The soldier is the Army’s most deployed combat system and the most essential weapon in the Army’s arsenal. Program Executive Office (PEO) Soldier was activated in October 2002 to equip the soldier as a system through centralized development, acquisition, fielding and sustainment of virtually everything the soldier wears or carries. PEO Soldier is the first organization in U.S. Army history to be charged with the mission to treat the soldier as a system. All aspects of soldier equipment are integrated, modular, interoperable and mission-tailorable. This focused effort has led to the most lethal and survivable ground force in modern warfare.

**Project Manager Soldier Warrior**

Project Manager Soldier Warrior (PM SWAR) supports soldiers through the acquisition of integrated systems. Current systems include Nett Warrior, Air Warrior, Soldier Power, and Tactical Communication and Protective Systems (TCAPS). PM SWAR’s product managers and directors develop and integrate components into complete systems designed to increase combat effectiveness, decrease combat load and improve mission flexibility.

**Product Manager Ground Soldier**

Product Manager Ground Soldier manages the Nett Warrior (NW) program. NW builds upon Land Warrior as an integrated, dismounted soldier situational awareness system for combat operations. The system provides unparalleled situational awareness and understanding to the dismounted soldier, resulting in faster and more accurate decision making in the tactical fight.

NW reduces time on target and greatly reduces the risk of fratricide by allowing for immediate feedback of battlefield effects, reducing the use of voice communication, clearing the fog of battle by displaying a real-time common operating picture (COP), and providing immediate command and control.

The centerpiece capability of NW is the ability to graphically display the location of fellow NW-equipped Soldiers on a personally worn end-user device (EUD). NW can also enable communications and provide vital situational awareness throughout multiple echelons through the joint capabilities release and joint battle command platform systems. A graphical user interface integrates this into a user-defined format that allows soldiers to see, understand and interact easily in the method that best suits them and the mission.

NW consists of an EUD coupled with the joint tactical radio system (JTRS) radio. It connects commercial smart devices using the Android operating system to the radio. The device’s ability to run applications and process data transforms the radio into a dismounted leader situational-awareness and command-and-control tool. NW entered the technology development phase in February 2009. It achieved Milestone C and low-rate initial production status in April 2012.

**Product Manager Air Warrior**

Air Warrior (AW) is a modular, integrated, rapidly reconfigurable combat aircrew ensemble that saves lives and maximizes Army aircrew mission performance. The Army has equipped more than 20,000 Army aircrew members with the system.

AW increases personal protection and mission performance. It consists of a primary survival gear carrier that includes first aid, survival, signaling and communications equipment; body armor tailored to each aircrew member; the aircrew integrated helmet system with a communication enhancement and protection system to provide hear-through capability; over-water survival equipment, which includes personal flotation, an emergency escape breathing device and body-mounted life raft; and microclimate cooling system (MCS), a mix of platform-mounted and soldier-mounted cooling gear that increases mission endurance under extreme heat by more than 350 percent.

The MCS also supports Army Stryker, Abrams and Bradley ground forces; Navy and Marine Corps M9 Armored Combat Earthmover (ACE); and foreign militaries. To date, the Army has fielded more than 16,000 systems.

The Portable Helicopter Oxygen Delivery System (PHODS) is a soldier-worn system that delivers compressed oxygen from a lightweight steel bottle attached to the AW vest. The system provides oxygen via a nasal cannula up to 18,000 feet and via a mask at altitudes above 18,000 feet. The Army has fielded more than 3,000 PHODS.

The Electronic Data Manager (EDM) is a touch screen, knee-board computer for aircrew members. It enables them to plan missions quickly and react to possible flight mission changes. The EDM is compatible with night-vision goggles and is readable in direct sunlight. It features a moving map and Blue Force tracking. More than 2,700 fielded EDM systems support the Army, Navy, Marine Corps and foreign militaries.

The Encrypted Aircraft Wireless Intercom System (EAWIS) provides secure, hands-free, wireless aircrew communications for nonrated aircrew members. It gives them mobility inside and around the immediate vicinity of the aircraft. EAWIS provides the first true aircraft intercom capability for medical evacuation helicopter personnel during rescue hoist missions. It consists of an aircraft-mounted interface unit and crewmember-worn mobile equipment units.

The Survival Kit, Ready Access, Modular (SKRAM) gives aircrews a readily accessible, 72-hour suite of life-support equipment. A flame-retardant, modular and configurable backpack houses SKRAM, along with supplemental survival gear for extreme environmental conditions.

The Air Soldier System program formally entered into the engineering and manufacturing development phase in December 2011. It has a requirement to reduce aircrew member weight and bulk while improving safety and situational awareness and mission duration. Air Soldier fielding will happen in two increments. The first will be in fiscal year (FY) 2015 and includes several capabilities.

The Common Helmet Mounted Display
A Layered Clothing Ensemble (LCE) introduces an active heating capability. It also reduces the bulk and weight of the current AW aircrew flexible body armor, cooling vest, chemical/biological protective garment, survival vest components and cold-water immersion protective garments.

The second and final delivery of Air Soldier capability in FY 2018 will fully replace AW. It will include the Wide Field of View/High Resolution Helmet Mounted Display, incorporating 3-D degraded virtual environment symbology for AH-64 Apache aviators; Radio Interface Control Module (RICM), which combines the functionality of—and replaces—the soldier-worn encrypted aircraft wireless intercom system transceiver and combat survivor evader locator survival radio and adds a wireless data capability; Enhanced Laser Eye Protection (ELEP), which provides increased wavelength protection in a spectacle or visor configuration; and Integrated Protective Ensemble (IPE), which fully replaces the legacy AW gear carriage and body armor system. The IPE reduces weight and bulk by using electro-textile mounting raft, reducing the size and weight of breathing devices, and integrating personal flotation.

The Soldier Worn Integrated Power System (SWIPES) provides a central power source for extended mission duration when used with the ergonomic soldier-worn conformal battery. It reduces the number and varieties of batteries a soldier carries. SWIPES provides power for up to four devices. They include, but are not limited to, a radio via a smart charging pouch, a USB hub to power any USB device, a Defense Advanced Global Positioning System (GPS) Receiver (DAGR) and an end-user device such as Nett Warrior.

The Conformal Battery is an ergonomic, soldier-worn battery. It provides a lightweight central source of power for a variety of capabilities.

The Soldier Power Manager is a lightweight, portable power management system that uses power from primary batteries while also managing power from solar, vehicle and fuel cell sources.

The Rucksack Enhanced Portable Power System is a solar power energy system that supplies power to the individual or team. Soldiers can also carry it in an assault pack.

The Modular Universal Battery Charger (MUBC) with a 120-watt solar blanket weighs approximately 6 pounds. It brings recharging capabilities for the entire networked squad in a Tier 1 environment. This charger reduces—and potentially eliminates—the need to return to the forward operating base for recharging. The MUBC allows soldiers to extend their mission duration without needing a logistics battery resupply.

The 1-Kilowatt JP8 Generator allows soldiers to use existing logistics infrastructure while providing a lightweight and portable power solution. The Army is developing a multifuel-compatible capability.

The Tactical Communication and Protective System (TCAPS) provides concurrent hearing protection and auditory situational awareness. In the past, soldiers had to choose either hearing or force protection. As a combat force multiplier, TCAPS maintains hearing protection while enabling soldiers to use existing tactical radios. This results in increased mission effectiveness, safety and survivability.
Active hearing-protection technology, coupled with hearing-attenuation technology, enables soldiers wearing TCAPS to hear in steady state and impulse environments. TCAPS’ ambient-sound capability provides soldiers with localized, 360-degree acoustic situational awareness.

An increase in soldier use of hearing protection devices will result in a reduction of hearing injuries and subsequent post-service disabilities. According to a General Accounting Office report, in FY 2009 “some of the most common impairments for veterans receiving disability benefits were hearing-related. Annual payments for such conditions exceeded $1.1 billion.”

The rapid fielding initiative is issuing an early version of TCAPS to deploying units. The TCAPS program of record will seek to offer a lighter, more interoperable, non-radio-dependent materiel solution. Soldier Systems and Integration is planned for Milestone C in FY 2013.

**Project Manager Soldier Sensors and Lasers**

Project Manager Soldier Sensors and Lasers (PM SSL) provides soldier-borne sensors and lasers. These devices enhance the soldier’s ability to see and dominate in all battlefield and lighting conditions. The sensors and lasers acquire objects of military significance before the enemy can detect a soldier. They also accurately target threats to soldiers and guide munitions to engagement. These systems provide critical, on-the-ground direct support to U.S. forces.

**Product Manager Soldier Maneuver Sensors**

The Product Manager Soldier Maneuver Sensors (PM SMS) is responsible for developing and equipping soldiers with sensors and lasers, which help them dominate the battlefield through improved lethality, mobility and survivability in all weather and visibility conditions.

The AN/PSQ-20 Enhanced Night Vision Goggle (ENVG) provides increased capability by incorporating image intensification and long-wave infrared sensors into a single, helmet-mounted passive device. The ENVG combines the visual detail in low-light conditions provided by image intensification with the thermal sensor’s ability to see through fog, dust and foliage. This thermal capability makes the ENVG, unlike earlier night-vision devices, useful during the day as well as at night. The two variants are the AN/PSQ-20A and the AN/PSQ-20B.

The AN/PVS-14 Monocular Night Vision Device (MNVD) is a head- or helmet-mounted passive device. It amplifies ambient light and very near infrared energy for night operations. Soldiers use it in conjunction with rifle-mounted aiming lights.

The AN/AVS-6 Aviator’s Night Vision Imaging System (ANVIS) is a third-generation, helmet-mounted, direct-view, image-intensification device. Aviators who wear it operate more effectively and safely during low light and degraded battlefield conditions. The low-light sensitivity represents a 35 to 40 percent improvement over the earliest ANVIS. In addition, the gated power supply enables operation at significantly higher light levels than previous designs.

The AN/PAS-13 Thermal Weapon Sight (TWS) gives soldiers with individual and crew-served weapons the ability to see deep into the battlefield. It gives them increased surveillance and target acquisition range as well as the ability to penetrate obscurants, day or night. The TWS systems use uncooled, forward-looking infrared (FLIR) technology. The sight provides a standard video output for training or remote viewing. TWS are lightweight systems mounted onto each weapon’s rail. They operate to the weapon’s maximum effective range. In 2013, deliveries of TWS included 17-micron technology. This will result in size, weight and power improvements over present configurations.

The TWS family includes three variants for different weapons. The AN/PAS-13(V)1 Light Weapon Thermal Sight (LWTS) works with the M16/M4 series rifles and carbines and the M136 Light Anti-Armor Weapon. The AN/PAS-13(V)2 Medium Weapon Thermal Sight (MWTS) works with the M249 Squad Automatic Weapon (SAW)/M240B series medium machine guns. The AN/PAS-13(V)3 Heavy Weapon Thermal Sight (HWTS) works with the squad leader’s weapon M16/M4 series rifles and carbines, M24/M107 sniper rifles and M2 HB/Mk 19 machine guns.

The AN/PSQ-20 Enhanced Night Vision Goggle

The Family of Weapon Sights (FWS) program provides soldiers with networked individual, crew-served and sniper weapons sensor capability. This allows for significantly reduced target engagement times, increased identification ranges and reduced weight throughout all visibility conditions. FWS systems use uncooled FLIR, wireless technologies and additional features to improve offensive firing capabilities, decrease transition time between mobility and targeting sensors, and improve firing accuracy.

The FWS has three variants: FWS-Individual (FWS-I) for use with M16/M4 series rifles and carbines, the M249 Squad Automatic Weapon, the M136 Light Anti-Armor Weapon and M141 Bunker Defeat Munitions; FWS-Crew-Served (FWS-CS) for use with M240B series medium machine guns and the M2 HB/Mk 19 machine guns; and FWS-Sniper (FWS-S) for use with M110, M107 and XM2010 sniper rifles.

The AN/PVS-30 Clip-On Sniper Night Sight (CoSNS) is a lightweight, in-line, weapon-mounted sight. Soldiers use it in conjunction with the day optic sight on the M110 SASS and the XM2010 Enhanced Sniper Rifle (ESR). It employs a variable gain image tube that snipers can adjust to ambient light levels.

When used in conjunction with the M110 or XM2010 day optical sight, the CoSNS provides personnel-sized target recognition at quarter-moon illumination in clear air to a range of 600 meters. The integrated rail adapter attaches directly to the Military Standard (MIL-STD)-1913 rail for quick and easy mounting to, or dismounting from, the weapon. Using the CoSNS does not affect the zero state of the day optical sight. It allows the M110 Semi-Automatic Sniper Sys-

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System (SASS) and XM2010 to maintain bore sight throughout the focus range of the CoSNS and the weapon system’s day optical sights.

The Multifunction Aiming Light (MFAL) family includes the AN/PEQ-15 Advanced Target Pointer Illuminator Aiming Light (ATPIAL), the AN/PEQ-15A Dual Beam Aiming Laser-Advanced 2 (DBAL-A2), and the AN/PEQ-16B Mini-Integrated Pointer Illuminator Module (MIPIM).

The AN/PEQ-15 and AN/PEQ-15A class 3B MEAL devices replaced the AN/PAQ-4C. The infrared (IR) and visible aiming lasers are co-aligned. Soldiers can use the visible laser to bore-sight the device to a weapon without the need of night-vision goggles. The IR lasers emit a highly collimated beam of IR light for precise weapon aiming and a separate, IR-illuminating laser with adjustable focus. Soldiers can select a visible red-dot aiming laser to provide precise weapon aiming during operations at any time of the day.

Soldiers can use the AN/PEQ-15 and AN/PEQ-15A IR lasers as handheld illuminator pointers or weapon-mount them with the included hardware. They can use these units with night-vision equipment to engage enemy targets at night. The AN/PEQ-16B incorporates the function of the AN/PEQ-15 with aiming lasers and a white light capability. This eliminates the need for a separate weapon-mounted white light.

The AN/PEQ-14 Integrated Laser White Light Pointer (ILWLP) is a small, lightweight device soldiers can hold or mount on the M9 pistol with a MIL-STD-1913 rail adapter. It combines the functions of a white-light flashlight with adjustable focus, visible aiming and infrared aiming lasers, and IR illuminator into one system. Soldiers use the ILWLP with the M9 pistol to engage targets on the battlefield and in close-quarters combat. The Army fields it to military police units.

The LA-5/P Aircrew Laser Pointer (ALP) is a finger-mounted laser. It has the capability to direct fire, identify friend and foe, and signal adjacent formations during night operations. Soldiers can mount it on a fire-resistant fabric designed to attach to the aircrew member’s glove. Because soldiers wear it on the hand, it does not interfere with aircraft operation. The master arming switch allows a high-power (Class IIIb) or low-power (Class I) infrared laser operation. A momentary fire button allows easy activation with the thumb to initiate a light-emitting diode (LED). The ALP incorporates a laser diode that projects a pinpoint beam that is brighter and more defined than other lasers.

The Green Laser Interdiction System (GLIS) is a rifle-mounted laser that allows soldiers to interdict hostile actions through nonlethal effects. Soldiers use it to divert, disrupt or delay potential threats before they can engage friendly forces. It is also an effective, nonlethal means to warn civilians that they are approaching a zone of military operations.

Product Manager Soldier Precision Targeting Devices

The Product Manager Soldier Precision Targeting Devices (PM SPTD) develops and equips soldiers with portable precision targeting systems (locators, designators and entry devices). Joint force scouts, forward observers and joint terminal attack controllers across the full spectrum of operations use the equipment.

The AN/PED-1 Lightweight Laser Designator Rangefinder (LLDR) provides dismounted fire support teams, combat observation and lasing teams, and scouts with a precision target-location and laser-designation system. It allows them to call for fire using precision, near-precision and area munitions. It is a crew-served, man-portable, modular target locator and laser designation system.

The primary components of the AN/ PED-1 are the target locator module (TLM) and the laser designator module (LDM). The TLM incorporates a thermal imager, day camera, laser-designator spot imaging, electronic display, eye-safe laser rangefinder, digital magnetic compass, selective availability/anti-spoofing module global positioning system (SASSM GPS), and digital export capability.

The Army is fielding a new compact laser designator with the LLDR 2. It requires less power and operates on one common single-channel ground and airborne radio system (SINCgars) battery.

PM SPTD developed the LLDR 2H to provide a precision targeting capability to the dismounted soldier. It integrates a celestial navigation system with the digital magnetic compass in the TLM to provide highly accurate target coordinates. Soldiers can use the TLM as a stand-alone device or in conjunction with the LDM.

By using the TLM, soldiers can recognize targets more than 7 kilometers away during day operations. At night and in obscured battlefield conditions, soldiers can recognize vehicle-sized targets at more than 3 kilometers. The LDM emits coded laser pulses compatible with DoD and NATO laser-guided munitions. Soldiers can designate targets at ranges greater than 5 kilometers.

The Laser Target Locator (LTL) provides daylight and limited night capabilities to locate targets accurately and transmit target data. These are commercial-off-the-shelf, handheld or tripod-mounted, lightweight laser target locators. PM SPTD designed them to deliver target data to the fire support and maneuver command, control, communications, computers and intelligence (C4I) system.

The Vector 21 is a binocular laser rangefinder (BLRF) with an embedded digital compass. Soldiers can use it in combination with the AN/PVS-14 night vision goggles for limited night capability. Combined with a precision lightweight GPS receiver (PLGR) or a DAGR, the system can compute and display targets.

The Mark VII integrates a monococular direct-view optic, an image intensifier, a laser rangefinder and a digital compass into a day/night target location device. The MARK VII provides a limited night capability. Combined with a PLGR or a DAGR, the system can compute and display targets.

The Mark VIE is an improved Mark VII. In addition to the Mark VII’s capabilities, it features a more powerful 8x day optic, an uncooled thermal sight for increased night
The Target Reconnaissance Infrared Geolocating Range Finder (TRIGR) incorporates a 7x direct-view optic and an improved uncooled thermal sight for increased sight range. It also features a laser rangefinder, a digital compass and embedded GPS to determine target location.

The Joint Effects Targeting System (JETS) is an Army-led, joint interest program with the Air Force and Marine Corps to develop and field a manportable targeting system that forward observers and joint terminal attack controllers can use. JETS provides the dismounted forward observer and joint terminal attack controller with the ability to acquire, locate, mark and designate targets for precision GPS-guided and laser-guided munitions. It provides connectivity to the joint forces through fire and close air support digital planning/messaging devices.

The AN/PSQ-23 Small Tactical Optical Rifle-Mounted (STORM) Micro-Laser Rangefinder (MLRF) is a lightweight, multifunctional laser system. It operates on individual and crew-served weapons, the Stryker remote weapons station, and the Common Remotely Operated Weapons Station (CROWS). It combines the functionality of a laser rangefinder, the AN/PEQ-2A infrared aiming laser and illuminator, the multiple integrated laser engagement system (MILES), a digital compass, and a visible pointer into a single system. The system can compute and display targets when combined with a PLGR or DAGR.

Project Manager Soldier Protection and Individual Equipment

The Project Manager Soldier Protection and Individual Equipment (PM SPIE) develops and fields advanced soldier protection products, uniforms, and parachute systems. These products protect soldiers and improve mission effectiveness in any condition.

The Product Manager Soldier Clothing and Individual Equipment (PM SCIE) provides soldiers with different uniforms designed to protect them wherever they are. Army combat uniforms are factory-treated with the insect repellent permethrin to protect soldiers from flying and crawling insects.

The Army Combat Uniform (ACU) and Flame-Resistant Army Combat Uniform (FRACU) consist of a jacket, trousers and patrol cap. Soldiers wear these with a moisture-wicking T-shirt. They wear combat boots suited for temperate and hot weather conditions or mountain combat boots for rugged terrain.

In February 2010, the Army announced its decision to change the operational camouflage pattern for Afghanistan after receiving soldier feedback. The Operation

Enduring Freedom Camouflage Pattern (OCP) replaced the pixelated Universal Camouflage Pattern (UCP). OCP is more effective in Afghanistan’s varied visual environments. The first soldiers to receive OCP were deployed in August 2010. Soldiers already in theater received theirs that fall. In August 2012, the OCP uniforms included an improved fabric and several design changes that made them easier to wear and more durable in rugged terrain.

The Army Service Uniform (ASU) is a traditional uniform that fully embodies utility, simplicity and quality. The ASU is Army blue. The Army traces this color back to the blue in the U.S. flag and blue uniforms worn by Continental Army soldiers in 1779. The ASU presents a distinctive appearance that easily identifies a soldier.

The ASU streamlines various dress uniforms—Green Class As, dress blues and dress whites—into one. This reduces the burden of maintaining up to three uniforms. The ASU allows soldiers to dress from the lowest end to the highest end of service uniforms with little variation required. It includes a coat and low-waist trousers for male soldiers, while female soldiers have a coat, slacks and skirt. The ASU uses a 55/45 wool/polyester fabric blend. This is heavier and more wrinkle-resistant than the current commercially available blue uniform. The new ASU coat has an athletic cut to improve fit and appearance. The short- and long-sleeved white shirts are wrinkle-resistant. They also have permanent military creases and shoulder loops.

The beret is the primary headgear for the ASU, but soldiers must also wear the service cap. Commanders have the discretion to determine if corporals and above should wear either the service cap or the beret. Soldiers can wear the windbreaker, all-weather coat, overcoat and sweaters with the ASU.

Soldiers can wear the new Combat Service Identification Badge (CSIB) on their ASUs to honor the heritage and traditions of combat service. The CSIB replicates the former Wartime Service Shoulder Sleeve Insignia on the ACU. The green leaders tab cannot be worn on the ASU.

The ASU first appeared in military clothing sales stores in the fourth quarter of FY 2007. The Army introduced the ASU into soldiers’ clothing bags at initial-entry training in FY 2010. The mandatory possession date for the ASU for all soldiers is the fourth quarter of FY 2014.

Product Manager Soldier Protective Equipment

The Product Manager Soldier Protective Equipment (PM SPE) increases soldiers’ lethality and mobility. SPE optimizes their protection while effectively managing all life-cycle aspects of personal protective equipment.

Interceptor Body Armor (IBA) is a joint-service item designed and developed for the Army and Marine Corps. Interceptor is a modular, multiple-threat body armor system that consists of a base tactical vest and components. It includes small-arms inserts to protect soldiers from multiple battlefield ballistic hazards.

The Improved Outer Tactical Vest (IOTV)
The Enhanced Small Arms Protective Inserts (ESAPI) plates provide additional ballistic protection to a soldier’s sides, which are not covered by ESAPI. The ESBI can also withstand small-arms hits from the same threats the ESAPI defeats.

The X-Threat Small Arms Protective Insert (XSAPI) plate meets short-term emerging threats. It provides additional ballistic protection against more lethal small-arms rounds. The X-Threat Side Ballistic Insert (XSBI) plates can withstand small-arms hits from the same threats as the XSAPI and provide ballistic protection to a soldier’s sides, which are not covered by XSAPI.

The legacy Concealable Body Armor (CBA) is for soldiers in military police units, corrections, confinement and law-enforcement operations, DoD investigative and security components, and other U.S. military forces. The CBA offers ballistic protection to National Institute of Justice (NIJ) Level IIIA. The CBA provides maximum torso coverage while maintaining comfort and the ability to conceal.

The Family of Concealable Body Armor (FoCBA) program will replace the legacy CBA. It standardizes the CBA for all Army components and a portion of the DoD police force. The FoCBA provides two types of vest protection based on the operating environment or mission.

The Type 1 vest provides Level IIIA ballistic protection to the NIJ 0101.06 standard and stab protection to Level I of the NIJ 0115.00 standard. The Type 2 vest will provide stab protection to meet the NIJ 0115.00 standard for Level III stab protection, while meeting additional Army requirements. These vests will allow for increased mission effectiveness by providing improved protection and a selection based on the operational environment.
to protect soldiers’ eyes from external threats and hazards such as ballistic fragmentation, electromagnetic radiation, sand, wind and dust. MCEP provides eye protection for both prescription and nonprescription wearers in a variety of commercial styles and sizes. This variety of eyewear enables soldiers to choose the best eyewear for their mission while maintaining military standards for eye protection.

The Advanced Bomb Suit (ABS) protects explosive ordnance disposal (EOD) soldiers against bombs and IEDs. This system uses new materials technology and design to provide protection, comfort and ergonomic efficiency. The ABS ensemble consists of the EOD 8 bomb suit and EOD 9 helmet.

The bomb suit is a full-body ensemble that protects the wearer from fragmentation, blast overpressure, impact, heat and flame. To minimize weight and maximize flexibility, the suit’s level of fragmentation protection varies based on winding potential. There is blast overpressure protection to the front of the thorax. The head and spine features impact protection. Fire-resistant materials provide heat and flame protection.

The suit also includes an ice-based cooling system to extend mission duration. A hand-protection module provides increased protection. Wearers can remove the system in less than 30 seconds. All ballistic inserts are removable for easy cleaning and repair. The system’s design allows for future upgrades to communications, performance and capability.

Project Manager Soldier Weapons

The Project Manager Soldier Weapons (PM SW) ensures soldiers have battlefield dominance in individual and crew-served weapons capabilities. PM SW supports soldiers through the development, acquisition, fielding and sustainment of current and future weapons systems. It also supports associated target acquisition and fire control products. Soldiers benefit from continuous improvement programs and are equipped with systems that enhance lethality and survivability.

Product Manager Individual Weapons

Product Manager Individual Weapons (PM IW) develops current and future rifles, carbines, pistols, shotguns, grenade launchers, sniper systems, airburst weapons and related target acquisition/fire control products.

The M4/M4A1 Carbine features lightness, speed, mobility and firepower, and it is standard issue for brigade combat teams. Throughout more than 10 years of sustained combat operations, the 5.56 mm M4 has proven itself an effective weapon system. The system is 1 pound lighter and more portable than the M16 series of rifles. Soldiers can mount the M203A2 grenade launcher, M320 grenade launcher or M26 modular accessory shotgun system (MASS) to the M4 series of carbines. Many performance-based design improvements since its inception keep the M4 well-suited for soldiers. The Army authorized the upgrade of all M4s to the M4A1 configuration in September 2010. The M4A1 has full automatic capability, an ambidextrous fire selector and a slightly heavier barrel that increases the sustained rate of fire.

The M16A2/A4 Rifle is the most prevalent combat rifle in the Army’s inventory. Soldiers can fire the gas-operated, air-cooled, shoulder-fired 5.56 mm weapon in either automatic three-round bursts or semiautomatic single shots. The M16A2 has an integral rear sight, while the M16A4 includes a MIL-STD 1913 upper receiver and forward rail system with a backup iron sight. Both systems can accommodate modern optics and accessories and can incorporate the M203 and M320 40 mm grenade launchers.

The M320 Grenade Launcher enables soldiers to engage the enemy accurately out to 350 meters with 40 mm low-velocity grenades. The M320 will replace all M203 series grenade launchers mounted on the M16/M4 series of rifles and carbines. The weapon includes a side-loading unrestricted breech that permits the system to fire longer 40 mm projectiles (NATO standard and nonstandard). It also features the enhanced safety of a double-action trigger/firing system.

The M26 MASS provides soldiers with a 12-gauge shotgun accessory attachment with lethal, less-than-lethal and door-breaching capabilities. The system attaches underneath an M4’s barrel and provides a capability equivalent to a stand-alone shotgun. Soldiers can convert the M26 without tools to operate in a stand-alone mode. The Army began fielding the M26 to select engineer and MP units in 2012.

The M107 Semi-Automatic Long Range Sniper Rifle (LRSR) fires .30-caliber ammunition. It delivers precise, rapid fire on targets out to 2,000 meters. It is especially valuable during military operations in urban terrain, where greater firepower and standoff ranges provide counter-sniper capability while enhancing sniper survivability.

The XM2010 Enhanced Sniper Rifle (ESR) is a fully upgraded M24 sniper weapon system. The Army recambered it to fire .300 WinMag ammunition. The bolt action, magazine-fed system provides precision fire on targets at ranges 50 percent farther than existing 7.62 mm sniper systems.

The XM2010 includes a suppressor and a fully adjustable right-tilting chassis system featuring a monolithic MIL-STD 1913 accessory rail and accessory cable routing channels. Soldiers can tailor the shooter interface to accommodate a wide range of shooter preferences. Fielded with the XM2010 is a Leupold Mark 6 6.5 to 20x50 mm extended range/tactical riflescope. It features a scalable ranging and targeting reticle and an AN/PVS-29 Clip-on Sniper Night Sight. The Army began fielding the XM2010 to sniper teams in Afghanistan in 2011.

The XM25 Counter Defilade Target Engagement (CDTE) system is the Army’s latest developmental weapon. It addresses the problem of defeating enemies behind cover, defilade and exposed targets at ranges and accuracies not seen in today’s small arms. It fires 25 mm high-explosive airburst (HEAB) munitions. The XM25 incorporates full-solution target acquisition and fire control that integrates a thermal sight, 2x direct-view optics, a laser rangefinder, compass, fuze
The M110 Semi-Automatic Sniper System (SASS) is the Army’s medium-caliber sniper rifle. It supplements the sniper’s role to support combat operations with greater firepower and versatility. The 7.62 mm SASS brings a semiautomatic capability to sniper teams. It is particularly effective in urban areas, where there are multiple targets and frequent close-combat situations.

The M110 comes with a suppressor and incorporates a 3.5x10 scope with illuminated mil-reticle. It also comes with the M151 Enhanced Spotting Scope, which allows long-distance target recognition and identification. With powerful and bright optics, the spotting scope has 12x to 40x magnification with a 60 mm objective lens diameter. The scope has a Leupold mil dot (round dot) reticle for both range estimation and tactical collaboration with the shooter. The scope is weatherproof and fog-proof.

The M14 Enhanced Battle Rifle (EBR) provides infantry squads operating in Afghanistan with interim capability to engage enemy targets beyond the range of M4s and M16s. The 7.62 mm weapon is air-cooled, gas-operated and magazine-fed. It is a modern M14 rifle mated to an enhanced aluminum billet stock, tactical scope and cantilever mount. The rifle is effective in close-quarters combat and in the conceptual squad designated marksman role.

The M9 Pistol is a 9 mm pistol with rail-attachment capabilities that enhances lethality and survivability in close combat situations. It is the primary sidearm of crew-served weapon soldiers and others who have a personal defense requirement, including law-enforcement personnel, unit leaders and aviators.

The M68 Close Combat Optic (CCO) is a red-dot aiming device. It enhances target acquisition speed by allowing soldiers to engage targets up to 300 meters with both eyes open to maintain situational awareness. The sight has no magnification. Soldiers can use it with all current night-vision enhancements.

The M150 Rifle Combat Optic (RCO) is a rugged, battery-free, 4x magnified optic. It provides full mission profile optical capability for use on the M4/M16/M249 weapon systems. An enhanced capability of the M150 RCO is range estimation that, along with the bullet drop compensated reticle, provides accurate target engagements out to 800 meters for trained operators.
The M2 .50-caliber Machine Gun is belt-fed, recoil-operated and air-cooled, and it has a cyclic rate of fire of 450 to 600 rounds per minute. It has a maximum effective range of 1,500 meters for point targets and 1,830 meters for area targets. This battle-proven system mounts on the M3 tripod and on most vehicles. It also serves as an antipersonnel and antiaircraft weapon. It is highly effective against lightly armored vehicles, low- and slow-flying aircraft, and small boats. The M2 provides suppressive fire for offensive and defensive purposes. It is capable of single-shot and automatic fire.

In post-combat surveys, soldiers rated the M2 among the most effective weapon systems in their small-arms arsenal.

The M2A1 with Quick-Change Barrel and fixed headspace and timing is an enhancement to the M2 .50-caliber machine gun. It offers soldiers increased performance and design improvements. The weapon is easier and safer to use while meeting all of the M2 reliability and operational characteristics. The M2A1 improves survivability and safety by reducing the time required to change the barrel. It eliminates the need to manually adjust headspace and timing. The M2A1 also provides a flash hider that reduces muzzle flash by 95 percent, making the weapon less detectable in darkness. The Army began fielding the M2A1 in 2011, and it was designated an Army’s Greatest Invention that year. The Army plans to upgrade its fleet of 45,000 M2s to the M2A1 standard.

The M240B 7.62 mm Medium Machine Gun is a gas-operated, crew-served machine gun. It has a cyclic rate of 550 to 650 rounds per minute. It has a maximum effective range of 600 meters against point targets and 800 meters against area targets. It comes with an accessory rail integrated with the top cover to attach sighting devices. The Army issues it to infantry, armor, field artillery and combat engineer units that require medium-support fire.

The M240L 7.62 mm Medium Machine Gun (Light) weighs approximately 5 pounds less than the existing M240B, while meeting all its reliability and operational characteristics. The M240L incorporates titanium construction and alternative manufacturing methods to achieve its weight savings. The weapon system’s short barrel and collapsible butt-stock configuration allow easier handling and movement of the weapon. The rugged and reliable M240L has a minimum 50,000-round receiver life.

The M240H 7.62 mm Machine Gun (Aviation Version) supports aviation operations and demonstrates reliability equal to that of the M240B. It delivers two minutes of continuous suppressive fire and is removable for use in a ground role. It replaces the M60D machine gun for the UH-60 Black Hawk and CH-47 Chinook helicopters as part of their defensive armament systems.

The M249 5.56 mm SAW serves as an automatic rifle and light machine gun for infantry squads. The M249 SAW is an air-cooled, belt-fed, 5.56 mm weapon with fixed headspace and a quick-change barrel. It has a cyclic rate of fire of 700 to 850 rounds per minute and a maximum effective range of 600 meters for point targets and 800 meters for area targets. Soldiers can fire the weapon from the shoulder, bipod/tripod-mounted or vehicle-mounted position. It replaced the M16 rifle in the squad automatic rifle role.

The M192 Lightweight Ground Mount for Machine Guns and the M205 Lightweight Heavy Machine Gun Tripod are the Army’s improved machine-gun tripod systems. The M192 provides a lighter weight, low-profile mounting platform for the M249 and M240. It offers controlled, sustained and accurate fire at extended ranges. The M192 is compact and collapsible, and it weighs 6 pounds less than the M122A1 tripod it replaces.

PM CSW will begin fielding the M205 in 2013 for the dismounted M2/M2A1 and M4 19 to enable a quicker, more accurate target engagement. At 34 pounds, the M205 weighs 16 pounds less than the current M3 heavy tripod. It offers an integrated traverse and elevation mechanism that soldiers can operate with one hand.