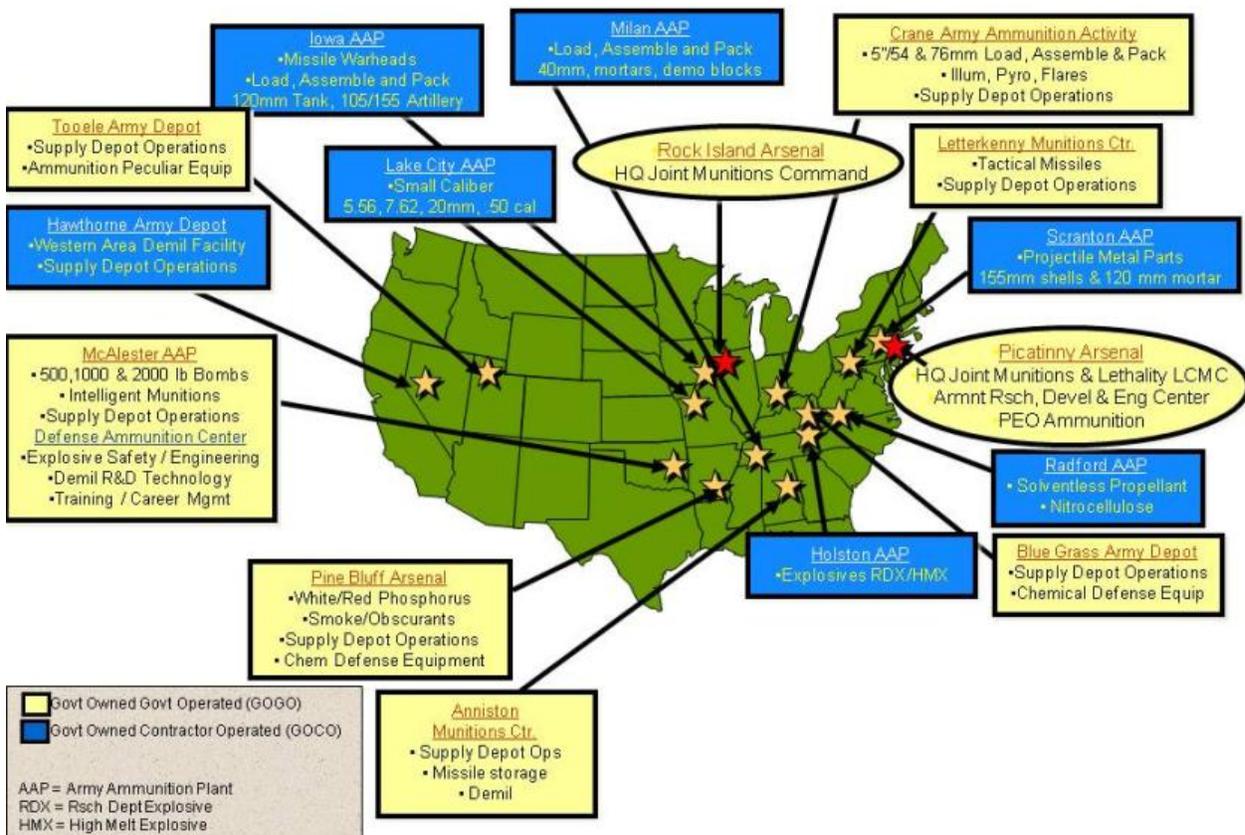


THE US ARMY JOINT MUNITIONS COMMAND FY 2012 ANNUAL COMMAND HISTORY - EXECUTIVE SUMMARY

The Joint Munitions Command (JMC) is headquartered at Rock Island Arsenal, Rock Island, Ill. The JMC mission is to provide America's Joint Forces with ready, reliable and lethal munitions at the right place and time, in a cost effective manner, to enable successful military operations. JMC is the logistics integrator for the life-cycle management of ammunition providing a global presence of technical support to frontline units. JMC is responsible for conventional ammunition valued at over \$39 billion. JMC is part of the Joint Munitions and Lethality Life Cycle Management Command (JM&L LCMC), which aligns three organizations that execute the Army's munitions and lethality mission: the Program Executive Office for Ammunition (PEO Ammo) headquartered at Picatinny Arsenal, N.J.; the Armament Research, Development, and Engineering Center (ARDEC) also located at Picatinny Arsenal; and the Joint Munitions Command in Rock Island. JMC is responsible for munitions production, maintenance, demilitarization, and storage at 14 ammunition installations as depicted below.



Leadership

Brigadier General Gustave F. Perna assumed command of JMC and JM&L LCMC on 16 November 2010 and relinquished command to BG Kevin G. O'Connell on 5 June 2012. Mrs. Patricia Huber served as the Executive Director of Ammunition at JMC until 6 May 2012 and was assigned as the Acting Deputy to the Commanding General during periods of Mr. Jyuji

Hewitt's absence. During this period, Mr. Hewitt was assigned to an executive position in support of wartime operations in Afghanistan. Brigadier General Jonathon A. Maddux remained the Program Executive Officer for Ammunition throughout FY12 and Dr. Gerardo Melendez continued to direct ARDEC. Colonel Arnold P. Montgomery retired from the military and was replaced by Colonel Joseph A. Tirone. Command Sergeant Major David Puig was transferred to an Explosive Ordnance Disposal unit and replaced by Command Sergeant Major Anthony M. Bryant.



Brigadier General Gustave F. Perna
 Commanding General, Joint Munitions and Lethality
 Life Cycle Management Command - 16 Nov 10 - 5 Jun 12
 Commanding General, Joint Munitions Command
 16 Nov 10 - 5 Jun 12



Brigadier General Kevin G. O'Connell
 Commanding General, Joint Munitions and Lethality
 Life Cycle Management Command - 6 Jun 12 - Present
 Commanding General, Joint Munitions Command
 6 Jun 12 - Present



Senior Executive Service Member, Mr. Jyuji Hewitt
 Deputy to the Commanding General, Joint Munitions Command
 16 Nov 10 - 27 Nov 11; 1 Mar 12 - 24 May 12



Senior Executive Service Member, Mrs. Patricia Huber
 Acting Deputy to the Commanding General,
 Joint Munitions Command
 27 Nov 11 - 1 Mar 12; 25 May 12 - Present
 Executive Director for Ammunition
 25 Jul 11 - 25 May 12



Mrs. Rhonda VanDeCastele
 Acting Executive Director for Ammunition, 6 May 12 - Present



Colonel Arnold P. Montgomery
Joint Munitions Command, Chief of Staff
Jul 10 – 18 Jul 12



Colonel Joseph A. Tirone
Joint Munitions Command, Chief of Staff
28 Jun 12 – Present



Command Sergeant Major David Puig
Joint Munitions Command, Command Sergeant Major
2 Aug 09 - 8 Apr 12



Command Sergeant Major Anthony M. Bryant
Joint Munitions Command, Command Sergeant Major
9 Apr 12 - Present

JM&L LCMC Leadership



Brigadier General Jonathon A. Maddux
Program Executive Officer for
Ammunition
18 Sep 09 - Present



Dr. Gerardo J. Melendez
Director, Armament Research
Development and Engineering Center
2 Jul 10 - Present

Significant Events

During FY12, the JMC executed an annual budget of approximately \$4 billion and employed 6,486 government personnel and 7,155 contractors. Fielding ammunition in support of Operation Enduring Freedom (OEF) in Afghanistan continued as critical throughout the year. JMC also completed draw down of ammunition in Operation New Dawn (OND) in Iraq. JMC customers included all US military services, foreign governments and federal, state, and local law enforcement agencies. Since the start of contingency operations in November 2002, JMC has supported the wars in Iraq and Afghanistan with 320,000 short tons of ammunition, equaling 24,000 containers. In FY12, JMC installations issued 222,000 short tons and received more than 228,000 short tons of ammunition. The FY12 munitions readiness status was maintained at 44 of 44 ammunition groups rated as green or amber. JMC met 99.7% of on-time delivery for ammunition throughout the world in support of training and combat operations.

The base ammunition program was funded at approximately \$263 million with an additional offset of \$86 million from supplemental appropriations for Overseas Contingency Operations (OCO) and Reset. Supplemental funding enabled the following high priority missions to be accomplished: OCO out load of ammunition supporting troop training; Southwest Asia operations; overseas War Reserve call forward; reset maintenance projects making critical contingency ammunition items available; OCO ammunition packaging requirements; re-warehousing projects; and surveillance backlog inspection requirements. JMC completed 89 Lean Six Sigma projects that resulted in cost savings and avoidances totaling \$20 million, while embarking on the ISO certification process.

JMC approved the Urgent Materiel Release (UMR) of Multi-Role Antiarmor Antipersonnel Weapon System (MAAWS) munitions in support of OEF. This weapon is a breech-loaded, shoulder-fired, 84mm recoilless rifle to provide Soldiers the capability to engage armored targets. JMC processed Conditional Materiel Releases (CMRs) for Spider munitions, the XM8 Miniature Grenade Launcher, XM9 Extended Range Tripline Sensor, and the XM10 Munition Control Unit. JMC executed full materiel releases (FMR) for the Cartridge, 105mm, High Explosive (HE) Pre-Formed Fragmentation (PFF), Base Bleed (BB), M1130 and a Cartridge, non-lethal Firing Device, XP25, which is used by the TASER X26E for controlling hostile personnel. JMC continued to fill critical requisitions for 30 and 40mm ammunition rounds in theater. JMC executed UMRs for 120mm High Explosive Guided XM295 mortar rounds. JMC continued production and FMR of the Army's first autonomous, cannon fired, precision guided Excalibur M982 155mm artillery projectiles. JMC executed a high production rate and capacity for production and delivery of small caliber munitions. JMC continued to field the M855A1 5.56mm Enhanced Performance Round (EPR) which increased small caliber lethality and effectiveness. There was also an increase for non-lethal call forward requirements for M72A7 LAW rockets.

JMC continued support for draw down of ammunition and personnel in Iraq with final removal of all troops. JMC quality assurance specialists (ammunition surveillance) (QASAS) and logistics assistance representatives (LARs) continued oversight of ammunition operations including inspections, demilitarization and transportation oversight. They monitored turn-ins to ensure only inert certified materiel was released from the ammunition storage areas. They

conducted active reviews of Ammunition Stockpile Reports to ensure ammunition was suspended or restricted accurately. QASAS/LARs assisted with closures of ammunition sites. As sustainment operations decline, Foreign Military Sales (FMS) requirements and priority distribution operation in the CENTCOM theater will continue to evolve.

As part of Army Materiel Command's Responsible Reset Task Force (R2TF), JMC executed Operation Ammunition Clean Sweep to provide a safer operational environment for US personnel in the Combined Joint Operations Area (CJOA) in Afghanistan. QASAS and ammunition LARs on five teams conducted a full surveillance inspection of all munitions at sites from ammunition support activities down to unit level holding areas. Ammunition determined to be unserviceable, restricted, or suspended was reclassified and segregated for retrograde or disposal. Items were inspected and ammunition was identified for removal from use, substantially reducing the explosive hazards exposed to personnel in theater. Service members were trained on site by JMC personnel on the proper methods to store and handle munitions.

Security Assistance - Foreign Military Sales (FMS)

JMC supported \$3.2 billion in open orders for the FMS program in FY12. JMC continued to support the Security Assistance (SA) mission to develop, train and sustain Iraq and Afghanistan military forces. Requirements articulated by foreign countries continued and more ammunition deliveries were requested to be expedited. Significant program increases concerning CENTCOM AOR programs required a singular focus to develop and execute. For FY12, JMC submitted seven Letters of Offer and Acceptance for standard and non-standard ammunition (NSA) valued at \$106 million. JMC delivered \$79 million of standard ammunition and \$2 million of NSA to Iraq.

Demilitarization

The Army's goal is to reduce the demilitarization stockpile by 6% annually. The stockpile was measured at more than 611,000 tons for the year. JMC obligated \$98 million in demilitarization funding. Conventional ammunition items and components were demilitarized, freeing up critical storage space in the depot system. The Joint US/Korea Munition Demilitarization Facility (DEFAC) is a cooperative effort between Republic of Korea (ROK) Ministry of National Defense and the US that began in the 1990s. After years of negotiation and establishment, the facility began demilitarization operations in 2012.

Logistics Modernization Program (LMP)

JMC continued to sustain the Logistics Modernization Program (LMP). Efforts were put in place to deploy Extended Warehouse Management (EWM). The EWM project scope was aimed at eliminating the mandatory use of handling units (HUs) to view serial numbers and the required packing and unpacking of HUs to execute all transactions associated with serial numbers. JMC also deployed the General Fund Enterprise Business System (GFEBs), the Army's enterprise resource planning (ERP) solution. Users at all levels were provided training for their identified roles in GFEBs and EWM. Significant progress toward organic support was

in place and JMC reduced contractor support. JMC increased efforts to gather requirements for future programming efforts (LMP II, Extended Ammunition and Expanded Industrial Base programs).

Installation Modernization Projects

JMC's direct coordination with HQDA and the joint communities ensured appropriate investment by DoD to revitalize industrial base infrastructure. Funding enabled critical modernization projects to begin across six Army GOCO plants to include \$24 million for infrastructure upgrades and \$5.5 million to maintain environmental compliance. JMC also began execution of \$219 million for key modernization efforts such as production of Research and Development Explosive/High Melt Explosive (RDX/HMX) at Holston Army Ammunition Plant (AAP); equipment rehabilitation at Scranton AAP; construction of the new nitrocellulose (NC) facility at Radford AAP; and high explosive (HE) artillery, 120mm tank, Modular Artillery Charge System (MACS), mortars and missile warhead production projects at Iowa AAP. In 2011, the Vice Chief of Staff of the Army directed JMC to address quality of work environment (QWE) concerns. After developing a standard baseline across ammunition installations, \$17 million in projects to impact the QWE began across the industrial base.

Golden Cargo Exercise

JMC oversaw the execution of the FY12 Golden Cargo (GC) exercise. Army/Navy Reservists and National Guard Soldiers from more than 50 Units, were involved in the exercise to conduct ammunition transportation operations. Participating installations included: Blue Grass Army Depot; Crane Army Ammunition Activity; Tooele Army Depot; Hawthorne Army Depot; Anniston Munitions Center; McAlester Army Ammunition Plant and Military Ocean Terminal Concord, CA; Fort Leonard Wood, MO, which served as the rest overnight site; and Winnemucca, Nevada Army National Guard Complex as the "hot site" for the trailer transfer point between Hawthorne and Tooele. The exercise logged 511,000 miles and carried over 8,000 short tons of ammunition, providing invaluable logistics training to the participants. GC provided a cost avoidance of \$2.5 million.

Defense Ammunition Center (DAC)

The Defense Ammunition Center provided support for OEF/OND and deployed personnel with the best available expertise and training in the QASAS, ammunition management, explosives safety, and other needed fields. DAC trained more than 92,000 military and civilian personnel in ammunition-related subjects for mandated certification and special skills development via web-based and classroom training. DAC facilitated an urgent request from 1st Theater Support Command Kuwait to provide certification training for approximately 230 ammunition workers at the Camp Arifjan ammunition supply point (ASP). As the Army's Ammunition Knowledge Center, DAC experts answered more than 655 ammunition questions through the AmmoHelp database. DAC conducted 31 ammunition logistics reviews and explosives safety surveys. DAC continued program support for the Automated Tactical Ammunition Classification System fielded in theater. The US Army Technical Center for Explosives Safety (USATCES) continued to support the Soldier by providing on-site technical assistance in-theater. USATCES provided personnel to fill two explosives safety slots in

Afghanistan for FY12. DAC launched several mobile applications for explosive safety professionals.

Crane Army Ammunition Activity (CAAA)

Crane Army Ammunition Activity receives, stores, issues, produces, renovates and demilitarizes conventional ammunition, missiles and related components to meet contingency requirements in support of the Joint Force. CAAA shipped and received ammunition. Major programs included the production of M85 and M54 burster tubes; load, assemble and pack (LAP) of MK186 projectiles, (PBXN-9) press loaded projectiles; inspection and repackaging of casting powder; and renovation projects for bombs and other components. CAAA also produced illuminating candles in various configurations to support Warfighter requirements. CAAA recovered 30mm projectiles from 30mm cartridges in support of the Air Force medium caliber projectile remanufacture program. Production of countermeasure flares was also critical to support operations. CAAA renovated MICLIC (Mine Clearing Line Charge) products for immediate shipment to theater. CAAA also established an organic capability for 2.75 inch IR rocket warheads. CAAA accomplished production while reaching the milestone of 2.5 million hours worked without a days away case. CAAA received the AMC Excellence in Explosive Safety Award in 2012.

Holston Army Ammunition Plant (HSAAP)

Holston Army Ammunition Plant produced explosives in FY12. HSAAP was integral to creating solutions for the Strong Nitric Acid (SNA) industry shortfall. An integrated product team (IPT) developed the solution to reactivate Holston's magnesium oxidation process to create SNA, leading to production operations by December 2012. The quick action prevented potential delays and shutdowns in scheduled explosive manufacturing operations. HSAAP continued to execute \$138 million for consolidation of operations to combine Area A with Area B (A2B) to create production efficiencies and eliminate environmental and security concerns. The hometown of HSAAP, Kingsport, TN, has been recognized as an International Safe Community by the World Health Organization. The award identifies communities with a focus on injury and safety prevention. Kingsport will be the first city in Tennessee and one of only ten cities in the US that has received this award.

Iowa Army Ammunition Plant (IAAAP)

Iowa Army Ammunition Plant continued production of large caliber munitions and completed limited production of Javelin K-Charge, Sidewinder, and XM982 Excalibur missile warheads as programmed. Production for 120mm propelling charge M234s began after the facilitization of production equipment. American Ordnance (AO) continued to implement and invest in the baseline optimization plan to transition production items from Milan Army Ammunition Plant to IAAAP. IAAAP facilitated all movements and installation of production equipment for the C-4 Extruder operation that supports the M112 demolition charge and the M58/M59 MICLIC; the M58/M59 MICLIC LAP; the HELLFIRE IBFS Romeo warhead LAP; the M888 60mm mortar LAP; and the M299/M702 ignition cartridge (mortar) LAP from Milan AAP. The consolidation optimizes production operations and creates efficiencies within the

industrial base. The transition was executed and Iowa began producing 60mm, 81mm, and 120mm mortar propelling charges and 40mm grenades. In recognition of its stewardship, IAAAP received the Des Moines County Business and Industry Waste Reduction Award.

Lake City Army Ammunition Plant (LCAAP)

Lake City Army Ammunition Plant continued in its role to produce the highest quality small arms ammunition to meet combat and training requirements. Simultaneous with continuous production, LCAAP continued mechanical and electrical refurbishment of various 1970's SCAMP (Small Caliber Ammunition Modernization Program) production lines and replacement of most WWII .50 caliber and 7.62mm process equipment. Together, with critical infrastructure upgrades, these investments improved product quality, increased reliability, reduced cost, and increased sustainability.

McAlester Army Ammunition Plant (MCAAP)

McAlester Army Ammunition Plant produced approximately inert and live-loaded bombs, renovated various munitions, demilitarized munitions, and recovered energetics for reuse. MCAAP loaded 450 BLU-129/B (Bomb Live Unit) specialized warheads for an urgent-need fill requirement from the Air Force. MCAAP depot functions remained eventful with shipment and receipt of ammunition. MCAAP continued to develop facilities for resonant acoustic explosive mixing for making and casing PBXN explosives and will be the first explosive operation in the world to use the new process. MCAAP was awarded the 2011 Air Force External Support Team Award for work on the BLU-129/B and the Precision Strike Association 16th Annual William J. Perry Award for work on the massive ordnance penetrator (MOP). The McAlester Chamber of Commerce awarded MCAAP its Large Business of the Year Award.

Milan Army Ammunition Plant (MLAAP)

Milan Army Ammunition Plant production missions for 40mm, 60mm, and 81mm mortar components, Spider grenades, C4 extrusion, and ignition charges transferred to Iowa AAP by the end of FY12. MLAAP increased production of 40mm and 60mm to offset downtime during the move of production equipment to Iowa. After more than 70 years of ammunition production, MLAAP completed its final full year of planned production in 2012. MLAAP increased efforts to commercialize the site through the Armament Retooling and Manufacturing Support (ARMS) program as a way to offset the loss of ammunition production jobs for the plant and community. Extensive leadership was required to sustain community relations during this significant transition period for the workforce and community. MLAAP received an AMC Community Relations Award in the annual Major General Keith L. Ware competition for community outreach efforts after AO announced its plan to consolidate production at IAAAP.

Radford Army Ammunition Plant (RFAAP)

Radford Army Ammunition Plant continued to produce quality propellants, energetics, and munitions for our Nation. RFAAP produces nitrocellulose (NC), varieties of propellants, 25mm and 30mm munitions, hand grenades and artillery simulators. RFAAP's focus continued to center on major modernization projects valued at more than \$18 million such as the new NC Plant, lightning protection, Nitric Acid Concentrator and Sulfuric Acid Concentrator (NAC/SAC) emissions upgrades, and road paving. RFAAP produced MK-90 rocket motors, tube-launched, optically tracked, wire-guided missile (TOW) motors, and Antipersonnel Obstacle Breaching Systems (APOBS). RFAAP produced medium caliber rounds and M789 High Explosive Dual Purpose (HEDP), combat ammunition. RFAAP seamlessly transitioned contracted operations from Alliant Techsystems (ATK) to the new contractor, BAE Systems.

Scranton Army Ammunition Plant (SCAAP)

Scranton Army Ammunition Plant continued manufacture of large caliber ammunition metal parts. SCAAP government personnel worked in excess of 13,000 hours without a reportable safety mishap. Operating contractor, General Dynamics Ordnance and Tactical Systems (GD-OTS), continued to invest \$27 million over 10 years for facilities and equipment upgrade and refurbishment. SCAAP executed \$8.3 million in production base support (PBS) projects to modernize production equipment and processes and infrastructure. Other projects include electrical upgrades and replacement of aging cooling towers. SCAAP received the DoD Award for Environmental Sustainability for reducing energy usage, conserving/reuse of process water, and improving indoor air quality while reducing greenhouse gas emissions. SCAAP also won the AMC Green Innovation Award.

Pine Bluff Arsenal (PBA)

Pine Bluff Arsenal produces illuminating and infrared munitions, serves as the specified mission facility for smoke munitions, and maintains the capability for white phosphorus fill. PBA produced illuminating, infrared and smoke munitions and completed white phosphorus fill of munitions. PBA performed maintenance on Chemical/Biological Defense (CBD) items. PBA produced grenades without a failure. The Transportation Department received the Military Surface Deployment and Distribution Command's Shipper of Merit Award for timely and accurate submission of shipping instructions. Defense transportation regulation guidelines for these operations are based on an average of 95%; PBA's average was 99%.

Blue Grass Army Depot (BGAD)

Blue Grass Army Depot is a multifunctional depot conducting storage, surveillance, shipping, receipt, maintenance, production and demilitarization operations for conventional ammunition. BGAD produced mortar fins to fill production gaps of needed 81mm mortar high explosive, and full-range practice cartridges to support Army and Marines. BGAD shipped and received ammunition. BGAD completed maintenance for 105mm ammunition rounds, MK82

bombs, grenade fuze confidence clips, 25mm rounds and 30mm containers. BGAD demilitarized ammunition and explosives. BGAD completed fabrication projects in coordination with ARDEC, TACOM and other Army entities for HMMWVs, Mine Resistant Ambush Protected (MRAP) vehicles, and other wheeled and track vehicles. BGAD produced MRAP-ATV (M-ATV) exhaust patch kits and remaining kit orders for other vehicles for direct fielding in theater. The exhaust patch rectified a breach in the armor package endangering Soldiers. BGAD employees worked 24/7 operations to complete Caiman MRAP kits in support of urgent requirements. BGAD managed the Chemical Defense Equipment (CDE) stockpile valued at \$196 million. BGAD shipped fielding packages of new CDE in support of sustainment and contingency operations for Joint Warfighters. BGAD won the AMC Cultural Resources Award for their management of cultural resources.

Hawthorne Army Depot (HWAD)

Hawthorne Army Depot conducts storage, surveillance, shipping, receipt, maintenance and demilitarization operations for conventional ammunition. HWAD, which stores the entire Defense stockpile of elementary mercury, began the permitting and construction in support of the new mission requirements to re-flask mercury for the Defense Logistics Agency (DLA) in 2013. In support of the Army's request to conduct energy alternative testing, the Navy drilled additional geothermal test holes. HWAD shipped and received ammunition. HWAD demilitarized munitions. HWAD continued to provide a high desert training environment to train units for deployment in support of OEF. HWAD became the first JMC installation to achieve ISO 50001 certification for energy management. HWAD began a time critical removal action to locate and remove unexploded munitions fired by the Navy between 1940-1970 from the Walker Lake range.

Tooele Army Depot (TEAD)

Tooele Army Depot shipped and received munitions in support of OEF/OND. TEAD demilitarized munitions and provided maintenance for munition items. TEAD broke ground for a new \$9.6 million, 1.5MW Stirling Solar Array, renewable energy project. This initiative is part of the Secretary of the Army's Energy Initiatives Task Force (EITF). TEAD began projects from the DLA including production of tow pins and metering pins for aircraft and a major project to build mercury containers to house the DoD mercury stored at HWAD. TEAD also took over management of the Deseret Chemical Depot (DCD) and began preparations to begin a new mission to receive and store first and second-stage C-4 rocket motors from the Trident I C-4 Fleet Ballistic Missile/Submarine-Launched Ballistic Missile from the Missile Defense Agency.

Letterkenny Munitions Center (LEMC)

Letterkenny Munitions Center maintains, stores, and demilitarizes tactical missiles and conventional ammunition for the Army, Air Force and Navy. LEMC assembles, disassembles and tests missiles and missile sections and is also responsible for every aspect of conventional ammunition and missiles to include demilitarization, renovation and X-ray. LEMC performed maintenance and demilitarization on missiles and other ammunition items. LEMC transitioned the sustainment of the Army Tactical Missile System from a contractor to the government,

becoming the sole source of support for the ATACMS worldwide. LEMC issued and received ammunition. LEMC received the Secretary of the Army and Chief of Staff of the Army Excellence in Explosives Safety Award for FY11 in 2012.

Anniston Munitions Center (ANMC)

Anniston Munitions Center maintains, stores, and demilitarizes missiles and conventional ammunition for the military. ANMC continued as the single US Army TOW missile recycling center. ANMC finished construction of the Army's first DoD-owned Multiple Launch Rocket System (MLRS) demilitarization facility. ANMC completed its first shipment by air of the Terminal High Altitude Area Defense (THAAD) missile system in September 2012, validating this unique capability. ANMC shipped and received ammunition. ANMC completed the year without a lost time injury.

Summary

As the Nation continued to support contingency operations in Afghanistan, JMC provided lethal, cost effective and reliable munitions to all Services. Ammunition installations and depots provided constant support to production, maintenance, shipping, and receiving operations in support of Operation Enduring Freedom. The command deployed and sustained LMP, working through specific solutions that addressed the ammunition mission. JMC continuous improvement initiatives increased efficiency and the Headquarters began the ISO 9001:2008 certification process. Brigadier General Gustave Perna executed several organizational realignments and leadership changes to posture the command for future budget declines. Many employees from the headquarters and installations deployed to support Warfighters and solve ammunition mission issues in the field. The historical summaries within the body of this report describe challenges and accomplishments in greater detail.