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CRANE ARMY

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DEMILITARIZATION

CRANE Quarterly Magazine

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Commander's Comments

Legacy. Relevancy. Opportunity.

Those are the themes of this issue of the Crane Quarterly which celebrates all the efforts by Crane Army employees who have enabled our mission to continue for the past 45 years. These efforts are still ongoing today.

When I first took command at CAAA, I was asked about what part of Crane's legacy I hoped to continue. After a year at CAAA, learning the depth and complexity of our mission, I truly appreciate the historical legacy, dedication, and commitment of our organization. Our past forged our path, but now it is up to us to continue and improve CAAA as we know it. I'd ask you all to take a moment and think about and share your personal connections with CAAA, as our ties to family and community go back decades in some cases, as we highlight in this issue. The heart and reputation of CAAA resides with our phenomenal personnel. I believe even more now that our future legacy and mission success can only be achieved if there is a dedicated and skilled workforce making it happen.

I can only imagine what CAAA's first commander, Lt. Col. George Connor Jr., thought as he took command 45 years ago during a milestone day for this installation. Although Crane Army was a new command, it had the benefit of inheriting a seasoned workforce from the Navy that knew the importance of supporting the Joint Forces. They had to learn new accounting and reporting systems for the Army and execute their mission in the safe and reliable manner that people had come to expect from Crane going all the way back to its inception during WWII. Those early Army Civilians set the standard we still match and exceed today. Though four and a half decades have passed, our employees have adjusted to a changing world and military and excelled. From the Cold War era through today, one constant has remained – Our safely providing munitions readiness to the Warfighter.

It is our people who have always been the ones over the years to get the ammunition out the door to our troops when it is desperately needed. We have always applied our manufacturing and engineering skills to enable a production line to run more smoothly. We will continue to improve our infrastructure and develop projects that build up our capabilities for future workload. It is our people who embrace opportunity and continue to build our legacy in the years to come.



Happy 45th Anniversary Crane Army!

V/R,
Col. Vasquez

A monument outside of the Crane Cafe is dedicated to the munitions employees who worked at the Navy base when it was first established during World War II. CAAA inherited a strong legacy when it was founded in 1977.

NEWS & NOTES

1 Did You Know?

Technically the United States has had an Army longer than it has been a country. Our country had not yet been formally established when George Washington led the first Continental Army after a measure passed by the Second Continental Congress on June 14, 1775, a year before the Declaration of Independence was even adopted.

2 By the Numbers:

96 K

U.S. Industrial Mobilization During WWII

The number of tanks manufactured

7 M

The number in tons of aircraft bombs produced

8 M

The number of Soldiers equipped

78 B

The number of rounds of small ammunition produced

9513

The number of civilian employees at Naval Ammunition Depot, Crane during peak WWII workload

690

Continuing the Legacy

The number of civilian employees that made the move from the Navy to the newly formed CAAA in 1977

650

The approximate number of civilian employees in 2022



Safety is Central to Army Readiness

At Army Materiel Command, experts are ensuring its subordinate organizations like Crane Army Ammunition Activity are actively instituting policies and procedures to promote a culture of safety throughout the enterprise.

A pending Army directive to implement a Safety and Occupational Health Management System is expected to be released in October and states that the adoption of ASOHMS by commands will enhance mission capabilities and reduce safety and health-related mishaps by improving the standards of safety and health within workplaces and increasing personnel readiness through effective risk management.

3 Overheard

"The way we have conducted **sustainment** in the past will not be sufficient for future operations in a complex environment and extended battlespace that is contested across all domains. The way we have conducted sustainment operations with large storage and distribution areas moving predictably along prescribed routes and distribution points will be challenged in the future. We will no longer have **complete unchallenged lines of communication from our depots, arsenals, ammunition plants and installations** through ports of embarkation and debarkation to the tactical edge; **we must modernize** both our systems and processes to protect our deployed units and materiel in a contested environment."



Gen. Ed Daly
AMC Commanding General

Recon



An explosives handler with CAAA's Depot Operations processes new inventory at CAAA's receiving facility.



A machinist in CAAA's Manufacturing and Engineering directorate operates semi-automated machinery to fabricate munitions-related components.



A CAAA explosives handler wipes down an M112 training round before it goes to paint.



A CAAA explosives handler works with Naval Submarine Base Bangor crew members to test marine acoustic device countermeasures.

History 101: The Organic Industrial Base

The first Continental Army ordinance supply chains were established in 1775 when George Washington mobilized the first American army. By 1777, a powder magazine was established at Carlisle, Pennsylvania, along with a foundry at Springfield, Massachusetts, which helped supply the Continental Army throughout the Revolutionary War. When Watervliet—the oldest arsenal still operating today—began operations in New York during the War of 1812, there was a desperate need for growth as the country produced and stored munitions for an expanding army.

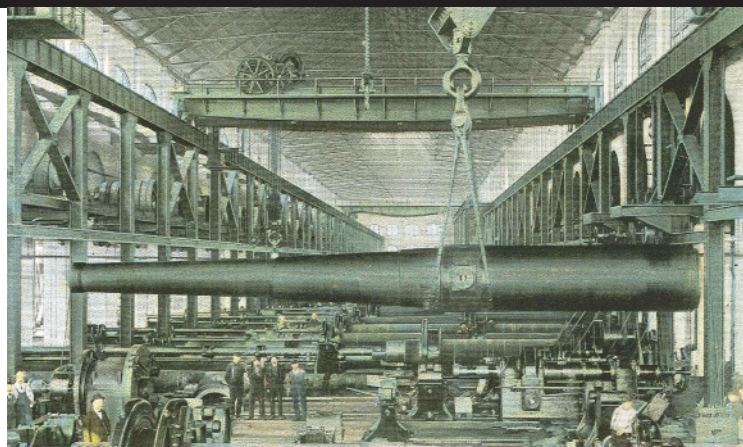
By the Civil War, the Army had built several permanent arsenals and depots in major cities. These helped to support the first one-million soldier army. New processes were implemented as the Industrial Revolution continued to mature during the latter decades of the 19th century. WWI ushered in a new modern era, but little growth occurred during the peaceful interwar years afterward.

The onset of WWII required a major growth spurt in the production, shipment and storage of munitions. Large-scale government-owned, government-operated installations were quickly mobilized and 77 government-owned, contractor-operated facilities were created. Crane, the U.S. Naval Ammunition Depot, Burns City, Indiana, was commissioned on December 1, 1941, to fulfill a need for an inland base for the loading and storage of ammunition.

After WWII, and stretching into the Korean War, many ammunition plants concentrated on the demilitarization, renovation and the production of fertilizer. Between the years of 1953 and 1964, large stockpiles and advancements in technology reduced the number of ammunition plants from 86 to 26. But during the Vietnam War, these plants continued to produce enough ammunition to support the war effort.

After Vietnam, with a goal of consolidating several agencies, the Single Manager for Conventional Ammunition concept was created and assigned to the U.S. Army. Crane Army Ammunition Activity was formed in 1977. The goal of the SMCA was to conjoin the complete life cycle of munitions under one command. This included producing, storing and managing conventional ammunition for the Department of Defense. It created a more efficient way to maintain operations for all branches of the Armed Forces.

CAAA became a subordinate of the Army Material Command, established in 1962, and later the Joint Munitions Command which was reorganized in 2003 after



First 16-inch gun made at Watervliet Arsenal in New York.



The onset of WWII required a major growth spurt in the production, shipment and storage of munitions.



The Mark 20 Rockeye bomb, first fielded in 1968 in support of the Vietnam War, in production at CAAA.

being part of the Army's Operation Support Command. Both commands have weathered overhauls over the years, but the OIB continues to focus on maintaining readiness, building surge capacity and modernizing current operations.

Today, Crane Army continues to move through the 21st century safely and efficiently as one of the military's top suppliers.

THEN & NOW: 45 YEARS OF AMMUNITION EXCELLENCE

Foundations

On October 1, 1977—a warm and sunny Saturday—a crowd of people gathered around the gray columned portico of the headquarters building on Naval Weapons Support Center Crane to listen to remarks by Capt. J. E. Edmundson. Until two years earlier, his command had widely been known as Naval Ammunition Depot Crane, where thousands of workers had produced and managed munitions for the Navy since World War II. Behind the speaker at the podium was a sign with another name and logo hidden by long curtains that would soon be swept aside as unit activation orders were read aloud, announcing a newly formed organization. To the side sat Army Lt Col. George H. Connor, Jr. who listened as orders were read appointing him as the first commander of this new organization. Rising for his own speech, he then joined his wife in cutting a birthday cake during a traditional military ceremony that was the first in Crane Army Ammunition Activity's history.



Red Letter Day: Activation Ceremony for Crane Army Ammunition Activity, October 1, 1977

Widespread changes with the military's sustainment communities had been the driving factors for forming an Army command at Crane. Two years earlier, after the U.S. had withdrawn from supplying its troops involved in the Vietnam War, the Department of Defense had established the Single Manager for Conventional Ammunition. This directive had assigned the Army as the "Single Manager" for all branches of the military services, responsible for the procurement, production, supply, maintenance and renovation of conventional ammunition. Two other Naval installations—the ammunition depots at McAlester, Oklahoma, and Hawthorne, Nevada—had also been affected by the "Single Manager" assignment and named as Army ammunition plants. At Crane, however, the Army had assumed NWSC Crane's ammunition production functions and established a new command. CAAA had arrived and was here to stay.

"The concept of Single Service Management of conventional munitions is oriented toward the economical utilization of existing facilities and resources while maintaining a high level of deliberate responsiveness to user requirements. The unification of all conventional munitions procurement, production, storage and maintenance management will allow all the Services to enjoy economies of scale beyond those otherwise available."

- Concept Study for Establishment of a Single Service Manager for Conventional Ammunition, May 28, 1975.



A Joint Effort

"Crane's transition to the Army in 1977 was unique," Keri Pleasant, a historian with Joint Munitions Command, explains about Crane's activation 45 years ago. "Unlike the other Navy installations, it became a tenant at NWSC Crane, which would provide essential support services through interservice support agreements."

"Throughout its history under Navy and Army management, Crane has evolved to meet modern requirements, but, its lasting presence and success have been dependent on the workforce who produced and delivered munitions at a moment's notice to meet the demands of war for over 80 years."

The First Year

At its founding in 1977, the manpower pool for the newly formed CAAA consisted mainly of on-board NWSC personnel. Approximately 690 Navy employees, basically the former Navy ordnance department, accompanied by some additional personnel, transferred into the Army.

Tommy Davis, who would eventually retire with CAAA after a 50-year career, was among them.

"It was very smooth," Davis said. "As production workers, we went home one night as Naval employees and came back the next day as Army. We really had no choice in switching. There were a few people that quit, and some retired, but mostly everyone just transitioned."

Setting the bar high, CAAA excelled in its mission performance during its first year in operation despite some systems-related problems that occurred during the transition period. Major production lines performed at 108 percent efficiency at a workload level only slightly below that of fiscal year 1977. The industrial shops experienced a full workload in support of production, NWSC Crane, and other customers. A "wall-to-wall" inventory of all Single Manager stocks which were not inventoried the previous year was successfully completed. All open storage was eliminated and large amounts of excess materiel were demilitarized. Despite funding constraints in the depot operations mission, both receipt and shipment tonnages were above program for fiscal year 1978. All vital shipments were made on time and the number of late shipments reduced substantially.

Two challenging events tested CAAA's mettle during its first winter months. First, the record "Blizzard of '78" forced the closure of the base for two days in January. Several employees at the Rockeye facility were stranded on the installation but accommodations and food were provided by NWSC Crane to all personnel caught on station by the storm. A second trial arrived with a national coal strike and the curtailment of electrical power by Public Service Indiana. The electricity shortage was eventually mitigated through conservation and by setting up the capability to generate electrical power at NWSC Crane. Overcoming challenges and rising to the occasion had become hallmarks of the CAAA ethos during its first year, and CAAA established a successful track record from the very beginning.



Tommy Davis

Retired Quality Assurance Inspector

A Crane employee since 1968, Davis joined CAAA at its inception and looks back on a fifty-year career

Q: Would you work for CAAA again if you could go back?

A: It was a good career. I started out in the Navy Evaluation Laboratory then moved to production at the time of the move [in 1977]. I spent 30 years in inspection before retiring a couple of years ago. I might do things differently, but I would do it over. The people are the main reason. Everyone I worked with over the years became friends, more like one big family!



Q: What was the biggest change that you noticed during that transition from the Navy?

A: What I noticed the most was safety. It improved so much as CAAA continued to grow. At first, the Navy was still in charge of safety until the Army formed its own department, and when it did, it was much better.

Q: How has technology changed over 45 years?

A: Computers! In 1977, no one knew anything about them. We all had to learn. It was all new and a pain to learn! Everything has modernized... robotics, new computer programs and processes have all grown and changed so much.

Q: Technology has been one of the biggest changes, but what is something else that you noticed that is different?

A: The updates on the buildings have been great! New break rooms, better lighting and floors, and even some air conditioning. Some of the old buildings were just getting run down.

Q: In the past 45 years what do you think has changed the most?

A: The way we keep track of things. We were a pencil and paper workforce back then. And then we stored records in filing cabinets. We counted things by hand and used calculators to add them up!

Q: Then versus now... Was there anything 45 years ago that we did better than we do now?

A: No, I don't know that anything was better, just different. Things have changed over the years, but mostly for the good of the job.

Building On A Legacy



"World War II required the largest government ammunition industrial base buildup in U.S. history. In 1941, a network of ammunition plants was built around the country, at a great cost to the government. It truly was a monumental effort to rapidly mobilize the nation's resources and build installations like Crane in such a short timeframe. Crane was established by the Navy prior to WWII, and commissioned less than a week before Japan's attack on Pearl Harbor. Its first missions were to receive, load, renovate, store and issue all types of ammunition. Crane's first capabilities included gun ammunition, pyrotechnics, land mines, bombs and bomblets. Pyrotechnic production included smoke and flame marine location markers, used for rescue efforts and submarine surveillance."

-Keri Pleasant, Joint Munitions Command historian

A Place Like No Other

Forty-five years later, CAAA continues to be a premier provider of conventional ammunition to the Department of Defense, safely providing ammunition to the Warfighter regardless of the challenges involved. For four and a half decades, its employees have adapted to a rapidly changing world as new conflicts and opportunities have arrived. Still a key component of the Organic Industrial Base, CAAA has continued to evolve to remain relevant and ready, from modernizing its technology and processes to breaking ground on new facilities to drive down costs and drive up efficiencies.

"The ammunition industrial base has been reconfigured several times to meet projected requirements, accommodate changing weapons technology and incorporate improved manufacturing methods," Pleasant said.

Although the landscape of ammunition production, management and logistics has changed over the years, one constant has remained: the professionalism of the CAAA workforce to accomplish its mission.

Norm Thomas, CAAA's deputy to the commander, has been one of those employees for most of CAAA's history.



CAAA Employees, 1983

"As we celebrate our 45th CAAA anniversary, I reflect back on my years since 1983 and realize that although our products, facilities and faces have changed, our dedication and commitment to 'provide only our best to the world's best' has not changed," Thomas said. "I have always been amazed at our ability to pull out all the stops when we needed to surge for an outload or produce or renovate an item for quick delivery to the field."

"The 'can do' attitude of the CAAA workforce is unequaled in getting the right product to the right place at the right time."

The Next 45

CAAA's 45th anniversary is not just a celebration of history but also of the workforce that continue to make history today. The Army is currently undergoing a once-in-a-generation transformation that is setting the stage of the future and includes investment in people and the development of new equipment and processes.

"As we move forward toward the next 45 years, there will be new products, facilities and faces, but I am confident that the CAAA workforce will always be there to support the warfighter by carrying on the legacy of the munitions mission here when they need us," Thomas said.



MANUFACTURING AND ENGINEERING



CAAA personnel in the Manufacturing and Engineering directorate have been busy the last few months **integrating new ideas into the production process**. Prime examples include new ways to print on live energetics, assisting on projects new to the directorate and modernizing equipment to safely increase production.

The countermeasures department has recently introduced a new printing technique to the flare program: a Keyence ink jet printer that can apply a warning label on live energetics. This process is being safely conducted through a no-touch system that is reducing the amount of handling done by operators.

Recently, another project involving Acoustic Device Countermeasures was completed as part of a team effort with the Naval Submarine Base Bangor and the Keyport Naval Undersea Warfare Center. Crane Army assisted with the inspection and maintenance of the devices which are also known as sonar jammers. This high priority job was formerly performed in Depot Operations.

The engineering department has also successfully tripled production on a project involving a Stokes rotary press. The press, used to make pellets for supplementary booster charges on 155mm artillery rounds, has been an ongoing project for some time. But after evaluating the process with help of the manufacturer, the team has safely added new tooling and manipulated controls to revitalize the dated press. The update has also reduced the labor involved in the pressing process by freeing operators up to perform other important tasks.

Manufacturing and Engineering continues to work on ways to modernize equipment, processes and the workforce skill set. Moving into the future, Crane Army plans to stay up to date and be competitive when it comes to safely supporting the U.S. military.



DEPOT OPERATIONS

With four directorates, hundreds of workers and dozens of pallets of munitions on the move at Crane Army Ammunition Activity every day, the **Ammunition Operations Center** is one of the most important efforts that keeps the activity safe and working efficiently.

The AOC is a one-stop shop that tracks day-to-day work around the installation and keeps track of CAAA missions going on around the world.

"We've also worked closely with the FBI, Explosive Ordnance Disposal and the Indiana State Police," Steve Cummings, logistics management specialist, said. "Managing communication both internally at Crane Army and externally is critical in the AOC."

The AOC was established in 2005 due to a growing need for a common operating system to centralize communication at Crane Army. Leadership at the time specifically requested the ability to know the status of any field crew within five seconds.

The center grew from a small shop updating a spreadsheet to a cost-efficient and eagle-eyed team that updates LMP in real time to keep track of the hundreds of missions that take place at CAAA on any given day. The work that the AOC does to track and communicate has improved safety and security for field crews in addition to mitigating shortfalls in equipment and personnel.

"The AOC is a tool in place to make everyone at Crane Army's job easier. We are all more efficient knowing what is going on and where crews are around base," Cummings said. "Knowing each incident helps us keep our people safe."

Having access to the information and data of current operations at CAAA leads to better decisions made about priority missions. In the event of weather or a major incident, the AOC can keep the workforce in the right place and safe from any potential risks. Easy access to data also helps the planning process for Depot Operations – they can add crew members, reschedule missions, beef up the work schedule or clear areas of crew faster than ever.

"Just like how knowledge is power, having access to current information is critical," Cummings said.

AOC employees are tasked with sending incident reports to relevant staff at Crane Army, and even to some of the Navy workforce on the installation. Most incident reports are related to property damage, injuries or explosive safety – but some reports cover near-miss incidents or are informational in nature.

"The incident reports capture attention from its recipients," Misty Kelsey, Ammunition Operations Center



coordinator, said. "They're good for sharing information and improving safety measures."

Attention raised from reports has led to changes across the activity in standard operating procedures, deadlines, equipment usage, road blocking and work redirection. Though every incident report doesn't have an impact on operations at CAAA, the workforce can rest assured knowing that the AOC will do everything in its power to keep them safe.

"If you call the AOC, you know we are going to do what we can to help you," Kelsey said.

The Crane Army workforce can report injuries, fuel needs, road blockages or snow removal. The team is also equipped to get facility repairs in motion, coordinate government and specialty vehicles for depot operations, find help for an employee with a flat tire or even issue a weather report to callers.

"All of the pieces of the Crane Army puzzle have to come together to get our people to the right places at the right time," Cummings said. "We work hard to make sure all of our people, not just depot operations, are always in the right place."

As a result of their extensive knowledge around the installation, the AOC acts as a single point of contact for all Crane Army operations. Practicing complete communication internally and externally with CAAA stakeholders has made the AOC a valuable source for critical information for the people of Crane.

ACTIVITY SUPPORT

The **Preventive Maintenance Division** consists of two general maintenance mechanics and one lifting device inspector. They perform regularly scheduled maintenance on production and support equipment throughout all Crane Army directorates. This helps to prevent breakdowns that could lead to significant downtime. By conducting routine inspections, they can predict the need for downtime to maintain and repair equipment.

The division stays busy inputting new maintenance plans into the Facility Equipment Maintenance System and are constantly learning how to better maintain CAAA's equipment. PM personnel also perform Title V inspections to protect the environment and test ultra-high-speed portable deluge machines to help keep CAAA safe.

The division is also working to establish CAAA's Weight Handling Equipment program. The inspector has been collecting an inventory of all WHE to ensure the equipment is properly serviced and certified. Pallet jacks have been a focus of this program with more than 15 tested and certified every week.

The PM Division will continue doing their part to keep Crane Army running safely, smoothly and efficiently.



Mike Quick
General Maintenance
Mechanic

STAFF



Lynn Kiser
Civilian Pay Administrative Specialist

Every two weeks, Crane Army's **timekeeping cell** ensures hours worked are recorded accurately. Previously, the task was accomplished by more than twenty timekeepers spread throughout the directorates and their divisions.

Headed by Lynn Kiser, Crane Army's civilian pay administration specialist, the S1 timekeeping cell includes a financial management specialist and financial technicians who are responsible for inputting hours worked into the Logistics Management Program system.

"This process was put together to streamline the collection of information," said Kiser. "It goes to one place and one group to complete the reporting of time."

"In an audit atmosphere, it helps to have all the documentation and information in one area so that audit requests are handled efficiently and with less effort and disruption to others," she said.

If Crane Army employees would like to help ensure pay is processed as smoothly as possible, Kiser recommends submitting timesheets in a timely manner, and if applicable, working with supervisors to verify hours worked are reported and accurate. The timekeeping cell is always available to answer questions and make changes as necessary.

EMPLOYEE SPOTLIGHT

Curtis Russell

Tool Maker



As a production, storage, distribution and demilitarization depot, Crane Army Ammunition Activity employs a highly skilled workforce to accomplish its unique mission set.

From forklift operators and explosives handlers in Depot Operations to mechanical engineers and fabricators in Manufacturing and Engineering, the dedicated people at Crane Army have the skills and experience necessary to ensure our service members receive the highest quality products each and every day.

Curtis Russell, a master craftsman at ME's machining center—a full-service machine shop that provides engineering and technical support for high-capacity production and machining—started out as a machinist helper and a Pathway employee in 2010.

After graduating from Vincennes University with a degree in advanced manufacturing, Russell was hired as a machine tool operator where he assisted in the manufacture of a variety of parts related to conventional munitions and ammunition.

Later, Russell secured a machinist position where, in addition to manufacturing parts, he was given more responsibilities and trusted to communicate with customers and help resolve issues in and outside the shop.

As a machinist, he assisted with set up and efficiency improvements of some production facilities, and

later, helped get the pyrotechnic facility back on track after an accident left much of the tooling unserviceable.

Today, Russell is a tool maker, and solves complex problems in the manufacturing and machining process, assists machinists and CNC machine operators as needed and, in general, lends his expertise where required to ensure the highest quality product is produced for the Joint Force.

"I've put in more than my fair share in overtime and staying late to ensure jobs get done," said Russell. "And I've had a lot of input in how some problems have been solved."

"Curtis is by far one of our most talented tool makers that we have at the machine shop," said Aaron Smith, a planner estimator at the shop.

"He is always willing to help no matter what the job is, he is quick to mentor less experienced employees, always conducts himself in a professional manner and is one of our go-to guys to figure out difficult parts to produce," Smith said.

"From day one, I've pretty much just been here to make sure our warfighters get what they need," Russell said.



Only Our Best For The World's Best

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