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 $35.4 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 and storage and ammunition installations in 13 states as depicted below.

Leadership

Brigadier General Larry Wyche commanded JMC and JM&L LCMC from February 2009 to 30 July 2010. Mr. Jyuji Hewitt, Senior Executive Service member and Deputy to the Commanding General, JMC, accepted assignment as Acting Director of the JM&L LCMC and JMC through the end of FY10. Brigadier General Gustave F. Perna assumed command of JMC and JM&L LCMC on 16 November 2010. Mrs. Patricia Huber was selected as a Senior Executive Service member within JMC and was promoted on 25 July 2011 and assigned as the
Executive Director of Ammunition at JMC. Brigadier General Jonathon Maddux commanded PEO Ammo throughout FY11 and Dr. Gerardo Melendez continued to direct ARDEC.
Significant Events

During FY11, the JMC executed an annual budget of approximately $6 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 continued 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 2003, JMC has supported the wars in Iraq and Afghanistan with 311,815 short tons of ammunition, equaling 24,000 containers. In FY11, JMC installations issued 215,000 short tons and received more than 249,000 short tons of ammunition. The FY11 munitions readiness status was maintained at 44 of 44 ammunition families rated as green or amber. JMC continued on-time delivery, reporting 99.7% for regular training and 100% for mobilization training. JMC completed 83 Lean Six Sigma projects that resulted in cost savings and avoidances totaling $14 million.

JMC completed six Full Materiel Releases, one Conditional Materiel Release, and eight Urgent Materiel Releases (UMRs). The eight UMRs were for forces deployed or for New Equipment Training for forces that will be deploying in support of OEF. JMC supported urgent requirements for Anti-Personnel Obstacle Breeching System (APOBS), Mine Clearing Line Charge (MICLICs), and aircraft countermeasure flares in support of theater demands. JMC provided ammunition in support of New Equipment Training and continued supporting all training and operation load authorizations for the fielding of OMEGA 60 launchers, which use M34 and M35 Simulators. JMC continued to support the Warfighter by filling multiple requisitions for 30 and 40 mm ammunition rounds in SWA. During FY11, high demand LW 30mm M789 HEDP (High Explosive Dual Purpose) rounds were called forward. As in previous years, JMC executed a high production rate and capacity for production and delivery of rounds of small caliber munitions.
JMC supported theater requirements for Operation Odyssey Dawn in March 2011. Within 24 hours of its start, JMC depots supported an urgent, short notice request for ammunition for the operation. Three JMC installations shipped air-to-ground missiles and aircraft countermeasure flares in support of Navy operations off Libya by the Required Delivery Dates (RDDs).

JMC continued support for draw down of ammunition and personnel in Iraq with final removal of all troops planned for the end of CY11. JMC Quality Assurance Specialists (Ammunition Surveillance) (QASAS) and Logistics Assistance Representatives (LARs) continued oversight of ammunition operations including inspections of all kinds, 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. JMC will continue to support the planned US presence in Iraq headed by the State Department. As sustainment operations decline, FMS requirements and priority distribution operation in the Central Command (CENTCOM) theater will continue to evolve.

Operation Ammunition Clean Sweep was conducted to provide a safer operational environment for US personnel in the Combined Joint Operations Area (CJOA) in Afghanistan. QASAS and ammunition LARs 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.

Previously, Headquarters, Department of Army (HQDA) G-4 established the M855A1 Enhanced Performance Round (EPR) fielding plan with the intent to support operational requirements in theater and build the War Reserve stockpile while expending the worldwide M855 inventory through training. The fielding plan consisted of three phases: Phase 1, support operational requirements in theater; Phase 2, support OCONUS (outside continental United States) theaters' Combat Load (CL) requirements; and Phase 3, support worldwide training requirements. Phase 1 was completed and EPR rounds were shipped to Kuwait in support of operational requirements through August 2011. Phase 2 began and shipments were made to PACOM and EUCOM in support of CL requirements. Commands will transition the M855 stockpile from their CL and expend through training. Phase 3 also began and will be ongoing as the Army is in the process of reducing the M855 stockpile through training and sales to other customers (including foreign military sales (FMS)), while buying back the EPR.

Security Assistance - Foreign Military Sales (FMS)

In FY11, the requirements articulated by foreign countries continued to increase and more ammunition deliveries were requested to be expedited. The JMC Security Assistance (SA) team managed cases valued at $3.6 billion with 45 countries in FY11. The top 10 FMS countries included Afghanistan, Egypt, Australia, France, Kuwait, Lebanon, Israel, Iraq, United Arab
Emirates, and Saudi Arabia. Significant program increases concerning Iraq, Afghanistan, Pakistan, and 1206 Programs required a singular focus to develop and execute. Four Special Assignment Airlift Missions (SAAMs) were completed to the Philippines, Indonesia, Bangladesh, Burundi and Uganda. During FY11, SA prepared five cases for standard and non-standard ammunition for Afghanistan.

**Funding and Warfighter Readiness**

In FY11, BG Perna expressed concern for the growing reliance on supplemental funding to support Ammunition Readiness Base programs. He stressed that JMC was leveraging 56% of Base in FY10, when only 10% directly supported contingencies. JMC aligned the Program Objective Memorandum (POM) FY13-17 requirements with Army strategy, Secretary of Defense (SECDEF) initiatives, the Army Campaign Plan and the DA Initiatives and Army Materiel Command (AMC) strategy. JMC’s top POM concerns were: supporting current contingency operations and the Joint Warfighter; modernizing the industrial base; and executing demilitarization. In August 2011, BG Perna briefed JMC’s FY12 Resource Summit to AMC, presenting JMC’s top five prioritized unfinanced requirements and budget shortfalls. JMC’s top five FY12 issues in prioritized order are: enduring mission; readiness inspections; specialized skills training; storage improvement; and environmental risk management program. BG Perna emphasized AMC’s need to begin the reversal of JMC’s reliance on supplemental funding due to anticipated reductions in the out years. This trend, if not reversed, will adversely impact Joint Warfighter readiness.

**Demilitarization**

The Army’s goal is to reduce the demilitarization stockpile by 6% annually. The stockpile was measured at more than 602,000 tons for the year. Throughout FY11, JMC obligated $161 million in demilitarization funding.

**Logistics Modernization Program (LMP)**

In October 2010, the Logistics Modernization Program (LMP) Project Office deployed the LMP solution to more than 11,000 additional users at 29 CONUS (Continental United States) and OCONUS sites. JMC deployed and worked to sustain the LMP as part of Deployment 3 (D3) along with the Army Sustainment Command (ASC) and the Tank Automotive Command Life Cycle Management Command (TACOM LCMC). LMP transforms logistics operations in six core processes: order fulfillment; demand and supply planning; procurement; asset management; materiel management; and financial management. LMP replaced two AMC materiel management systems which had been in place over 30 years, the Commodity Command Standard System (CCSS) at the headquarters, and Standard Depot System (SDS) at the plants. Users at all levels were provided appropriate education and training for their identified roles. Data was tested and migrated from legacy systems to LMP. The Ammo Solution functionality was identified, developed and converted to change requests for system application. Significant progress toward organic support was in place and JMC reduced contractor support throughout FY11. The command prepared to deploy the Extended Warehouse Management (EWM) system
in FY12. JMC also began preparation for transitioning resource management accounting legacy systems to the General Federal Fund Enterprise Business System (GFEBS) in FY12.

Telework Pilot Study

JMC implemented a test pilot for teleworking in September 2011. The pilot included HQ JMC, Crane Army Ammunition Activity (AAA), and Iowa Army Ammunition Plant (AAP). Participation was limited to a maximum of 10% of the eligible positions/employees with participants allowed to telework no more than 1 day per week. Feedback mechanisms for FY12 will include monthly reports from all participants and their supervisors, as well as bi-monthly surveys with all employees. The pilot will be formally assessed every 4 months and future determinations will be made on program expansion to additional workforce members.

Base Realignment and Closure (BRAC)

The final phases of base closure actions were completed in FY11. JMC established production capabilities at Iowa AAP for the 105 mm/155 mm HE (high explosive) artillery functions that moved from Kansas AAP and the mine and the detonator/relay/delay functions moved from Lone Star AAP. JMC established production capabilities at Milan AAP for the 60 mm/81 mm/120 mm mortar and the 155 mm ICM artillery functions moved from Kansas AAP. JMC also established capabilities for the 60 mm/81 mm mortar, the 105 mm/155 mm ICM artillery and the Multiple Launch Rocket System (MLRS) functions moved from Lone Star AAP. JMC established production capabilities at the Rock Island Arsenal Quad City Cartridge Case Facility (QCCCF) site for the artillery cartridge case metal parts functions which were previously located at Riverbank AAP in California. Prove-out of the QCCCF will be completed in FY12. JMC removed all ammunition assets from the Red River Munitions Center (RRMC) and the Sierra Army Depot by moving storage and demilitarization functions to McAlester AAP and by completing the destruction of remaining assets at Sierra Army Depot. In June 2011, the Army terminated the permit for the Mississippi AAP with the National Aeronautics and Space Administration (NASA). Red River Munitions Center completed mission closure on 28 June 2011.

Installation Modernization Projects

During FY11, the Army began executing $148 million in Production Base Support (PBS) ammunition modernization projects. The funding enabled 32 critical modernization projects to begin across six Army government-owned, contractor-operated (GOCO) plants to include $24 million for infrastructure upgrades and $5.5 million to maintain environmental compliance. It also incorporated $97 million for key modernization efforts such as production of Research and Development Explosive/High Melt Explosive (RDX/HMX) at Holston AAP; equipment rehabilitation at Scranton AAP; final design for construction of the new nitrocellulose (NC) facility at Radford AAP; and missile warhead production projects at Iowa AAP.
20th Anniversary – Golden Cargo Exercise

JMC oversaw the execution of the FY11 Golden Cargo (GC) exercise, which marked the 20th anniversary for this exercise. Army/Navy Reservists and National Guard Soldiers from all over the US were involved in the exercise to conduct ammunition transportation operations. Phase I was held from 4-18 June 2011 at Crane AAA; Blue Grass Army Depot (AD); and McAlester AAP. Fort Leonard Wood (FLW) was used as a Rest-Over-Night/Trailer Transfer Point (RON/TTP). Phase II took place at the Military Ocean Terminal Concord, CA, (MOTCO); Hawthorne AD; and Tooele AD from 25 June to 9 July 2011. Reserve and National Guard Soldiers issued, transported, received, and stored ammunition. The exercise provided a cost avoidance of $3 million.

Defense Ammunition Center (DAC)

The Defense Ammunition Center held a strong presence in support of 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 over 90,000 military and civilian personnel in ammunition-related subjects for mandated certification and special skills development via web-based and classroom training. DAC experts answered 658 ammunition questions through the AmmoHelp database. DAC delivered the fourth and final Mobile Ammunition Processing Facility (MAPF) to Afghanistan in support of ammunition operations.

Crane Army Ammunition Activity (CAAA)

Crane Army Ammunition Activity reached the safety milestone of more than 4.3 million hours worked without a lost workday accident through August 2011. CAAA shipped and received ammunition. Crane provided direct support for contingency operations by renovating Mine Clearing Linear Charges (MCLIC) and Antipersonnel Obstacle Breaching Systems (APOBS) to support the Army and Marine Corps.

Holston Army Ammunition Plant (HSAAP)

Holston Army Ammunition Plant meets our nation's energetic needs. Holston produced explosives and related products in FY11. Operating contractor, OSI made significant progress in the continued development of new insensitive munitions (IM). Insensitive Munition Explosive IMX-101 was qualified for use in the M798 round and IMX-104 is in pursuit of qualification as a common fill for 60 mm and 81 mm mortars. Modernization through the A2B Relocation project continued at Holston. The project will relocate the Acetic Acid/Anhydride production facility from Area A facility to main facility at Area B. The groundbreaking ceremony was held May 2011 with Principal Military Deputy, Assistant Secretary of the Army for Acquisition, Logistics, and Technology (ASA(ALT)), LTG William Phillips presiding as the special dignitary.
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 120 mm 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 to Iowa AAP. This required the facilitization of Bldg 1-85-2 for 40 mm grenade production and the environmental documentation of the 40 mm test range.

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 the combat needs of the Warfighter. During FY11, LCAAP met 100% of production schedules while performing modernization to production lines and administering the plant contract competition. LCAAP delivered Enhanced Performance Round (EPR) rounds to Afghanistan in FY11. LCAAP received the Army’s Greatest Invention Award for the EPR.

McAlester Army Ammunition Plant (MCAAP)

McAlester Army Ammunition Plant produced inert and live-loaded bombs, renovated various munitions, demilitarized munitions, and melted out energetics. Depot functions remained active with shipment and receipt of ammunition. McAlester performed periodic maintenance on Maverick missiles. MCAAP modified the existing 40 mm AP (Armor Piercing) round to a 40 mm API (Armor Piercing Incendiary) for Air Force Special Operations Command’s requirements to sustain the training regimen of C-130 flight crews. The Navy requested MCAAP production of D297 reduced prop charges, which hadn’t been produced in 20 years at MCAAP. MCAAP successfully completed rounds to meet the Navy’s required delivery date (RDD).

Milan Army Ammunition Plant (MLAAP)

Milan Army Ammunition Plant production continued on 40 mm rounds; 60 and 81 mm mortar components; and Spider grenades in FY11. In order to streamline operations, operating contractor, American Ordnance (AO), began execution of the Baseline Optimization Plan to transition production items from Milan to Iowa AAP. AO will focus efforts at Milan on commercial storage and acquiring additional tenants. However, this will mean a significant reduction in production jobs at Milan, having a significant economic impact on the community. Throughout FY11, BG Perna conducted several site visits to meet with local Milan community leaders and personnel to address concerns, update strategic plans, and inform them of the Army’s actions. Transition of 40 mm production from Milan to Iowa made significant progress in FY11. A new M169 cartridge case loading line and new cartridge LAP (load, assemble, and pack) equipment were successfully installed and proved out for 40 mm HV training ammunition. The test range at Iowa is expected to be operational in the May 2012. Until that time, AO-Milan will
continue to LAP and test 40 mm ammunition until production is fully operational at AO-Iowa.

**Radford Army Ammunition Plant (RFAAP)**

Radford Army Ammunition Plant continued to produce quality propellants, energetics, and munitions for our Nation. Two major challenges involved the facility competition and modernization program. The RFAAP staff teamed with JMC and other agencies to provide support for the facility competition. The contract announcement was made in May 2011 that BAE Systems was awarded a 10-year contract to operate and maintain RFAPP with three, 5-year options. Upon this announcement Alliant Techsystems (ATK), RFAAP facility contractor, filed a protest with the Government Accountability Office (GAO). At the end of FY11, the protest was under review and final contract award is expected in FY12. Radford completed the Fire Emergency Services Center (FESC) to upgrade outdated facilities and relocate first responders to a more suitable area on the installation. The family housing area underwent significant improvements in support of military families. Studies were conducted to increase the quality, efficiency and cost competitiveness of the nitrocellulose process, as well as completion of a new solvent recovery system.

**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. More than $5 million in PBS funding was disbursed in order to modernize SCAAP. Projects completed included rehabilitation of the Erie I press line, relocation and installation of a Bliss nosing press from Lake City AAP, rehabilitation of the Bliss III press line, installation of a 20,000 lb/hr induction heater, relocation and installation of an 800 ton press, and separation of storm and sanitary sewers. The operating contractor, General Dynamics – Ordnance and Tactical Systems (GD-OTS), voluntarily joined a Department of Energy program, “Save Energy Now.” This program requires GD-OTS to voluntarily commit to reducing energy intensity by 25% or more in 10 years.

**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. In November 2010, the Pine Bluff Chemical Activity and Pine Bluff Chemical Demilitarization Facility celebrated the completion of missions to safely store and transport, and destroy the chemical weapons that had been housed at PBA for several decades.

**Blue Grass Army Depot (BGAD)**

Blue Grass Army Depot demilitarized ammunition and explosives during FY11. BGAD shipped and received ammunition. BGAD continued fabrication projects in coordination with ARDEC, TACOM LCMC and other Army entities for High Mobility Multipurpose Wheeled Vehicle (HMMWVs), Mine Resistant Ambush Protected (MRAPs) and other wheeled track
vehicles. BGAD also continued the chemical defense equipment mission supporting Joint Warfighters. BGAD deployed personnel in support of OEF/OND.

*Hawthorne Army Depot (HWAD)*

In October 2010, a new 5-year contract with a 5-year option for operation of Hawthorne Army Depot was awarded to the current operating contractor, SOC Nevada LLC. Teamwork, planning and the careful adherence to state requirements resulted in safe delivery of shipments of elemental mercury to HWAD in March 2011. In FY11, Hawthorne shipped and received ammunition. The Army Environmental Command funded $9.6 million for remedial investigation and $5 million for time critical removal action for clean-up and fencing, due to unexploded ordnance surfacing at the south end of Walker Lake. Hawthorne continued to provide a high desert training environment to train units for deployment in support of contingency operations.

*Tooele Army Depot (TEAD)*

HQ JMC and Tooele Army Depot began participation in the AMC Special Installations Study. Tooele is the pilot JMC government-owned, government-operated (GOGO) installation, along with Anniston Army Depot of TACOM LCMC. The study calls for GOGO installations to transfer their base operations staff and functions to the Installation Management Command (IMCOM), based on their core competency of Army Installation Support. Pilot installations are currently scheduled to transfer in FY14, with the remaining AMC GOGO installations transferring sometime during FY15-17. Tooele shipped and received ammunition. During FY11, TEAD received the 2010 Army Exceptional Organization Safety Award.

*Letterkenny Munitions Center (LEMC)*

Letterkenny Munitions Center issued and received ammunition. LEMC performed maintenance on approximately 9,000 missiles and other ammunition items. LEMC demilitarized ammunition, missile and missile component items. LEMC began projects to execute workload for third party work from the Aviation and Missile Life Cycle Management Command (AMCOM LCMC) for the Army Tactical Missile System and Guided Multiple Launch Rocket System (MLRS). LEMC also began projects to establish capability to produce two Low Cost Reduced Range Practice Round prototypes.

*Anniston Munitions Center (ANMC)*

Anniston Munitions Center continued missile recycling operations, successfully recycling TOW missiles. Construction of the Army’s first Department of Defense (DoD)-owned Multiple Launch Rocket System (MLRS) demilitarization facility neared completion with construction to be completed in 2012. ANMC issued and received munitions. After completing infrastructure upgrades, new equipment purchases and training, ANMC received the first Terminal High Altitude Area Defense (THAAD) missiles for storage from the DoD contractor.
Summary

As the Nation continued to support contingency operations in Afghanistan, JMC provided lethal, cost effective and reliable munitions to all Services and Warfighters. Ammunition installations and depots provided constant support to production, maintenance, shipping, and receiving operations in support of contingency operations. The command deployed LMP, working through specific solutions that addressed the ammunition mission. Brigadier General Gustave Perna postured the command to look strategically at core competencies while championing lines of operations that nested with Army objectives. He addressed funding shortfalls for conventional ammunition products, industrial base, modernization, demilitarization and manpower planned in future budget POMs. Many employees from the headquarters and installations deployed to support Warfighters and solve ammunition issues in the field. The historical summary reports within the body of this report describe challenges and accomplishments in greater detail.