed to anticipate and respond to the complexities of modern supply chains," Roberts said, "Staying with the status quo would mean falling behind, both in terms of efficiency and our ability to support the warfighter effectively."

ERP systems can often suffer from data silos, a lack of integration, complex customizations, limited scalability, outdated technology and security vulnerabilities. That's why DLA launched ERPX, Roberts said. It's a strategic initiative designed to evolve the Enterprise Business System into an integrated system capable of supporting the agency's mission for years to come, he added

S/4 HANA: The next-generation ERP

The core of the ERPX program is the implementation of a next-generation ERP suite. This new platform, Business Suite 4 of the High-Performance Analytics Appliance — known as S/4 HANA — fully replaces the legacy ECC system and is designed to run on an in-memory database for real-time data processing. This enables DLA to gain live insights into its operations, identify potential disruptions and make informed decisions.

> "REMAINING ON THESE OUTDATED SYSTEMS WOULD STIFLE INNOVATION, HINDER THE ADOPTION OF NEW SUPPLY CHAIN TECHNOLOGIES AND INCREASE MAINTENANCE COSTS."
>
> – ADARRYL ROBERTS

"S/4 HANA isn't just a software upgrade; it's a complete transformation of how we manage our logistics operations," said James Johnson, DLA Information Operations' program executive officer. "It gives us the real-time visibility we need to anticipate disruptions, optimize inventory levels and ensure the warfighter has the right supplies at the right time. The in-memory computing capability of S/4 HANA will dramatically improve our decision-making speed."

What does S/4 HANA mean for DLA? A streamlined, data-driven future

"The S/4 HANA implementation will affect all DLA employees who currently use EBS with the most significant impact on those in finance, procurement and order management," Johnson said. "For these users, the new system will streamline workflows and improve efficiency. DLA is providing access to training materials to help employees maximize the benefits of the new system."

While the system will undergo significant technological changes, most users may only notice a change in the look and feel of the system. S/4 HANA offers a user interface that is customizable to employees of all skill and experience levels.

S/4 HANA will offer faster data processing and simplified processes, with real-time analytics and predic-

tive capabilities. An updated user experience and interface aligns with War Department standards and maintains enhanced security.

ERPX: A strategic transformation aligned to the warfighter

In a contested environment, Roberts said logistics must be anticipatory, resilient and agile. ERPX addresses audit recommendations, promotes industry-standard business capabilities and fosters strong partnerships across the War Department and industry, Roberts said.

"The ERPX program is a fundamental modernization of our logistics and financial operations," Roberts said. "It will equip our teams with real-time analytics and simplified workflows, enabling quicker, more-informed decisions. A key part of this transformation is reducing inefficiency by eliminating customizations that are costly to maintain and increase the risk of errors."

DLA's ERPX initiative reflects a broader government trend of replacing outdated systems with modern ERP platforms, similar to efforts in the Army and Air Force. This modernization is driven by the need to improve operational efficiency, strengthen security and gain real-time insights for more effective mission support.

DLA's ERPX transformation to the S/4 HANA platform provides a critical digital advantage, shifting logistics from reactive to predictive. This modernization equips the warfighter with a more resilient and agile supply chain, ensuring the entire Department of War stays ahead of future threats.

– DLA graphic by Brian Dumas

The digital quartermaster: Creating digital-powered supply chains for a contested logistics era

By Janeen Hayes, DLA Troop Support Public Affairs

Defense Logistics Agency Troop Support is replacing outdated processes with new, digital capabilities to strengthen warfighter readiness throughout the entire agency by changing its posture from reactive to proactive. These changes are bringing clarity to complexity, making data easier to understand.

"We are instilling a warrior's mindset into every facet of our enterprise, which begins with providing our warfighters an undeniable advantage through speed and precision," said Army Brig. Gen. Sean Kelly, DLA Troop Support commander. "This is a strategic evolution. We are building stronger, more resilient supply chains by moving from fragmented, manual processes to integrated, data-driven networks that make our supply chains as advanced and lethal as our weapon systems."

DLA Troop Support's Clothing and Textiles supply chain launched a data-driven intelligence tool that enhances visibility of military clothing support to the Army and Air Force Exchange Service.

"The objective was to develop and implement a tool that would give us supply chain management proactivity with AAFES' partnership to improve forecasting, strengthen our partnership and identify any shortfalls that we can see in advance," Clothing and Textile's Director of Customer Operations Angela Gonzalez said.

For years, supply chain data across DLA Troop Support lived in static formats that offered only backward-looking insights. Analysts spent hours exporting massive files, manipulating spreadsheets and assembling charts, time-consuming tasks that slowed decision making.

"The biggest change is shifting from being reactive to proactive,"

Defense Logistics Agency Troop Support supply chain analysts Dan Clark, left, and Nick Weidman are helping introduce a new suite of artificial intelligence-powered tools that transform complex supply data into clear, interactive visuals.

– DLA photo by Kendall Swank

said Dan Clark, a DLA Troop Support demand supply chain analyst who works with supply chains on data solutions. "Before, we were always reporting on a supply problem that a unit in the field had already experienced. Now, with the solutions in development, we can identify a potential delay for a critical requirement weeks in advance and solve the issue long before the warfighter's mission is affected."

One specific tool that DLA Troop Support uses is the Agency Global Assessment Review metric tool. It consolidates data streams into insights that are translated into a consolidated view of performance indicators for a specific supply chain. For a major subordinate command supporting more than 77,000 global customers and working with 2,700 suppliers, these gains help optimize resources and strengthen global readiness.

"It really helps to see the data visually," said Nick Weidman, a DLA Troop Support lead demand supply chain analyst who works alongside Clark. "When information is presented that way, it's much easier to understand what's happening and spot trends quickly."

The goal is simple but transformative: bring clarity to complexity, Kelly said. By making data visible, intuitive and predictive, DLA Troop Support is revolutionizing how it sees and manages global operations. Future iterations of the AGAR will automatically flag delinquent purchase orders and initiate vendor outreach. These tasks that once consumed hundreds of workforce hours will occur at machine speed.

"It really changes how we spend our time," Weidman said. "Instead of digging through data, we can focus on solving problems and having better conversations with suppliers."

Participants in the Creating Innovative Navigators Course present their team's proposal to DLA Troop Support leadership. The course had presentations where teams pitch innovative solutions focused on using artificial intelligence and digital tools to solve real-world logistics problems and enhance the agency's core mission of supporting the warfighter.

– DLA photo by Kendall Swank

The initiative strengthens the defense industrial base by providing transparent data on vendor performance, allowing DLA Troop Support to make faster, smarter contracting decisions and reduce risks across supply chains, Weidman explained.

"Tracking lead time is especially helpful because it gives us a clearer picture of how long it takes a part to reach the customer," Weidman said. "If we see lead times increasing, we can get ahead of it by placing orders earlier to maintain a steady flow of supplies."

> "WHEN INFORMATION IS PRESENTED VISUALLY, IT'S MUCH EASIER TO UNDERSTAND WHAT'S HAPPENING AND SPOT TRENDS QUICKLY."
>
> – NICK WEIDMAN

Kelly emphasized the strategic implications.

"Data is the new ammunition, and this initiative uses it to fully synchronize our logistics with combat operations," he said. "We are creating a converged network that stretches from the sensor to the shooter and back to the sustainer and supplier. This seamless linkage provides real-time insights into consumption, disruption and distribution, giving us an unparalleled strategic advantage."

Putting powerful data tools into the hands of the workforce will enhance the technical knowledge of DLA Troop Support employees and empower them to make critical decisions that positively impact customer support, Weidman said.

"You don't need a coding background to use these tools," Weidman said. "With some basic technical familiarity, teams across DLA Troop

– DLA graphic

Support, or DLA more broadly, can start building applications that simplify everyday work."

To accelerate this cultural shift, DLA Troop Support is participating in and implementing training programs across the organization. Collaborative workshops bring together teams from the four supply chains — Subsistence, Clothing and Textiles, Medical, Construction and Equipment — as well as the staff offices to learn new tools and develop applications.

During a three-day innovation course in late 2025, employees across DLA Troop Support came together to brainstorm ideas and present ways forward to create a more data-driven organization.

"What stood out to me was how the course demystified the whole idea of innovation," Matt Ligato, a Subsistence division chief who attended the course, said. "It showed us that you don't need to be a designated 'creative type' to build a solution. It's about following a logistical process, and that gives you the confidence to table a complex problem and develop a sound, presentable plan."

One topic participants addressed during the course was the need to transition from reactive to proactive logistics. They proposed creating the Vendor Alert and Liability Oversight Resource tool, which is now in its planning phase. VALOR will be a conceptual artificial intelligence tool that will focus on automated vendor collaboration to identify potential delinquencies, allowing DLA Troop Support employees to pivot procurement plans to prevent backorders.

"What's really powerful about these workshops is seeing people from completely different supply chains in the same room, solving problems together," Clark said. "It's breaking down those walls between us and getting everyone to speak the same language, which in this case is data."

The success of DLA Troop Support's initiatives is now informing broader DLA modernization efforts. The organization is sharing its tools, frameworks and lessons learned as a model for other commands, helping build a unified, interoperable logistics enterprise.

"Now that we've proven this model works, the next phase is taking it on the road," Kelly said. "Expanding this framework lets every organization benefit from what we've already learned."

This evolution reflects a fundamental shift in the global security environment, Kelly said. Logistics is no longer simply a supporting function; it is a decisive element of modern warfare. Sustaining high-intensity conflict requires a supply network as sophisticated and resilient as the combat systems it enables. DLA Troop Support's efforts complement DLA's enterprise-wide investments in cloud platforms, automation and machine learning to secure and maintain a decisive digital advantage.

"We are setting steadfastly high standards for our entire logistics enterprise because we understand that behind every uniform, every meal, and every construction and medical requirement is a supply chain that must not fail," Kelly said.

Data-processing personnel operate three IBM 7080 computers at the Defense Electronics Supply Center, Gentile Air Force Base, Ohio, in the late 1970s.

– DLA photo

From pools to lakes: DLA's decades-long plunge into database management

By Dr. Colin J. Williams, DLA Historian

Many of the technological tools the Defense Logistics Agency depends on today, including artificial intelligence, wouldn't exist if not for databases. Even before high-speed processors and probability-based algorithms, databases organized information in retrievable formats, a necessary precursor for AI agents returning in-depth answers to user prompts.

Information has long needed to be arranged, but databases, which require automated data processing, are relatively new. One of the first organizations to integrate multiple databases was DLA, formed as the Defense Supply Agency in 1961, about the time "database" entered the English language.

Database pooling with DIDS

DSA became a database manager when it inherited the federal catalog in November 1961. At the time, the catalog consisted of 38 million 5-inch by 8-inch cards, 7 million of which the agency trucked from Washington, D.C., to Battle Creek, Michigan, the headquarters of its new Defense Logistics Services Center. Activities throughout the federal government stored the remaining 31 million. Digitizing this massive archive in DSA's 80-character format permitted national stock number information to be integrated with other logistics data. DSA called the program governing these interactions the Defense Integrated Data System.

DIDS took a decade to deploy. Managers running its databases received information in various ways, including over the phone and by mail, but most entries arrived by wire transmissions. Military units used specially designed machines to transmit punch-card data to DLSC mainframes over telephone lines. The Defense Communications Agency operated the lines and DSA's Defense Automatic Addressing System routed the transmissions.

DIDS stored data on magnetic tape capable of holding 13.5 billion characters. While a government auditor chastised the agency for creating a program that was onerous to build and unable to keep up with expand-

ing requirements, DIDS nonetheless consolidated existing databases, decreased the time it took to screen new catalog items and interfaced with material management programs. As revealed in the auditor's report, what prevented DIDS from being truly transformative wasn't nearsighted vision or a deficient design but the limited computing capabilities of its two Burroughs 6700 and one IBM 360/65J computers.

DIDS covered more than cataloging. The system also helped DLSC with repurposing military equipment. While matching excess in one service to the needs of another depended on those services uploading on-hand quantities, the databases they populated belonged to DIDS. Another database mission was the Integrated Disposal Management System, established by DSA and operated by its Defense Property Disposal Service, a predecessor of today's DLA Disposition Services. When property disposal employees updated this system, DLSC's mainframes updated other DIDS databases. Supply condition codes were updated as well.

Special database missions

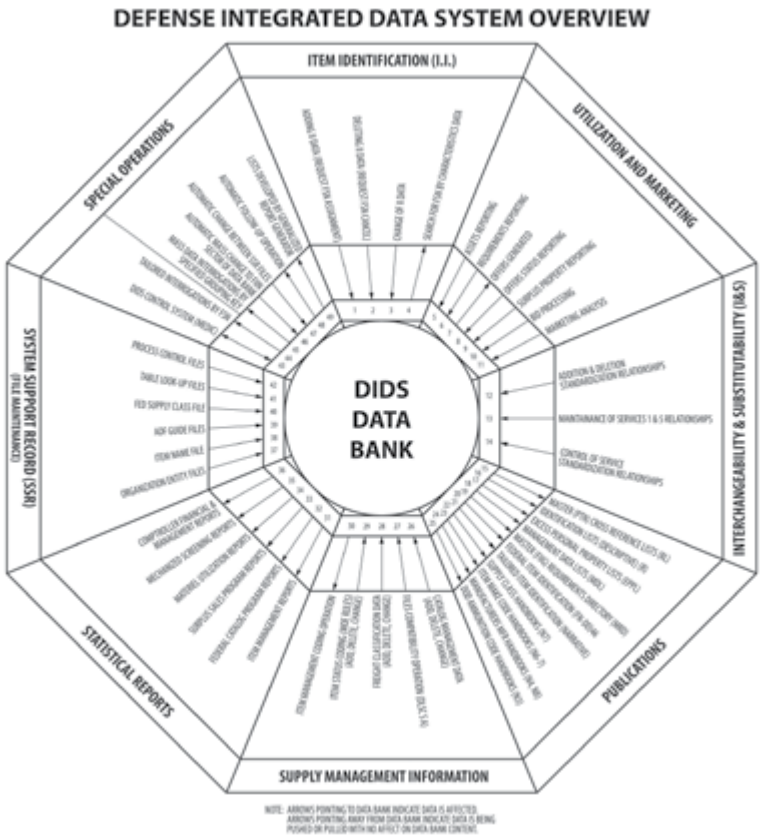
Not all database pooling involved DIDS. Automatic data processing equipment was scarce in the mid-1960s, with only 2,600 computers in the federal government. At the request of the Defense Department, DSA established a program in 1964 that screened this equipment for potential reuse. While covering multiple inputs and two owner types, the databases feeding the program didn't relate to cataloging and weren't integrated into DIDS.

The Defense Industrial Plant Equipment Center also had a database mission. DIPEC was a primary-level field activity DSA established in 1962 to manage manufacturing equipment. The center had multiple components, including the agency's only maintenance activity and a repository that could loan machines. This last mission depended on databases outside DIDS tracking where equipment was and where it could go.

Another one of DSA's database missions resulted from the Vietnam War. In 1968, the Defense Department asked the agency to design an automated program for placing veterans in federal jobs. The Vietnam Era Veterans Employment Referral System consisted of two information flows in constant need of updating, one for veterans and one for job openings. Run out of the Defense Electronics Supply Center in Dayton, Ohio, VEVERP targeted 225 occupations and found jobs for former service members in the Defense Department, Department of Agriculture, Post Office and Civil Service Commission.

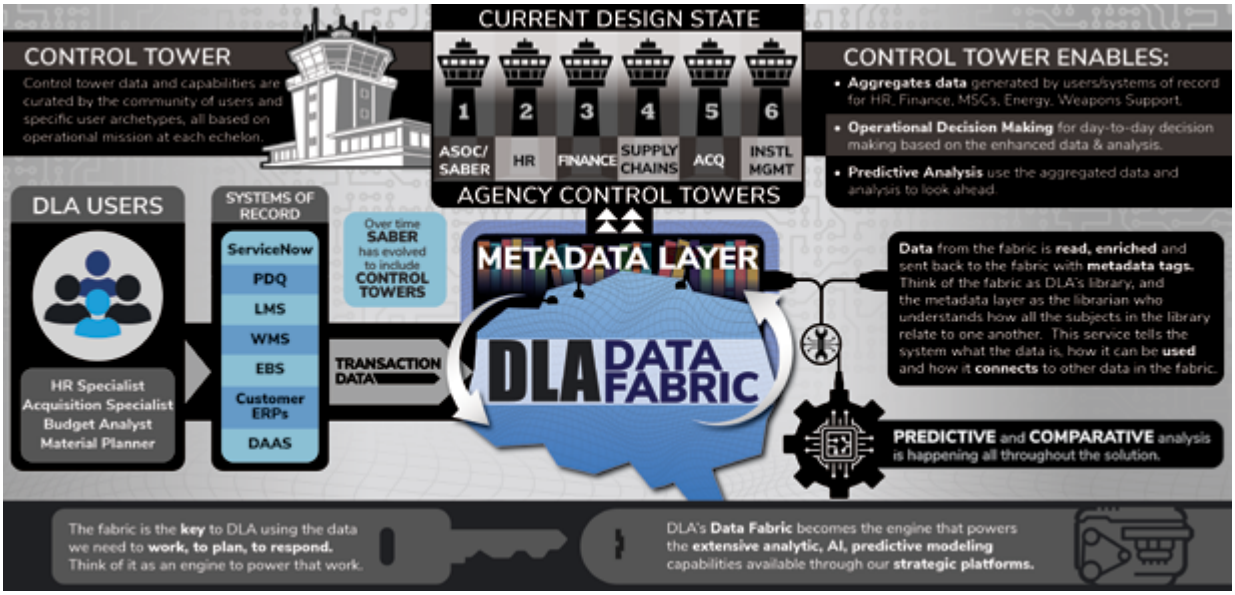
Material management programs

Not all database missions helped DSA procure items and logistics services. While reutilization databases and the Integrated Disposal Management System were incorporated into DIDS, DIPEC inventories and VEVERP were administrative programs unrelated to the agency's core mission. DSA leadership wanted databases in set formats so



Graphic depicting data flows in eight Defense Integrated Data System categories. Image provided to the General Accounting Office in December 1977 and reproduced by DLA Public Affairs.

– DLA graphic by Brian Dumas



– *DLA graphic by Mike Kimmel*

they could feed programs automating operations. DIDS, for example, was incorporated into the Standard Automated Materiel Management System, DSA's first platform digitizing logistics functions. Subsequent database-dependent management programs included the Mechanization of Warehousing and Shipping Procedures and Defense Fuels Automated Management System.

After DSA became the Defense Logistics Agency in 1977, it began sharing data outside the organization. The need for cooperation became evident during the First Gulf War when poor shipping container management led to overordering and frustrated cargo. The agency and U.S. Transportation Command addressed this problem by pooling databases. A quarter century later, changes to the Federal Acquisition Regulation mandated another logistics partner — corporations — register with the agency's Commercial and Government Entity program. CAGE is a longstanding catalog database that had been competing with a proprietary system. A current digital advancement project called Technical Data Management Transformation integrates databases compiled by project executive offices and original equipment manufacturers into language acquisition professionals can use to compete contracts.

Database management in the current technological environment

Today, DLA combines in-transit visibility, contractor information and repair parts data in a central repository, or data lake. This lake is a modern version of DIDS. The difference is technology. Developments outside the defense arena have allowed data in noncongruent formats to be pulled, assimilated and converted into media humans can comprehend.

While the most advanced form of pulling, assembling and computing data is AI capable of decision-making and independent action, earlier iterations have been flattening DLA procurement for decades. The standardization that began with SAMMS and continued with Enterprise Business Systems can be seen in the agency's approach to aviation consumables. DSA rejected Defense Department suggestions that it manage aircraft parts early in its history due to items in the relevant federal supply classes being complex, technical, subject to engineering changes and requiring reparable programing. With today's management systems blurring differences in ordering procedures, the agency has been able to combine its aviation, land and maritime parts management into one supply chain, DLA Weapons Support. This centralization wouldn't have happened without database consolidation.

The same pooling concept is also helping DLA digitize its supply chains. In the near future, databases from EBS and other systems will be aggregated and their data assigned tags. These tags convert the agency's data lake into a data fabric, allowing supply chain, finance, property and human resources programs to pull information from one location.

Supply chain mergers and digitized supply chains cannot occur without consolidation. As with artificial intelligence, DLA's digital journey started with the humble database.

Before Patton fought the Nazis, he flanked through Texas

By Army Major Riley M. Kramer

Army Gen. George Patton, perhaps the most iconic American commander of the twentieth century, destroyed Nazi formations in North Africa, Sicily and the Ardennes Forest. We all know this story; but before the fury of "Old Blood and Guts" was felt on World War II battlefields, he bolted through East Texas alongside his newly formed 2nd Armored Division, symbolizing the U.S. Army's modernizing force and Patton's surging leadership.

His dramatic dash through the Lone Star State reminds us of the crucial but forgotten peacetime training operations called the "Louisiana Maneuvers" of September 1941, only a few months before the nation entered the war after Japan attacked Pearl Harbor on Dec. 7, 1941.

The Texas-Louisiana borderlands represent a site of forgotten American military triumph of the second World War. The fact that this triumph occurred before real bullets started flying toward American troops is precisely the point. Peacetime training is crucial, and the Louisiana Maneuvers serve as an excellent example of such preparation. Despite that, the massive mobilization efforts during World War II remain a footnote in the minds of many who celebrate Allied victories, such as the Normandy beach landings on D-Day and the freezing struggle of the Battle of the Bulge. But before boasting about the famous victories, there should be an understanding of how the U.S. got there.

Army Maj. Gen. George Patton during the second phase of the Louisiana Maneuvers in 1941.

- Photo courtesy of the US Army United States Army Training and Doctrine Command

The world in September 1941

The Louisiana Maneuvers commenced two years after Germany's brazen invasion of Poland on Sept. 1, 1939, igniting the second World War. While this alerted Americans to the threat of widespread war, Germany's swift victory over France in the summer of 1940 prompted the United States to actively prepare for war[1]. As European powers collapsed, Japan aggressively pursued control of the Pacific, directly threatening U.S. territories, bases and allies.

By September 1941, much of Europe and North Africa were under Axis control. The Nazis seized Kyiv early that summer as part of its invasion of the Soviet Union. The world

1 Robert Citino, "The Louisiana Maneuvers," The National World War II Museum, July 11, 2017, www.nationalww2museum.org/war/articles/louisiana-maneuvers.

***Patton's tanks cross the Sabine**. Tanks from Army Gen. George Patton's 2nd Armored Division cross the Sabine River on a pontoon bridge west of Converse, Louisiana.*

– Photo courtesy of the Rickey Robertson Collection

slowly came to realize the true nature of Adolph Hitler's aggression and the horrors that lay in his wake. As the U.S. Army concluded its Louisiana Maneuvers at the end of September, German forces executed over 33,000 Ukrainian Jews outside of Kyiv at a ravine called Babyn Yar on Sept. 29 and 30. With Britain barely hanging on and the Soviet Union on the run, who was left to stop the destruction of civilization?

The United States in September 1941

Between 1939 and 1940, the U.S. Army's size ranked 18th in the world, a far cry from what would be deployed between 1942 and 1945. On the same day as Germany's invasion of Poland, Army Gen. George Marshall was sworn in as the U.S. Army chief of staff. Uniquely qualified to build a formidable military, Marshall recognized that war clouds were forming. He wrote to his friends the following day, "I do not anticipate peaceful years ahead."[2] Yet, the United States still resisted improving its defense posture.

In February 1940, Marshall warned Congress that if Europe "blazes in the late spring or summer, we must put our house in order before the sparks reach the Western Hemisphere." The fall of France and the attack on Britain in the summer of 1940 finally awakened the country, and President Franklin D. Roosevelt and Marshall could then raise the army they needed. Roosevelt enacted the first peacetime draft in September 1940, dramatically increasing the size of the force.[3]

***Blue Army Goodson Creek Bridge**. Blue Army troops cross at Goodson Creek Bridge on what is now Louisiana Highway 118 as they advance toward Mount Carmel.*

– Photo courtesy of the Rickey Robertson Collection

2 Nancy Beck Young, *Why We Fight: Congress and the Politics of World War II* (Lawrence, Kansas: University Press of Kansas, 2013), 23; Debi and Irwin Unger, with Stanley Hirshon, *George Marshall: A Biography* (New York: Harper Collins Publishers, 2014), 88.

3 Unger and Unger, 91; Paul Dickson, *The Rise of the G.I. Army 1940-1941: The Forgotten Story of How America Forged a Powerful Army Before Pearl Harbor* (New York: Atlantic Monthly Press, 2020), 94.

While the United States remained uncommitted to joining the war, large-scale training operations became feasible and prudent. In 1941, Marshall, a World War I veteran who understood the consequences of sending an unprepared army into combat, organized the largest military training exercises in U.S. history. Tennessee, Louisiana and the Carolinas were selected as the primary sites for these massive training events, with the Louisiana Maneuvers becoming the most memorable.

Waiting for an attack on the country before preparing a modernized and well-trained force would have been a fatal mistake. The day before arriving in Louisiana to witness the massive training event, Marshall emphasized the historical significance of the milestone: "The present maneuvers are the closest peacetime approximation to actual fighting conditions that has ever been undertaken in this country … In the past we have jeopardized our future, penalized our leaders, and sacrificed our men by training untrained troops on the battlefield."[4]

The fight was on; even though it was simulated combat, the news that 94 soldiers died during the training event, mostly from vehicle accidents, brought a sobering reality to what the looming war might bring.[5]

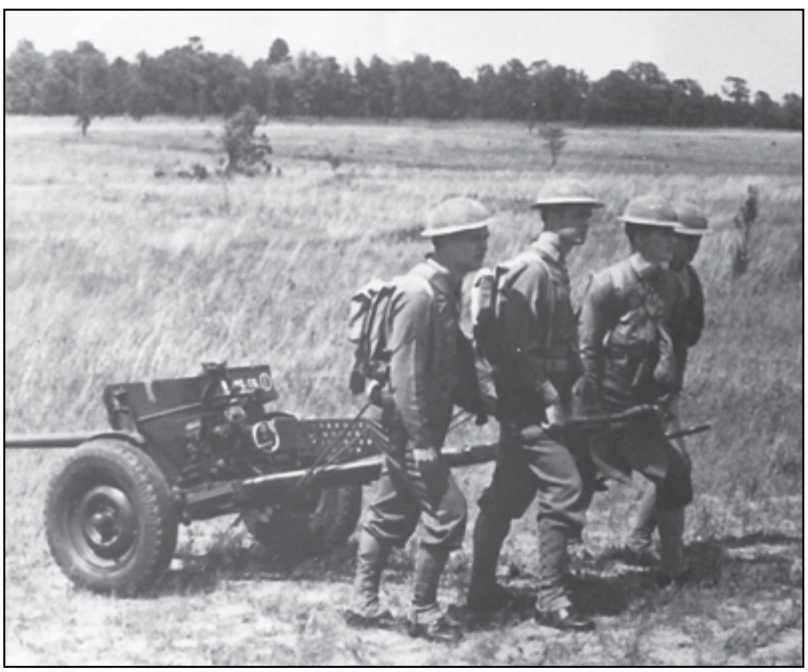
Phase I: Battle of the Red River

Twenty million acres of Texas and Louisiana land were acquired for the exercise, and the San Antonio-based Third Army helped secure permission for Texas properties. One Texan granted permission to use their land, stating, "You can dig it up or blow it up. I don't care. You have to have the land to do your job."[6] This response was reportedly typical of the many Texans who happily provided their land to help support their country's defense.

Although it was simulated combat, the Louisiana Maneuvers marked the largest military exercise in American history. The mock war featured 19 full divisions and 400,000 soldiers. To fully appreciate its scale, consider that if it were conducted today, it would involve nearly the entire

***Machine gunners crossing Sabine River**. A machine gun squad crosses the Sabine River by assault boat. The 1st Cavalry Division crossed the river and attacked Patton's troops at Zwolle, Louisiana.*

– Photo courtesy of the Rickey Robertson Collection.



***Antitank gun crew**. An antitank gun crew moves its 37mm gun after the Battle at Mount Carmel, east of the Sabine River, on September 17, 1941.*

– Photo courtesy of the Rickey Robertson Collection.

4 Dickson, 220-221.

5 Dickson, 233.

6 Dickson, 196.

active-duty U.S. Army roster of approximately 460,000 troops.[7]

The opening phase of the Louisiana Maneuvers featured Lt. Gen. Ben Lear's smaller, tank-heavy Red Army attacking Lt. Gen. Walter Krueger's larger, less armored Blue Army. The implications for European warfare were clear, as smaller German Panzer divisions had frequently trounced larger defending forces. However, this battle occurred in the swamplands of East Texas and Louisiana instead of the firm grounds of northern France. The maneuvers were staged as a realistic combat simulation with no stoppages or days off, but also as an elaborate display for the American public showcasing the new army's readiness to defend the nation. As historians Debi and Irwin Unger put it, "Many of the foot soldiers on maneuvers slogging through the marshes and forests of Louisiana and East Texas, swatting mosquitoes and crushing ticks, were draftees getting their first taste of combat's rigors."[8]

Patton and his tanks were assigned to Lear's Red Army, but this was not their battle to shine. The Red Army's inferior size needed to compensate with speed, flexibility and shock, none of which were displayed in this fight. Lear was a skeptic of swift armored maneuvers, and as a result, Patton's tanks were trapped by swamplands, forcing them to move along main paved roads. This situation ultimately made them vulnerable to the Blue Army's effective dive-bomb attacks.[9]

***Leadership**. Senior officers during the Louisiana maneuvers, shown left to right: Mark Clark, chief of staff, Army Ground Forces; Harry J. Malony, chief of staff, Second Army; Dwight D. Eisenhower, chief of staff, Third Army; Ben Lear, commander Second Army; Walter Krueger, commander Third Army; Lesley J. McNair, commander Army Ground Forces.*

– Photo courtesy of the U.S. Army, Eisenhower Library, and Wikimedia Commons

The Blue Army's 1st Cavalry Division, lurking across the Sabine River in East Texas, clinched the victory by fording an improvised ferry and boldly charging into Louisiana near Zwolle after dark. The charge from the storied Texas cavalrymen put Lear's Red Army on the ropes. One journalist compared it to the daring cavalry raids of the Civil War. Hours later, the Blue Army's bombers dropped propaganda leaflets that read, "Rout, disaster, hunger, sleepless nights in the forest and swamps are ahead of you — unless you surrender, surrender while there is still time."[10]

Patton's 2nd Armored Division was effectively destroyed in Phase I, bogged down by weather and terrain, and outmaneuvered by infantry and anti-tank units. Patton was disappointed at the battlefield loss and at the missed opportunity to capture his old friend, despite offering his troops a $50 reward to capture "a certain s.o.b. called Eisenhower," as historian Piers Brendon quoted him saying. Patton's tankers, eager to redeem themselves and show their tanks' true speed and power on a larger, more open battle space, lamented, "Wait 'til the next time."[11] The final phase of the event provided that open battle space, and Patton's tanks found their path to victory, moving towards Shreveport through East Texas.

Phase II: Patton Storms Through Texas

For Phase II of the exercise, Patton's 2nd Armored Division was transferred to Lt. Gen. Walter Krueger's Blue Army in southern Louisiana, tasked with attacking Lear's Red Army to the north. Lear's

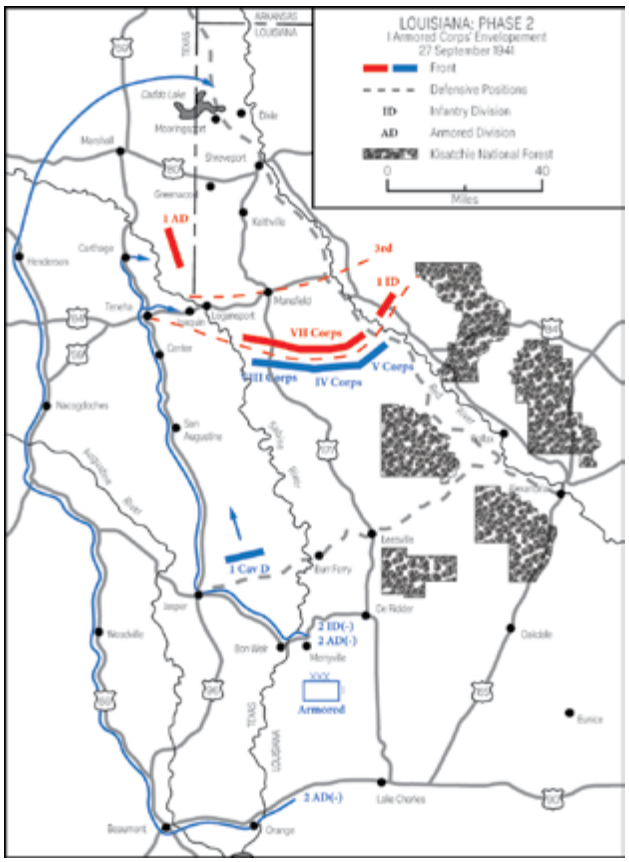
7 Dickson, 190; U.S. Department of Defense, "2022 Demographics Profile: Army Active-Duty Members," Military OneSource, https://download.militaryonesource.mil/12038/MOS/Infographic/2022-demographics-active-duty-army-members.pdf.

8 Unger and Unger, 107.

9 Dickson, 223.

10 Christopher Gabel, *The U.S. Army GHQ Maneuvers of 1941,* Commemorative ed. (Washington, D.C.: Center of Military History, U.S. Army, 1991), www.google.com/books/edition/The_U_S_Army_GHQ_Maneuvers_of_1941/62vbAAAAMAAJ?hl=en&gbpv=1, 84; Dickson, 222.

11 Dickson, 224; Piers Brendon, *Ike: His Life and Times* (New York: Harper & Row, 1986), 74; Donald Houston, *Hell on Wheels: The 2d Armored Division* (San Rafeal, California: Presidio Press, 1977), 85.



***Map**. The blue line at far-left traces Patton and the 2nd Armored Division's route to flank through Texas. Map originally provided by the Center of Military History, U.S. Army, and reproduced by DLA Public Affairs.*

– DLA graphic by Brian Dumas

smaller force was now tasked with defending Shreveport. The smaller Red Army's mission was to hold off the Blue's attack led by Patton's tanks for as long as possible, with notional Red reinforcements en route.

Adverse weather presented an additional obstacle for Patton, as hurricane season peaked. A strong hurricane blasted Galveston and Houston just as the final battle began. Heavy winds and rain drenched the troops, but did not halt their movements. The storm strengthened as it neared the Gulf Coast, and the Army quickly moved hundreds of aircraft inland for shelter. An Associated Press report from Sept. 22, 1941, indicated, "Approximately 500,000 troops in western central Louisiana were in the area affected by the disturbance, but were believed in no danger unless the storm swings due north. Today the storm was 500 miles south of the troop concentration." Winds of 100 miles per hour hit the coast of Galveston before moving towards Houston, killing three in the area, and causing millions of dollars of damage to property and crop loss.[12]

The hurricane's residual impact benefited the defending Red Army, as the muddy terrain obstructed the Blue Army's swift and direct northbound advance. However, with the planning genius of Krueger's promising chief of staff, then-Col. Dwight D. Eisenhower, the attacking Blue Army utterly confused the defending Red Army. Expecting a direct attack north through muddy Louisiana between the Red and Sabine Rivers, Lear's Red Army destroyed as many bridges as possible, hoping to slow the Blue armored advance towards Shreveport.

But Patton's armored force suddenly turned left and launched an epic mounted ride west into Texas, cutting almost 400 miles through the heart of East Texas in three days. Crossing the Louisiana-Texas state line over the Sabine River close to today's Interstate 10 near Orange, Texas, Patton's tanks bolted towards Beaumont before heading north. Covered by the 1st Cavalry Division, which was already moving through East Texas, Patton swung his tanks far from his supply lines, an immense risk for an armored unit that relied heavily on constant refuels.[13]

Patton did not neglect logistical constraints; he just redefined them. After years of mystery, it

Tanks 'Capture' City Of Shreveport

Dramatic Coup Winds Up U. S. War Games

International News Service

WITH THIRD ARMY IN NORTH LOUISIANA, Sept. 27.—Led by Major General George Patton, tanks of the Second Armored Division rumbled into Shreveport today in what appeared as the final act of the greatest war maneuvers ever staged by the Army.

The march on Shreveport came as one of the most dramatic moments of the entire maneuvers. While to the south and east other units of the Second and Third armies battled for possession of strategic hill positions, the tanks, half tracks and armored cars of Gen. Patton swung west over the Sabine River and

(Continued on Page 12, Col. 2)

***News clip El Paso**. An excerpt from the Sept. 27, 1941,* El Paso Herald-Post*, highlights how Patton's bold assault on Shreveport "appeared as the final act of the greatest war maneuvers ever staged by the Army."*

– Image courtesy of Newspapers.com.

12 Gabel, 100; Associated Press, "Gulf Storm Is Headed For Texas," *The Evening Independent*, September 22, 1941, https://news.google.com/newspapers?id=aqkLAAAAIBAJ&sjid=KVUDAAAAIBAJ&pg=3460,5129833; Sumner, 264-266.

13 Citino; Gabel, 103.

***Bradley, Eisenhower, Patton**. Generals Omar Bradley, Dwight Eisenhower, and George Patton, (left to right) meet in Bastogne, Feb. 4, 1945, having forged their leadership skills in the Louisiana Maneuvers in 1941.*

– Photo courtesy of the National Archives and Wikimedia Commons.

was revealed that Patton used his own cash to refuel his tanks at local Texas gas stations as he raced north. Storming through Beaumont, Patton then sprinted north through the Texas towns of Woodville, Nacogdoches, and Henderson, before closing in on Shreveport to envelop the enemy.[14]

On Sept. 27, the Shreveport Journal carried a dramatic report of the wargames from AP journalist Jerry Baulch, who was embedded with Lear's Red Second Army: "The more than 300 tanks of the second armored division swept from Texas in a wide arc that carried them completely out of the maneuver area to hit the Red stronghold (in Shreveport) from the rear."[15]

Baulch described how Patton's route through Texas forced him onto established roads, which risked his unit's capture and incentivized a swift run through East Texas: "To reach Shreveport, Maj. Gen. George S. Patton, Jr. sent his mechanized columns deep into Texas, but being out of the maneuver area, they were forced by rules to stick to roadways." Therefore, Lear's Red Army tried to capitalize on this "handicap faced by (Patton's) armored division attacking from Texas … and the tank-killers were sitting in wait at all possible approaches into Louisiana."[16]

Baulch captured the drama of Patton's plunge through Texas: "The troops set for a knockout blow to the second army all were on the Texas side of the treacherous Sabine River, an obstacle that apparently will take super military acumen to cross safely in an attack as closely watched as the third army's."[17]

Even the defending Red Army crossed into Texas in search of Patton's tanks, deploying 15,000 troops into the small town of Center, Texas, hoping to cut off the attacking Blue forces from Patton's armored unit. The Red soldiers were camped around Center, watching "for a surprise movement by the mechanized units of the Blue forces supposed to be in Nacogdoches in considerable numbers." Red Army machine guns were placed at all four corners of the small Texas town, waiting for Patton to walk into the trap. Patton's tanks instead marched on towards Nacogdoches, and the Red Army came up empty. Baulch noted that "a number of Blue scouts were seen in Center, but none was captured."[18]

Patton's tanks advanced north of Shreveport before crossing back into Louisiana, surprising the Red Army during a nighttime raid in highly disciplined and dangerous blackout conditions. Patton and his troops seized the airport, water supply, and the surrounding area of the Red Army headquarters. This bold flank through Texas was described by one of Patton's officers, Captain Norris Perkins, as "the longest and most completely self-sustaining maneuver ever made by a large force in a short time."[19]

Lear protested Patton's unorthodox tactic, complaining that his Texas route lay outside of the legal Louisiana Maneuvers area. Patton responded, "I am unaware of the existence of any rules in war." More protests were lodged against Patton's alleged refueling methods at Texas gas stations. Patton seemed to relish

14 Dickson, 231; Citino; Gabel, 103-105.

15 Jerry Baulch, "Lear's Army Halts Attack From Rear," *The Shreveport Journal*, September 27, 1941.

16 Baulch.

17 Baulch.

18 Baulch.

19 Dickson, 231.

the outrage over his clever tactics and responded that "the tanks are there; what are you going to do about it?"[20]

Wargames conclude, but war looms

The Louisiana Maneuvers concluded on Sept. 28, 1941, just before 5 p.m., with Army Lt. Gen. Lesley McNair declaring an armistice. Patton's tanks had effectively encircled the Red Army headquarters at Shreveport, but the Blue Army's main force was still 25 miles away. The official tie disappointed the press and the soldiers, leading to great debate about which side actually won. With the massive wargames over, the South returned to normal. The next day, airlines resumed flights into Atlanta, New Orleans, Houston, San Antonio, Corpus Christi and Brownsville while local colleges, schools and parishes reopened.[21]

The Louisiana Maneuvers became a hotbed for crucial military innovation and experimentation, as well as a media circus. The Army sold the event as an attraction and a laboratory, with journalists nationwide covering the event with intense interest. Some experiments led to doctrinal changes and others did not, but all offered valuable information for the evolving force. Newly formed paratrooper units dropped into wargames for the first time, untested armored units learned the challenges of moving with a dismounted infantry element, and the Quartermaster Corps' armed laundry units debuted their efficient sustainment capabilities in the field. Testing new equipment and techniques became invaluable, but testing leadership and combat power topped the Louisiana Maneuvers' list of achievements. This is where Patton made his mark.

Patton's ride through Texas proved thrilling for the many reporters covering the wargames, but his flank through Texas should do more than entertain. It's a reminder that peacetime training matters. This training may have been crucial to the American victory in World War II and certainly reduced battlefield losses.

Senior Army leaders, such as Marshall, directly credited the Louisiana Maneuvers as being critical to victory in World War II. Years later, he stated that the rough realities of the wargames helped Eisenhower become an effective strategist and "is the reason that Patton and Hodges and Bradley were able to move as rapidly as they did across the face of Europe."[22]

Patton provided the most remarkable endorsement of the maneuvers in a letter to the Shreveport Times' editor Don Ewing on Jan. 7, 1945, just weeks after his legendary Battle of the Bulge breakthrough in the Ardennes Forest. Eisenhower had called on Patton to rescue the surrounded 101st Airborne Division at Bastogne, given that Patton's aggressive instincts — showcased in the wargames years earlier — were world famous.

Patton's letter confirmed that his successful attack on the Nazis' southern front in Bastogne resembled the nighttime maneuvers in Shreveport. Patton had befriended Ewing as they traveled through East Texas during the wargames. In his letter from battered Bastogne, Patton informed Ewing that he had not forgotten his flank through Texas and his several training raids in blackout conditions: "I recall very well our trip through the night; and I can assure you that our success, particularly in this present operation, has been due to the ability of our people to move rapidly at night."[23]

Military readiness can easily be overlooked during peacetime. However, Patton's forgotten ride through Texas in 1941 is a reminder that peacetime preparations are crucial for winning uncertain future conflicts.

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20 Citino; Don Ewing, "Night March in Louisiana Beat Germans at the Bulge," *The Shreveport Times*, March, 2, 1945.

21 Dickson, 232-233.

22 Forrest Pogue, *George C. Marshall: Ordeal and Hope, 1939-1942* (New York: The Viking Press, 1966), 89.

23 Dickson, 325; Ewing.

Air Force Lt. Gen. Jennifer Hammerstedt, Air Force Sustainment Center commander, listens to Air Force Staff Sgt. Ryan Torres, 75th Security Forces Squadron, as he describes types of patrol technology during a base visit Jan. 5, 2026, at Hill Air Force Base, Utah. Tech acumen enables leaders to integrate tools in ways that transform operations

– Air Force photo by Cynthia Griggs

Tech acumen: A cornerstone of modern leadership in the digital era

By LTG Mark T. Simerly, USA,
DLA Director

For over six decades, the Defense Logistics Agency has sustained U.S. military operations, ensuring warfighters receive critical support and supplies whenever and wherever required. Traditional manufacturing, communications and transportation methods worked well to meet and deliver warfighter requirements for decades.

However, with the exponential increase of digital and technological advancements made over the last 20-plus years, the landscape of today's battlefield has fundamentally changed. Emerging technologies such as drones, artificial intelligence and machine learning differentiate cyber warfare and can dictate success or failure in combat.

At the very core of these emerging technologies is a proliferation of data. Data points down to a granular level of a single screw for a weapon system — its location, usability, quantity, time to order more, and so forth — are all critical data points for DLA to fulfill requirements for the warfighter. On the opposite spectrum, broader data views like supply chain fragilities, transportation blockages or weapon systems production increases are just as essential for logisticians. The aptitude to identify, discern and interpret data will inherently affect a logistician's ability to successfully support the warfighter, and by extension, win the fight. A workforce that incorporates deft data acumen across all levels can effectively leverage data to inform integral decisions.

With a skilled workforce leveraging data to its full potential, in order to remain effective and make better informed decisions, leaders must be able to adapt and embrace a new pro-

fessional competency: "technological acumen." Every day, new and evolving technological innovations require us to fundamentally reshape how we lead and manage our organizations. Leaders must have the aptitude to quickly understand, adapt and leverage these innovations to their full capacities in order for the workforce to make strategic, long-term changes. To build and measure this capability for leaders, a tech acumen leadership framework is necessary to provide a roadmap for leaders to progress from basic awareness to strategic vision.

Simply put, tech acumen is the leader competency to confidently navigate and leverage the digital landscape to achieve mission-driven outcomes. It requires more than awareness of technology; leaders must understand its core functions, critically evaluate its potential, and strategically apply it to large scale operations. The foundation of this transformation can be laid out in this equation: tech acumen = data acumen + digital systems + strategic integration + innovation leadership.

To understand how this equation works, let's consider its components.

This professional competency builds upon a strong foundation of data acumen — the ability to collect, analyze and interpret data to inform decision-making. This empowers the workforce to identify trends, uncover inefficiencies, and make more-strategic choices about resource allocation and supply chain management. A data-literate workforce is the critical first step; however, additional steps are required to unlock the full potential of these innovative technologies. Tech acumen expands leadership fluency in the following areas:

1. **Digital systems and platforms**: Data acumen equips leaders to interpret the information produced by digital systems; tech acumen requires a deeper fluency. Leaders are not expected to be data scientists or coders, but they must possess a working knowledge of how systems function, where they excel, and what constraints they face. This fluency comes from understanding how platforms connect across the enterprise and how their outputs can be aligned with mission priorities. With this perspective, leaders can identify requirements, guide the effective use of digital tools, and unlock opportunities to leverage technology for efficiency and effectiveness. Mastery is achieved through hands-on exposure, structured training and deliberate integration of digital systems into strategic decision-making.

SENIOR LEADERS PLAY A CRITICAL ROLE IN EMBEDDING DIGITAL CAPABILITIES INTO STRATEGY, OPERATIONS, AND CULTURE.

2. **Integrating emerging technologies**: Looking forward from data acumen's focus on existing streams, tech acumen anticipates how AI, machine learning, cyber and automation can reshape operations. Integration is a deliberate process in which leaders seek out and pilot new technologies in controlled environments, evaluate their impact, and then scale successful capabilities across organizations. They ensure interoperability by embedding emerging tools into enterprise frameworks rather than leaving them as isolated experiments. Cybersecurity guardrails are applied from the outset, and continuous training builds organizational fluency so personnel can confidently use these innovations. In this way, emerging technologies are woven into daily operations — refining current processes while also forging entirely new capabilities.

3. **Strategic integration of tools across the enterprise**: Tech acumen enables leaders to integrate tools in ways that transform operations. For DLA, this means connecting predictive analytics to inventory systems to anticipate demand, embedding AI into procurement workflows to accelerate contracting, and applying automation to warehouse operations to streamline distribution. Security must also be woven into logistics networks to protect sensitive data and ensure trust in global supply chains. True integration requires interoperability across functions so that tactical insights like real-time shipment tracking informs enterprise-level decisions. This holistic approach allows DLA to align digital tools with mission objectives, transforming isolated capabilities into force multipliers that enhance agility, resilience and modernization in support of the warfighter. Tech

acumen is no longer optional. As evidenced by recent conflicts, success increasingly hinges on the swift and flexible adoption of new technologies. This necessitates cultivating a culture of continuous innovation, where we relentlessly experiment with novel technologies and approaches, embrace calculated risks, and strive for breakthrough outcomes. Navigating this environment is challenging, as emerging technology ecosystems are often characterized by uncertainty. Leaders must ensure they remain informed on the prevailing threats, strategic imperatives and opportunities to harness technology for advantages.

In today's contested, data-rich battlespace, leaders must lead through technology — not just with it. Tech acumen drives improvements across:

- **Mission success**: In a complex and interconnected world, success depends on integrating technology to ensure objectives are met effectively and efficiently.
- **Operational agility**: To effectively support global operations, leaders must adapt swiftly to changing circumstances and exploit emerging opportunities.
- **Strategic advantage**: Maintain dominance and outpace adversaries through the innovative application of technology, reinforced by secure networks and resilient cybersecurity.

Empowering leaders through tech acumen

Tech acumen enables leaders to make faster, smarter and more-secure decisions; align technology with operational and strategic goals; build resilient, data-driven organizations; and drive innovation and modernization across the force.

Senior leaders play a critical role in embedding digital capabilities into strategy, operations and culture. This means interpreting data insights to guide decisions, leading trans-

U.S. Marine Corps 1st Lt. Hunter Shrieves, center, instructs Naval Academy Midshipmen 3rd class Carter Breen, left, on Marine Corps operating procedures during a Marine Corps Combat Readiness Evaluation on Marine Corps Base Camp Lejeune, North Carolina, Oct. 20, 2025. Marines and Sailors with 2nd Marine Regiment, 2nd MARDIV conducted the MCCRE in order to demonstrate combat proficiency through the combined use of modern infantry tactics and technology, ensuring readiness for any future conflict or operation.

– U.S. Marine Corps photo by Lance Cpl. Preston Morris

formation initiatives that leverage technology, and cultivating a culture of digital confidence and innovation.

Building tech acumen requires a commitment to lifelong learning. Leaders progress through a series of stages, building from foundational knowledge to visionary leadership. The tech acumen leadership attributes framework provides a structured approach for developing leaders who can effectively leverage technology to achieve mission success.

The framework defines five distinct levels of leadership, each characterized by specific attributes and competencies:

1. **Foundational awareness**: At this level, leaders recognize digital systems as integral to the battlespace. They possess a basic understanding of how technology is used in operations and appreciate its importance for mission success. This initial level sets the stage for future development.
2. **Operational proficiency**: Leaders at this level demonstrate the ability to apply digital tools to enhance unit performance. They can effectively utilize available technology to improve efficiency, communication and decision-making within their immediate sphere of influence. This level signifies a practical application of tech skills.
3. **Strategic fluency**: This stage marks a transition from tactical application to strategic integration. Leaders at this level can weave digital strategy into planning and resource decisions. They understand how technology investments can support broader organizational goals and can effectively advocate for resources to support digital initiatives.
4. **Transformational leadership**: Reaching this level signifies the ability to drive modernization and embed digital culture across the organization. Transformational leaders champion digital initiatives, promote innovation, and foster a culture that values digital skills and experimentation. They actively work to break down silos and create a collaborative environment where technology can thrive.
5. **Strategic visionary**: The highest level in the framework, strategic visionaries shape the digital future of the joint force to ensure decisive advantage in the information age. They possess a deep understanding of emerging technologies and can anticipate future trends. They formulate long-term digital strategies that align with national security objectives and ensure that the joint force remains at the forefront of technological innovation.

Successful implementation of this framework requires a dual focus. We must address common challenges through continuous growth, effective communication, and the promotion of innovative ideas that drive modernization. Simultaneously, we must cultivate a culture that embraces digital confidence, collaboration and adaptability. This means shifting our perspective to view technology not as a tool to be managed, but as an integral part of how the organization thinks, operates and evolves. Such a cultural transformation starts from the top. Leaders must possess the wherewithal and drive for consistent self-development and have the awareness to overcome a skill gap if necessary.

A cornerstone of modern leadership

Tech acumen empowers us to move beyond simply reacting to data, enabling leaders to proactively leverage the digital landscape by harnessing innovation, strengthening deterrence, and driving operational dominance across the modern battlefield. As new innovations unlock novel capabilities and bolster deterrence, embracing tech acumen is vital for our leaders to maintain decision superiority and operational dominance in a technology-driven battlespace. It equips us to make smarter decisions, optimize operations, maintain a competitive edge, and, above all, continue providing unparalleled support to the warfighter in an ever evolving and increasingly complex world.

THE APTITUDE TO IDENTIFY, DISCERN AND INTERPRET DATA WILL INHERENTLY AFFECT A LOGISTICIAN'S ABILITY TO SUCCESSFULLY SUPPORT THE WARFIGHTER, AND BY EXTENSION, WIN THE FIGHT.

By building on the cornerstone of data acumen and fully embracing the principles of tech acumen, DLA will be ideally positioned to meet the challenges of tomorrow and safeguard the success of our nation's defense.

Monster Transformation: Leadership reflections on culture, systems, execution

By Dr. Charles Barber,
DLA Human Resources Director

Large organizations today are no longer debating whether transformation is necessary. The more difficult and more consequential question is whether transformation is achievable under real-world constraints. This challenge is especially familiar to leaders operating inside large, mission-driven public institutions, where transformation must occur while sustaining ongoing operations, complying with statutory and fiscal requirements, and managing real workforce impacts.

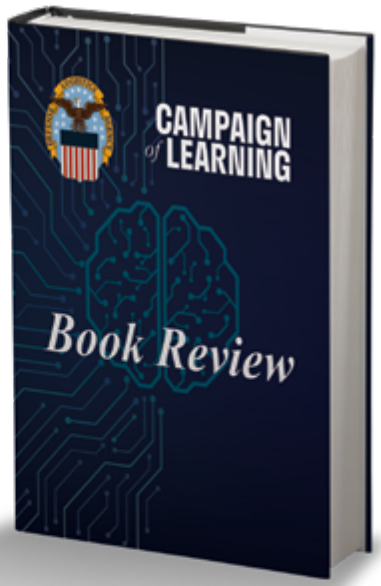
Within organizations like the Defense Logistics Agency, transformation is not theoretical. It unfolds in real time, under operational pressure, and with direct consequences for mission delivery. In the sections that follow, the themes of the book "Monster Transformation" are examined not only in concept, but through a parallel leadership lens informed by ongoing transformation efforts within DLA.

Rather than focusing on individual leaders or workforce resistance, "Monster Transformation" draws attention to the systems within organizations that quietly shape behavior over time. From a leadership perspective, this framing is less about diagnosing failure and more about understanding why transformation efforts stall even when intent, resources and commitment are present.

This perspective resonates strongly in complex public-sector environments. Transformation rarely occurs in a clean-slate context. It unfolds amid legacy systems, accumulated requirements, risk controls and institutional norms that evolved to solve earlier problems. The "monster" described in the book is not a single obstacle. It is the accumulation of processes, incentives and safeguards that once served a purpose but now exert quiet resistance to change.

One of the book's most constructive contributions is its insistence that organizational resistance is rarely personal. It is structural and behavioral. Legacy processes, informal workarounds and risk tolerances form a self-reinforcing system that continues to operate even after a transformation initiative is announced. Leaders often respond to stalled progress by increasing urgency, issuing new directives or reorganizing reporting lines. "Monster Transformation" challenges whether those responses meaningfully address the deeper dynamics at work.

The book's treatment of culture is particularly instructive. Culture is not framed as morale, messaging or sentiment. Instead, it is revealed through what organizations consistently reward, tolerate or overlook. From this perspective, culture and performance cannot be separated. Performance outcomes are a direct reflection of how systems influence behavior over time.



– DLA graphic by Brian Dumas

This framing is especially relevant in operational environments where execution matters. Culture change cannot be achieved through communication alone, just as performance improvement cannot be sustained through structural adjustments in isolation. Durable change requires alignment among expectations, incentives, decision authority and accountability. When those elements drift out of alignment, organizations often absorb new requirements in ways that unintentionally create mission risk.

A recurring theme in "Monster Transformation" is the danger of confusing activity with impact. Organizations can become highly effective at generating visible motion while making limited progress toward meaningful outcomes. Closely related to this is a second, often overlooked leadership challenge: conflating measures of performance with measures of effectiveness.

Measures of performance focus on outputs: tasks completed, milestones met, metrics reported and requirements satisfied. These measures are necessary. They provide visibility, discipline and a shared basis for accountability. However, performance measures alone do not answer the more important question of whether the organization is becoming more effective.

Measures of effectiveness focus on outcomes. They assess whether work is improving mission delivery, decision quality, resilience and the organization's ability to perform under stress. When performance metrics become proxies for effectiveness, leaders risk mistaking compliance for progress. An organization can meet every reported requirement and still fail to improve mission outcomes or operational readiness.

Transformation succeeds when organizations stop mistaking motion for progress and start holding themselves accountable for effectiveness, not just performance.

In large enterprises, this distinction matters deeply. Over time, systems tend to optimize for what is measured. If performance metrics are easier to track than effectiveness outcomes, organizations may unintentionally reward activity over impact. The book's insights help explain why transformation efforts that appear successful on paper can feel disconnected from lived operational reality.

These dynamics are not theoretical. In mid-2025, DLA Director Army Lt. Gen. Mark Simerly issued enterprise transformation guidance that deliberately emphasized disciplined execution, clarity of purpose and the mitigation of unintended workforce impacts. That guidance did not frame transformation as a single initiative or end state. Instead, it reinforced the need for sustained alignment across governance, systems and culture.

Viewed through the lens of "Monster Transformation," that guidance reflects an understanding that durable change depends less on announcing transformation and more on shaping the conditions under which people operate. It implicitly acknowledges that unmanaged systems, accumulated requirements and misaligned

Defense Logistics Agency Director Army Lt. Gen. Mark Simerly speaks to employees of DLA Guam Marianas during a town hall Jan. 28, 2026. During the town hall, Simerly shared the DLA strategic plan and how its four transformation imperatives apply to Guam, specifically.

– DLA photo by Brittany Ellis

incentives can undermine even well-designed reform efforts.

The book also invites reflection on the role of leadership judgment in change management. Established frameworks remain valuable tools for sequencing, shared language and discipline. Their continued relevance lies in their ability to impose structure in complex environments. At the same time, "Monster Transformation" underscores that no framework operates independently of leadership maturity. Following a model does not automatically resolve systemic friction.

These insights are particularly salient in defense and public-sector organizations, where transformation must occur under enduring constraints. Leaders rarely have the option of wholesale organizational reinvention. Instead, they must be deliberate about where to intervene, which risks to accept, and how to sustain progress over time. Transformation becomes less about dramatic pivots and more about disciplined, persistent alignment.

Recent large-scale transformation efforts within the War Department, and within the Defense Logistics Agency specifically, illustrate these dynamics in practice. Enterprise modernization efforts, organizational realignments and significant organizational mergers currently underway are not simply technical or structural exercises. They represent deliberate efforts to better align mission, structure and execution in response to evolving operational demands.

These efforts expose the intersection of culture, systems and execution. New tools, redesigned organizations and merged missions can enable better outcomes, but only if accompanied by clarity of purpose, disciplined governance and trust across the organization. Without that alignment, even well-intended reforms risk reinforcing existing patterns rather than improving effectiveness.

Enterprise system modernization offers a useful illustration. While technology is often viewed as the centerpiece of transformation, experience consistently shows that the hardest work is not technical. It is cultural. Aligning decision authority, accountability, training and expectations requires sustained leadership attention. Without that alignment, new systems risk reinforcing old behaviors rather than enabling new ones.

Another important theme in "Monster Transformation" is the accumulation of requirements over time. Large organizations often carry layers of compliance, reporting and oversight that were added incrementally to address specific risks or events. Individually, these requirements may be reasonable. Collectively, they can crowd out operational focus and slow decision making. A consistent leadership responsibility is to prevent necessary requirements from becoming unintended operational burdens.

The monster metaphor serves as a warning against allowing complexity to grow unmanaged. When systems are not periodically examined and recalibrated, they begin to dictate behavior rather than support mission outcomes. Leaders then find themselves reacting to the system rather than shaping it.

"Monster Transformation" also highlights the level of leadership maturity required to sustain change. Transformation demands leaders who can tolerate ambiguity, resist performative action, and remain disciplined when progress is uneven. This is less about charismatic inspiration and more about judgment, patience and systems awareness.

Importantly, the book does not offer simple solutions. It frames transformation as an ongoing leadership responsibility rather than a finite initiative. Success is measured not by the elegance of a transformation plan, but by whether new ways of working endure under pressure.

> THE "MONSTER" DESCRIBED IN THE BOOK IS THE ACCUMULATION OF PROCESSES, INCENTIVES AND SAFEGUARDS THAT ONCE SERVED A PURPOSE BUT NOW EXERT QUIET RESISTANCE TO CHANGE.

In that sense, "Monster Transformation" serves less as a prescriptive manual and more as a leadership mirror. It challenges leaders to examine not only what they are trying to change, but how their organizations are structured to respond to change. Transformation does not fail because leaders care too little or push too hard. It falters because systems quietly push back harder.

For senior leaders operating inside complex, mission-critical organizations, this insight is both sobering and empowering. It reframes transformation as a test of stewardship and judgment rather than ambition alone. Enduring change is achieved by consistently shaping the systems that allow the organization to perform today, tomorrow and under pressure.

REFORPAC 2025 and the friction of distribution: Stress-testing agile combat employment logistics

By BrigGen Mike Zuhlsdorf, Director, Logistics, Engineering, and Force Protection PACAF, USAF, and Capt Carolina Arboleda, PACAF A4, USAF, SMSgt Jessica Harvey, PACAF A4, USAF, and Avon Cornelius, PACAF

Introduction

The United States' strategic engagement in the Indo-Pacific was forged in the crucible of World War II. In that campaign, General Douglas MacArthur operationalized "island hopping"–the sequential seizure and development of forward operating bases to project combat power across vast maritime distances.[1] This approach proved decisive in the Pacific theater and established a foundational insight that endures today: in the Indo-Pacific, geography rewards dispersion, and logistics determines whether operational concepts succeed or fail. That logic underpins contemporary concepts such as Agile Combat Employment (ACE).

In the decades following 1945, however, America's operational focus shifted away from the Pacific. For nearly two decades, U.S. forces conducted sustained campaigns in the Middle East, where warfighting was largely continental and logistics benefited from relatively mature infrastructure, predictable lines of communication, and permissive sustainment environments. These conditions shaped force design and sustainment practices optimized for efficiency and scale, not survivability under contestation. The stark contrast between the Indo-Pacific's dispersed maritime geography and the Middle East's land-centric theaters illustrates why legacy basing models are increasingly mismatched to the demands of modern strategic competition and why flexible, forward-deployed basing has reemerged as an operational necessity.

> "WE MUST BE READY TO OPERATE IN AUSTERE CONDITIONS, WITH DEGRADED NETWORKS, AND THROUGH DISRUPTIONS TO SUSTAINMENT CHAINS."
> – GEN KEVIN SCHNEIDER, PACAF, USAF

Today, the Department of War prioritizes the Indo-Pacific as the pacing threat for strategic competition. No other region concentrates such a share of the global population, economic activity, and maritime commerce, or presents such acute challenges to access, mobility, and sustainment.[2] The region presents a complex web of operational and logistical challenges for the United States Air Force (USAF), the Joint Force, and our partners and allies.[3] Preserving free and open trade routes across this vast expanse is therefore essential to global security and prosperity.

The imperative for agile combat employment

For decades, US force overmatch relied on a range of large, complex, and costly weapon systems supported by centralized basing. That approach is no longer sufficient. Business as usual will not deliver the advantages required in an operational environment increasingly shaped by adversary pressure on access, sustainment, and freedom of maneuver. Legacy models built around large, centralized, and unhardened main operating bases are increasingly vulnerable to modern threats. In response, the USAF exercises ACE to ensure operational resilience across

1 MacArthur Memorial Education Programs, "World War II Island Hopping Primary Resources," MacArthur Memorial, n.d., https://www.macarthurmemorial.org/.

2 Matthew Olay, "Hegseth Outlines U.S. Vision for Indo-Pacific, Addresses China Threat," DOD News, 30 May 2025, https://www.war.gov/.

3 Charles Q. Brown Jr., "Demystifying the Indo-Pacific Theater," Journal of Indo-Pacific Affairs 3, no. 1 (Spring 2020): 3–10, https://www.airuniversity.af.edu/.

vast distances and within degraded environments.[4]

Adversaries have closely studied US warfighting practices across United States Central Command and other areas of responsibility and have developed capabilities intended to erode traditional US military advantages in the Indo-Pacific. Continued reliance on a limited number of forward operating bases exposes the USAF to expanding arsenals of conventional and hypersonic weapons. In response, the Air Force — led by Pacific Air Forces (PACAF) — has adopted ACE as both a tactical approach and a cultural shift, dispersing, maneuvering, and re-aggregating forces to deter aggression and, if necessary, defeat threats.

ACE requires sustained, deliberate investment in logistics to enable a dispersed, combat-credible force capable of complicating adversarial planning and enhancing combat effectiveness.[5] Sustaining airpower from dispersed locations in a contested environment, however, is inherently complex and resource-intensive. In the Indo-Pacific, a cornerstone of this effort is "setting the theater" — establishing access, presence, and posture to enable resilient operations. Transitioning to smaller, dispersed, resilient airfields demands new approaches to command and control (C2) and aircraft generation, as well as the ability to acquire, transport, store, and sustain fuel, munitions, equipment, and materiel on scalable infrastructure protected against attack. As the PACAF Commander, Gen Kevin Schneider, has articulated "we must be ready to operate in austere conditions, with degraded networks, and through disruptions to sustainment chains. Our forces must be self-sufficient, mobile, and capable of rapid adaptation."[6]

Setting the theater: Access, presence, and posture

Setting the theater, a foundational element for successful ACE operations in the Indo-Pacific, requires a deliberate focus on access, presence, and posture. The USINDOPACOM AOR encompasses a diverse set of nations, making sustained diplomatic engagement essential to set conditions for competition, crisis, and conflict. Longstanding US partnerships enable the USAF to maintain critical access, presence, and posture throughout the region. These partnerships are vital to operating in a contested logistics environment.

Access. Access is essential to building allied and partner capacity, reducing the tyranny of distance, establishing a credible sustainment posture, and enabling a distributed logistics network. Achieving access requires a network of logistics nodes, staging bases, and storage sites, enabled by host-nation agreements such as Mutual Logistics Support Agreements (MLSA), Status of Forces Agreements (SOFA), and Acquisition and Cross-Servicing Agreements (ACSA), coordinated through the Department of State.

Presence. Joint and allied force presence deters aggression, demonstrates readiness, and signals sustained commitment to regional stability. Persistent basing enables dynamic force employment, overflight operations, and exercises that generate sustainment opportunities with the Joint Force, allies and partners, and host nations. Such presence also allows the Joint Logistics Enterprise (JLEnt) to plan and execute jointly, rehearse concepts for contested logistics, and build habitual relationships. Most importantly, sustained presence establishes the conditions necessary for future posture initiatives.

Posture. Posture is central to overcoming contested logistics. Pre-positioning supplies and equipment reduces transportation demands, accelerates response times, and improves operational efficiency in crises. Pre-positioned stocks enable decentralized logistics and distributed sustainment, strengthening resilience under threat.

Executed from July through August 2025, Exercise Resolute Force Pacific (REFORPAC) enabled PACAF to test and refine evolving ACE and setting-the-theater strategies.[7]

REFORPAC 2025: Stress-testing ACE and distributed logistics

The USAF tasked PACAF with demonstrating its ability to rapidly disperse thousands of servicemembers, aircraft, and associated mission-generation equipment, across the region to defend the United States and the shared democratic interests of our allies and partners in the Pacific.

REFORPAC deployed more than

4 Air Force Doctrine Note 1-21, Agile Combat Employment, 23 August 2022, https://www.doctrine.af.mil/.

5 Luke A. Nicastro, "Defense Primer: Agile Combat Employment (ACE) Concept," In Focus, 24 June 2024, https://www.congress.gov/.

6 "REFORPAC 2025: High-powered international team ready to conduct Air Force's largest Pacific contingency-response exercise," Pacific Air Forces Public Affairs, 8 July 2025, https://www.pacaf.af.mil/.

7 "Department-Level Exercise (DLE) Series," US Air Force, 23 September 2025, https://www.af.mil/.

400 aircraft and 12,000 personnel across 50 locations spanning approximately 6,000 miles east to west and 4,000 miles north to south, making it the largest airpower exercise in Indo-Pacific history. Hundreds of sorties were generated from a distributed hub-and-spoke network across the region. Leveraging lessons from prior exercises such as Valiant Shield, the USAF executed a phased approach to power projection — beginning with rapid engineering and construction of critical infrastructure, employing pre-positioned warfighting materiel, and culminating in sustained mission generation. Throughout the exercise, PACAF engineers, logisticians, maintainers, medics, and security forces Airmen drove success, integrating the Total Force and coordinating across multiple Major Commands (MAJCOMs) to deliver a resilient and flexible force capable of decisive response across vast distances.

Every large-scale exercise yields lessons, and REFORPAC was no exception. The exercise generated critical insights to strengthen logistics resilience across the Indo-Pacific and highlighted the inherent tension between operational efficiency and sustainment resilience.

REFORPAC did not reveal a force unprepared for the demands of competition or conflict; rather, it exposed a mismatch between Airmen's demonstrated capabilities and logistics systems designed for a different era. Above all, the exercise reaffirmed that Airmen remain the USAF's decisive asymmetric advantage.

Ultimately, REFORPAC demonstrated a central reality of modern airpower: advantage accrues to the force that can move, sustain, and regenerate combat capability faster than an adversary can target it. Consistent with the Department of War's reassessment of the technologies and capabilities required for future conflict, this advantage derives not solely from exquisite platforms, but from Airmen. Longstanding critiques of the USAF and ACE have characterized the concept as overly complex, excessively dispersed, and dependent on ideal conditions. REFORPAC refuted those claims. Amid real-world operations and severe weather, redeployment occurred on schedule. Airmen adapted faster than institutional expectations, dispersing forces across the theater and generating combat power with measurable effect. These Airmen demonstrated a genuine ACE mindset. Despite operational constraints, they executed the ACE concept of operations, exhibiting the adaptability and resourcefulness required to operate effectively from dispersed locations.

Logistics C2

REFORPAC underscored that the Air Force's logistics command-and-control (LOG C2) architecture must mature to meet the speed, scale, and uncertainty of operations in the Indo-Pacific. The current structure was designed for predictability, efficiency, and steady-state operations. REFORPAC compelled that architecture to perform in a warfighting role — spanning thousands of miles, integrating the Total Force and

U.S. Air Force Tech. Sgt. Benjamin Wiest and Staff Sgt. Alexandria Raynard, maintainers with the 121st Air Refueling Wing, conduct a pre-flight of a KC-135 Stratotanker during exercise Resolute Force Pacific 2025 at Yokota Air Force Base, July 23, 2025. The REFORPAC exercise is part of the first-in-a-generation Department-Level Exercise series, employing more than 400 Joint and coalition aircraft and more than 12,000 members at more than 50 locations across 3,000 miles.

– U.S. Air National Guard photo by Staff Sgt. Ivy Thomas

the joint enterprise, and supporting high-tempo dispersal operations. Yet the enterprise remains characterized by legacy systems, fragmented authorities, and stove-piped workflows that provide asset visibility but fall short of delivering decision advantage to the dual-hatted Theater Joint Force Air Component Commander and the Commander, Air Force Forces (TJFACC/COMAFFOR).

Experience during REFORPAC exposed critical gaps in LOG C2 across the competition–conflict continuum. At present, USAF relies on a mix of information technology systems that provide base-level visibility of logistics assets alongside enterprise-level, mandated logistics management platforms. These outdated systems rely on labor-intensive, manual data entry at the tactical level, increasing workload and the risk of human error. This data is not consistently shared across echelons; fragmented user permissions create disparate operating pictures for Wings, Air Expeditionary Task Forces (AETFs), and the MAJCOMSs, preventing a unified, real-time understanding of the battlespace. They include Headquarters Air Force's (HAF) newest information technology systems which will be used for Air Force enterprise-wide common operating pictures (COPs), and the Joint Staff's Maven Smart System (MSS), a decision-support platform employed during competition and conflict that fuses operations, intelligence, and logistics data using advanced artificial intelligence (AI)–enabled analytics. While both systems provide valuable visibility at the enterprise level, they are not yet optimized to support real-time, theater-level LOG C2 in contested environments.

For these reasons, the Air Force is pursuing more capable information technology systems designed to enable deeper integration with US Indo-Pacific Command (USINDOPACOM), particularly its logistics directorate (J4). This closer alignment strengthens the service's ability to meet its most critical operational objectives by building a LOG C2 architecture capable of supporting high-tempo, distributed operations. To best ensure proactive LOG C2, the Air Force must drive investment in next-generation infrastructure, enhanced integration between data sources and mandated management platforms, rapid prototyping initiatives, and systems that enable information sharing with coalition partners. REFORPAC illustrated that legacy systems and disconnected data streams are incompatible with the speed, scale, and coalition complexity required for contested logistics, reinforcing the need for deliberate investment in integrated and streamlined LOG C2 capabilities.

Streamlining LOG C2 structures is essential to enabling commanders at all echelons to make timely, informed decisions in dynamic and contested environments. This requires resilient communication architectures with built-in contingencies to ensure continuity of operations when primary systems are degraded or denied. Standardized procedures must be institutionalized across the force and reinforced through realistic exercises to develop shared understanding and operational agility. Together, these measures enhance the joint force's ability to sustain operations under pressure and maintain decision superiority in complex theaters.

Integrating emerging technologies such as AI, automation, and additive manufacturing can improve logistics efficiency, enhance predictive maintenance, and enable distributed production, strengthening the resilience and adaptability of the USAF's logistics enterprise. AI-enabled analytics can fuse disparate data streams to forecast demand, anticipate system failures, and optimize supply prioritization, while automation can reduce manual workload, increase throughput, and improve accuracy across maintenance, supply, and distribution functions.

Additive manufacturing further enables forward-positioned, on-demand production of critical parts, reducing reliance on contested supply lines and increasing operational endurance in austere environments. Together, these technologies support faster decision-making, greater sustainment agility, and a more resilient logistics posture capable of operating at scale in contested theaters.

Total force & allies and partners

Effective logistics in the Indo-Pacific requires comprehensive planning that fully integrates Active Duty, Guard, Reserve, and civilian components. Equally essential is close coordination with local governments and host-nation authorities, particularly across the Second Island Chain, where access, sustainment, and base operating support (BOS) are enabled through deliberate partnership and shared commitment to regional security. In locations such as the Commonwealth of the Northern Mariana Islands, U.S. operations are made possible by the support of local leadership and communities that provide critical BOS functions — including airfield services, power generation, fuel distribution, transportation, communications access, and force protection

U.S. Air Force Airmen with the 113th Maintenance Group, D.C. Air National Guard, moor an F-16 Fighting Falcon in preparation for the weather, as part of exercise Resolute Force Pacific 2025, July 23, 2025, on Guam. The REFORPAC exercise is part of the first-in-a-generation Department-Level Exercise series, a new way of conducting operations in a contested, dynamic environment to build capabilities making a stronger, deterrent force.

– U.S. Air National Guard photo by Staff Sgt. Natalie Filzen

— often under austere conditions and limited infrastructure.

This approach requires clearly defined roles and responsibilities across wings, MAJCOMs, combatant commands, and headquarters to ensure authorities, decision rights, and execution responsibilities are aligned across echelons. It also demands the deliberate revision of misaligned policies and guidance, along with standardized joint and allied training frameworks that reinforce common processes, data standards, and operational expectations to maximize interoperability. By leveraging the distinct capabilities of each component and advancing desired learning objectives that increasingly reflect integrated, multi-echelon operations, the force enhances the effectiveness of Airmen, the Joint Force, and allied and partner forces.

Central to PACAF's mission is working with our allies and partners to ensure regional stability and security. Expanding joint training with partner nations further strengthens interoperability, logistics coordination, and shared situational awareness. Standardized procedures and common operating protocols are essential to enabling seamless collaboration during crises and conflict and institutionalize host-nation BOS as a deliberate enabler of theater sustainment rather than an ad hoc requirement during contingency operations.

Increased infrastructure investment

Chronic underinvestment in infrastructure erodes readiness and degrades the combat credibility of forward-postured forces in the Indo-Pacific — particularly across the Second Island Chain, where vast distances, fragile supply chains, and harsh climate conditions compound the challenges of operating from dispersed and often austere locations. These realities demand more than incremental improvements; they require expeditionary organizations purpose-built to set and sustain the theater under competition and crisis.

The redesignation of the 356th Expeditionary Theater Support Group (ETSG) reflects Pacific Air Forces' long-term commitment to confronting these challenges head-on. Designed to operate in austere, remote, and contested environments, the 356th ETSG integrates civil engineering, logistics, materiel management, contracting, finance, and resilient command, control, communications, computers, and intelligence (C4I) capabilities to enable distributed air operations. This construct allows the Air Force to project combat power from "places, not bases," reducing reliance on vulnerable main operating locations and mitigating the tyranny of distance inherent to the Pacific.

By prepositioning materiel, rapidly establishing expeditionary infrastructure, and installing tactical C4I architectures, the 356th ETSG directly enables Agile Combat Employment — accelerating airfield opening, sustaining mission generation, and preserving operational tempo despite degraded networks and constrained supply lines. Equally important, the group strengthens interoperability through persistent engagement with allies and partners, building the trust and integration required to operate from dispersed locations during crisis or conflict. Together, these efforts underscore a key lesson reinforced by REFORPAC: resilient infrastructure, enabled by purpose-built expeditionary organi-

zations, is essential to overcoming the friction of distribution and sustaining credible deterrence in the Indo-Pacific.

Addressing the risks and challenges ahead

Although ACE and distributed logistics are a substantive advance over legacy force-posture models, they do not obviate the structural risks inherent in the Indo-Pacific security environment. Ensuring operational resilience and strategic success will require sustained attention to a set of interrelated challenges that extend beyond force employment concepts alone. First, US competitors continue to modernize their militaries at pace, coupling investments in advanced precision strike systems, integrated air and missile defenses, cyber and space capabilities, and long-range fires with doctrinal innovation explicitly designed to contest US power projection in high-end conflict. These modernization efforts prioritize exploiting perceived vulnerabilities in US basing, logistics, and C2 architectures, particularly during the early phases of a conflict.

Second, adversaries increasingly employ gray-zone strategies that deliberately blur the boundary between peace and war. Through the coordinated use of military, paramilitary, irregular, and informational instruments, competitors seek to impose cumulative costs, erode US influence, and coerce allies and partners while remaining below the threshold that would trigger a decisive military response. These activities complicate deterrence, strain alliance cohesion, and place persistent pressure on access, presence, and sustainment well before the onset of open hostilities.

Finally, these dynamics are reinforced by the steady expansion of adversary political and military influence across the Indo-Pacific. Through a combination of security cooperation, infrastructure investment, economic relationships, and political engagement, competitors are reshaping the regional operating environment in ways that generate new strategic dilemmas for the Joint Force. This expanding footprint complicates alliance management, introduces uncertainty into basing and access arrangements, and risks altering the regional balance of power in ways unfavorable to US interests.

Taken together, these trends underscore a central reality: while ACE and distributed logistics enhance operational resilience, they are insufficient in isolation. Mitigating these challenges demands more than adaptive force employment. It requires sustained integration with the Joint Force and regional allies and partners, deliberate investment in resilient logistics and basing architectures, and continuous shaping of the strategic environment to reinforce deterrence, preserve access, and assure partners of long-term US commitment.

Ultimately, REFORPAC underscored that sustained investment in command and control, infrastructure, technology, and partnerships is essential to maintaining the USAF's competitive advantage and protecting U.S. interests in the Indo-Pacific. While the USAF has demonstrated the ability to operate in contested logistics environments, success in crisis or conflict will depend on translating that capability into credible deterrence through effective power projection and the preservation of regional security and stability.

The Indo-Pacific is the most contested operational environment confronting the United States. To deter aggression and counter evolving threats, the Air Force has adopted ACE as a necessary shift toward a more agile and integrated force posture across the region. ACE places new demands on logistics systems, basing, and transportation networks, requiring them to operate with greater resilience and adaptability under contestation. REFORPAC provided critical operational insights into these demands. By institutionalizing ACE, integrating Total Force capabilities, setting the theater deliberately, and addressing identified risks, the USAF can continue to complicate adversary planning and enhance force survivability in this strategically decisive region. "Deterrence demands proactive training, and REFORPAC has succeeded in doing just that," said General Schneider. "We maintain the capability to deter, defend, and if necessary, defeat aggressors by investing in readiness, delivering capable forces, and staying postured to protect the American people, allies, and interests across the region. REFORPAC stands as a prime example of our strong commitment to maintaining peace through strength in the Indo-Pacific."[8]

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8 "REFORPAC 2025: U.S. Air Force Executes Unprecedented Surge into Pacific Theater," Pacific Air Forces Public Affairs, 16 July 2025, https://www.pacaf.af.mil/News/Article-Display/Article/4247649/reforpac-2025-us-air-force-executes-unprecedented-surge-into-pacific-theater/.

Beyond factory to foxhole: DLA transforms for a contested future

By Col Brogan Issitt, USMC, Commander, DLA Distribution San Joaquin

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The inadequacy of legacy sustainment: DLA's call for transformation

For decades, the U.S. military's logistics system prioritized global efficiency, cost savings, and reliable throughput, fostering a culture of centralized stockpiling at large, fixed supply depots. As a result, this system is dangerously inadequate for confronting emerging global threats, particularly from the People's Republic of China (PRC) in the Indo-Pacific theater. Today, logistics functions are no longer relegated to rear area support; logistics has become the "central front" in great power competition.

Sustaining the future dynamic U.S. Joint Force across an ever-changing Western Pacific will be immensely challenging. Until modern sustainment methods are implemented, contemporary joint force dispersed operating concepts will remain reliant on traditional theater sustainment practices, which involve thousand-mile supply lines, dated sealift capabilities, and large rear-area vulnerabilities. Under contested conditions, dispersed forces could face strategic isolation due to fractures in the legacy "factory to foxhole" model.

Facing a shifting operational landscape the Defense Logistics Agency is adapting to a new operational reality with a strategic transformation. This will allow DLA to effectively supply forces on the front lines and maintain the health of the U.S. Defense Industrial Base (DIB). To address the sustainment challenges brought about by future warfare, DLA must leverage and invest in technology, partnerships, and strategies such as the Global Resilience Initiative.

DLA Transforms: A bold plan for 21st-century sustainment

Early in a conflict, a potential adversary will likely target critical fixed logistical infrastructure (e.g., depots, ports, supply nodes) with precision strikes, both kinetic and non-kinetic. This strategy aims to cripple maneuverability, disrupt logistical operations, and render traditional logistics models ineffective. This highlights the vulnerability of static logistical infrastructure and necessitates adaptable, resilient alternatives. Recognizing the Joint Force's need for increased resilience and decreased dependence on strategic transportation, DLA has reached an inflection point requiring the Agency to assess its current state and its future support to the Warfighter.

The DLA Director, Army LTG Mark Simerly, has initiated rapid modernization efforts, unveiling "DLA Transforms: A Call to Action" to recalibrate DLA's strategy and better support the Joint Force, positioning DLA to more effectively support 21st-century joint warfighting across multidomain challenges. To that end, DLA faces the challenge of aligning its workforce and modernizing its capabilities, enabling the transforming Services to prevail against peer threats in the future operational environment. This strategic vision is underpinned by the "DLA Strategic Plan 2025-2030," as articulated by LTG Simerly, which outlines three strategic priorities: "Set the Globe" — optimal logistics positioning; "Set the Agency" — preparedness for current and future conflicts; and "Set the Supply Chain" — supply chain optimization through advanced modeling and wargaming.[1]

Adapting to future sustainment: DLA's pivotal role

The Services and Combatant Commands are all undergoing transformation of their warfighting concepts. Consistent with their transformation efforts, the future Joint Force is likely to require a shift away from traditional approaches towards new equipment, materials, specifications, and procurement methods. However, the DIB is an efficient but inelastic system, currently producing material based on

1 Defense Logistics Agency. DLA Strategic Plan 2025 — 2030 DLA Transforms: A Call to Action (Fort Belvoir, VA.: September 10, 2024. https://www.dla.mil/Portals/104/Documents/Headquarters/StrategicPlan/DLAStrategicPlan2025-2030March2025.pdf.

Quality Assurance Specialist for Ammunition Surveillance at Blue Grass Army Depot, Kentucky, prepares ammunition inventory for inspection to ensure service members around the world have access to reliable, effective, and lethal munitions as a part of the Single Manager for Conventional Munitions charter through the Ammunition Stockpile Reliability Program.

– Joint Munitions Command photo by Dori Whipple

steady-state demand. A recent assessment indicates that the U.S. DIB faces limitations in its ability to rapidly scale production to meet wartime demands.

Future sustainment will require a tightly integrated sustainment ecosystem. This system will require new technology, forward-positioned supplies, regional partnerships, and closer collaboration with industry. This ecosystem must focus on supporting both forward deterrence efforts and domestic resilience through a continuous, integrated defense logistics network.

Recognizing this, DLA has prompted a fundamental shift in the U.S. approach to logistics, enabled by greater automation in demand forecasting and adapting infrastructure to strategically position supplies and materials, both regionally and domestically. While these adaptations are crucial to ensuring DLA can properly support the Joint Force of tomorrow, this shift will potentially require years to fully implement to meet wartime demand.

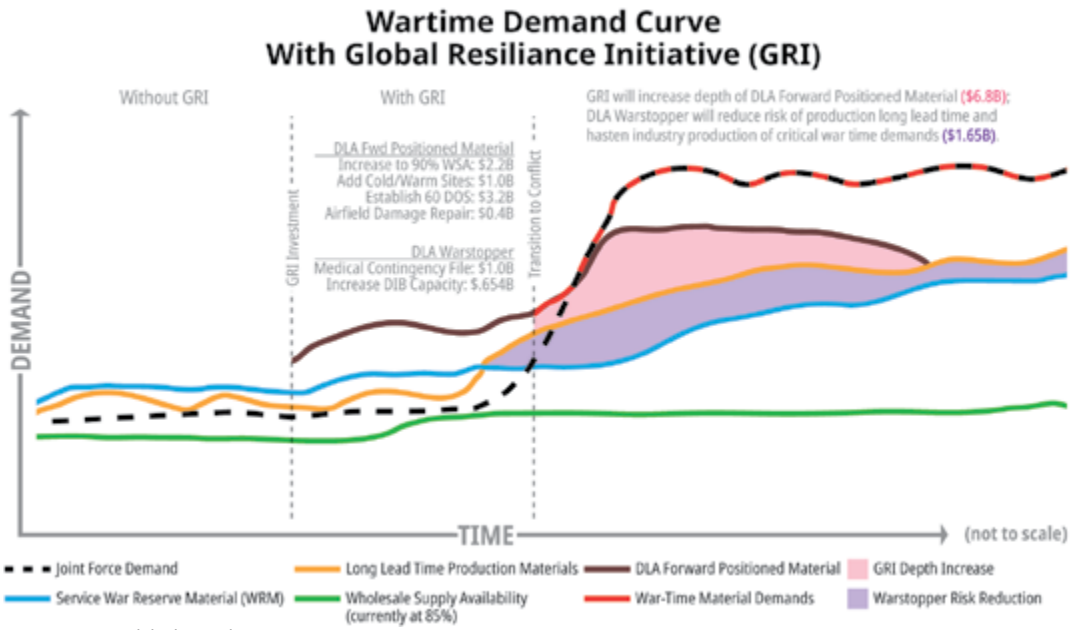
DLA's Global Resilience Initiative (GRI): Forging a resilient, forward-positioned supply chain

Recognizing the Joint Force's evolving logistics requirements for future warfare, DLA is proactively adapting its supply chains. In October 2025, DLA merged its Aviation and Land & Maritime divisions to form a unified 'DLA Weapons Support' command, enhancing oversight, increasing effectiveness, and gaining efficiency in managing Class IX repair parts and components.[2]

In addition, to bolster its sustainment capabilities and minimize the risk of failures during a prolonged conflict, DLA introduced the Global Resilience Initiative (GRI). GRI is a DLA-wide initiative designed to address sustainment gaps across DLA-managed classes of supply, procuring necessities like subsistence, individual combat equipment, packaged POL, construction materials for airfield and port damage repair, medical supplies, and materiel repair parts. Ultimately, GRI enables DLA to support the Joint Force during both "generating the force" (forward-positioning stocks for rapid response) and "sustaining the force" (maintaining a "warm" vendor base capable of quickly scaling up production to meet surge requirements).

To close the sustainment gaps, GRI will utilize two primary levers: materiel investments and the Warstopper program. The first lever, materiel investments, initially serves to stimulate production demand, and to strategically position materials closer to the point of need. This strategic forward positioning will enhance Combatant Commander operational flexibility and reduce sustainment reliance on constrained inter-theater transportation assets. To achieve this, GRI requires an increase in Wholesale Supply Availability (WSA) from its current 85% (OSW approved) to a target of 90%, enabling a greater volume of materiel to be strategi-

2 DLA Public Affairs, "DLA Establishes New Subordinate Command for Weapons Systems Support," October 1, 2025.



– DLA graphic by Brian Dumas

cally forward positioned throughout DLA's global distribution depots. The second lever, Warstopper, is aimed at preserving industrial capability to meet wartime needs for critical go-to-war items. Warstopper programs will strengthen U.S. DIB resilience through targeted investments, ensuring essential military production capabilities are maintained despite low peacetime demand, hastening industry production of long lead time materials, and mitigating potential supply shortages during surges.

For GRI to be successful, material forward-positioned at joint cold/warm sites must align with Service-validated operational needs and be protected from vulnerabilities. This precision approach will be supported by predictive data analytics to improve demand forecasts, and by linking supply chain risk management (SCRM), to identify locations, both forward and domestic, that are at high risk of disruption. Furthermore, GRI must also remain complementary to Combatant Command's Joint Theater Distribution Centers (JTDCs), and service-owned War Reserve Materiel (WRM) and prepositioned equipment, such as the Marine Corps' Global Positioning Network (GPN).

Implementing the GRI presents several challenges for DLA, including strategically prioritizing materials for forward positioning, selecting appropriate storage sites, securing sufficient funding for procurement and infrastructure upgrades, and ensuring supply chain security against cyber and physical threats. DLA is actively addressing these challenges through several strategies, including leveraging technology, integrating with Service-level demand planners to optimize stock levels, and strengthening relationships with the Joint Force, industry, and allied nations.

While the GRI resource investment is significant, it is essential for enabling the Joint Force to generate and sustain operations in a protracted Large Scale Combat Operation (LSCO). While the specifics of Congressional resourcing remain under development, the GRI has identified an $8.5 billion sustainment gap within DLA-managed supply chains and logistics services that must be addressed over the next five years. This funding is primarily required for materiel procurement ($6.8 billion) and $1.65 billion allocated to Warstopper investments.

Securing adequate and sustained funding is paramount to the GRI's success, beginning with proposals in the Program Objective Memorandum (POM) 2027. Possible funding mechanisms include new appropriations, re-allocation of resources from each of the Services' budgets to augment DLA's Defense-Wide Working Capital Fund, or a combination of these approaches.

Conclusion: Transforming sustainment to win the future fight

The moment for incremental change has passed. Deterring and prevailing in future great power conflicts demands a fundamentally different sustainment ecosystem than the U.S. currently possesses. Sustainment transformation demands commitment, bold innovation, and a willingness to challenge outdated assumptions. A capable warfighting force equipped

U.S. Army Spc. Liam Jouvenat, 294th Quartermaster Company, 36th Sustainment Brigade, 36th Infantry Division, Texas National Guard rigger, secures a pallet of food and water onto a trailer within the U.S. Central Command area of responsibility, Jan. 21, 2026. The 294th QM team regularly prepares pallets of various supplies for transport throughout the CENTCOM AOR using U.S. Air Force cargo aircraft.

– U.S. Air Force photo by Tech. Sgt. Justin Norton

to face 21st-century challenges in the Indo-Pacific is vital, and the ability to credibly sustain this force is essential.

The success and sustainability of dispersed Joint Forces, like the Marine Littoral Regiment (MLR) or the Army's Multi-Domain Task Force (MDTF), hinges on a modern, survivable logistics ecosystem. This requires a shift from the traditional "factory to foxhole" model to one characterized by dynamically distributed sustainment enabled through robust sustainment partnerships. DLA's GRI bridges the gap between the future of U.S. defense strategy and the challenges stemming from decades of consolidations, shortfalls, and underinvestment in the DIB.

Specifically, DLA's ability to integrate with the Joint Force concepts, leverage partner nation capabilities, and appropriately respond to surge requirements will be critical in a protracted conflict. The GRI promises to alleviate the strain on the U.S. DIB by utilizing warm-basing strategies and commercial partnerships in targeted geographic regions. Furthermore, by prioritizing data analytics and demand forecasting, the GRI can optimize stock levels and ensure the Joint Force receives the right supplies at the right time, even in the face of disruptions and attacks on traditional supply lines. This increased resilience strengthens deterrence. It shows potential enemies that the U.S. military can sustain operations even under attack, making aggression less attractive.

Moving forward, continued investment in and refinement of the GRI estimates, alongside a broader commitment to modernizing the DIB, are essential for maintaining a credible deterrent and ensuring U.S. readiness for future conflicts. The transformation of DLA is not merely an internal matter; it is a critical component of national security and a key factor in maintaining peace and stability in the Indo-Pacific region and beyond. The U.S. must embrace sustainment transformation with urgency, committing the necessary resources and fostering a collaborative environment with the Joint Force, industry partners, and allies. Only through such concerted action can the U.S. ensure its forces remain ready to deter aggression and, if necessary, prevail in protracted conflict.

BIBLIOGRAPHY

1. Defense Logistics Agency. DLA Strategic Plan 2025 — 2030 DLA Transforms: A Call to Action (Fort Belvoir, VA.: September 10, 2024. https://www.dla.mil/Portals/104/Documents/Headquarters/StrategicPlan/DLAStrategicPlan2025-2030March2025.pdf.

2. Defense Logistics Agency Public Affairs. 2025. "DLA Establishes New Subordinate Command for Weapons Systems Support." October 1, 2025.

Internet of behavior and digital dust: Implications for supply chain security and mission assurance

By Katherine Meadows, DLA Logistics Operations, Mission Assurance Division

Moving can be a stressful event. Whether you have moved once or several times, it is an event that upends the lives of the entire family. SSG Alex Kallus, an Army logistics NCO, had just received orders to PCS (Permanent Change of Station) from Fort Novosel, AL, to his new joint assignment in DLA at Fort Belvoir, VA. His spouse, Kay, and their two kids were ready for the move and were busily making plans for the new location. As any military family knows, PCS moves meant chaos, checklists, and lots of internet searches.

Once on the road, the family kept things simple: Apple CarPlay for their car, Google Maps for directions, Spotify for road trip music, and documenting their road trip on their family's Instagram account. They posted several pictures of the Auburn Buc-ee's, the giant Peach in Gaffney, the Marine Corps Museum, and several other fun sights along the way.

As they approached Washington, DC, things began to happen on the family's phones.

Scrolling through Facebook, Kay started to see ads for DC at-night tours. On Instagram, posts were appearing about military relocation support and child activities in the Fort Belvoir area. Local moving businesses filled her internet with ads.

Kay turned to Alex, "Okay…how do they know we're moving here? I haven't even posted that yet!?!?"

Suddenly, the family's social media feeds were filled with local ads and targeted marketing from packers and movers, pediatricians, auto shops, and home improvement stores near their new home.

This story is all too familiar in today's world of data aggregation and data brokers. It's not magic, but it's something we all need greater awareness of the mechanics behind it.

- In the application customer agreement, Google and Facebook both can collect location access by default. As soon as the family enters the National Capital Region, their phones register a location change.
- The family searched for military housing, BAH rates, and Fort Belvoir schools weeks before. Their device's advertising ID linked this online activity to their advertising profile. Depending on whether the family searches on their laptop, phone, or another device will affect companies' ability to consolidate user profiles. Companies can also use the login information to tie devices back to a family or user, consolidating user data.
- SSG Kallus and his family stopped at a military-friendly hotel, which shared location data via Wi-Fi or ad trackers in apps Kay uses.
- Across various internet searches and cookies on computers, the websites Zillow, Instagram, Facebook, Amazon, and Google all shared signals about keywords, combining interests like "military move," "school-age," and "new location."
- Behind the scenes, data brokers and ad networks updated the family's digital profile with information from new geolocation data, transition efforts, various searches, and other websites that tracked cookies.

This information, or the digital dust you leave behind and the collection of it to better understand you, is called the Internet of Behavior (IoB). This information trail of data, created by individual behavior, system interactions, and devices, is reshaping big data and how it is utilized across multiple industries, including commercial, marketing, and business, as well as defense and military applications. For DLA, big data, along with its associated technologies, presents increased risks to the operational landscape, balanced by meaningful advantages for effective support. Still, the degree to which we take advantage of this technology should be considered in light of the risk landscape it presents. DLA leads the DoD in revolutionary logistics technologies, which hold huge potential to reshape supply chain management.

DLA serves as the Department of Defense's combat logistics support agency, ensuring readiness through secure, responsive, and resilient supply chains. Mission assurance requires continuous oversight of supply chain integrity, particularly in light of an evolving digital and geopolitical threat landscape. According to 10 USC 48191[1], DLA must streamline and digitize its approach for identifying and mitigate risks to the defense industrial base. This modernization effort requires the identification and aggregation of specific data to build visibility and insights for decisions.

The IoB involves the collection, analysis, and application of data about human or company behavior. This is often drawn from social media, IoT devices, communication patterns, and purchasing behaviors. The use of this data collection is then used to inform decision-making and operations.[2]

Opportunities

By leveraging data collection and behavioral analytics on suppliers, DLA can identify patterns of concern using advanced AI methods. These patterns include financial stress, foreign influence, supplier reliability, reputational issues, and many more.

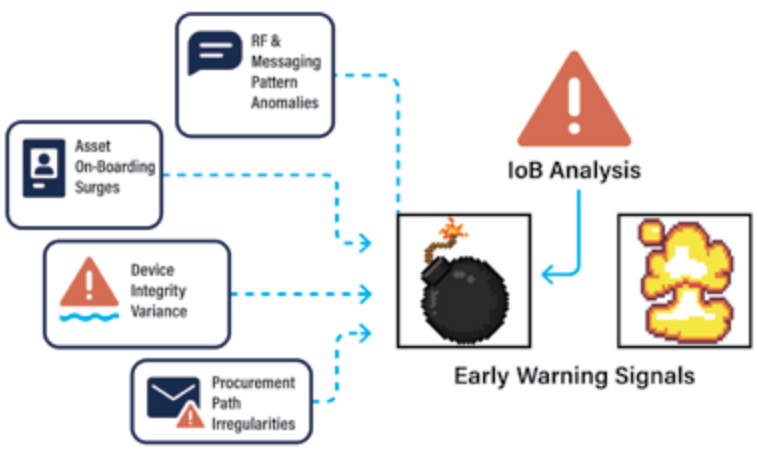
The use of IoB in defense and government settings offers unique advantages beyond conventional risk management. In contested logistics environments, where supply chains are threatened by peer adversaries, cyber-attacks, or kinetic disruptions, IoB can provide early warning indicators through anomalous digital behavior, shipment patterns, or emerging misinformation trends. It enables defense planners to make preemptive decisions and adapt posture dynamically in operational theaters.

Government-wide behavioral data can contribute to resilience planning, fraud detection, public health responses, and emergency management. Behavioral patterning is becoming normalized in federal analytics through commercial partnering and national security contexts. As technologies mature, these tools offer the potential to identify not only bad actors, but macro-level trends that might otherwise evade traditional surveillance.

For example, on September 17, 2024, thousands of pagers used by Hezbollah personnel detonated almost simultaneously across Lebanon, followed on September 18 by explosions of handheld radios, causing dozens of deaths and upwards of 3,000 injuries. This completely disrupted the organization's command-and-control and ability to conduct operations. Reporting and subsequent analyses described the incident as a supply-chain infiltration in which devices were tampered with or counterfeited prior to delivery and detonated by coded signals.

By using IoB and the integration of DoD systems with publicly available data, we can identify emerging risks quickly through anomalies and linked data points. Individual signals are subtle but when linked together in an ecosystem with IoB analytics, it can form a high-confidence early warning system or identify potential compromises in the supply chain.

IoB can be used, as in the example, primarily for security, however, its uses can be applied to many different applications. DLA can leverage IoB for synchronized forecasting of demand, movement tracking, and contractor stability, particularly in areas with poor physical access but strong digital visibility, allowing DLA a digital presence on the battlefield. Our understanding of industry behavior, combined with government data, also enables us to target vendors that are prime investment opportunities, allowing us to build out industrial capabilities during periods of surge. Bad actors are routinely discovered in pre- and post-award relating to ownership provenance, regulatory compliance, and other concerns.[3] DLA's ability to operationalize IoB



– DLA graphic by Brian Dumas

1 10 US Code 4819, 2021 Modernization of Acquisition Processes to Ensure Integrity of Industrial Base

2 Gartner. (2021). Top Strategic Technology Trends for 2021.

3 Department of Defense. (2023). Instruction 3000.16. Vendor Threat Mitigation Procedures.

Signal Class	Observable	Detected Anomaly	Potential Threat
Procurement Path Irregularities	Sudden shift to new intermediary/ vendor for pagers; with extended dwell in transit/storage	Diverges from prior procurement behavior; long layover creates tampering window	Supply-chain compromise risk; initiate technical inspection & trusted-path sourcing review
Asset On-boarding Surges	Compressed device provisioning to cadres shortly hours/days before use	Unusually synchronized issuance pattern	Heightened risk that a coordinated trigger could maximize impact
RF & Messaging Pattern Anomalies	Short, uniform burst traffic across paging network; rare codes seen across disparate cells	Not typical of organic operational traffic; suggests test pings or trigger rehearsal	Flag as possible remote-detonation C2 prep; escalate for network interdiction
Device Integrity Variance	Weight/thermal signatures or battery pack construction inconsistencies in random-sample QA	Indicates non-OEM modifications	Quarantine lot; conduct disassembly/X-ray; suspend distribution

requires breaking down silos of information within the Agency. Through the integration of people, technology, and governance across divisions, job series, and supply chains, DLA can harness this type of solution. DLA will have to embrace the type of change required to empower lower echelons with decision authority through governance, allowing a more agile and responsive workforce informed by information and utilizing a common data picture through various lens such as logistics, acquisitions, legal, intelligence, cyber, and so many others.

Risks

The aggregation of data and its use to proactively target identified risks, as well as monitor supply chain threats, raises several concerns and a threshold of risk that leaders often lack the appetite for. Several DoD instructions and manuals, as well as numerous discussions, outline the laws, guardrails, and expectations for using data in this area.[4]

Privacy and Civil Liberties remain top concerns, as risks of overreach in both data collection and application of data analysis exist in this space. Data aggregation and big data analysis are not a new problem to corporate America, but the discussion takes a different turn when the Defense Department discusses the application and use of the IoB.[5]There is a critical responsibility in handling big data, with numerous ethical implications related to personally identifiable information (PII) or the aggregation of data that can reveal other pieces of information through digital footprints.

Adversarial targeting and behavioral spoofing, utilizing the same techniques and data that DLA currently uses, are of grave concern. It is already apparent that social media companies are capable of customizing streams for individual users and tailoring content to their online behavior. What does the weaponization of digital dust look like, and are we sophisticated enough to detect it? DLA currently employs numerous bots to assist with automation and efficiency. Inherent risks lay in corrupting bot automation to cripple supply chain activities. We can employ currently available technologies to mitigate this type of risk; however, we must ensure that we are fully leveraging them to protect critical areas. Additionally, generative AI and LLMs become more sophisticated, DLA employees are the first-line guardians to many of these attacks. Threat actors continue to conduct penetration testing and sophisticated attacks to gain access to information and people within DLA, it is imperative to recognize and intercept the bad actors at the gates.

Additional risks lie within data volume and with the analysis that is underway. We must be cautious as we recognize that refining data poses challenges along the knowledge continuum. Often, this process will stop at the information stage. Leaders are left overwhelmed by data that merely informs but does not provide the necessary knowledge or perception for practical decisions. An environment of decision fatigue can creep in with too many tools, too much data, and a wall of dashboards that all have volumes of information yet provide no real ability to affect change. There must exist clear leadership that integrates strategic information-type operations via a disciplined framework that filters priorities with perceptions appropriately.[6]

Excessive monitoring with data collection on trusted partners is a potential area for risks not often explored. DLA values industry partnerships, yet

4 RAND Corp. (2023). Cybersecurity and Supply Chain Risk Management are Not Simply Additive.

5 Department of Defense. (2023). Instruction 3115.18. DoD Access to and Use of Publicly Available Information.

6 GAO. (2021). GAO-21-525. Information Environment: DoD Operations Need Enhanced Leadership and Integration of Capabilities.

it also has a duty to watch the supply chain for weaknesses and dangers. While vendors have a tolerance for most of the data collection conducted, there is ultimately a threshold crossed as either issues are uncovered, or concerns are raised. There is significant potential for misuse or misinterpretation of collected commercial data during vendor reviews. With guidance from the Department of Defense and the Intelligence Community, DLA continues to collaborate with General Counsel, Intelligence and Security (DI&S), and others to ensure the appropriate handling and analysis of data for informed decision-making.[7] Discussions are currently ongoing with both industry and the Department of Defense on their contractual relationships and safe haven clauses to allow for greater data sharing and communication of issues.

The moral gray

Today's data environment forces us to confront a deep ethical tension between protecting civil liberties and fulfilling the government's duty to secure the nation. As adversaries grow increasingly sophisticated in exploiting digital behavioral data, the U.S. cannot afford to stand idle while others weaponize information. However, the tools and partnerships used to harvest that data — particularly when outsourced to commercial platforms — must be examined critically.

Private sector technologies now play a central role in enabling government surveillance and behavioral analysis.[8] While these tools are indispensable for national security, they are often developed outside the realm of democratic oversight. As a result, the lines between defense analytics and commercial surveillance are increasingly blurred. The same datasets that enable proactive risk detection can also allow for manipulation, discrimination, or mission creep when not governed properly.

There is a clear imperative for the defense community — including DLA — to employ advanced data analytics to detect foreign influence, fraud, and supply chain vulnerabilities. Behavioral signals can uncover otherwise hidden threats: financial distress, compromised ownership, adversarial ties, or fraud indicators. Ignoring these insights cedes strategic ground to bad actors. However, embracing invasive analysis must not mean abandoning ethical restraint. Oversight must evolve alongside technological capability.

The moral challenge is not whether to collect and analyze behavioral data — but how to do so without replicating the very systems of authoritarian control we oppose. Just as resistance movements in fiction and history have used intelligence techniques for survival, so too must we adopt proactive surveillance responsibly. The goal is not omniscience, but resilience. Defense agencies must ensure that their data strategies are guided by legal guardrails, internal checks, and a clear moral compass anchored in democratic values.

Conclusion

As DLA expands its ability to harness the Internet of Behavior for supply chain risk management, it must simultaneously reinforce its commitment to transparency, accountability, and public trust. The increasing reliance on behavioral analytics in national defense demands a more developed ethical and operational framework. It is not merely a question of what is possible — it is a question of what is just, necessary, and sustainable.

DLA should collaborate with legal counsel, the intelligence community, and trusted industry partners to build frameworks that support invasive analytics where required but within clearly defined limits. Safe haven clauses, responsible data-sharing agreements, and audit-ready oversight mechanisms must be implemented. At the same time, the agency must resist the drift toward opaque or overly privatized surveillance infrastructure that may operate without adequate public scrutiny.

Policies must enable analysts to detect threats quickly and decisively, but within an environment that values civil liberties and constitutional norms. Oversight boards should evaluate analytic models for fairness and proportionality and ensure that data collection aligns with both mission relevance and ethical boundaries.

The Internet of Behavior offers transformational potential for mission assurance and supply chain security. But its power must be exercised with intention. The success of national defense depends not only on the precision of our insights — but on the principles that guide how we obtain and use them.

7 Department of Defense. (2023). Manual 8910.01 Vol 2. DoD Information Collections Manual.

8 The Conversation. (2024, July 18). Tech giant helps the US government monitor its citizens — its CEO wants Silicon Valley to find its moral compass. https://theconversation.com/tech-giant-palantir-helps-the-us-government-monitor-its-citizens-its-ceo-wants-silicon-valley-to-find-its-moral-compass-260824

Leveraging machine learning for enhanced warfighter readiness

By David G. Bella, DLA Logistics Operations Demand Planning Branch Chief

Abstract

Technological advances and the evolving nature of the modern battlefield necessitate a transformation of logistics planning. The DLA Strategic Plan recognizes this critical juncture for the Defense Logistics Agency (DLA) and stresses the need for the Agency to transform itself.

Current material demand and supply planning processes, relying on traditional univariate methods, are insufficient to meet the needs of a dynamic and complex world, leading to inefficiencies, stockouts, and increased risk to warfighter readiness. This paper proposes that enhanced data sharing, enhanced by Machine Learning (ML) algorithms, is essential for improving DLA's ability to support the warfighter in this transformative era. It lays out a vision, lessons learned, and a roadmap for implementing a ML-driven, data-rich material planning process to ensure optimal warfighter support.

Introduction

The recent war in Ukraine has underscored the importance of logistical planning. In a 2023 study, RAND noted that "Russia's failures in the war with Ukraine were due to poor planning"[1]. Seeing these missteps and recognizing the critical importance of logistics, US Army Pacific named it as one of its four core "Interior Lines" that must be met to achieve its 2025 posture plan.[2] The Defense Logistics Agency (DLA), the Department of Defense's (DOD) combat support supply chain organization, will be a key piece in achieving these plans. Because of this importance, DLA's way of material planning needs to evolve. DLA supports the DOD with most of its consumable items, everything from clothing to fuel to medical supplies to weapon system repair parts. While historical-based planning to predict future DOD requirements has served DLA well, it may not be fully equipped to handle the complexities and uncertainties of the modern battlefield. Current models rely solely on historical demand, limiting DLA's ability to account for the wide range of factors that now influence military supply chains. This limitation has become even more pronounced as enhanced data sharing from DLA's customers has opened access to richer, timelier, and more diverse datasets. Machine learning-based planning methods are uniquely positioned to leverage this expanded data environment by incorporating multiple variables, identifying nonlinear relationships, and adapting to changing patterns in real time. Transitioning to ML-based material planning that is informed by new data represents a necessary evolution for the organization to improve accuracy, resilience, and strategic responsiveness.

DLA MUST ENABLE THE AMERICAN WARFIGHTER TO SUCCESSFULLY DEFEND THE HOMELAND AND DETER ITS ADVERSARIES.

DLA manages a significant portion of the DoD's supply chain: it plans for future customer requirements, acquires inventory to meet that demand, stores the inventory, and fulfills customer orders from that inventory. Like private industry, DLA's demand planning seeks to predict what customers will order in the future. Based on that input, DLA's supply planning strives to ensure the right inventory is available at the right location when that demand materializes. DLA HQ Planning controls policy and maintains oversight of these planning functions and then works with DLA Acquisition to ensure the supply plan is met. Similar to private industry, when these core functions are out of sync cash flows are interrupted, orders go unfilled, and objectives are

1 Bradley Martin, D. Sean Barnett, and Devin McCarthy, *Russian Logistics and Sustainment Failures in the Ukraine Conflict: Status as of January 1, 2023* (Santa Monica, CA: RAND Corporation, 2023), https://www.rand.org/pubs/research_reports/RRA2033-1.html

2 United States Army Pacific. *Theater Army Strategy: Get in Position to Compete, Fight, and Win.* Interim edition. Fort Shafter, HI: USARPAC, April 2025.

not accomplished. However, unlike the commercial sector DLA does not seek to maximize revenue; it is tasked with maximizing warfighter readiness. Because of this, the ramifications of a misaligned DLA supply chain are much greater than private sector organizations: DLA impacts the DoD's ability to defend the homeland and defeat its adversaries.

DLA is also in an incredibly difficult business because 80% of its five million items average zero demands a year, 70% of its stocked items have vendor lead times over six months, and the number of small businesses in the defense-industrial base has declined by 40% in the last decade.[3] Because of these challenges, DLA relies on five statistical methodologies that are univariate, meaning they are solely influenced by one variable (historic demand, historic vendor lead times, etc.). Across these five methods, DLA routinely achieves a steady balance of 60% of items that are adequately planned, 20% over-planned (too much inventory and/or not enough demand), and 20% under-planned (too little inventory and/or too much demand). DLA also receives formal collaborative demand forecasts from the military services that are used to influence DLA's final demand plan. DLA's Collaborative Horizon Metric (CHM) assesses customers' collaborative forecasts and reveals that customer input only adds value to 25% of DLA's statistical forecasts. This poor customer forecasting drives the same outcomes as poor DLA planning: increased inventory that ties up funding and decreased customer support.

With the smallest American industrial base in recent history, DLA must increase the quality of its planning as it no longer has the luxury of having suppliers that can produce items with a moment's notice. These are warning signs that keep the door open to the DoD's supply chain being a limiting factor in a potential future conflict similar to what the Russians initially experienced in Ukraine. It is time to transform DLA's material planning with machine learning algorithms operating on new and more data to meet the intent of the new DLA Strategic Plan.[4]

Objective

To meet the Director's intent, DLA HQ Planning is undertaking the five-step process outlined in Nicolas Vandeput's Demand Forecasting Best Practices. Vandeput, a leading expert in supply chain optimization and demand forecasting, provides a practical framework for improving forecasting accuracy and aligning it with business objectives.[5] The objective of DLA's planning system is clear: DLA must enable the American warfighter to successfully defend the homeland and deter its adversaries.

Data

Data will inevitably be the most important factor in moving DLA's planning process forward. Luckily, there have been massive gains in data processing, storage, and willingness to share data up and down the DOD supply chain. However, a significant challenge remains: the DoD's data landscape is often characterized by siloed systems and inconsistent data standards, hindering effective collaboration and optimization. The most important data DLA needs is downstream customer demand data that is currently not visible to DLA. Having that data will allow DLA to match downstream customer demand with supply, which will ultimately improve DLA's demand plan. Secondly, DLA needs customer on hand inventory and inventory policy data. This will allow for global optimization of the DOD supply chain inventory, rather than its current siloed approach. This concept is called Multi-Echelon Inventory Optimization (MEIO) and has reduced inventory by as much as 35% in some business use cases while still maintaining high service levels.[6] In DLA's case, a 35% reduction in inven-

Figure 1: Planning Process Transformation – DLA courtesy graphic

3 U.S. Department of Defense, *Small Business Strategy* (Washington, DC: Department of Defense, January 2023), https://www.defense.gov/News/Releases/Release/Article/3279279/dod-releases-small-business-strategy/

4 Mark Simerly. *DLA Transforms: A Call to Action.* https://www.dla.mil/Info/Strategic-Plan/

5 Nicolas Vandeput. *Demand Forecasting Best Practices*. 2023, page 5.

6 Nicolas Vandeput. *Inventory Optimization, Models and Simulations*. 2020, page 182.

tory would amount to almost $6B.[7] In addition to order and inventory data, commercial data from DLA's vendors, exogenous data like weather patterns and economic indicators, and internal DOD data like maintenance schedules, unit employment schedules, and other internal logistics data unique to each military service should all be curated and fed into DLA's planning algorithms. Finally, all data must be fully integrated into DLA's Enterprise Advanced Analytics' (EA2) data warehouse to ensure the planning system and analysts can make the most of it. There can no longer be spreadsheet swapping or intermittent pushes of data. In addition, data quality teams must address the challenges of inconsistent data formats, disparate systems, and security concerns. A robust and secure data infrastructure is essential for enabling effective ML-driven planning. Overcoming the challenges of breaking down data silos, using that new data, and ensuring high levels of data quality are foundational steps in transforming DLA's material planning process.

Metrics

DLA can benefit from a more balanced approach to Planning metrics, giving greater attention to forecast bias and inventory-related measures. Bias is important because it tells if a forecast is systematically wrong in a particular direction. Unchecked, it can compound stockouts, lead to buying dormant inventory, and result in a loss of trust in the forecasting process. Figure 2 shows that ideal forecasts are

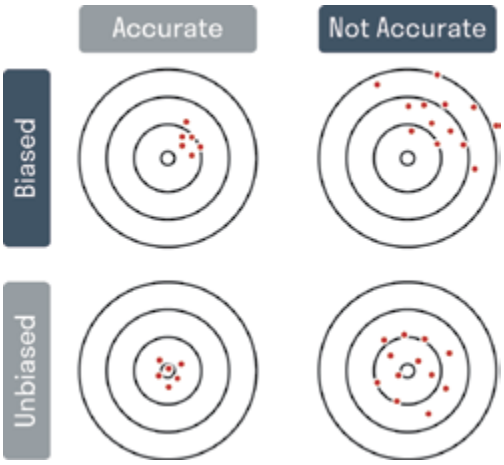


Figure 2: Visualization of the difference between Accuracy and Precision – DLA courtesy graphic

accurate AND unbiased. DLA's naïve forecast (replaying historical demand) has an accuracy of 50%, which beats DLA's published forecast by three points.[8] DLA has a 15% over forecast bias, which sounds like a much better alternative than having a bias toward under forecasting. But digging deeper, being biased toward over forecasting results in tying up money on inventory of which DLA already has too much.[9] Since DLA is in such a variable demand environment, it is astonishing that DLA gets the results it does, but there is still room for improvement to get DLA's demand plan centered and concentrated around the bullseye. Finally, there is not enough exposure to inventory metrics. Looking at inventory is important because it shows where DLA is putting its money. If that money is misplaced, it leads to poor customer results and bad DLA financials.

Baseline model

DLA can also move away from its current univariate, statistical models and toward ML based planning because of the variety of factors that impact DLA planning. Factors like global operations, seasonality, maintenance schedules, and unknowable patterns to the human eye impact customer demand to which DLA is currently blind. Statistical models can only handle these factors one at a time, while ML models are trained on entire datasets. DLA should take advantage of all data available to it via a model that can consider all relevant variables. To get this ML-enabled model, HQ Planning should encourage open competition to see if internal and external DLA stakeholders can create ML models that improve DLA's supply and demand planning. To this end, DLA should hold its own Makridakis Competition like Kaggle's 2020 M5 Forecasting-Accuracy challenge, during which users predicted daily Walmart sales for the next 28 days.[10] Five teams beat the benchmark by 20% and the winner won $25,000. Instead of money, the DLA competition's prize could be a winner take all event where the winning model is adopted for use by DLA.

Review processes

It is a good rule of thumb to assume that the further up the DOD food chain you get, the more influence budgets have on the planning process. It is also safe to assume the closer to the warfighter you get, the more the planning process becomes readiness focused. Competing priorities are natural in any organization, and the

7 DLA, Tim Morefield, "FY2024 End-of-Year Materiel Management Review". March 14, 2025 slide 5.

8 DLA, Tim Morefield, "FY2024 End-of-Year Materiel Management Review". March 14, 2025 slide 10.

9 Spyros Makridakis, *M5 Forecasting = Accuracy* (Kaggle, 2020), accessed July 2, 2025, https://www.kaggle.com/competitions/m5-forecasting-accuracy

10 Nicolas Vandeput. *Demand Forecasting Best Practices*. 2023 page 61.

combination of these biases should culminate in an improved plan in the aggregate. Acknowledging this fact will allow all planning stakeholders to speak frankly and honestly with each other. To that end, DLA should work with OSD to re-examine its processes and procedures, ensuring that both efficiency and warfighter readiness are effectively balanced. For example, the Weapon System Priority Program (WSSP) that identifies mission essential critical parts must be updated to ensure DLA's ML models maximize critical platform readiness to better align with warfighter readiness needs.

Ultimately the end state for DLA's Planning system and community is to become more analytically adept and engaged. Planners will increasingly leverage data-driven insights and advanced analytics tools, augmenting their existing expertise and judgment. The future is centered around fine-tuning models, collecting better data, generating a better understanding of support strategies and customer requirements, and being more agile in response to shifting customer demands. HQ Planning is currently working on several projects to move DLA's planning ability to this desired end state, which, on their own merits, serve as examples of how ML and advanced analytics capabilities can improve logistics planning.

Reducing the bullwhip effect via enhanced Army data sharing

Nicolas Vandeput in *Demand Forecasting Best Practices* defines the bullwhip effect as "a situation where the more upstream an echelon is in the supply chain, the more demand variation it faces, even if the final demand (from end customers) is steady."[11] As the most upstream organization in the DOD supply chain, DLA struggles mightily with this phenomenon. Demand variation has DLA playing Whac-a-Mole, trying to distinguish if large swings in demand are trends or one offs.[12] Vandeput asserts data sharing is the only way the bullwhip effect can be counteracted. Being able to see upstream in the supply chain allows DLA to see when demand will be coming its way.

> IT IS A GOOD RULE OF THUMB TO ASSUME THAT THE FURTHER UP THE DOD FOOD CHAIN YOU GET, THE MORE INFLUENCE BUDGETS HAVE ON THE PLANNING PROCESS.

Imagine a scenario in which DLA can see that ten widgets are ordered internally in the Army every week instead of one large order of one hundred and thirty every quarter. DLA would know this widget demand is not randomly happening four times a year but rather is steadily demanded. This new insight allows DLA's vendors to maintain steady production schedules with steady cash flows, and it also allows DLA to carry less inventory (only having to carry a few weeks of safety stock vice multiple quarters).

To this end, the Army is actively sharing internal consumption data for Bradley Fighting Vehicle items, allowing DLA to see internal Army consumption. The hypothesis was that this internal consumption data allows DLA to smooth out the demand, which would lead to a dampened DOD bullwhip. In trial simulations using this internal Army consumption data, results showed an 8% increase in forecast accuracy for fast moving items. But it also showed that almost 80% of items receive no forecast accuracy improvement. For the items that seemed to benefit from this new insight, their actual demand plan was modified to incorporate this enhanced insight in the July 2025 demand plan. The team will monitor the production results, learn from them, and incorporate the lessons learned into a larger effort that includes all Army data.

Using machine learning to demand plan

DLA HQ Planning is reviving a 2019 R&D ML based demand forecast effort that had promising results. Simulated over-forecast dollar error decreased by a simulated $102M for the sample fifty thousand items and average demand plan accuracy was increased by 3.5%. The approach used an ensemble method where multiple forecasting algorithms were used together to produce a single demand plan. A neural network was trained using item level characteristics, which allowed the business to adjust what characteristics were heavily weighted depending on business need. In theory, this can allow DLA to plan by readiness driver or weapon system platform instead of its aggregated demand profile. After six years, DLA has seen massive gains in areas that held the 2019 project back. Specifically, DLA

11 Nicolas Vandeput. *Demand Forecasting Best Practices*. 2023 page 61.

12 https://en.wikipedia.org/wiki/Whac-A-Mole

J6 rolled out a dedicated ML environment, Cloudera Data Science Workbench, for analysts to create their own ML models.[13] The workforce is also much more analytically advanced, and the data warehousing and compute power has drastically expanded. This project began in July 2025 and hopes to radically transform DLA's planning algorithms.

Estimating vendor lead times with random forests

Estimating when vendors will deliver material is critical to supply chains because it allows businesses to estimate how much inventory will be needed. This predictability reduces costs, minimizes delays, and improves service to customers.

In 2024, the team started a project that used a random forest machine learning model to see if it could better predict vendor lead times. This model analyzed ten years of procurement history and was able to more accurately predict when vendor deliveries would be delivered. It is estimated the model will reduce buyer workload by 5% in its first year and will reduce lead time estimation error by 32 days. Because of these promising results, DLA HQ Planning changed 165k vendor lead times according to the recommendations from the model in March 2025. As this was the first ML project to drive business decision making, it revealed many things. The first was that it took buy-in from key stakeholders to put these changes into production. Close collaboration with stakeholders ensured the successful transition of insights into production. The second major finding was how important communication was throughout the project's life cycle. Communicating the strategic intent to the modelers, the modelers communicating the fundamentals of the model to the Planning team, and the Planning team communicating to senior leaders and other MSC stakeholders about important process differences all needed to take place before changes could be made to the lead times in the system. Finally, because AI and ML are not easily reverse engineered, the team found that buy-in is a hard, slow road when it comes to early adoption of new technology. Not every model recommendation was adopted: DLA HQ Planning did not change every lead time as the model said because there was not total buy-in. Exceptions were made and countless late night phone calls were fielded to get enough buy in so that everyone could sleep at night.

THE TEAM LEARNED THAT PUTTING PEOPLE IN POSITIONS TO SUCCEED ANALYTICALLY IS THE ONLY WAY TO GARNER EFFECTIVE OUTCOMES ACROSS THE DLA SUPPLY CHAIN.

Posturing for the future

One of the biggest revelations that has come out of the initial projects is how people are the most critical piece of advancing planning's analytic capabilities. The team has encountered disbelievers, evangelists, early adopters, naysayers, and cultures of tradition that are difficult to break. Without the right people willing to share data or come to the table with an open mind, many efforts would have fallen flat. The team learned that putting people in positions to succeed analytically is the only way to garner effective outcomes across the DLA supply chain. This paradigm saw glimmers of enhanced agility and responsiveness. With real time data monitoring and predictive analytics, the team could quickly identify and respond to shifts in demand, supply disruptions, or logistics bottlenecks which reduced customer wait time and stock outs. Lastly, since the team was structured around analytics it was able to simulate changes in environmental conditions, supplier reliability, and customer behavior. Putting people in positions to succeed analytically is one of the key takeaways from our experience with these ML projects.

What Success Looks Like

As stated in DLA's Strategic Plan 2025-2030, DLA is in a transformative era. Planning's central role in shaping supply chain outcomes sets it up as a key catalyst to enable that transformation in support of the warfighter. To get there, DLA HQ Planning is pushing the Agency into a more data-centric material planning ecosystem. DLA's material planning is becoming more integrated with its customers both by giving and receiving data. Planning is also modernizing its technology with a push toward ML based demand and supply planning over traditional univariate ones. And finally, DLA HQ Planning is creating a culture of analytical excellence internally that will encourage partnership with other like-minded organizations across the Joint Logistics Enterprise. Come join us.

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DLA cybersecurity director discusses threats, cyber resilience on agency podcast

The Defense Logistics Agency's cybersecurity director discussed the ever-present threats facing the agency and stressed the importance of cyber resilience on a recent episode of the "DLA Dialogues: Factory to Foxhole" podcast.

Linus Baker says cybersecurity is critical because information technology is omnipresent throughout DLA's global combat support mission.

"Everything we do in DLA, every supply chain, every business process, is enabled by IT," Baker says. "So the availability and the integrity of the data we rely on is critical in DLA being able to fulfill its mission in support of the warfighter."

Threats come from both nation-state actors and criminal organizations, but the most common method used to target DLA is social engineering through phishing emails, Baker explains. He says that despite having the most advanced technical controls, the human element remains the biggest challenge. To counter this, DLA has run a phishing awareness exercise program for 17 years, sending test emails to the workforce to build knowledge and awareness.

Because it is impossible to stop every attack, Baker emphasizes the need to focus on cyber resilience, which is the ability to operate with the assumption that the enemy may already be inside the network.

"At some point, you can expect one of the myriad of vulnerabilities you have to be exploited," he says. "If it hasn't already been exploited."

Baker encourages employees to think about how to maintain operations with that perspective.

Using this proactive approach, DLA has established a cyber-integrated planning element to work with operational planners on future and contingency operations. While his team stops millions of attacks a month, preparing for the inevitable is key.

"All it takes is one," Baker says. "We've got to prepare for that inevitability, that one time a bad actor succeeds."

Episodes of "DLA Dialogues: From Factory to Foxhole" are available on the Campaign of Learning website, DVIDS and YouTube.

Former garrison commander shares story of resilience

Resiliency isn't a switch you flip but a character you cultivate, retired Army Col. Gregory Gadson told Defense Logistics Agency employees in November.

Gadson, a former Fort Belvoir garrison commander and bilateral above-the-knee amputee, spoke about how his character was rebuilt day-by-day, starting with small habits, and how his character is what got him through his darkest days.

In July 2007, during a deployment to Afghanistan, Gadson's vehicle was struck by a command-detonated explosive device, resulting in the loss of both legs and partial use of his right arm and hand. Months later, he found himself wanting to give up.

"In my darkest, lowest moment, I found out who I was. And I certainly wasn't a quitter," he said. "My legs were gone. There was no need for me to look into the past. Nothing I could do was going to bring those back."

This forward-looking perspective brought him unexpected opportunities. While still on active duty, Gadson became a motivational speaker for the New York Giants and acted in the movie "Battleship." He challenged the audience to adopt a similar resiliency-focused mindset in their own lives.

"We talk about resiliency like it's on demand, like it's something we have to be when we need to be," he said. "But what I would argue is that resiliency is really about our character. It's not about what we do but who we are."

— By Kristen Wong, DLA Public Affairs

Former Sergeant Major of the Army recounts combat stories, leadership lessons

Retired Sgt. Maj. of the Army Michael "Tony" Grinston shared leadership lessons from his 35-year career, from his time as a field artillery soldier to his tenure as the Army's top enlisted leader, in December.

As the 16th Sergeant Major of the Army, Grinston spearheaded quality-of-life improvements for soldiers and their families, including securing $1.2 billion to improve barracks. He also oversaw the update to the Army Combat Fitness Test. He recalled receiving conflicting feedback but stressed that adapting physical readiness was essential for future conflicts.

"'Pushup, sit-up, run' will not do well in the next combat. You've got to be lighter, you've got to get faster. It's going to be more lethal," Grinston said. "What you had a long time ago is not going to work."

Now serving as the chief executive officer of Army Emergency Relief, Grinston continues to address the challenges facing military families. He said everything he does at AER impacts soldier readiness.

Talking about future conflicts, Grinston said the battlefield will be increasingly dangerous. He called drones the improvised explosive device of the future and emphasized the need for lighter equipment and new strategies.

Despite the danger and pressure he faced throughout his military career, Grinston said he wouldn't change a thing.

"It's the greatest profession I've ever seen, and I've been alive for 57 years," he said. "I would say I would do it all again, selfless service to protect other people and be willing to do it."

— DLA Public Affairs

Former logistics officer warns against readiness atrophy during 'off-season'

A former Air Force logistics officer warned Defense Logistics Agency employees in January that sustainment capabilities can quietly erode during periods of relative peace. He stressed that leaders must remain vigilant to prevent an unprepared force when a crisis emerges.

John Cooper, a retired Air Force lieutenant general and former deputy chief of staff for Air Force logistics, engineering and force protection, cautioned against the dangers of the logistics "off-season."

He shared a story from when he discovered critical shortfalls in Air Force readiness. The root cause, he explained, was a series of budget-driven decisions made years earlier. The rheostat was turned down, he said, and metrics were adjusted to match the new, lower capability, creating a false sense of readiness.

In response, Cooper developed a set of logistics truths: simple, enduring axioms to help leaders articulate risk and remember the fundamentals of sustainment.

Looking forward, he proposed a Civil Reserve Industrial Base to use existing commercial maintenance, warehousing and supply chain capabilities in allied nations to augment the military's own footprint.

"The fastest way to get something there is to already have it there for the warfighter," he said.

Cooper advised leaders to stay focused on a small handful of priorities. Leaders should be considered successful when they leave an organization better than they found it, he said, and the only way to do that is to narrow their focus.

— By Kristen Wong, DLA Public Affairs

DLA NEWSWIRE

DLA DISPOSITION SERVICES DELIVERS STORM RELIEF THROUGH LESO

An excess military vehicle acquired from Defense Logistics Agency Disposition Services by the Adamsville Police Department in Tennessee proved to be a critical asset during a recent winter ice storm, allowing officers to navigate impassable roads and respond to emergencies.

The department requisitioned a lifted, four-wheel-drive Chevrolet Suburban in 2024 at no cost to the city through DLA's Law Enforcement Support Office.

Adamsville Police Department Chief Nathan Reagan explained the vehicle's value in a statement.

"APD has gotten a lot of quality use from this vehicle, however, I would like to highlight the particular success we experienced during this very significant, prolonged winter ice storm that resulted in extremely hazardous weather and roadway conditions," Reagan said. "Due to the significant amount of ice on the roadways, as well as downed lines and trees, the roadways in our jurisdiction were rather impassable for several days. APD was left with only one patrol vehicle that could safely maneuver on the roadways. APD was able to utilize the Chevrolet Suburban from LESO to give us two patrol vehicles that allowed our department to not only safely operate but also operate as normal."

The vehicle's use was not limited to patrol. Reagan noted a specific life-saving event.

"It was even used to transport an individual experiencing a serious mental health issue who had inflicted harm upon themselves from an area of our jurisdiction where an ambulance could not access a main highway so that the ambulance could treat and transport the individual for care services," he explained.

The National Defense Authorization Acts of 1990 and 1991 laid the foundation for the LESO Program. Congressionally authorized, the program allows the transfer of excess military equipment for use by federal, state and local law enforcement agencies

By Jeff Landenberger,
DLA Disposition Services Public Affairs

DLA DISTRIBUTION SIGONELLA UNVEILS NEW SOLAR ARRAY, BATTERY STORAGE SYSTEM

In a step towards energy independence and operational resilience, Defense Logistics Agency Distribution Sigonella, Italy, unveiled its new solar array and Battery Energy Storage System with a ribbon-cutting ceremony Jan. 15.

This microgrid is the first of its kind in DLA and Navy Region Europe, Africa, Central.

The project, which had a combined cost of less than $2 million for two systems, builds upon a cost-saving initiative that began around 2016 with the installation of solar photovoltaic systems on several buildings at Naval Air Station Sigonella.

Those initial systems provided savings of over $100,000 annually and paid for themselves by 2022.

To enhance mission resilience during power outages, the new project integrates a BESS and microgrid controls.

The new system features sodium nickel chloride batteries that store excess solar energy to provide power during nighttime and cloudy conditions. Each of the two BESS installations can provide up to 400 kilowatt-hours of energy.

During a utility outage, the microgrid transitions to "island mode," ensuring an uninterrupted power supply by combining stored battery energy, solar generation and generator support. The system is designed to sustain continuous operations for up to 14 days on a single tank of fuel.

Beyond enhanced operational resilience in an area prone to power outages, the system will reduce fuel consumption and logistical demands associated with generator use.

The project was a collaborative effort between DLA Installation Management and Naval Facilities Engineering Systems Command Sigonella.

"This system will allow for DLA Distribution Sigonella to support the warfighter by providing seamless coverage using its own generated power separate from the power grid," said Navy Cmdr. Renae Renken, commander of DLA Distribution Sigonella. "We now are a more agile and flexible workforce using this new energy-conscious technology that provides greater energy independence in a constantly evolving combat environment."

By Thomas Zimmerman,
DLA Distribution Public Affairs

DLA NEWSWIRE

TRIAL AIMS TO SPEED UP AIRCRAFT PART DELIVERY IN OKINAWA

Defense Logistics Agency Weapons Support at Ogden and the 1st Marine Aircraft Wing have initiated a 90-day proof-of-concept trial to forward-stock critical aircraft parts in Okinawa, Japan.

The initiative, which will conclude April 15, aims to drastically reduce the time it takes to get essential components to Marine Corps aircraft, ensuring they are ready for missions at a moment's notice. The Ogden team plans to discuss the framework and requirements for a Phase 2 with the 1st MAW.

The partnership came about after the 1st MAW identified readiness challenges during experimentation with Distributed Aviation Operations concepts. Recognizing the risk posed by long supply lines in a contested environment, 1st MAW leadership collaborated with DLA to develop this forward-stocking trial as a tangible solution to close the critical logistics gap.

This collaboration addresses the logistical challenges posed by the distances in the Pacific theater. Historically, getting a necessary part from depots in the continental U.S. to Okinawa could lead to lengthy aircraft downtime, often exceeding 20 days and impacting overall operational readiness.

The trial, centered at Kadena Air Base, Japan, involves pre-positioning 21 different parts represented by National Stock Numbers closer to the 1st MAW's flight lines at Marine Corps Air Station Futenma, Japan.

These are not random parts, said Daren Pierce, a logistics support manager for DLA Weapons Support at Ogden.

"The 21 NSNs chosen by the 1st MAW were deemed their highest-demanded items and would be best suited to exercise the 90-day proof-of-concept," he said. "These NSNs provide support to 1st MAW's fixed-wing, rotary-wing and tilted-rotary aircraft."

Under the terms of the agreement, DLA Weapons Support will allocate 250 square feet of storage space at Kadena Air Base and manage the replenishment of the forward-stocked parts. The 1st MAW will provide storage bins, maintain inventory records, and order the designated parts through their established supply system.

By Amy Perry,
DLA Weapons Support (Richmond) Public Affairs

DLA TROOP SUPPORT PROCURES NERVE AGENT ANTIDOTE AUTOINJECTORS

The Defense Logistics Agency Troop Support Medical supply chain is working with medical industry partners to acquire nerve agent antidote autoinjectors.

With a new three-year contract in place, approximately 250,000 to 1 million autoinjectors are now available to military service customers.

The antidote treatment nerve agent autoinjectors are small medical devices prefilled with the medication needed to counteract a service member's potential contact with nerve agents.

The antidote included in the autoinjectors can be self-administered in the field for initial emergency treatment, said Alexander Quinones, the Pharmaceutical Manufacturer and Distributor Division chief.

According to the Department of Health and Human Services, nerve agent antidote is first aid for nerve agent injury. Nerve agents — chemicals that interfere with the nerves that control the body — can cause trouble breathing and seeing. Once administered, these antidote autoinjectors can stop further damage.

"This contract is significant as it facilitates the procurement of these autoinjectors and fills the gap for a consistent, reliable supply of nerve agent antidote for the warfighter," Quinones said.

DLA Troop Support was able to negotiate successfully with the vendor, completing contract negotiations to reopen the ATNAA supply. The organization is working closely with respective military service customers on ATNAA distribution, ensuring devices are available where and when needed.

"We will work with the services to see how to allocate these autoinjectors so that all warfighters in each area of responsibility are positioned for success," Quinones said.

By Alison Welski,
DLA Troop Support Public Affairs

I AM DLA

– DLA photo by Nutan Chada

Jamieson Duvall

Jamieson Duvall is the deputy director of Business Process Support at Defense Logistics Agency Weapons Support (Columbus).

My name is:

Jamieson Duvall

I am:

The deputy director of Business Process Support at DLA Weapons Support (Columbus).

Briefly describe your job:

My office handles analytics and system interfaces and processes. That involves planning, order fulfillment, inventory management and technical quality, along with analytics. We essentially support the rules and tools of how the business works.

How long have you worked for DLA?

Just over 10 years.

What do you like about your job?

It's a great time to be a part of DLA because of the technological advances. As we move into the agency transformation, a lot of what we're doing is attempting to look at those processes and single-up duplications across both Richmond and Columbus. It feels like we're right in the eye of the hurricane, and I wouldn't have it any other way.

How do you feel about being part of DLA's newest major subordinate command?

I'm excited. I've always been somebody who's wanted a challenge in my job, and I think there's great opportunity with this. I tell myself each day that I'm going to have more of a hand in building the agency's future than if I had just been relegated to working on part of repair parts with DLA Land and Maritime. Now I'm working with all of DLA Weapons Support. I get to work with some cool aviation platforms as well, so I'm super excited about that because I'm interested in B-52s and B-1s and B-2s and all of those things since being a little boy with models.

What energizes you about the change and working with your colleagues in Richmond?

Through working on projects with people in Richmond, I realized how like-minded we are. Before, when I felt like maybe I was fighting all on my own from a Columbus perspective, now I have other voices that I can engage with when we speak to Headquarters, or the Office of the Secretary of War or the services.

How do you think this transformation is going to benefit the warfighter?

In Columbus, we essentially had the Army, Navy and the Marine Corps as our primary customers. DLA Aviation in Richmond had the Air Force as a primary customer. Those customers are looking to DLA for information. There were always little twists in how we answered them that might not have been exactly the same. DLA is doing its best to create one process that is efficient and provides customers with the best quality of material.

Is there anything else you'd like to add?

To the vendors, industry and the warfighter, I would say give us time because we're going to have to build. Know that the broader effort is to create efficiencies and cut out the larger fat to make sure we're moving things to them faster.

To the workforce, I would say it's OK to smile. It's OK to not get mired down in the things that are changing and all of the things that you don't know, and to have some fun at work. Remember, it's a marathon, not a sprint. If you're having a bad day, find one or two people and impact them positively. I guarantee that it will boomerang back for you by the end of the day, and you'll feel that you've done something good by helping somebody else.