

# Crane Army Ammunition Activity

Ammunition and Missile Life Cycle Support

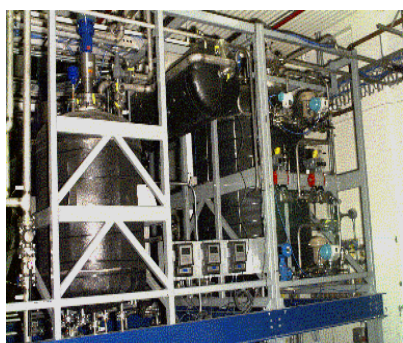
## Partnering With You.....

Manufacturing

■ Pyrotechnics



■ Logistics



Demilitarization ■



■ Maintenance

Renovation

## .....To Support The Joint Warfighter

# Ammunition For The World's Best



**Crane Army  
Ammunition Activity**

Commander  
Civilian Executive Assistant  
Executive Officer

**Liaisons**

Navy  
Marine Corps

**Special Assistants**

Safety  
Contracting  
Security  
Continuous Improvement  
Strategic Planning  
Marketing  
Reserve Affairs  
Audit

**Directorates**

Resource Management  
Manufacturing & Engineering  
Depot Operations  
Quality  
Letterkenny Munitions Center

# Crane Army Ammunition Activity



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## Mission:

**To receive, store, ship, produce, renovate,  
and demilitarize conventional ammunition,  
missiles, and related components**

**For More Information:**

Visit Our Website at [www.crane.army.mil](http://www.crane.army.mil)

# Your Needs Are Our Mission...

## ISO 9001:2000 Certification

Crane Army Ammunition Activity and Letterkenny Munitions Center (LEMC) are certified jointly to the ISO Quality Management System Standard. The scope of our multisite Certification of Registration is: *Manufacture, Storage, Demilitarization, Renovation, Maintenance, and Shipment of Ammunition, Missiles, and Related Components.* CAAA has been certified to the ISO Quality Standard since 1998.



## Public-Private Partnerships

Our unique capabilities, skilled workforce, equipment, and secure facilities, coupled with our willingness to work with the customer, have made Crane Army Ammunition Activity and Letterkenny Munitions Center valued members of teaming and partnering arrangements for defense and non-defense items. We have a full time business staff dedicated to providing our Industry partners with quality products and services in support of the warfighter. We continue to seek new opportunities to team with private industry to establish “win-win” arrangements.



## Lean Six Sigma

Crane Army Ammunition Activity has a full time staff of Lean Six Sigma specialists committed to continuous improvement. Our efforts focus on the elimination of waste and non-value added actions. Continually improving our processes allows us to provide our customers with quality, responsive products at a very competitive price. These savings are passed along to our customers.



## Environmentally Sound Processes

Our ongoing goal is to minimize waste streams and maximize resource recovery and recycling (R3). Our White Phosphorus to Phosphoric Acid Conversion Plant represents one effort in this direction. At full scale operational level since 1989, the facility has a maximum capacity to process up to 11,500 pounds of white phosphorous a day, producing 48,000 pounds of phosphoric acid with a 75 percent concentration in a 24-hour period.



# Logistics...

## Shipping/Receiving

Crane Army Ammunition Activity ships to the Joint Warfighter an average of over 40,000 short tons of conventional ammunition per year in support of the world wide operations. Additionally, CAAA receives and stores over 50,000 short tons of conventional ammunition per year.



## Logistics Facilities

We support our magazines with both rail or truck access, blocking and bracing, and two modern containerization facilities to support Sea/Land Containers. CAAA directly supports various joint warfighting units by receiving, storing, and shipping their Ammunition Basic Load as required.



## Pre-Configured Containers

CAAA containerizes pre-configured ammunition loads in support of our military. The containers are delivered directly to troops on the ground, to ships afloat or to pre-positioned stocks.

## 650,000 Short Ton Storage Capacity

We store prime warfighting and training assets for the DoD. Storage facilities include above ground storage magazines that can accommodate projectiles, high explosives, black powder, fuzes, and detonators.



## Material Handling

Specialty transporters on hand to facilitate material movement include super stackers, 50K lb rough terrain container handler, auto railer, and hi-lo trailers.

## ATTACC

CAAA established the Joint Ammunition Transportation Tracking and Control Center (ATTACC) as a centralized database for scheduling, visibility of all resources, real time dispatch of equipment, and direct observation with immediate corrective actions. For our customers, the ATTACC dramatically reduces shipping and receiving costs and ensures on time deliveries.



# Production...



## Pyrotechnics

CAAA is a recognized center of technical expertise in the production of pyrotechnic devices including signal, smoke, illuminating and infrared (IR) items, illuminating projectiles, marine location markers, and IR flares for illumination in conjunction with night vision devices. CAAA has the experience, capacity, and responsiveness to provide multiple, quality pyrotechnic products to the warfighter.



## Cast Load

CAAA has the ability to produce cast loaded explosives utilizing five production lines with mixing, melting, and holding kettles. Our diverse processes and expertise enable us to melt and pour explosives with many different characteristics, including HBX, H-6, Tritonal, Composition B, TNT, PBX and Octol. We produce bombs, mines, shock test charges, demolition charges, underwater sound signals, cluster bombs, and projectiles. Equipment is also available to thermally coat munitions.



## Press Load

With the availability of 42 presses in seven heavily reinforced facilities, our workforce can press load various compositions, such as Tetryl, Composition A-3, and PBX. From a single ram 500 ton press, to multiple ram high volume presses, operators can load 76mm, through 155mm projectiles, missile warheads such as Sparrow and Sidewinder, pyrotechnic items, and a variety of actuating devices and boosters.



## Machining Center

CAAA's machine shop is equipped with the latest manufacturing technologies and equipment. A full complement of modern computer numerical control (CNC) machines (mills, lathes, laser fabrication center, wire electrical discharge machine, waterjet, etc.) offers versatility to machine a multitude of configurations. We have specialized and unconventional machine equipment which gives us formidable manufacturing capabilities for all types of materials including tough alloys and exotic metals. Cleaning and finishing processes include chemical cleaning, ultrasonic cleaner, turbo washer, plating, titration, atomic absorption, powder coating, statistical process control, and workstation automated data collectors.

# Support to the Joint Warfighter...

## Mortar Illuminating/IR Candles

Crane Army Ammunition Activity annually produces thousands of Illuminating and Infrared Mortar Candles for 60mm, 81mm, & 120mm mortars as well as 105mm and 155mm artillery projectiles. Illuminating and Infrared projectiles enhance our warfighter's capability to operate at night and compliment the capabilities of night vision equipment.



## Aircraft Decoy Flares

Aircraft Decoy Flares are vital to the safety of our fixed and rotary winged pilots and aircraft. CAAA has produced a variety of aircraft decoy flares including MJU-32/B, 38/B, 53, 55, & 57. CAAA has also supported the development and fielding of new flare designs.



## Armor Survivability Kits

Crane Army has the capability to produce vehicle armor. We produced over 400 M939 armor kits as well as HMMWV armor in support of contingency operations. The fully integrated kits were installed onto 5-ton trucks overseas to provide protection to operators.



## Bomb Renovation

Precision guided bombs have been vital to our warfighter's success. Crane Army Ammunition Activity renovates Mark 80 series bombs including 500 lb, 1000 lb, and 2000 lb bombs. We also renovate the 2000 lb penetrator and low drag bombs.



# Renovation/Maintenance...

## Automated Facilities

Ordnance and pyrotechnic renovation work is accomplished in any number of flexible manufacturing units. Remote defuzing and refuzing capabilities are available for a variety of items. Propellant charge renovation is accomplished in multiple facilities configured with powder lofts. Exterior maintenance is performed on ordnance and ordnance related items such as containers, metal pallets, and wire cages using CO<sub>2</sub> pellet blasting, grit blasting, high pressure water cutting, degreasing, and painting.



# Demilitarization...

## Equipment/Methods

Disposing of excess or obsolete ammunition and explosives is critical for the safety of the ammunition stockpile and maintaining storage space for “go to war” items. Current methods utilized include: automated high pressure washout, breakdown, steam-out, open burning, open detonation, and CO<sub>2</sub> pellet blasting. We have facilities and capability for white phosphorous conversion, contained detonation, yellow-D conversion, APE 1236 deactivation furnace, depleted uranium demil, and magnesium reclamation.



# Letterkenny Munitions Center...

## Missile Storage and Maintenance

Letterkenny Munitions Center (LEMC) is a recognized leader in support of DoD missile systems. LEMC’s mission is to receive, store, issue, assemble, test, and demilitarize missiles and ammunition. It is a government owned, government operated installation in south central Pennsylvania, near Chambersburg.



# Shared Crane Resources...

## Ordnance Testing

Crane Army Ammunition Activity is a tenant on Naval Surface Warfare Center Crane Division and can leverage Navy capabilities through an interservice support agreement. A few of the many resources include ranges for R&D, First Article, and lot acceptance testing. An 85-acre ordnance test area with 4 operating and 2 support buildings. Dynamic/Climatic testing includes a 23,000 sq ft building with 100-lb net explosive weight limit for testing vibration, mechanical shock, shock response, jolt, jumble temperature, altitude, salt fog, temperature/humidity, altitude, sand and dust.



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# Assets

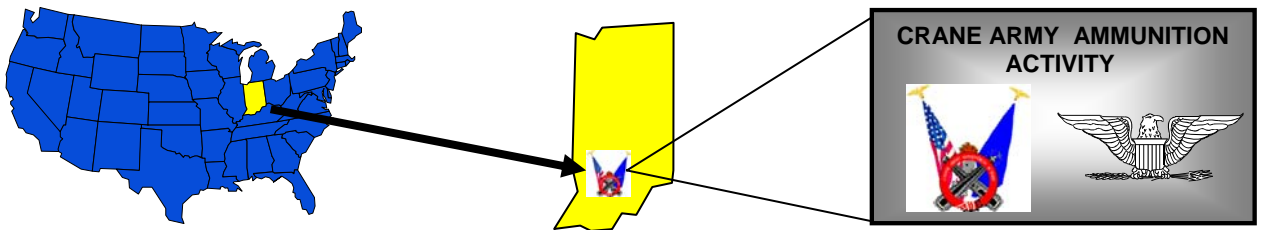
## Crane

62,434 Acres (100 Sq miles)  
17 Production Areas  
1800 Ammo Storage Magazines  
Over 600 Employees

## Letterkenny

16,000 Acres  
13 Production Sites  
912 Ammo Storage Magazines  
Over 150 Employees

Only Our Best For The  
World's Best



## Contact Us

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Crane Army Ammunition Activity  
Ammunition and Missile Life Cycle Support

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Visit Us At:  
[WWW.CRANE.ARMY.MIL](http://WWW.CRANE.ARMY.MIL)