

# THE METAL BOOK



U.S. ARMY MATERIEL COMMAND

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# Introduction

**The U.S. Army Materiel Command (AMC)** is the Army's premier provider of materiel readiness – technology, acquisition support, materiel development, logistics power projection, and sustainment – to the total force, across the spectrum of joint military operations. If a Soldier shoots it, drives it, flies it, wears it, or eats it, AMC provides it.

The command's complex missions range from development of sophisticated weapon systems and cutting-edge research, to maintenance and distribution of spare parts.

To develop, buy and maintain materiel for the Army, AMC works closely with Program Executive Officers, the Army Acquisition Executive, industry and academia, other military services and government agencies.

The command's main effort is to achieve the development, support, and sustainment of the future force in this decade. At the same time, AMC is key to supporting and sustaining the interim force and to sustaining and recapitalizing the current force. Its maintenance depots restore weapon systems needed as the Army makes its way to full transformation. The command's overhaul and modernization efforts are enhancing and upgrading major weapon systems – not just making them like new, but inserting technology to make them better and more reliable.

AMC is headquartered in Fort Belvoir, Va., and is located in 149 locations worldwide, including 43 states and 55 countries. Manning these organizations is a work force of more than 55,000 dedicated military and civilian employees, many with highly developed specialties in weapons development and logistics.

## Purpose

This book was designed to educate individual organizations, commanders, and program managers about the organic capabilities that reside within AMC. Each depot, arsenal and ammunition plant is highlighted, providing the reader a snapshot of AMC's industrial base to include the facilities' mission, capabilities, and contact information.

Facilities with an asterisk located next to their name were affected by the 2005 BRAC decision-- the site will either close or the capabilities will be impacted. Refer to the history section of each site for more information.

AMC facilities may partner with the private sector and other parts of the public sector under multiple legal authorities. Partnerships range from direct sales, to public-private teaming and work share arrangements, to leases of facilities or equipment. For additional information on Public-Private Partnerships, please contact us at [Partnerships@hqamc.army.mil](mailto:Partnerships@hqamc.army.mil).

# The Industrial Base



# Anniston Army Depot \*

## Anniston, Alabama



### Mission

Provide industrial and technical support to joint services for repair and overhaul of combat vehicles, artillery systems, bridge systems, small arms and secondary components. Anniston Army Depot (ANAD) is the premier DoD Center for Industrial and Technical Excellence and is capable of overhaul and refurbishment of all the aforementioned systems. Major tenants of the installation include Anniston Defense Munitions Center, Anniston Chemical Activity and Defense Distribution Depot Anniston.

### History

Anniston Ordnance Depot (AOD) was constructed in 1941 with storage igloos, ammunition magazines, warehouses and several administrative buildings. Nearly a decade later, AOD began an assignment to overhaul and repair combat vehicles. The maintenance and storage missions began in 1963 under the name Anniston Army Depot. ANAD began repair and overhaul of the M1 Abrams Main Battle Tank in the mid-1980s and was the recipient of towed and self-propelled artillery and light combat vehicle missions as a result of BRAC 1995. Production of Stryker vehicles began in 2001 with commercial partner General Dynamics. ANAD is transforming with the Army and utilizing innovative initiatives including but not limited to workforce revitalization, Lean/Six Sigma and partnering with industry. In September 2006, the Secretary of the Army designated ANAD as the Center of Industrial and Technical Excellence for Combat Vehicles (wheeled and track except Bradleys) including Assault Bridging, Artillery and Small Caliber Weapons.

*\* The capabilities of this installation will be impacted in accordance with BRAC 2005.*

### Installation Overview

ANAD is located on 15,279 acres in Calhoun County. ANAD has 8,971,016 square feet of buildings and plant replacement value of approximately \$1.6 billion. To the north, the installation is bordered by Pelham Range which is a 20,000-acre training range operated by the Alabama Army National Guard. There are no encroachment issues for the installation. With a \$1.1 billion economic impact, ANAD is a major economic engine for the region.

### Contact Information

Anniston Army Depot  
ATTN: AMSTA-AN-CO  
7 Frankford Avenue  
Anniston, AL 36201-4199  
256-235-6679 (COM), 571-6679 (DSN)  
<http://www.anad.army.mil> (Web site)

### Competencies

The most valuable resource existing at ANAD is the multi-skilled workforce that would take decades to replace. The infrastructure is capable of repeated 70-ton combat vehicle traffic and has heavy lift capability within key facilities. ANAD has a live firing range capable of firing weapons up to 155mm.

### Capabilities at a Glance

Combat vehicles (Except Bradley and Multiple Launch Rocket System)  
Overhaul/Repair  
Artillery Overhaul/Repair  
Small Arms Overhaul/Repair  
Bridging systems Overhaul/Repair  
Worldwide support



# Blue Grass Army Depot \*

## Richmond, Kentucky



### Mission

Blue Grass Army Depot (BGAD) provides conventional munitions, missiles, non-standard ammunition and chemical defense equipment logistical support to the joint Warfighter by providing timely receipt, storage, issue, maintenance, inspection, demilitarization and recycling of ammunition and missiles in support of the Department of Defense's power projection mission requirements.

### History

BGAD was established in 1941 and began operation in 1942 as an ammunition and general supply storage depot. In 1964, Blue Grass merged with the Lexington Signal Depot and became Lexington Blue Grass Army Depot. The Lexington facility was closed under BRAC and in September 1999, the Richmond facility was renamed BGAD.

### Installation Overview

The depot sits on approximately 14,596 acres of land. The facility has more than 1,152 structures including: igloos, supply warehouses, maintenance buildings, munitions sheds and X sites. In 1999, BGAD assumed operational control and command of Anniston Defense Munitions Center. The depot is also home of L3 Communications, a contractor providing repair and modification to Special Operations aircraft.

### Contact Information

Blue Grass Army Depot  
ATTN: SJMBG-CO  
2091 Kingston Highway  
Richmond, KY 40475-5001  
859-779-6605 (COM), 745-6605 (DSN)  
joel.kallenberger@us.army.mil (Email)

### Competencies

BGAD is a Strategic Mobility Platform providing munitions, chemical defense equipment and military operations support. The depot is DoD's primary center for surveillance, receipt, storage, issue, testing and minor repair for the Chemical Defense Equipment Program (CDE). BGAD maintains and supports CDE stocks for deploying units and Homeland Defense Forces and is a training site for Reserve units. Major capabilities also include Resource Recovery and Reutilization, Ammunition Information Technology Beta test site, precision smart bomb renovation, shipping container repair and renovation of conventional munitions.

### Capabilities at a Glance

Industrial Services Support - Machining, fabrication and assembly  
Ammunition maintenance, renovation, disassembly and demilitarization  
Thermal Arc Coating of Air Force Bombs  
Water Washout Facility with Flaker Belt for Mines and Projectiles  
Molten Salt Research and Development Facility  
Ultrasonic testing for mortar ammunition  
Chemical Material Surveillance Program  
Quality Assurance and Joint Logistics Support  
Ammunition Life-Cycle Management/Logistics Services

# Corpus Christi Army Depot

## Corpus Christi, Texas



### Mission

Overhaul, repair, modify, retrofit, test and modernize helicopters, helicopter engines and components for all services and foreign military sales. The depot serves as a training base for active-duty Army, National Guard, Reserve and foreign military personnel. In addition, Corpus Christi Army Depot (CCAD) provides worldwide on-site maintenance service, aircraft crash analysis, lubricating oil analysis, and chemical, metallurgical and training support.

### History

The Army Aeronautical Depot Maintenance Center began operations in 1961. The center was tasked with helicopter repair and maintenance for three different engines and four airframes. The first Huey UH-1 helicopter was overhauled in 1962, and by 1968 the facility was in full operation. In 1974, the name was changed to Corpus Christi Army Depot, employing more than 4,500 civilian employees and serving the growing Army inventory of helicopters. In August 2001, the Secretary of the Army designated CCAD as the Center of Industrial and Technical Excellence for Rotary Wing Aircraft (less avionics). In January 2007, the Secretary of the Army redesignated CCAD as the Center of Industrial and Technical Excellence for aviation structural airframes and blades, advanced composite technologies, flight controls and control surfaces, aviation engines, aviation transmissions and hydraulic systems (including subsystem accessory components), and aviation armament, electronics, support equipment (less avionics).

### Installation Overview

CCAD is a tenant of Naval Air Station-Corpus Christi, and is situated on 158 acres of the 4,800 acre complex. CCAD operates a \$600 million, 2.2 million square-foot depot complex that includes extensive test, maintenance and hanger facilities. The vast installation includes a wide range of test cells, two blade whirl towers, autoclaves, and a bearing refurbishing facility with the ability to refurbish multi-service, multi-function component bearings. CCAD received certification to ISO 9001:2000 standards in November 2005 and certification to AS 9100 in August 2006.

### Contact Information

Corpus Christi Army Depot  
308 Crecy Street  
Corpus Christi, TX 78419-5260  
361-961-3132 ext. 4 (COM), 861-3132 ext. 4 (DSN)

### Competencies

CCAD is a large helicopter overhaul and repair facility. In addition to Army aircraft, the depot overhauls and repairs helicopters and components for the Air Force, Navy and Marines. As the "Cornerstone for Rotary Wing Aviation," the depot's multi-skilled and dedicated workforce of 3,470, backed by state-of-the-art facilities and equipment, support a wide range of weapon and component systems. CCAD's capabilities have been greatly enhanced through partnership contracts with Original Equipment Manufacturers including General Electric, Sikorsky, Boeing and Honeywell.

### Capabilities at a Glance

Fabrication/Repair  
Precision rotor balancing  
Water jet stripping  
Autoclave capabilities  
Composites: Cat III, Rotor blade repair  
Bearing gauging, reballing, honing  
Certified soldering  
Computer Aided Manufacturing: Computer Numerically Controlled programming  
Metal spray  
Class 100 clean room  
ION vapor deposition  
Machining and sheet metal forming  
Tool and die manufacturing  
Cables: Forming/Machining/Milling  
Heat treating  
Sheet metal  
Tube and hose manufacturing  
Foundry (non-ferrous)  
Metal finishing, metal spray  
Painting (airless, air-assisted)  
World-class airfield

# Hawthorne Army Depot

## Hawthorne, Nevada



### Mission

Hawthorne Army Depot (HWAD) provides munitions and unit training support for the joint Warfighter. Provides conventional ammunition maintenance and demilitarization focused on resource recycling and recovery of materials and components. Provides high desert training facilities for Special Operations Forces and Conventional Forces. Designated site for long-term storage of reused Industrial Plant Equipment.

### History

Hawthorne Army Depot was established Sept. 15, 1930. Naval Ammunition Depot Hawthorne was redesignated Hawthorne Army Ammunition Plant (HWAAP) on Oct. 1, 1977, and subsequently, HWAAP was converted to a government-owned, contractor-operated installation on Dec. 1, 1980. On Oct. 1, 1994, with the loss of its production mission, HWAAP was redesignated as Hawthorne Army Depot.

### Installation Overview

The depot occupies 147,236 acres. The facility has more than 2,915 structures including: igloos, supply warehouses, maintenance buildings, munitions sheds and office buildings. HWAD has 7,685,000 square feet of storage and is the nation's premier demilitarization facility for conventional ammunition. The high desert, isolated location provides ideal training facilities for joint Special Operations forces preparing for deployments to Southwest Asia.

### Contact Information

Hawthorne Army Depot  
ATTN: SJMHW-CO  
1 South Maine Ave., Bldg 1  
Hawthorne, NV 89415-9404  
775-945-7001 (COM), 830-7001 (DSN)  
lucy.engebretsen@us.army.mil (Email)

### Competencies

HWAD is a large ammunition depot. The depot has immense storage and outload capabilities for both rail and truck. The Western Area Demilitarization Facility at Hawthorne is the nation's premier conventional ammunition demilitarization facility. HWAD is a provider for high desert military training facilities. Selected by the Defense Logistics Agency for the storage of the nation's stockpile of elemental mercury.

### Capabilities at a Glance

#### Demilitarization

Plasma Ordnance Destruction System  
Rotary furnace  
Hot gas  
Melt out  
Steam out  
Press out  
Open detonate and burn  
Flashing furnace

#### Training Capabilities

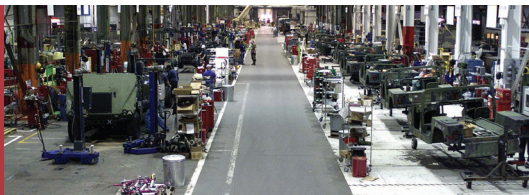
Convoy live fire  
Live fire ranges  
Mountain driving  
Rock climbing/cliff rappelling  
High angle sniper range  
Airborne operations  
Demolition areas

Ammunition renovation  
Quality assurance activities  
ISO container maintenance/repair facility  
Range scrap processing  
7,685,000 square feet of covered ammunition storage



# Letterkenny Army Depot \*

## Chambersburg, Pennsylvania



### Mission

Provide the Army and other Armed Forces with worldwide, reliable, responsive and cost-effective depot level maintenance, field support, systems integration and product support integration for weapon systems, components and ancillary equipment to ensure the readiness, sustainability and safety of these forces during the full spectrum of operational environments.

### History

Letterkenny Army Depot (LEAD) was established in 1941. Letterkenny's mission was to reduce the surplus of forthcoming war materiel and store and ship ammunition, trucks, parts and other supplies. Since the 1950s, LEAD's mission has been three fold: supply, maintenance and ammunition. LEAD's future was reshaped in the 1990s by the tactical missile consolidation and DoD's downsizing, reorganization and realignments. In 2005, the depot was awarded the Shingo Prize for demonstrated achievement in implementing Lean systems in support of the maintenance, repair and overhaul of the Patriot Missile Air Defense System. In 2006, LEAD was again awarded the Shingo Prize for demonstrated achievement in implementing Lean Systems in support of the HMMWV program. LEAD is the Army's only two-time winner of this prestigious award.

### Installation Overview

Comprising over 17,500 acres, a large land portion of the depot is used to conduct maintenance, modification, storage and demilitarization operations on tactical missiles and ammunition. Letterkenny is the top employer in Franklin County fueling an economic engine that propels more than \$250 million annually into the region through payroll, contracts and retiree annuities. Letterkenny is ISO 9001:2000 and 14001:1996 certified. LEAD currently has two Center of Industrial and Technical Excellence (CITE) designations: one as the CITE for Air Defense and Tactical Missile Systems and the other as the CITE for Mobile Electric Power Generation Equipment.

### Contact Information

Letterkenny Army Depot  
ATTN: AMSAM-LE-CO-TO  
1 Overcash Avenue, Bldg 10  
Chambersburg, PA 17201-4150  
717-267-8404 (COM) 570-8404 (DSN)  
angela.coons@us.army.mil (Email)

### Competencies

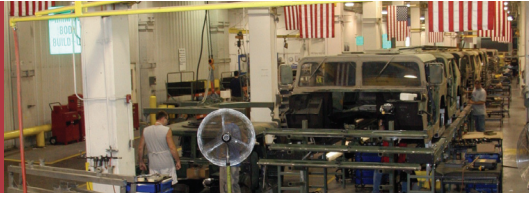
LEAD is a capabilities-based versus a commodity-based depot. The installation is home to PATRIOT maintenance as well as other missile systems such as Avenger, Tube-launched Optically-tracked Wire-guided missile (TOW), Multiple Launch Rocket System (MLRS) Advanced Fire Control System (AFCS), Hellfire and Javelin. LEAD provides overhaul and repair of power generation equipment and provides mobile repair teams for on-site maintenance assistance. LEAD also provides rebuild, repair and modifications for Ground Mobility Vehicles, specialized Special Operations vehicles, tactical wheeled vehicles, Biological Integrated Detection Systems, Material Handling Equipment, Force Provider, Mobile Kitchens, Containerized Chapels and various Soldier Support Systems. The depot machines and fabricates armor for various protection kits. Letterkenny has expanded its capabilities through the use of partnerships.

### Capabilities at a Glance:

Machining/Fabrication	Sheet metal	FLIR/Laser
Plating	Metal finishing	overhaul
Painting	Electric motor rebuild	Electronic Systems
Welding	Hydraulic repair	Intergration
Electronic testing	Total package fielding	Phased Array Antenna
28-acre Radar Test Site	Altitude chamber	repair
Armor capabilities	Circuit card repair	Non-Destructive
Wiring harness repair/ fabrication	Engine overhaul	testing
	Generator overhaul	Shelter repair

# Red River Army Depot \*

## Texarkana, Texas



### Mission

Conduct (Light) Ground Combat and Tactical Systems Sustainment Maintenance Operations, Air Defense Systems certification and related support services worldwide for the U.S. Armed Forces and allied/friendly nations. Train and employ the Army's emerging Component Repair Companies. Provide essential base support services to Red River Industrial Complex missions. Be an active and viable partner of Bowie County, the greater Texarkana community and the four states area at large.

### History

Red River Army Depot (RRAD) was originally established in 1941 as an ammunition storage depot. Because of the demands of World War II, the mission was expanded to include general supply storage and tank repair. Throughout the years, the depot's missions have evolved, and today Red River is engaged in activities ranging in scope from recertification of the AWK Patriot missile to the production of M1 road wheels. RRAD is aggressively pacing its performance to accomplish the goals of the Army's transformation by engaging innovative initiatives such as Lean/Six Sigma, extensive partnering with industry and enhanced business management techniques. Red River Army Defense Complex is the largest single employer in the greater Texarkana area.

### Installation Overview

The depot sits on approximately 18,316 acres of land. The facility has more than 1,310 buildings/structures that can accommodate repair/overhaul of electronic systems, heavy tanks, wheeled vehicles and artillery. The Red River Defense Complex is home to a workforce of approximately 4,500 civilian and three military service members. RRAD has achieved recognition and earned registration under stringent ISO Quality System Requirements. RRAD was the first depot in the Department of the Army to achieve ISO certification across the total depot. In 2006, the depot was the recipient of the Secretary of Defense Robert T. Mason Depot Maintenance Excellence Award and the Silver Shingo Prize Public Sector Award. These awards were achieved as a result of demonstrated innovations in implementing Lean systems in support of the remanufacture of the High Mobility Multi-purpose Wheeled Vehicle (HMMWV).

### Contact Information

Red River Army Depot  
ATTN: AMSTA-RR-B, Bldg 15  
100 Main Drive  
Texarkana, TX 75507-5000  
903-334-2542 (COM), 829-2542 (DSN)  
ibmo@redriver-ex.army.mil (Email)

### Competencies

RRAD is a strategic national asset with over 65 years of service to the United States and its Soldiers. Designated as the Center of Industrial and Technical Excellence for Bradley Fighting Vehicles, Multiple Launch Rocket Systems, rubber products, Patriot missile recertification, tactical wheeled vehicles (i.e., Heavy Expanded Multi-purpose Tactical Truck, HMMWV, Armored Security Vehicle and multiple configurations of trailers) and the Small Emplacement Excavator vehicle, RRAD possesses all the capabilities and characteristics required of the 21st-century depot. The depot's multi-skilled workforce possesses a wide-range of technical resources including the capability to design, fabricate and manufacture a wide range of items, from specialty parts to unique prototype weapon systems and vehicles. The dedicated workforce provides continuous on-site support throughout the world.

### Capabilities at a Glance

- Electronics
- Mechanical/Hydraulics
- Engines
- Transmissions
- Metal fabrication and machining
- Rubber road wheels and track shoes
- Combat and tactical vehicle test tracks
- Destructive and non-destructive testing
- Certified ballistic armor welding
- Engineering
- Live fire test ranges
- Explosive safety
- Renovation of missiles and related components
- Demilitarization/recovery of missiles and ammunition
- Design and manufacture prototype vehicles for various military services
- Worldwide support – Deployable workforce
- Technical training

# Sierra Army Depot \*

## Herlong, California



### Mission

Serve as the Expeditionary Logistics Center and joint strategic power projection support platform, providing support in the form of storage, maintenance, assembly and containerization as a Center of Industrial Technical Excellence for critical Operational Project Systems including deployable medical systems, petroleum and water systems, Force Provider, strategic configured loads and other items as directed.

### History

Sierra Army Depot (SIAD) was established in 1942 and began operations as an ammunition and general supply storage depot. In 1993, Sierra became home to the three largest Operational Project Systems in the Army: Inland Petroleum Distribution System, Water Support Systems and Force Provider and was designated a Center of Technical Excellence. Today, SIAD has become a premier life cycle management installation performing the receipt, storage, repair, maintenance and rapid deployment of a variety of military unique systems. In January 2007, the Secretary of the Army designated SIAD as the Center of Industrial and Technical Excellence for Reverse Osmosis Water Purification Units.

*\* The capabilities of this installation will be impacted in accordance with BRAC 2005.*

### Installation Overview

The depot sits on 36,322 acres of land adjacent to Honey Lake in Lassen County, Calif. The current infrastructure consists of 1,192 structures including igloos, supply warehouses, maintenance buildings, munitions buildings and Y sites. The depot is located on the east side of the Sierra Nevada mountain range at approximately 4,000 feet above sea level. This unique environment creates the perfect long-term storage conditions: extremely low humidity and moderate summers and winters.

### Contact Information

Sierra Army Depot  
ATTN: AMSTA-SI-COB  
74 C Street, Building 150  
Herlong, CA 96113-5001  
530-827-4888 (COM), 855-4888 (DSN)  
business@sierra.army.mil or partnerships@sierra.army.mil (Email)

### Competencies

SIAD is a Joint Strategic Power Projection Platform providing a wide variety of long-term, life-cycle logistics solutions to the joint services. From long-term care, storage and sustainment to minor repair and on-demand deployment, SIAD offers the competitive solution to logistics challenges.

### Capabilities at a Glance

ISO 9000:2001 certified  
Over 36,000 buildable acres  
On-post C-17 capable airfield  
Container certification and repair  
Configuration management  
Preservation and packaging prototyping  
10/20 repair of Operational Project Stocks  
On-demand shipments  
Partnerships with FPI and private industry that provide a range of additional capabilities



# Tobyhanna Army Depot \*

## Tobyhanna, Pennsylvania



### Mission

Provide total sustainment and integration of the full spectrum of DoD's critical Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR), avionics and Missile Guidance and Control systems.

### History

Tobyhanna Army Depot (TYAD) has served the United States since Feb. 1, 1953. Today, TYAD is the largest full-service joint C4ISR maintenance facility in DoD. It is also the largest employer in Northeastern Pennsylvania with an annual economic impact of nearly \$2 billion. In 2006, the depot earned both a Shingo Prize for Manufacturing Excellence and the Best Manufacturing Practices Award of Excellence.

*\* This installation is expected to receive additional capabilities in accordance with BRAC 2005.*

### Installation Overview

The depot encompasses 1,296 acres. The mission area consists of 153 buildings, 21 clean rooms and 13 test ranges, to include multiple radar ranges and a laser range. Over 1.9 million square feet are dedicated to the depot's C4ISR and missile guidance and control missions with 61 percent of the mission area under one roof. TYAD is virtually self-sustaining with a modern infrastructure to support its diverse mission requirements.

TYAD is ISO 9001:2000 certified for the repair, overhaul, fabrication, power projection and logistics support of C4ISR equipment and systems and the design and development supporting integration of communications electronics systems. The depot also holds certification for the ISO 14001:2004 Environmental Management System. In addition, TYAD is the first DoD facility to be certified as an OSHA Voluntary Protection Program Star Site.

### Contact Information

Tobyhanna Army Depot  
ATTN: AMSEL-TY-BU  
11 Hap Arnold Boulevard  
Tobyhanna, PA 18466-5051  
570-895-6660 (COM), 796-6660 (DSN)  
[www.tobyhanna.army.mil](http://www.tobyhanna.army.mil) (Web site)

### Competencies

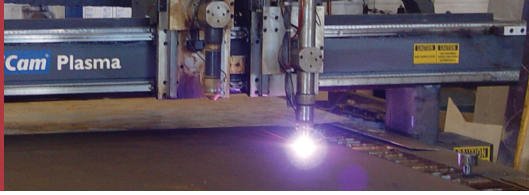
The Army has designated Tobyhanna as its Center of Industrial and Technical Excellence for C4ISR, avionics and missile guidance and control. The Air Force has designated Tobyhanna as its technical source of repair for command, control, communications and intelligence systems. TYAD's talented workforce, high level of electronics expertise and the latest technologies and business management techniques ensure the depot is the provider of choice for fabrication, electronic repair, engineering design, systems integration, technology insertion, automated test equipment and technical documentation development of DoD's joint C4ISR systems as well as missile guidance and control systems. TYAD also operates 38 forward support locations ensuring operational readiness for the Warfighter. TYAD personnel provide two-level maintenance on systems such as IED countermeasures, Standard Army Management Information Systems, Tactical Operation Centers, Army Airborne Command and Control, Guardrail/Common Sensor, Firefinder, Common Ground Station, Tactical Unmanned Aerial Vehicles and Communication Security equipment at sites throughout Europe, Southwest Asia, Korea, Okinawa and the Continental United States.

### Capabilities at a Glance

Total sustainment of C4ISR systems and components  
Missile guidance and control repair/overhaul  
Worldwide maintenance support (13 sites in Southwest Asia)  
Electronic equipment/small mechanic piece part manufacturing  
Robust engineering design, simulation and testing  
High-Tech Regional Training Site- Maintenance

# Tooele Army Depot \*

## Tooele, Utah



### Mission

Tooele Army Depot (TEAD) is a leading joint ammunition installation. As a premier life cycle management installation, the Ammunition, Logistics, and Engineering Directorate provides logistics support of war reserve conventional ammunition, and plays a significant role in the design, development, manufacture and fielding of ammunition-related equipment under the Ammunition Peculiar Equipment (APE) Program. This equipment is used in the maintenance and demilitarization of munitions throughout the world.

### History

Construction of the TEAD facilities was completed in 1943 and was originally known as the Tooele Ordnance Depot, which functioned as a storage depot for World War II supplies, ammunition, and combat vehicles. BRAC 1988 recommended that TEAD take over the general supply storage mission from Pueblo Army Depot Activity, Colo., and BRAC 1993 recommended TEAD eliminate its troop support, maintenance, storage and distribution missions. TEAD retained the logistic support of conventional ammunition shipping, storage, receiving, inspection, maintenance, testing, and demilitarization operations, and the design and manufacturing of ammunition related equipment. The depot continues to provide extensive base operations support to the Deseret Chemical Depot, the design and manufacture of chemical ammunition related equipment, and communications support to Army installations throughout the western United States.

*\* This installation is expected to receive additional capabilities in accordance with BRAC 2005.*

### Installation Overview

The depot is located just 35 miles west of the Salt Lake City International Airport. The depot encompasses over 23,610 acres of land and has over 1,100 storage, production, fabrication, and administrative buildings. TEAD has a workforce of approximately 500 civilians and two military service members. TEAD is ISO 9001:2000 accredited for research, development, design, manufacturer and rebuild of equipment including APE, and recognized as a Lean/Six Sigma continuous improvement organization.

### Contact Information

Tooele Army Depot  
ATTN: SJMTE-CO  
Tooele, UT 84074  
435-833-2181/5063 (COM), 790-2181/5063 (DSN)  
Kathy.anderson1@us.army.mil (Email)  
Paula.Kramer@us.army.mil (Email)

### Competencies

TEAD specializes in ammunition logistics and the engineering, design and manufacture of ammunition-related equipment. As a major Power Projection Platform for the United States' Joint Services, TEAD issues, receives stores, maintains, demilitarizes and tests ammunition. Additionally, TEAD's services include design, fabrication, equipment integration, and specialized expertise in energetics and hazardous materials. TEAD's equipment and services are used throughout the world. In its 60-plus year history as an ammunition management and development facility, TEAD has established the infrastructure, specialized workforce, and proven procedures necessary to meet today's technological challenges quickly and effectively. In sustaining organic capabilities TEAD has maximized the use of its organic capacity through a number of direct sales, public-private partnerships and work-share arrangements. TEAD also serves as the National Inventory Control Point for all APE.

### Capabilities at a Glance

Engineering services  
Explosives performance testing  
ISO container maintenance/repair facility  
Logistical support  
Machining, fabrication, assembly, repair  
Munitions renovation/maintenance  
Non-destructive testing (real time x-ray)  
Reclamation/demilitarization/disposal/recovery  
R3 Technology (hydrolysis and super critical water oxidation)  
Robotics, material handling and remotely controlled vehicles  
Ship/receive/storage/outload  
Test facility/equipment/munitions/environmental  
Wood product manufacturing  
Armor  
Autocad and Inventor – 2D/3D  
Container Certification and Repair  
Conventional Munitions  
Demilitarization  
Explosive Demilitarization/Disposal  
High Speed High Definition Plasma Cutting  
Laser Jet Cutting  
Plasma Arc Cutting  
Radian  
Tool Design and Manufacturing  
Slurry Emulsion Manufacturing Facility  
Specialty machine design/fabrication

# Anniston Defense Munitions Center

## Anniston, Alabama



### Mission

Anniston Defense Munitions Center (ADMC) provides timely and accurate receipt, storage, shipment, maintenance, inspection, demilitarization and recycling of ammunition and missiles in support of the joint Warfighter.

### History

ADMC, located at Anniston Army Depot, is a multi-functional ammunition facility. The primary mission is receipt, storage, surveillance and shipment of missiles and conventional ammunition. Effective Oct. 1, 1999, ADMC officially came under the full command and control of Blue Grass Army Depot in Richmond, Ky. ADMC received its first on-site commander in June 2004.

### Installation Overview

The center sits on 13,160 acres of land and is comprised of 33 buildings and 1124 igloos (storage capacity of 2,219,952 square feet). There are 180 miles of roads and 19 miles of railroads at ADMC. The site is centrally located to provide timely support to southeast portion of the United States. ADMC has year-round operational capability.

### Contact Information

Anniston Defense Munitions Center  
ATTN: SJMBG-AN-P  
7 Frankford Avenue  
Anniston, AL 36201-4199  
256-235-7571 (COM), 571-7571 (DSN)  
garry.mcclendon@us.army.mil (Email)

### Competencies

The ADMC is a key DoD site for missile and rocket maintenance, demilitarization and disposal by open burning and open detonation and is the strategic resupply center for some military units. The ADMC is also the site for the Department of Army's Missile Recycling Center and is one of the Army's ammunition storage sites with more than 450 Stradley igloos, which can store some of the Army's largest munitions. Future technologies and capabilities include: Energetics Processing Module, Slurry Explosives Module, Contained Detonation Chamber, Multiple Launch Rocket System Recycling, 155 additional Igloos in fiscal year 2010, additional Conventional/ Missile Maintenance Facility in fiscal year 2010, and Department of Army Automated Ammunition Requirements Tool/Ammunition/Computer Aided Manufacturing Web-based tool.

### Capabilities at a Glance

Ship/Receive/Outload  
Storage– Stradley, H-type and Standard Igloos  
Ammunition renovation  
Preservation, packaging and maintenance  
Quality assurance services  
Explosive Demilitarization/Disposal–  
    Open Burning and Open Detonation  
Missile recycling center



# Crane Army Ammunition Activity \*

## Crane, Indiana



### Mission

Receive, store, ship, produce, renovate and demilitarize conventional ammunition, missiles and related components to meet contingency requirements in support of the Warfighter.

### History

In 1940, Congress appropriated \$3 million for the construction of the depot. In 1941, the Naval Ammunition Depot was commissioned. In 1975, the U.S. Army was tasked by DoD as the single manager for procurement, supply, maintenance and renovation for conventional ammunition, and on Oct. 1, 1977, Crane Army Ammunition Activity (CAAA) was activated and assumed the ammunition production functions as a tenant activity at the Naval Surface Warfare Center Crane Division.

*\* This installation is expected to receive additional capabilities in accordance with BRAC 2005.*

### Installation Overview

CAAA is licensed 62,434.54 acres with 1,800 magazines, 386 buildings and approximately 4.9 million square feet of storage capacity. Crane's primary mission is that of a major Power Projection Platform, which includes storage and outload with an active production mission for Pyrotechnic (Illumination and Infrared) candles for mortars and projectiles, decoy flares, bomb and ammunition renovation as well as demilitarization. CAAA is also host to Reserve training programs.

### Contact Information

Crane Army Ammunition Activity  
ATTN: SJMCN-CO  
300 Highway 361  
Crane, IN 47522-5099  
812-854-4825 (COM), 482-4825 (DSN)  
timothy.i.adams@us.army.mil (Email)

### Competencies

CAAA is a Strategic Mobility Platform offering logistical support in receiving, storing, shipping and surveillance. As a Munitions Center of Excellence, CAAA is the producer of pyrotechnic "candles" for mortar and artillery illumination and infrared items. CAAA is also a producer of advanced Navy countermeasures. Crane is a major producer of large caliber Navy gun ammunition with capabilities to load (cast and press) and renovate munitions and bombs, missile warhead pressing, insensitive munitions, actuating devices, depleted uranium remanufacture and C-4 extrusion. CAAA's demilitarization capabilities include steam out, high pressure washout, permitted open burn/open detonation, CO2 pellet blasting, contained detonation (coming on line), water-jet, autoclaves and white phosphorus conversion. The Machining Center offers fabrication of tools, dies, fixtures, gages, production equipment and components. CAAA can also weld, heat treat and perform cleaning and finishing.

### Capabilities at a Glance

- Logistical operations
- Munitions manufacturing
- Pyrotechnic manufacturing (including countermeasures)
- Demilitarization
- Munitions maintenance and renovation
- Remote operations capability
- Engineering services
- Environmental test facility
- Logistics support machine shop
- In-house chemical lab

# Holston Army Ammunition Plant

## Kingsport, Tennessee



### Mission

Holston Army Ammunition Plant manufactures (HSAAP) a wide range of secondary detonating explosives including RDX, HMX, TATB, NTO and related formulations in addition to a growing number of speciality chemicals such as DNAN and DMDNB. Research and development plays a vital role in the development and production of new products to meet the current and future needs of the Warfighter. Holston is currently capable of producing more than 80 products.

### History

During WWII, the U. S. Government needed a highly effective explosive to counter German U-boats. In June 1942, the U.S. Government authorized Tennessee Eastman Company to design and operate Holston Ordnance Works for the manufacture of Composition B. Peak employment levels hit 7,345 in 1945. Holston was mothballed at the end of WWII and was reactivated for the Korean Conflict. In January 1999, BAE Systems Ordnance Systems Inc., became the operator under a facilities-use contract. Since 1999, Holston has experienced a significant growth in production volume, product offerings and manufacturing capabilities.

### Installation Overview

The plant sits on a total of 6,024 acres of land. HSAAP is comprised of two major areas: Area A is located within the city of Kingsport, Sullivan County; Area B, over 5,900 acres, is located west of Kingsport, in both Sullivan and Hawkins counties. The two areas are connected by rail and pipeline. The facility has more than 450 buildings, including 130 igloos. Holston has about 21 Armament Retooling and Manufacturing Support program tenant businesses, including the Holston Business Development Center. Since June 2004, Holston has been commanded by the commander of Anniston Defense Munitions Center in Alabama.

### Contact Information

HOLSTON AAP  
ATTN: SJMHS - CR  
4509 West Stone Drive  
Kingsport, TN 37660-1048  
423-578-6248 (COM); 748-6248 (DSN)  
hsaap@afsc.army.mil (Email)

### Competencies

Core capabilities at Holston include the mixed-acid nitration of organic molecules to synthesize a host of secondary high explosives, from gram-scale to millions of pounds. Product purification and particle size is controlled by recrystallization from organic solvents, with a fully permitted environmentally compliant effluent treatment capability. Explosive products are formulated at Holston to provide for melt-cast, pressed, extrudable and cast-cured explosive fillings. All explosive operations are performed against an ISO 9001:2000 accredited registration. Research and Development (R&D) at Holston is highly focused on next-generation energetic materials, using affordable, practical chemistry techniques. R&D covers the technology areas of synthesis, formulation, analytical methods-development and explosive performance testing. Synthesis scale-up is afforded by a unique production capability: a flexible, reconfigurable chemistry capability that can quickly produce multiple products throughout the manufacturing year. This agile facility, developed since 1999, has been used to manufacture new ingredients Insensitive Munitions compliant explosives, such as PAX-21 and PAX-34.

### Capabilities at a Glance

Production and development of Insensitive Explosives  
Production of RDX, HMX, Pressed PBXs and melt-cast high explosives  
Synthesis and manufacture of high explosives - grams to millions of pounds  
Recrystallization and purification from organic solvents  
Melt cast, cast cured, pressed and extrudable explosives formulation  
Explosives performance testing  
Full-spectrum explosives R&D capability  
Custom and Fine Chemical Manufacture for the Defense Industry  
ISO 9001:2000 accreditation

# Iowa Army Ammunition Plant

## Middletown, Iowa



### Mission

Produce and deliver quality large caliber ammunition items for DoD using modern production methods in support of worldwide operations. Maintain stewardship of government facilities and the environment.

### History

The Iowa Army Ammunition Plant (IAAAP), also referred to as the Iowa Ordnance Plant (IOP) prior to 1963, was established in 1940 and began production of ammunition in 1941 to support the war effort. All production was terminated on Aug. 14, 1945. Operations after that date consisted of completing work already in process and renovating rejected ammunition. The contract operations ceased in January 1946. The U. S. Government then assumed the operation of long-term storage, surveillance, demilitarization, and reconditioning activities. In 1947, the U.S. Atomic Energy Commission (USAEC) began operation at Line 1, which included the addition of many new facilities. Production of new ammunition resumed on Aug. 1, 1949. Both conventional and nuclear weapons were produced during the conflict and ammunition production at the IOP expanded significantly beginning in June 1950 at the onset of the Korean conflict. In 1973, the USAEC announced that it was phasing out of the IAAAP; the facilities were reverted back to Army control on July 1, 1975. The installation received the additional mission of detonators, mines and artillery production in accordance with BRAC 2005.

### Installation Overview

The plant sits on 19,011 acres of land. The facility has more than 1,112 structures including: igloos, buildings and magazines with a total of 4.3 million square feet of storage. The plant has 143 miles of roads and 102 miles of railroads. IAAAP is a government-owned, contractor-operated facility, operated by American Ordnance LLC, under a facilities-use contract. The use of the Armament Retooling and Manufacturing Support program at IAAAP has reduced the operating cost for the plant.

### Contact Information

Iowa Army Ammunition Plant  
ATTN: SJMIA-CS  
17571 Highway 79  
Middletown, IA 52638-5000  
319-753-7101 (COM), 585-7101 (DSN)  
leon.baxter@us.army.mil (Email)

### Competencies

Current production capabilities include the M795, M107, M927, Expeditionary Fire Support System (EFSS), Stryker Reactive Armor Tile (SRAT), Hawk, Stinger, Modular Artillery Charge System (MACS), the entire family of 120mm tank ammunition including the M1028, M467 and M1040 105mm tank ammunition, 75mm and 105mm Blanks, NLOS, Excalibur, Javelin, Hellfire, and Sidewinder Warheads. The plant also has an active test fire area for testing live munitions, on-post fire station and two contaminated waste processors that provide the capability to thermally decontaminate materials on plant ground. Add-on-Armor kits with reactive armor tiles are new to the production schedule at IAAAP. These kits support Stryker vehicles conducting combat operations. The plant also performs a large number of contracts for shaped charges, warheads and special builds and is constantly improving munitions and manufacturing techniques. In December 2005, American Ordnance, LLC, the operating contractor, received its ISO:14001 certification and the government staff instituted an Environmental Management System.

### Capabilities at a Glance

LAP for a full range of munitions and high-explosive components  
Tank ammunition  
High-explosive artillery  
Large caliber mortars  
Insensitive munitions  
Smart Munitions Mines and Family of Scatterable Mines  
Missile assembly  
Missile warheads  
Rocket assisted projectiles  
Detonators  
Development  
Pressed and cast warheads  
Test fire



# Kansas Army Ammunition Plant \*

## Parsons, Kansas



### **Mission**

Load, assemble and pack ammunition items.

### **History**

Kansas Army Ammunition Plant (KSAAP) was established in 1941 and began operation in 1942 as an Army ammunition plant.

*\* The installation was selected for closure under BRAC in 2005.*

### **Installation Overview**

KSAAP sits on approximately 13,727 acres of land. The facility has more than 749 structures including igloos, supply warehouses, maintenance buildings and munitions sheds. KSAAP is a government-owned, contractor-operated facility, operated by Day & Zimmermann, under a facilities-use contract.

### **Contact Information**

Kansas Army Ammunition Plant  
ATTN: SJMKS-CR  
23018 Rooks Road  
Parsons, KS 67357-8403  
620-421-7449 (COM), 956-7449 (DSN)  
donald.dailey@us.army.mil (Email)

### **Competencies**

Produces the Sensor Fuzed Weapon for the Air Force, M720 and M768 60mm mortars for the Army, and the M795 155mm projectile for the Marine Corps, as well as various ammunition items in smaller quantities. In addition, KSAAP demilitarizes, converts, develops and/or upgrades ammunition using melt pour, injection load, high speed pressing and large-capacity pressing using conventional and insensitive munitions explosives. The plant has a facilities-use contract, which allows both commercial and DoD work.

### **Capabilities at a Glance**

Load, assemble and pack ammunition items  
Bombs (unitary, cluster, guided, smart)  
Demilitarization  
Renovation/Rework  
Missile warheads  
Grenades, bomblets  
Tank ammunition  
Artillery Projectiles  
Mortars  
Detonators, lead charges, boosters

# Lake City Army Ammunition Plant

## Independence, Missouri



### **Mission**

Provider of DoD small caliber ammunition. Performs reliability testing for all calibers of small arms. Serves as NATO National and Regional Test Center for ammunition and weapons testing. Producer of small and medium caliber links.

### **History**

Lake City Army Ammunition Plant (LCAAP) began construction in 1940 and operations in 1941 as the first of 12 small arms plants. LCAAP orders bulk metals, chemical and propellants and fabricates them into complete 5.56mm, 7.62mm and .50 caliber.

### **Installation Overview**

The plant is located on 3935 acres. The facility has a total of 511 structures with over 420 buildings being utilized in active day-to-day fabrication, manufacturing and testing of small arms. LCAAP is a government-owned, contractor-operated facility, operated by Alliant Techsystems Inc., under a fixed-price supply contract.

### **Contact Information**

Lake City Army Ammunition Plant  
ATTN: SJMLC-CO  
7 Highway and Route 78  
Independence, MO 64501-1000  
816-796-7111 (COM), 463-9111 (DSN)  
lcaap@afsc.army.mil (Email)

### **Competencies**

High capacity source of small arms ammunition. The facility produces 1.5 billion rounds of 5.56mm, 7.62mm, .50 caliber and loads, assembles and packs 20mm ammunition each year. The plant is also the source for small/medium caliber links. LCAAP is a NATO Small Arms Ballistics Test Center.

LCAAP is a Comprehensive Environmental Response, Compensation, and Liability Act (aka SuperFund) site with a performance-based contract for the Installation Restoration Program.

### **Capabilities at a Glance**

- Small arms cartridges
- Percussion and electric primer
- Pyrotechnics manufacturing
- Machining, fabrication and assembly
- Explosive demilitarization/disposal
- Indoor range from 50-200 yards
- Outdoor range to 2400 yards

# Letterkenny Munitions Center

## Chambersburg, Pennsylvania



### Mission

Provide total munitions and missile support to the joint Warfighter.

### History

Letterkenny Army Depot (LEAD) was established in 1941 and began operation in 1942 as an ammunition and general supply storage depot. In 1961, LEAD's ammunition operation began supporting Army air defense missiles and Air Force air intercept missiles. The missile mission now encompasses Army, Air Force and Navy systems. In 1999, the Directorate of Ammunition Operations was renamed Letterkenny Munitions Center (LEMC) and command and control was transferred to Crane Army Ammunition Activity, Crane, Ind.

### Installation Overview

LEMC is a tenant on LEAD and occupies approximately 16,000 acres of the depot's total of 17,400 acres. The facility has more than 1,100 structures including: 902 igloos, 10 standard above-ground magazines, 20 supply warehouses, 16 maintenance and operations buildings, munitions sheds, administrative buildings and other various support buildings. LEMC has 128 miles of paved road, 30 miles of rail track, two major containerization pads and 26 rail docks.

### Contact Information

Letterkenny Munitions Center  
ATTN: SJMCN-MC  
1 Overcash Avenue  
Chambersburg, PA 17201-4150  
717-267-8400 (COM), 570-8400 (DSN)  
Edward.Averill@us.army.mil (Email)

### Competencies

LEMC is a Strategic Mobility Platform providing munitions and missile support. The depot is a center for surveillance, receipt, storage, issue, testing and minor repair for the Army Tactical Missile System and Guided Multiple Launch Rocket System missiles, Air Force and Navy Sidewinder, Sparrow, High-speed Antiradiation Missile, Joint Air-to-Surface Stand-off Missile, Advanced Medium Range Air-to-Air Missile and Penguin missiles. LEMC is a training site for Reserve ammunition units. Major capabilities also include demilitarization research and development, resource recovery and reutilization for missiles, shipping container repair, missile container repair, and renovation of conventional munitions.

### Capabilities at a Glance

Ammunition surveillance  
Munitions storage and shipping  
Munitions maintenance  
Missile maintenance  
Repair and electronic testing  
Non-destructive testing (very large x-ray, real time x-ray, magnetic particle, ultrasound)  
Demilitarization/Disposal  
Ship/Store/Outload

# Lone Star Army Ammunition Plant \*

## Texarkana, Texas



### **Mission**

Support the Warfighter by loading, assembling and packing ammunition. Produce high quality explosive items in a safe and secure manner at a competitive price.

### **History**

Construction of Lone Star Army Ammunition Plant (LSAAP) was completed in 1942 and was opened as the Lone Star Ordnance Plant. In 1945, production ceased and Lone Star was merged with Red River Ordnance Depot and was renamed Red River Arsenal. In 1950, when the international situation became critical, LSAAP was selected as one of the industrial installations to be reactivated. Day & Zimmermann was selected in May 1951 as the operating contractor and has continued as the operating contractor to date. LSAAP performs and maintains the various functions necessary to load, assemble and pack ammunition for all military services.

*\* The installation was selected for closure under BRAC in 2005.*

### **Installation Overview**

LSAAP occupies approximately 15,846 acres, including 153 miles of road, 41 miles of rail, 1,120 buildings and eight production areas. Also included are six storage areas, which include both earth-covered and above-ground magazines. As an industrial complex, LSAAP provides facilities maintenance, environmental programs and has a 50-acre industrial landfill and a 110-acre permitted municipal landfill.

### **Contact Information**

Lone Star Army Ammunition Plant  
ATTN: SJMLS-CO  
Highway 82 West  
Texarkana, TX 75505-9101  
903-334-1207 (COM), 829-1207 (DSN)  
[www.lonestaraap.com](http://www.lonestaraap.com) (Web site)

### **Competencies**

LSAAP's core capabilities include ammunition end-item production; explosive component production; production engineering; receipt, storage and issue; explosive and industrial facilities management.

### **Capabilities at a Glance**

- Load, assemble and pack ammunition
- Family of Scatterable Mines Components
- Improved conventional munitions
- Multiple launch rocket system grenades/cargo
- Hand grenades
- Renovation and reclamation
- Demilitarization/Disposal



# McAlester Army Ammunition Plant \*

## McAlester, Oklahoma



### Mission

Produce, renovate, demilitarize, and store and ship bombs, conventional ammunition and ammunition related components.

### History

Established May 20, 1943 as the McAlester Naval Depot, the first production began in September 1943. Peak employment during WWII was more than 8,000 civilians with 680 military. The depot transferred to the Army on Oct. 1, 1977, under the Single Manager for Conventional Ammunition Act. Red River Munitions Center transferred to McAlester Army Ammunition Plant (MCAAP) on Oct. 1, 1999 as a result of the BRAC process. MCAAP is a government-owned, government-operated facility.

*\* This installation is expected to receive additional capabilities in accordance with BRAC 2005.*

### Installation Overview

MCAAP consists of 45,000 acres in southeastern Oklahoma. The facility has more than 2,800 permanent structures; 2,000 igloos; 220 miles of railroad; 400 miles of improved roads and 25 miles of fiber optic cable. MCAAP is ISO 9001 certified and a Lean/Six Sigma continuous improvement organization. MCAAP is an organic bomb-making facility.

### Contact Information

Commander/SJMMC-CO  
McAlester Army Ammunition Plant  
1 C Tree Road  
McAlester, OK 74501-9002  
918-420-6211 (COM), 956-6211 (DSN)  
co@mcaap.army.mil (Email)

### Competencies

Load, assemble and pack MK80 Series Bombs, Plastic Bonded Explosive Bombs, Penetrator Bombs, insensitive munitions load, Massive Ordnance Air Blast, Navy Propelling Charges, rockets, 40mm cartridge assembly, High-speed Anti-radiation Missile Integration, Joint Stand Off Weapon All Up Round Integration, Extended Range Guided Munition Integration, Harpoon Warhead loading and Excalibur. Renovation of bombs, rockets, projectiles, mortars, small arms, propelling charges and shipping containers. Other capabilities include: wood and metal pallets, chemical laboratories, radiographic facilities, missile disassembly and demilitarization.

### Capabilities at a Glance

Load, assemble and pack of bombs  
20mm and 40mm cartridge assemblies  
Propelling charges  
Rockets  
Warheads  
Renovation  
Demilitarization  
Research and development  
Storage  
Ship/Receive/Outload

# Milan Army Ammunition Plant \*

## Milan, Tennessee



### Mission

Load, assemble, pack, store, ballistic test, extrude and accept conventional ammunition items.

### History

Milan Ordnance Depot and Wolf Creek Ordnance Plant were established in 1941. The plant began production in 1941 of ammunition items to support the war effort. In 1943, the plant and the depot were merged into Milan Ordnance Center, redesignated Milan Arsenal in 1945. Between 1960 and 1963, several name changes were made, concluding the redesignation of Milan Army Ammunition Plant (MLAAP).

*\* This installation is expected to receive additional capabilities in accordance with BRAC 2005.*

### Installation Overview

The plant sits on 22,357 acres of land. The facility has more than 2,405 structures including igloos, buildings and magazines with a total of 2.3 million square feet of storage. The plant has 205 miles of roads and 86 miles of railroads. The plant also has an active test fire area for testing live munitions, an on-post fire station and is capable of open burn/open detonation of explosives.

### Contact Information

Milan Army Ammunition Plant  
ATTN: SJMML-CO  
2280 Highway 104 West  
Milan, TN 38358-6101  
731-686-6087 (COM), 966-6087 (DSN)  
mlaap@afsc.army.mil (Email)

### Competencies

MLAAP manufactures the M74 Grenade and loads into Army Tactical Missile System Warhead. In addition, the plant has medium caliber 40mm pressing, loading, assembly, and packaging capabilities for: 40mm, M918/M385 and M430/M433. The plant has the capability to receive and ship containerized cargo and a CAT II storage capability.

Milan also has the ability for: High Explosive Artillery/Mortar Melt Pour; assembly and packaging of 105mm/155mm/60mm/81mm; modern Extruder of C-4 plastic explosives; C-4 used for Mine-Clearing Line Charge (M58A4/M68A2) and M112/M183 demolition charges; and assembly of Reactive Armor Tiles for the Bradley Fighting Vehicle. The depot storage capacity is 874 igloos and 22 magazines.

### Capabilities at a Glance

Load, assemble and pack of ammunition  
40mm cartridges  
Mortars/mortar components (propellant charges, ignition cartridges, fuze boosting)  
Artillery projectiles  
Ignition cartridges  
Propelling charges  
Bursters  
Grenades  
Tactical Missile System  
Dispenser and bomb cluster bomb units  
Reactive Armor Tiles  
Demilitarization/Disposal  
Renovation/Reclamation  
Item development and production test support  
Logistics support

# Mississippi Army Ammunition Plant \*

## Stennis Space Center, Mississippi



### Mission

Mississippi Army Ammunition Plant (MSAAP) provides maintenance of laid-away cargo grenade metal parts manufacturing equipment and associated tools, gages and Test, Measurement and Diagnostic Equipment.

### History

MSAAP is located in the National Aeronautics and Space Administration Stennis Space Center. Established in 1976 and dedicated on March 31, 1983, it is the only ammunition plant constructed since World War II. It was designed to handle the complete on-site production and assembly of the M483A1 ICM 155mm Howitzer projectiles and grenade bodies. Live load, assemble and pack (LAP) operations began in May 1984. The highest employment was 1,831 in 1989. The Army ceased active production in 1990 and layaway of excess capacity was completed in 1991. In December 1992, MSAAP was the first facility to sign a facility-use contract under the Armament Retooling and Manufacturing Support (ARMS) program. Applied Geo Technologies, Inc., is the current operating contractor.

*\* This installation was selected for closure under BRAC in 2005.*

### Installation Overview

The plant sits on a total of 4,214 acres of land owned by NASA. It occupies the land by means of an Army permit. The installation consists of 123 buildings, including 41 igloos and five magazines. A number of buildings have been converted from manufacturing related use to commercial/office space under the ARMS program. MSAAP has about 19 ARMS tenant businesses, including Boeing, the U.S. Navy and Department of Energy.

### Contact Information

Mississippi Army Ammunition Plant  
ATTN: SJMMS – AO  
BLDG 9100 Moses Cook Road  
Stennis Space Center, MS 39526-7000  
228-689-8907 (COM), 446-8907 (DSN)  
pamela.brown@us.army.mil (Email)

### Competencies

MSAAP's operating contractor maintains the capability for equipment maintenance, installation reuse, industrial waste treatment, sanitary waste treatment, gas-fired steam generation, water system distribution and hazardous waste accumulation.

### Capabilities at a Glance

Maintenance management  
Facility reuse management

# Radford Army Ammunition Plant

## Radford, Virginia



### **Mission**

Manufacture propellants and explosives in support of field artillery, air defense, tank, missile, aircraft and Navy weapon systems.

### **History**

In August 1940, Hercules reached agreement with the U.S. Government to build/operate Radford Ordnance Works and New River Plant. Construction was completed in six months. Operated under a cost-plus contract, the Army directed approximately 97 percent of the work. In 1995, Alliant Techsystems, Inc., obtained a firm fixed-price facility-use contract. Directed workload is only two percent and 98 percent is competitively obtained. Joliet Army Ammunition Plant load, assembly and pack (LAP) mission was relocated to Radford Army Ammunition Plant (RFAAP) in 1999.

### **Installation Overview**

RFAAP occupies approximately 7,000 acres in two separate locations. There are over 2,500 buildings (including ammunition storage), which provide over three million square feet of covered areas. RFAAP is an Armament Retooling and Manufacturing Support site with several tenants. Tenant revenue is used to off-set facilities costs.

### **Contact Information**

Radford Army Ammunition Plant  
ATTN: SJMRF-CO  
P.O. Box 2  
Radford, VA 24143-0002  
540-639-8711 (COM), 931-8711 (DSN)  
rfaap@afsc.army.mil (Email)

### **Competencies**

Continental United States producer of nitrocellulose, solventless propellant for rocket motors and weapons-grade TNT. Produces single and multi-base propellants. LAP facility for medium caliber munitions, 25/30mm. DoD munitions storage capability of approximately 200 igloos/magazines. Capable of producing over 400 different propellants.

### **Capabilities at a Glance**

Manufacturing propellant and explosives  
Nitrocellulose  
Nitroglycerin  
Nitrate esters  
Propellants (Single Base, Double Base, Triple Base)  
TNT  
Ethyl cellulose



# Red River Munitions Center \*

Texarkana, Texas



## Mission

Support the joint Warfighter by executing efficient and safe receipt, issue, storage, demilitarization, renovation and maintenance of conventional munitions and missiles within cost and on schedule.

## History

Built in 1942 as Red River Ordnance Depot, the original mission was to serve as an ammunition storage facility. Before completion of the ammo storage buildings, Red River was assigned the additional missions of tank repair and storage of general supplies. In 1967, Red River was chosen to become the sole maintenance facility for the Chaparral Missile. During the 1990s, the Army placed the general supply mission under the Defense Logistics Agency. In 1999, the depot was placed under command of TACOM Life Cycle Management Command and the ammunition mission under the Industrial Operations Command (which later became Joint Munitions Command). As a result, in 1999 the Ammunitions Directorate became Red River Munitions Center (RRMC) under the command and control of McAlester Army Ammunition Plant.

*\* The capabilities of this installation will be impacted in accordance with BRAC 2005.*

## Installation Overview

RRMC is a joint service provider, providing support to the Joint Munitions Command, Aviation and Missile Life Cycle Management Command, Army, Air Force, Navy and Marine Corps and the host depot, Red River Army Depot (RRAD). Provides support/partnership with RRAD, Theater Readiness Monitoring Facility (Hawk and Patriot Missile). Provides support/partnership with Lone Star Army Ammunition Plant for various demilitarization programs. RRMC works under the core concept of equipping and training the employees with multi-skilled expertise. RRMC has over 8,934 acres, 107 miles of improved roads, 20 miles of railroad, 701 igloos (107 for CAT I and II Storage), 18 standard magazines and 10 covered sheds for Patriot missiles. RRMC currently stores over \$5 billion of inventory. RRMC is ISO 9000 certified.

## Contact Information

Red River Munitions Center  
ATTN: SJMMC-MC  
100 Main Drive  
Texarkana, TX 75507  
903-334-2437 (COM), 829-2437 (DSN)

## Competencies

RRMC has the capability to test and repair various missiles and guidance control groups. The center is Level I, II and III certified in X-ray (M213 fuzes and rocket motors) and maintains/renovates various munitions and missile systems. In addition, RRMC is responsible for the renovation of M67 hand grenades, mortars, 2.75" rockets, and various 105mm and 155mm to include link and delink of various small arms. Provides Quality Assurance Specialist (Ammunition Surveillance) support to the Warfighter.

## Capabilities at a Glance

Ammunition surveillance  
Munitions storage and shipping  
Munitions/Missile Maintenance  
Demilitarization/Disposal  
Ship/Store/Outload

# Riverbank Army Ammunition Plant \*

## Riverbank, California



### Mission

Provide ammunition to sustain combat power for the services. Manufacture, under the facility-use contract, a wide range of ammunition, defense and commercial application items competitively obtained. Maintain and support minimum facilities in a standby status, required to produce deep drawn cartridge cases, medium caliber cartridge cases and grenade metal parts.

### History

Originally constructed in 1942 as an aluminum reduction plant and converted in 1951 to produce metal parts. At the height of the Vietnam conflict, employment peaked at 1,923. The plant was in a layaway status from 1958 to 1963 when put up for sale by General Services Administration. No qualified purchasers were interested and the plant remained in a standby status. In June 1966, the Army reactivated Riverbank Army Ammunition Plant (RBAAP) for the Vietnam conflict. The facility has three major production lines, two of which are laid away.

*\* This installation was selected for closure under BRAC in 2005.*

### Installation Overview

RBAAP is a government-owned, contractor-operated facility, operated by NI Industries, Inc., located near Riverbank, Calif. RBAAP occupies 172 acres, has 133 buildings and 500,000 square feet of storage area. RBAAP was listed as a National Priorities List site in 1990. Contaminants are chromium and cyanide. RBAAP is currently operating a pump and treat system to decrease the groundwater contamination plume. RBAAP is an Armament Retooling Manufacturing Support site with several tenants.

### Contact Information

Riverbank Army Ammunition Plant  
ATTN: SJMRB-CR  
5300 Claus Road, P.O. Box 670  
Riverbank, CA 95367-0670  
(209)869-7274 (COM), 466-7274 (DSN)  
william.e.wendt@us.army.mil (Email)

### Competencies

The Army has not work-loaded RBAAP since 1981, but it has the capability to produce ammunition metal parts for mortar, grenades and cartridge cases. Due to the closure of the Norris Industries-Vernon facility, RBAAP is now the source for steel deep drawn cartridge cases. RBAAP is producing steel and deep drawn cartridge cases via competitive awards from the services.

### Capabilities at a Glance

Manufacture munitions metal parts  
155mm, 105mm, 5"/54, and 40mm cartridge cases  
Mortars  
Cargo grenades  
Shearing and blanking processes for steel cold deep draw and brass

# Scranton Army Ammunition Plant

## Scranton, Pennsylvania



### Mission

Manufacture 105mm to 155mm diameter projectiles, including M795, 120mm family of projectiles, M107, M804, M485, MK64-2 and the M110.

### History

Originally constructed in 1910 as a steam locomotive erecting and repair facility for the DL&W Railroad, Scranton Army Ammunition Plant (SCAAP) was acquired in 1951 and converted to produce metal parts. Because the main production buildings remain largely unaltered, the installation is on the National Register of Historic Places as part of the Steamtown Historic District. The original operating contractor, US Hoffman Machinery Corporation, operated the facility until 1963, when Chamberlain Manufacturing Corporation (CMC) replaced them. CMC has been the operating contractor since then. In 1994, CMC was awarded a facilities-use contract for operation of the installation. This contract provides no government funds and allows the contractor to lease government-owned equipment to manufacture commercial products. The current contract also requires CMC to invest a minimum of \$2 million per year in facilities maintenance and improvements.

### Installation Overview

SCAAP is an active, government-owned, contractor-operated ammunition plant located in Scranton, Pa. SCAAP occupies 15.3 acres, has seven buildings and 509,000 square feet of building area. SCAAP manufactures large caliber steel projectiles for artillery, mortar and Navy projectile metal parts.

### Contact Information

Scranton Army Ammunition Plant  
ATTN: SJMSC-CR  
156 Cedar Avenue  
Scranton, PA 18505-1138  
570-340-1152 (COM), 247-1152 (DSN)  
scaap@aco.pica.army.mil (Email)

### Competencies

SCAAP is capable of producing finished large caliber projectiles from raw steel stock. The facility's long stroke, 400- to 2,500-ton presses are unique to ammunition manufacture.

### Capabilities at a Glance

Manufacturing ammunition metal parts  
Produce 60mm to 8" diameter projectiles  
120mm mortar family  
5"/54 gun projectiles  
155mm Artillery Projectiles

# Pine Bluff Arsenal

Pine Bluff, Arkansas



## Mission

Pine Bluff Arsenal's (PBA) mission includes ammunition production, chemical/biological defense production and repair, depot storage and surveillance, chemical weapons management, and homeland security. PBA is an organic facility with chem/bio production and rebuild capability. PBA's homeland security support mission includes first-responder equipment training and surveillance of prepositioned equipment.

## History

Established in November 1941 for the manufacture of incendiary grenades and bombs, PBA's mission rapidly expanded to include production and storage of pyrotechnic, riot control and chemical filled munitions. In the 1990s, PBA expanded its chemical defense mission and established a homeland security mission. In September 2006, the Secretary of the Army designated PBA as the Center of Industrial and Technical Excellence for Chemical and Biological Defense Equipment.

## Installation Overview

PBA occupies 13,500 acres and is the only active Army installation in the state of Arkansas. PBA actively maintains 675 buildings and 283 igloos with total real property of 3.7 million square feet. PBA has over 5,000 acres of pristine developable land.

## Contact Information

Pine Bluff Arsenal  
10020 Kabrich Circle  
Pine Bluff, AR 71602-9500  
870-540-3004 (COM), 966-3004 (DSN)

## Competencies

PBA has existing capabilities for 102 commodities (64 ammunition and 38 chem/bio defense). Eighty-three of the items manufactured by PBA are currently not available from the private sector; 41 items are considered critical go-to-war and nine are chem/bio. PBA possesses a white phosphorus (WP) canister fill capability and is a supplier for WP fill in smoke munitions. PBA is noted for its development of unique pyrotechnics mixing technologies including facilities for red phosphorus mixing, extrusion and pressing, and 40mm colored smoke grenade production. PBA rebuilds and recertifies protective masks for the Army and the Defensive Chemical Test Equipment Services for the manufacture of several large filters and of the M291 decontamination kit. The arsenal is the second site for the Chemical Defense Equipment Go-to-War field return and storage mission.

## Capabilities at a Glance

Chemical defense and test equipment  
Individual and collective chemical protection and decontamination systems  
Chemical Material Surveillance Program  
Machining, fabrication and assembly  
Specialty and less-than-lethal ammunition production  
Quality assurance and joint logistics services



# RIA Joint Manufacturing & Technology Center \*

## Rock Island, Illinois



### Mission

To support the National Defense Strategy with world-class products and service through development/prototyping, manufacturing, integration, testing and logistics to serve the Warfighter.

### History

Congress established Rock Island Arsenal in 1862. During the Civil War, the island served as a prison camp for the Confederate Soldiers. The Rock Island Arsenal (RIA) is the site of a National Cemetery for those who served their country. The construction of the first stone manufacturing shop began in 1866 and continued through 1893 when the last stone shop was finished. After WWI, RIA built the first American manufactured tank. The Rock Island Arsenal tradition continues today to strive to produce the best quality weapons and manufactured items for DoD while meeting the ever changing needs of today's Warfighters. In addition to the ISO 9001:2000 registration, the RIA Joint Manufacturing and Technology Center (RIA-JMTC) is the recipient of the 2006 Shingo prize for Excellence in Manufacturing Public Sector Award at the gold level.

*\* This installation is expected to receive additional capabilities in accordance with BRAC 2005.*

### Installation Overview

RIA is located on a 946-acre island on the Mississippi river between Illinois and Iowa. RIA has over 1.5 million square feet of manufacturing space and one of the largest warehouse facilities with over 770,000 square feet under one roof with additional outside storage space.

### Contact Information

Rock Island Arsenal Joint Manufacturing & Technology Center  
Attention: AMSTA-RI-BD  
1 Rock Island Arsenal  
Rock Island, IL 61299-5000  
309-782-5330 (COM), 793-5330 (DSN)

### Competencies

Rock Island Arsenal Joint Manufacturing & Technology Center is a full service, one-stop shop that saves customers' time and money by eliminating the need to outsource services. The capabilities range from having a full-purpose foundry, fabrication and welding of various metals, heat treating, machining, painting and engineering. More than 200 Computer Numerically Controlled machines along with more than 950 conventional machines (with two of only 13 seven-axis machining centers in the world) give RIA-JMTC unique capabilities in the industrial world.

### Capabilities at a Glance

Foundry	Fabrication
Investment casting	Welding
Forging	Plating
Heat treating	Painting
Machining	Gage manufacturing
Blasting	Full staff engineering
Rubber and plastic molding	

# Watervliet Arsenal \*

Watervliet, New York



## Mission

As part of the Joint Manufacturing & Technology Center (JMTC) at Watervliet, provides manufacturing, engineering, procurement and product assurance for cannons, howitzers, mortars and associated armaments for weapon systems used by the U.S. Armed Forces.

## History

Watervliet Arsenal (WVA), the nation's oldest continuously active arsenal, was founded in 1813 to support the War of 1812. After decades of producing gun shot, leather goods, wooden carriages and other materiel, the arsenal was chosen in 1887 as the site for the national cannon factory. Since then, WVA has been the nation's principal manufacturer of large caliber weapons. WVA is a government-owned, government-operated facility.

*\* The capabilities of this installation will be impacted in accordance with BRAC 2005.*

## Installation Overview

The arsenal is located on 140 acres in the center of the Watervliet, N.Y., six miles north of Albany and five miles from Albany Airport. The arsenal has more than two million square feet of floor space, more than half of which is for industrial operations. In the 1980s, \$300 million was invested to upgrade buildings, processes and equipment making the arsenal one of the most modern manufacturing facilities in the northeast. WVA is also near major academic institutions such as Rensselaer Polytechnic, the State University at Albany College of Nanoscale Science and Engineering and Union College. WVA is ISO 9001 certified, a Lean/Six Sigma continuous improvement organization and a large caliber weapons manufacturer.

## Contact Information

Watervliet Arsenal  
ATTN: AMSTA-WV-XO-CO  
1 Buffington Street  
Watervliet, New York 12189-4000  
518-266-4294 (COM), 374-4294 (DSN)  
Kevin.R.Moore@us.army.mil (Email)

## Competencies

Watervliet Arsenal and its partner, Armament Research, Development and Engineering Command's Benét Laboratories, is the Army's capability and Center of Excellence for Large Caliber Cannon. Collocation of research, design, development, engineering and manufacturing provides customers quick, seamless transition from concept design through prototyping to production. This is an integrated and inherently lean activity that focuses upon manufacturing and technology readiness. Watervliet and Benét support the Army's fighting force with tank, artillery, mortars and other components. Watervliet partners with all of the acquisition community (Boeing, General Dynamics and British Aerospace) in the design and prototyping of the latest and next generation weapons. This maturation of technologies provides advanced launch mechanisms to our forces. Customer expectations are exceeded by the arsenal's expertise in ultra high pressure components, advanced materials and coatings that are stronger and lighter with high service life. A recent added dimension to the JMTC at Watervliet is public-private partnering. These small-to-large on-site technology companies broaden Watervliet's portfolio with research and engineering in composites, nanomaterials and electronics. A partnership intermediary facilitates the ability to link into these force-multiplying assets.

## Capabilities at a Glance

Custom machining	Manufacturing and product engineering
Prototype and volume production of high pressure components	Modeling and simulation of heat, stress, fatigue and fracture
Rotary forging/heat treatment of large cylinders	Welding/Fabrication
Chromium plating for wear and erosion abatement	Water jet cutting
Reverse engineering of components	Material analysis
Stereo Lithography	TECOM approved in-laboratory fatigue simulation
Composites	Material replacement and compatibility analysis

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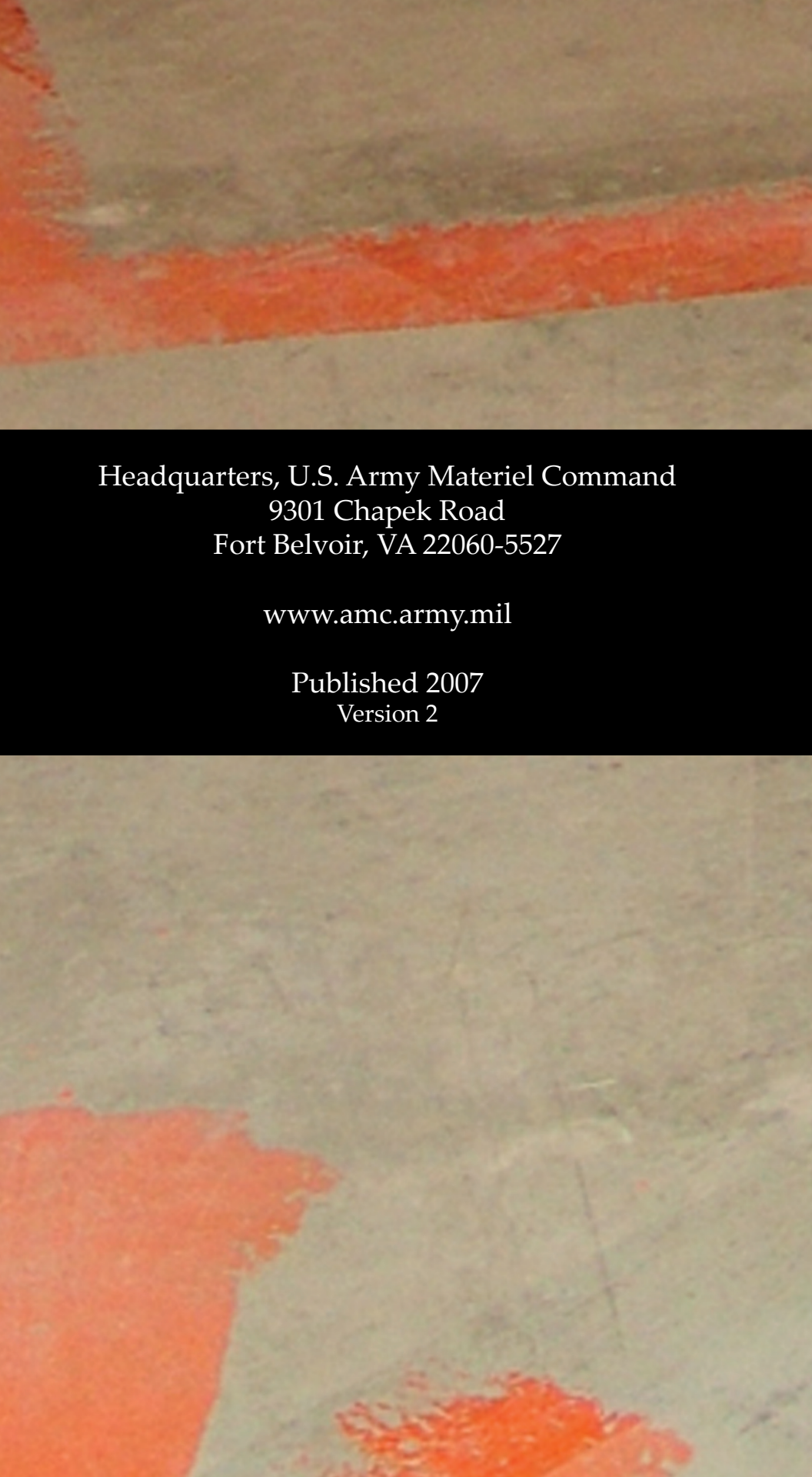
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NOTES

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