

SPRING 2019

Distrib^Y Ution

News from DLA Distribution's Worldwide Network - Supplying the Warfighter on Time, Every Time!

FOCUS
on the
FUTURE

WMS
OF THE FUTURE

VOICE PICK
PILOT PROGRAM

MODERNIZATION
IN MOTION

Commander's Corner

Welcome to the Modernization edition of DistribYOUtion! We're all on the modernization voyage together and I want to make sure every employee, valued customer, partner and legislator knows about the great things going on to help modernize our distribution centers and the systems that run them. All of these efforts are being made to ensure we are lock step with the Department of Defense reform strategy.



warehouse with automated material handling systems at DLA Distribution Korea, and exciting news on Distribution's Voice Pick technology pilot program at DLA Distribution San Joaquin, California.

In an attempt to lead innovation and leverage technology effectively, Distribution is putting systems in place to drive increased productivity and greater efficiencies across the entire network. This edition highlights the great projects that are currently underway—from the paramount modernization effort at the Eastern Distribution Center, to an update on the warehouse management system pilot at Corpus Christi, a \$75 million state-of-the-art

Our modernization strategy will take us into the 21st century and beyond. We should see a return on our investment for many of our modernization efforts by 2024. And in the end, we

anticipate the cost savings to be well over \$20 million.

It's an exciting time at DLA Distribution. I am proud to serve as your Commander and proud of this great Team!

HOOYAH!
Kevin Jones
RDML, SC, USN

DistribYOUtion

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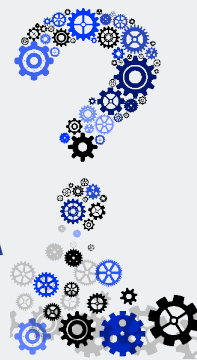
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Modernization in Motion!

Modernization is the key to keeping Distribution competitive and relevant in the new world of DOD Reform

**By Dawn Bonsell,
DLA Distribution PAO**

DLA Distribution's holistic modernization strategy leverages our people, processes, automation and technology to drive increased productivity and greater efficiencies across the entire Distribution network. Modernization is key to keeping Distribution competitive and relevant in the new world of Department of Defense reform.

DLA Distribution Susquehanna, Pennsylvania's Eastern Distribution Center, the largest warehouse within DoD, is the cornerstone project of the strategy. The EDC modernization effort is Distribution's paramount modernization effort to date since the EDC opened for business more than 20 years ago. The project is an amazing opportunity to dramatically transform the way we do business, bringing the best 21st century technology to our largest and busiest distribution center. Over the past several years, we have worked closely with an industry expert to better understand our options, leveraging the successes found throughout the commercial sector. This modernization opportunity promises increased efficiencies, reduced costs, and improved support to the warfighter.

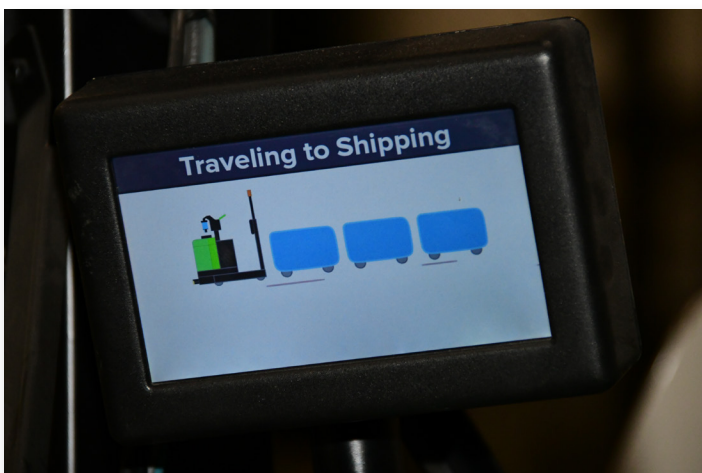
One significant pilot project, currently underway at the EDC, is an unmanned automated guided vehicle. The AGV is currently moving materiel

from location to location, freeing up employees to focus on materiel order receiving and processing. Quick response codes, suspended from the ceiling of the EDC, guide the AGV from a pre-programmed route that directs it from receiving to storage, out loading and then back. In addition, a collision avoidance system is installed in the vehicle and utilizes a laser to detect obstacles in the AGV's path. According to Ramona French, chief, J4 Integration Division, "We just heard that DLA Research and Development was approved to do another AGV/ Vision Guided Vehicle pilot. While we don't currently know the timing of that effort, it is exciting to be able to look across the landscape for this type of automation to find one that best supports our Distribution mission."

The EDC modernization plan has a return on investment of four years and will cost approximately \$107 million. Interestingly, the estimated cost to refurbish the existing equipment is \$57 million. So, in addition to being very cost effective, the solution also provides available modern technology that will support current and surge workloads—268 percent of current— while providing a strong return on investment and business case analysis. Funding is approved and the acquisition planning process is in the works. According to Paul Abel, J4 Director,

"We are very excited about the future of the EDC and will be looking to replicate some of these same technologies across the Distribution network where it makes sense."

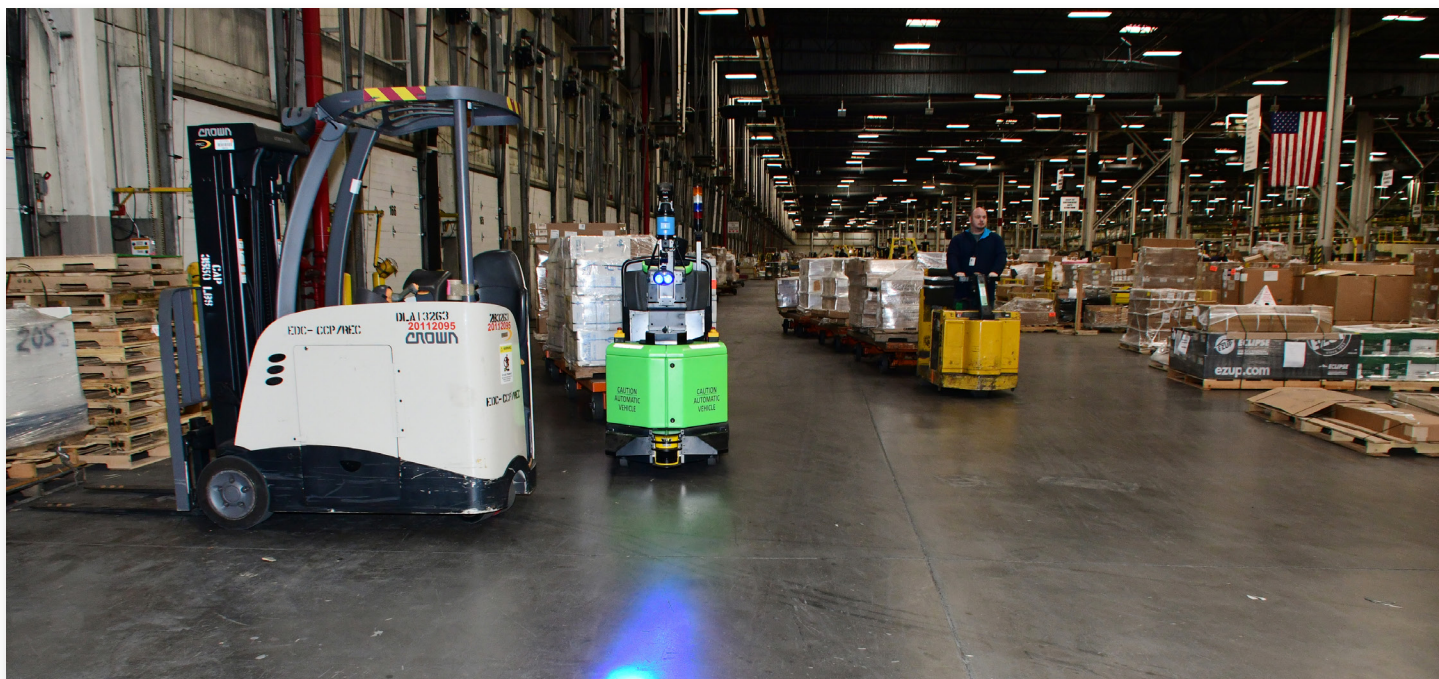
In addition to the EDC modernization project, efforts are taking place throughout the entire



Diana Dawa



An unmanned automated guided vehicle, part of the DLA Distribution modernization strategy, is currently at work in DLA Distribution Susquehanna, Pennsylvania's Eastern Distribution Center, assisting employees by moving materiel from location to location, freeing up warehouse employees to focus on materiel order receiving and processing.



The automated guided vehicle, currently being piloted at DLA Distribution Susquehanna, Pennsylvania's Eastern Distribution Center, features a collision avoidance system and utilizes a laser to detect obstacles in the AGV's path.

Distribution network. The new processes include additional AGV/VGV pilots, goods to man technology, yard management, automated weigh and offer stations, real-time location and pushback racking. Distribution Corpus Christi, Texas is piloting a new warehouse management system that will support the Distribution enterprise now and into the future. DLA Distribution Korea is building a new warehouse that updates a 1960 era warehouse with a state-of-the-art facility that incorporates modern automated material handling systems.

DLA Distribution's western Strategic Distribution Platform and DLA's primary distribution point to the western United States, Pacific and Indian Ocean regions, DLA Distribution San Joaquin, California, has been dubbed the "Innovation Center," and will pilot efficiency improvements aimed at reducing customer rates. Pilot process and productivity improvements are already in motion, including improving workplace organization, workstation layout and technology to support efficient pick and stow activities. Drones, materiel handling equipment, and robotic process automation pilots are also planned activities at the innovation center. New customer offerings will include video-based utilization, slotting and pick sequencing, digital planography and innovative partnerships with industry.

The worldwide Distribution workforce is also discovering a wealth of advantages with wireless and portable technology—specifically tablets and wireless printers. The tablets offer extreme value in the pick and inventory processes, allowing employees to simultaneously search WebFLIS (a system that provides essential information about supply items through a web interface connected to the Federal Logistics Information Service), work in the warehouse management system, take photos, and remain connected via email. This is a huge improvement over the radio frequency guns that cannot connect to the internet or email. The tablets' on-demand, instantaneous results, without the time lapse are much more efficient, potentially saving production time every day.

The tablets are lightweight and durable, while the printers print labels in record time. Armed with a tablet and a mobile printer, employees can work more efficiently throughout the warehouse, without having to go back and forth to a traditional workstation to input information or print labels; and, depending on how far away employees are from their workstation, that can be time consuming. The mobile printers, designed to allow process workers to print labels in location during the processing of materials, reduce travel time, improve end-to-end process time and enable process completion in one location.

As the modernization strategy gains momentum, the agency will continue to look for every opportunity to reduce costs and improve performance across the agency. The Distribution modernization strategy is to design, build, automate and equip the agency around simplified processes while leveraging the latest and greatest technology to provide better support to the warfighter.

Modernization

- Dramatically transforms support (cost, quality and delivery) to the warfighter.
- Provides 200,000 square feet of useable space.
- Reduces pick cycle to one day or less.
- Integrates future technologies.
- Is focused on sites with the largest number of transactions.
- Manually operated vehicles replaced with automatic storage retrieval system. Mini-load cranes will provide goods to man delivery system to high performance picking and replenishment stations.
- Dramatically improves pick productivity – 80 picks per hour.
- 50 percent increase in storage capacity small items to be centrally stored and processed.
- 12 visible ergonomic and safe workstations.
- Constant workflow will increase utilization of employees at high performance stations.



Diana Dawda



Quick response codes, suspended from the ceiling at DLA Distribution Susquehanna, Pennsylvania's Eastern Distribution Center, provide fiducial targets for the Automated Guided Vehicle from a pre-programmed route that directs the AGV from receiving to storage, out loading and then back.



Diana Dawda

Gary Cristiano, inventory action team member, DLA Distribution Tobyhanna, Pennsylvania, uses a tablet during his day-to-day operations.

Warehouse Management System OF THE FUTURE!

**By Diana Dawa,
DLA Distribution Public Affairs**

DLA Distribution's new Warehouse Management System will simplify storage and distribution processes to better align with industry standards, creating a single warehousing system for all of DLA. The new system will not only take DLA Distribution into the 21st century, but the anticipated cost savings are over 20 million.

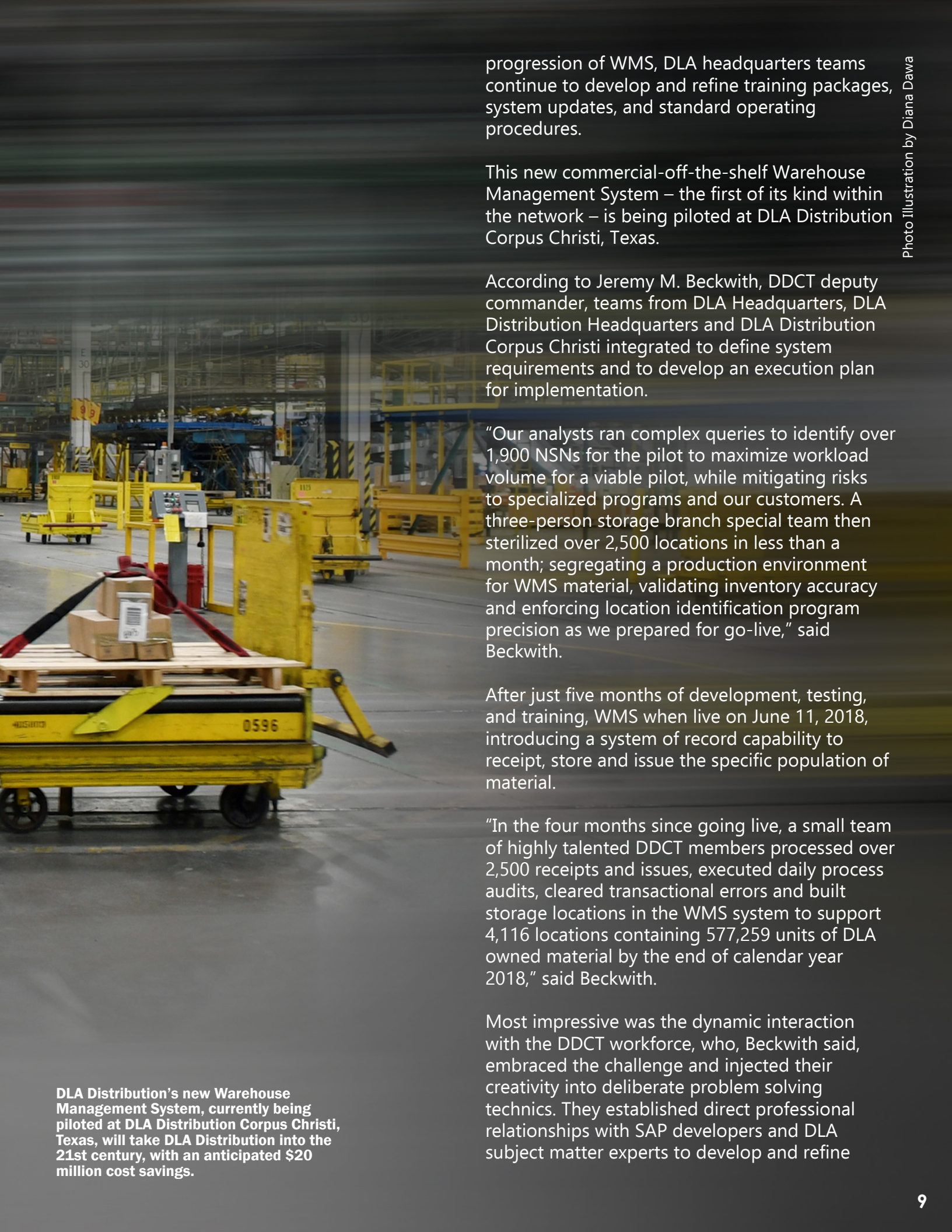
According to Paul Abel, DLA Distribution J4 director, the current Distribution Standard System is a great system in that they have programmed every customer request and ease of use upgrade possible, but it's utilizing a very old programming language called Common Business Oriented Language.

"COBAL was used and built for transactional based business mainframes that are now outdated, so we are moving WMS to the Cloud. We recognize this update as a strategic move toward the future for DLA Distribution," said Abel.

DLA's Enterprise Business System, a supply system, is Systems Applications and Products based and the new WMS will also be SAP based. This will align two of DLA's major operating systems on a single software platform, reducing complexities and streamlining processes.

Finally, said Abel, "We are keeping this deployment to commercial-out-of-the-box as much as possible as DLA moves to a software as a service model, which means we will buy the service and future updates from the vendor, similar to when smart phone companies push out updates."

Through several future releases, WMS will continue to expand capabilities and processes for DLA, improving logistics and information technology interoperability. In coordination with system developers and aligned with the



progression of WMS, DLA headquarters teams continue to develop and refine training packages, system updates, and standard operating procedures.

This new commercial-off-the-shelf Warehouse Management System – the first of its kind within the network – is being piloted at DLA Distribution Corpus Christi, Texas.

According to Jeremy M. Beckwith, DDCT deputy commander, teams from DLA Headquarters, DLA Distribution Headquarters and DLA Distribution Corpus Christi integrated to define system requirements and to develop an execution plan for implementation.

“Our analysts ran complex queries to identify over 1,900 NSNs for the pilot to maximize workload volume for a viable pilot, while mitigating risks to specialized programs and our customers. A three-person storage branch special team then sterilized over 2,500 locations in less than a month; segregating a production environment for WMS material, validating inventory accuracy and enforcing location identification program precision as we prepared for go-live,” said Beckwith.

After just five months of development, testing, and training, WMS when live on June 11, 2018, introducing a system of record capability to receipt, store and issue the specific population of material.

“In the four months since going live, a small team of highly talented DDCT members processed over 2,500 receipts and issues, executed daily process audits, cleared transactional errors and built storage locations in the WMS system to support 4,116 locations containing 577,259 units of DLA owned material by the end of calendar year 2018,” said Beckwith.

Most impressive was the dynamic interaction with the DDCT workforce, who, Beckwith said, embraced the challenge and injected their creativity into deliberate problem solving technics. They established direct professional relationships with SAP developers and DLA subject matter experts to develop and refine

DLA Distribution’s new Warehouse Management System, currently being piloted at DLA Distribution Corpus Christi, Texas, will take DLA Distribution into the 21st century, with an anticipated \$20 million cost savings.





Edward Buckelew

raining packages, system updates and standard operating procedures.

“Throughout the implementation process, the workforce at DLA Distribution Corpus Christi continues to test and provide quality control from an end user’s perspective to ensure this new warehouse management system meets the requirements that DLA expects, and that our Warfighters deserve,” Beckwith stated, adding, “We feel fortunate to lead this initiative down here in Corpus Christi, and to exploit the new system to its maximum potential to revolutionize the distribution and disposition process.”

“We are headed toward completion of the pilot by the end of this fiscal year. Once all capabilities that are needed to run a distribution center are in the WMS, we will have a 90 day period to assess that everything is in the software, working correctly, and that the system is auditable. It is imperative that we get it right at DDCT before we move to another site,” said Abel.

While the WMS Refresh is currently under pilot at DDCT, still, there are a lot of Distribution folks working the project simultaneously at the Distribution headquarters J4.

The team is currently working on a deployment plan with the goal of getting this out to all the sites by the end of fiscal year 2021.

“We are moving forward and seeing success,”

said Abel.

MODERNIZATION

By Cory Angell, DLA Distribution Public Affairs

Modernization has reached Defense Logistics Agency Distribution Korea with a \$75 million Republic of Korea funded construction project for a warehouse and a \$5.8 million modernization project inside the new facility.

The new facility and new equipment were combined with new ideas and efficiencies in how to do business; going from a 1960 era warehouse into the future.

“Not only was a new warehouse needed, we needed to upgrade the equipment and processes,” said Glen Harry, the industrial engineer who helped design the new facility and its modernization. “This will be a state-of-the-art facility with automated material handling systems.”

Harry said that when the construction is complete sometime in 2020 and the automated systems are in place; the facility will be the most up-to-date in DLA Distribution.

According to the project description and justification written for the project; the Camp Carroll facility was originally constructed in the 1960’s and has numerous deficiencies that needed repaired. The new two-story warehouse will provide 250,000 square feet of storage and

Inspectors at the DLA Distribution Korea swing space. Materiel will be moved from the swing space to the new warehouse slated for completion in 2020.



25,000 square feet of administrative space, along with 20,000 square feet of hazardous material storage.

The modernization includes the installation of an automated/mechanized material handling system and racks used for transferring materials in the new facility.

“Think of it like this; instead of bringing man to materiel, we will bring materiel to man,” said Harry. “This will reduce costs, reduce facility space requirements and decrease warehouse receiving, storage and shipment times.”

Harry said that the cost benefit analysis completed on the facility showed that the \$5.8 million in modernization would be recouped in savings in just over two years.

“The automated system has a 360 degree scanner that will read packages, orient them on the conveyor and deliver them to work stations for

at DLA Distribution Korea takes 1960 facilities into the future



The new two-story DLA Distribution Korea warehouse will provide 250,000 square feet of storage and 25,000 square feet of administrative space, along with 20,000 square feet of hazardous material storage. The modernization includes the installation of an automated/mechanized material handling system and racks used for transferring materials in the new facility, reducing costs, facility space requirements as well as warehouse receiving, storage and shipment times.



Rear Adm. Kevin M. Jones, SC, USN is touring the former, 1960 era Korea warehouse with LTC McGee, commander, DLA Distribution Korea and Ms. Macy Ooka, deputy commander, DLA Distribution Korea.

USACE, Far East District placement. From there they will be ready for pallet storage, package storage, bin storage or transshipment."

Harry said that modernization includes new styles of forklifts and very narrow aisle pallet rack storage 25 feet high that will maximize the cubicization of the facility and enable workers to increase productivity.

"Different styles of conveyer belts will help workers move materiel to include a vertical system to move materiel between the floors and a palletized conveyor system," said Harry. "There is also a greatly increased capacity for storage in the event there was a need for surge capacity."

Harry said that they had two loading dock doors and the new warehouse will have 10; greatly increasing the ability for trucks to load and unload at the new facility.

"The requirements for these new facilities are critical to supplying all Korean peninsula operations with daily logistical support in peacetime, contingency, and wartime operations," said Army Lt. Col. James McGee, commander, DLA Distribution Korea. "These new facilities will meet the Army Standards and are critical for DLA to continue to fulfill their mission requirements."

1st Lt. Tyler Hultgren DLA's new warehouse is considered Phase I of a multi-phased ROKFC series of projects to modernize the Army's logistics hub for the installation.

Voice Pick Technology Pilot Program Goes Live

at DLA Distribution San Joaquin, California

**By Annette Silva,
DLA Distribution San Joaquin Public Affairs**

DLA Distribution San Joaquin, California went live with the Voice Pick Pilot program Feb. 11 and will continue to test the technology until June.

This pilot is in direct alignment with the DLA Strategic Plan 2018-2022 under the First Line of Effort, Warfighter First; Objective 1.4 Predictive Technology. The voice pick technology gives DLA Distribution the platform to test the benefits to obtain an overall goal to reduce cost and gain efficiencies by automating and modernizing DLA storage and distribution functions.

Currently, the voice pick pilot is going well at DLA Distribution San Joaquin.

To date, 44 operators have received template training where the employee must say different phrases repeatedly to enable the Voice system to recognize their voice. Additionally, 24 operators are fully trained on the new technology.

According to Bin Division Chief Anthony Zuk, the test area in the Bin Division has successfully

picked nearly 1,000 line items more efficiently in the very early stages of this pilot program. Further, the Workload Management System provides a multitude of options from managing/ assigning workload to verifying that picks have been completed from a high-level view.

As with any pilot program, there will be challenges to overcome.

“There have been several challenges that we’ve faced but they have been resolved very quickly by our J6 programmers working with the contractors,” said Zuk. “Although we are still testing and need more volume to ultimately test the full functionality and capability of Voice, we are optimistic that this system will be successful and provide greater efficiency in assigning workload to employees, managing our workload more effectively and improving our operators’ productivity.”

Some specific challenges faced included the materiel movement label, which prints when a voice pick is confirmed. The right information must be available on the label to allow the operators packing the materiel to verify that it is compliant with audit readiness standards at time of pack. The contractor is near completion of the required changes to allow the Bin Division to fully test this part of the process and expand testing to the next phase of the pilot. Further, programming is being completed to ensure that a zero-balance condition is always verified when the recorded location balance reaches zero at the time of pick.

Anthony Kotta, distribution process worker and lead voice pick tester of the Bin Division has been trained on this technology and enjoys using it.



Annette Silva

The Voice Pick technology equipment gives DLA Distribution the platform to test the benefits to obtain an overall goal to reduce cost and gain efficiencies by automating and modernizing DLA storage and distribution functions.

"In my opinion, the voice pick equipment is user friendly. The initial setup was straight forward for creating a voice template that will recognize the way you say certain words, phrases, and numbers," he commented.

Kotta went on to explain that he feels this technology will benefit the selection process of the Bin Division.

He stated that it was beneficial not having to stare at paper and key/scan data into a radio frequency gun while navigating down some narrow aisles increasing the speed processing.

Further, Kotta felt that hearing and speaking the quantity definitely improved accuracy by eliminating the possibility of misreading the quantity from a paper pick ticket.

As with any new technology, there is a learning curve.

"It was easy to learn the voice equipment; however, getting down the correct speech commands was the hard part. For instance, if you didn't hear the location you needed and spoke the command "repeat", the voice will not respond. But if the correct command of "say again" is used, the voice will respond with the required location. After you get the commands down the rest is easy. Listen to the voice and do what it says," Kotta said.

Upon completion of the Voice Pick initiative, the expected results include increased productivity, accuracy and safety. This technology will be beneficial to the Bin Division, as the contractor has stated that it can improve efficiency by up to 35 percent. Zuk agrees with the statement based on the preliminary testing results.

Upon the successful conclusion of the pilot program, DLA Distribution San Joaquin plans to roll this voice pick technology throughout the mission area of the distribution center.

The Bin Division at DLA Distribution San Joaquin is the area that is currently testing the voice pick technology. Pictured is Anthony Kotta, the lead voice pick operator, selecting items using the technology.

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**"I am proud to serve as
your Commander and
proud of this great Team!"**

-Kevin Jones
RDML, SC, USN