FY 2016 DOD VE ACHIEVEMENT AWARD RECIPIENTS

Nominating Organization - U.S. Army

Nominee: Project Manager, Combat Ammunition Systems
Nomination Category: Program/Project
Value Engineering (VE) Effort: The Army developed a VE project to rework M825A1 155-millimeter projectiles in order to address the large number of unserviceable projectiles in inventory. The M825A1 project continues the long-standing collaboration between Project Manager, Combat Ammunition Systems (PM CAS); U.S. Army Armament Research, Development, and Engineering Center (ARDEC); and Program Executive Officer Ammunition with the administrative and technical guidance of the ARDEC VE Support Team. This unique collaboration represents the best in VE – improving the performance readiness of America’s soldiers, while achieving substantial savings that the Army can invest for other critical opportunities. PM CAS initiated a recapitalization program for the M825A1 projectiles, delivering 54,000 refurbished projectiles after successful completion of ballistic lot acceptance testing. Replacement of the delay igniter, safe and arm modules, and retainers (expulsion charges and pallets, as needed) resulted in a three year savings of $21 million and a return on investment of 419:1.

Nominee: Mr. William Huntzinger
Program Manager, Continuous Process Improvement
Blue Grass Army Depot
Nomination Category: Individual
Value Engineering (VE) Effort: Mr. William Huntzinger initiated a campaign to increase employee involvement in the VE program by actively promoting the program from top to bottom within Joint Munitions Command – Blue Grass Army Depot (BGAD). Five VE projects were implemented during FY 2016 and the VE program was expanded to all BGAD directorates including subordinate installations. In addition, Mr. Huntzinger was a major proponent of reinstituting an employee rewards program for projects submitted and implemented. The most significant VE efforts addressed processes for the confidence clip line, 105-millimeter cartridge case, and .50 caliber line. These efforts reduced lost production, material waste, and inventory time; increased throughput; and increased production and improved ergonomics, respectively. Mr. Huntzinger’s efforts led to BGAD exceeding their FY 2016 VE goal of $1.7 million by $4.4 million for a total of $6.1 million in cost savings and avoidance.
Nominate:  Dr. Clinton Holder and Tobyhanna Army Depot VE Study Team
Nomination Category:  Team
Value Engineering (VE) Effort:  Production Manager, Ground Sensors is part of Project Manager, Terrestrial Systems with the overall mission to ensure the warfighter has a decisive advantage over any adversary by leveraging technology to provide world class sensors for enhanced situational awareness and decisive action. The Tobyhanna Army Depot VE Study team contributed to the success of the mission by reducing the need for mandatory replacement of Detector Cooler Bench cryocooler assemblies while ensuring mission readiness and capability for the warfighter to best use available resources. The VE effort resulted in automated testing for environmental stress and final acceptance testing of the cryocooler assemblies. In addition to increased customer satisfaction, product quality, reliability, and maintainability, the effort resulted in cost avoidance of $12 million for FY 2016 through 2018.

Nominee:  U.S. Army Aviation and Missile Command
Nomination Category:  Organization
Value Engineering (VE) Effort:  The U.S. Army Aviation and Missile Life Cycle Management Command (AMCOM LCMC) VE program for FY 2016 resulted in 106 completed VE proposals with a savings of $163 million over a three year period. Fourteen of the 21 AMCOM LCMC organizational elements participated and 11 achieved their internal savings goal. Additionally, AMCOM LCMC VE program successfully completed VE efforts for multiple tenant and off site organizations which resulted in additional savings of $141 million for those organizations. In addition to cost savings, the VE efforts mitigated obsolescence, improved quality, expanded the industrial base, reduced weight, minimized cycle times, developed new repairs, enhanced performance, updated technology, reduced inventories, decreased administrative burden, optimized power consumption, and increased readiness. Taking into account AMCOM, tenant, and off site organizations, AMCOM LCMC achieved savings of $304 million on 118 VE projects.
Nominee: Mr. John F. Hedderich III  
Director, U.S. Army Armament, Research, Development, and Engineering Center  
Nomination Category: Special  
Value Engineering (VE) Effort: Mr. John Hedderich was integral to the effort to re-use 155mm M483A1 projectile metal parts for production of the M1123 and M1124 illuminating projectiles. The VE effort associated with the obsolete projectile provided extended range for the artillery projectile and period of illumination by the payload. The success of the project indicates the potential for future savings and cost avoidances through the continued approach of screening the Joint Service demilitarization stockpile for additional reutilization candidates. The re-use of the obsolete projectiles reduced production time and eliminated an unfunded demilitarization backlog with a total cost savings and avoidance of $32 million.

Nominee: Tank & Automotive Command, Watervliet Arsenal  
Nomination Category: Special  
Value Engineering (VE) Effort: Tank & Automotive Command, Watervliet Arsenal (Watervliet) leveraged shared use of its Rotary Forge, one of two in the United States, to reduce maintenance and repair requirements. The VE project team expanded the shared use to include recently installed larger and more efficient furnaces. With support of Watervliet’s in-house design partner, a new process was developed and approved to use the equipment for M284, M256, and M776 gun tube preforms. In addition to increasing throughput to 33 percent from nine preforms per day to 12 preforms per day, the VE effort resulted in savings of $843 thousand.

Nominee: Mr. Alivio Mangieri  
Product Manager, Aviation Air Traffic Control  
Nomination Category: Special  
Value Engineering (VE) Effort: In FY 2016, Mr. Alivio Mangieri transferred to the Air Traffic Control (ATC) Product Manager’s Office from the Aviation Ground Support Product Manager’s Office where he had success executing multiple VE initiatives. Mr. Mangieri immediately re-invigorated the ATC VE program. In FY 2016, Mr. Mangieri led a VE effort that resulted in the use government owned software instead of an obsolete commercial derivative. Mr. Mangieri’s leadership resulted in cost savings of $36.9 million.
Nominating Organization: Department of the Navy

Nominee: AN/ALQ-218(v)2 Factory System Bench Build Team  
Airborne Electronic Attack Systems Division  
Naval Surface Warfare Center, Crane Division  
Nomination Category: Special  
Value Engineering (VE) Effort: Airborne Electronic Attack (AEA) Suites used in EA-18G aircraft need to be verified at the multi-system level in order to compensate for advanced threats against the warfighter and decrease the risk of compromised missions. To allow for dependent AEA system responses to be tested and verified at a multi-aircraft level, Naval Surface Warfare Center, Crane Division (NSWC Crane) built two system level Factory System Benches (FSB). The NSWC Crane team used VE studies on acquisition activities and manufacturing practices associated with the FSB build. Their efforts expedited the use of the FSBs for EA-18G target acquisition technique development. In the future, the FSBs will be used for additional developments against emerging Electronic Warfare threats, to include developing the integration of the Next Generation Jammer. The NSWC Crane team saved $4.8 million and reduced the lead time from 24 months to 12 months. The efforts of the NSWC Crane team will ultimately reduce risk to Warfighters as they gather combat data on today’s advanced threats.

Nominee: Wide Field of View Night Vision Goggle Development Team  
Electro-Optics Technology Division  
Naval Surface Warfare Center, Crane Division  
Nomination Category: Special  
Value Engineering (VE) Effort: Through VE, the Naval Surface Warfare Center, Crane Division (NSWC Crane) used a proven platform, Personal Vision System 15 (PVS-15), to increase cost efficiency and reduce risk, while providing increased capability to the warfighter. The effort resulted in the PVS-15D Wide Field of View Night Vision Goggle (PVS-15D WFOV NVG). NSWC Crane subject matter experts invented a novel, biologically-inspired optical design resulting in a system wide size, weight, and power improvement of nearly 40 percent; developed a retrofit kit and reused existing hardware for project cost savings of $8 million; increased warfighter combat efficiency with NVGs by approximately 30 percent; and realized a cost avoidance of $32 million for additional buys to meet the total inventory objective of 1250 units.
Nominee: Stand Up Alternate Air Manifold Team  
Airborne Electronic Attack Systems Division  
Naval Surface Warfare Center, Crane Division

Nomination Category: Special

Value Engineering (VE) Effort: The Stand Up Alternate Air Manifold Team at the Naval Surface Warfare Center, Crane Division (NSWC Crane) conducted a VE workshop and determined that NSWC Crane could use additive manufacturing to print Electrostatic Dissipative safe air manifolds as a replacement to those used by the Original Equipment Manufacturer in the Interface Test Adapter. This allowed NSWC Crane to address the increased demand for Interface Test Adapters necessary to direct facility air to meet the cooling requirements of Units Under Test. The team challenged the cost associated with the proprietary casting equipment required for the OEM air manifolds by developing a cost effective in-house process that benefits current and future projects. The team achieved FY 2016 savings of $129 thousand.
Nomination Category: Team

Value Engineering (VE) Effort: The C-130J program team at the Air Force Life cycle Management Center implemented VE which allowed for cost savings and efficiencies through the award of a Multi-Year Procurement Contract (MYPC) for the C-130J ACAT IC production program. Additionally, the Program Office formed a tiger team of Government personnel who spent a considerable amount of time assisting the Contractor with subcontractor should cost analysis and negotiations, and value analysis. The Program Office attained $608 million in savings on aircraft procurement through the use of an MYPC versus annual buys, which allowed the Contractor to negotiate bulk purchases of materials and components, as well as, make investments in productivity enhancements. Also, the C-130J program team’s efforts resulted in negotiated aircraft prices that are being leveraged on additional requirements, creating additional cost savings for domestic and international customers.
Nominating Organization: Defense Logistics Agency

Nominee: Mr. James O. Dunlap
Product Specialist
Defense Logistics Agency Aviation
Nomination Category: Individual
Value Engineering (VE) Effort: The VE effort associated with the Aviation Engineering V-22 Source Control Project, managed by Mr. James Dunlap, resulted in the availability of source control drawings and additional sources for 709 V-22 national stock numbers (NSN). Mr. Dunlap then obtained any other available necessary drawings and, along with adding the newly identified sources, updated the procurement information. To deal with the large number of NSNs, Mr. Dunlap coordinated a mass update of DLA’s procurement codes. As a result, buyers and product specialists were notified of the newly added sources and procurement information which resulted in expanded competition and procurement savings. The VE effort led to $4.7 million of savings in FY 2016 and additional cost savings are expected to accumulate in future years.

Nominee: Should Cost/Price Challenge Team
Nomination Category: Team
Value Engineering (VE) Effort: DLA Aviation Should Cost (SC) and Price Challenge (PC) Team efforts are dedicated to providing best value solutions to DLA and its customers. The SC/PC Team’s VE efforts provided recommendations that resulted in reduced price from contract negotiations. The SC/PC Team achieved cost savings of $19.9 million in FY 2016, a 28.8 percent increase from FY 2015 cost savings. Additionally, for one significant VE effort, a parametric analysis and value analysis revealed a high-quoted price for a bulkhead connector used on multiple military aircraft platforms. Subsequently, the buyer secured a unit price that allowed for savings of $138 thousand.

Nominee: DLA Land and Maritime Value Management
Nomination Category: Organization
Value Engineering (VE) Effort: The VE efforts of the DLA Land and Maritime VM team resulted in $99.5 million of savings in FY 2016. VE efforts focused on obtaining increased value on small business use, reverse engineering capabilities, sustaining engineering activities, the Source Approval Request process, and those VE submissions that included indirect savings. DLA Land and Maritime Value Analysts contributed to increased use of small businesses, expanded reverse engineering capabilities, readiness (maintained or improved) of existing systems, increased competition, and increased indirect savings on VE submissions, all with cost savings to the DoD. Additionally, the most significant VE efforts for which national stock numbers were the focus resulted in increased competition and cost savings to the DoD of at least $5.6 million.
Nominating Organization: Defense Logistics Agency, continued

Nominee: DLA Aviation, Aviation Engineering Breakout Project
Nomination Category: Special
Value Engineering (VE) Effort: The DLA Aviation VE team proactively seeks out opportunities for increasing sourcing options and works diligently to ensure DLA Aviation receives the lowest and most competitive and reasonable pricing available in the marketplace. The team accomplishes this by enhancing the quality of solicitations and solving supply chain issues. The VE efforts associated with the Aviation Engineering Breakout Project resulted in $33 million of direct savings across 494 national stock numbers (NSN) with expanded competition for 167 NSNs. One significant VE effort resulted in the availability of source control drawings, along with additional sources, for V-22 NSNs which allowed DLA to add the newly identified sources and update procurement information in order to enable competitive procurement and realize FY 2016 savings of $4.7 million. Another significant effort allowed DLA to add a newly identified supplier as a new source for a latch assembly used on the Navy versions of the H-60 Blackhawk helicopter, resulting in decreased production lead times (from 271 to as low as 122 days) and $203 thousand of savings in FY 2016.
Nominating Organization: Defense Threat Reduction Agency

Nominee: Defense Threat Reduction Agency LONDON PRIDE Technology Demonstration and Evaluation Team
Nomination Category: Special
Value Engineering (VE) Effort: Building on the lessons learned and work accomplished in the Defense Threat Reduction Agency (DTRA) led MIGHTY SABER technology demonstration and working closely with the United Kingdom and Air Force Technical Applications Center partners, the DTRA Team skillfully led the actions of the technical, policy, and operational experts across 15 organizations throughout the two year preparation time and nearly three weeks of execution of the LONDON PRIDE demonstration, evaluation, and exercise. Since several paths to achieving overall goals and objectives existed, tailored value engineering function analyses were conducted among the partners and across the demonstration to determine and understand required activities, dependencies, and critical paths, such that schedules and limited resources were aligned to best achieve LONDON PRIDE goals/objectives. The VE efforts for the LONDON PRIDE Technology Demonstration and Evaluation team resulted in over $6.4 million in savings and cost avoidance.

Nominee: Defense Threat Reduction Agency Ground-Based Prompt Diagnostics Test Team
Nomination Category: Special
Value Engineering (VE) Effort: The DTRA Prompt Diagnostics Test Team diligently worked to build a partnership among disparate offices and organizations, each with independent objectives but shared equities, to use a “one-of-a-kind” X-ray source to verify and validate the operation of state-of-the-art sensors. By leading a systematic and thorough planning process among partners, the DTRA Team ensured that the objectives of each office/organization were met in a setting where the lack of partnering would have severely limited each organization’s achievements. After conducting a tailored value engineering function analysis on the use of the “one-of-a-kind” X-ray source for testing, the DTRA Prompt Diagnostics Test Team ensured that mission objectives were achieved while costs were kept constant. The VE efforts for the team resulted in $860 thousand in direct savings and millions of dollars leveraging other program capabilities.
Nominating Organization: Missile Defense Agency

Nominee: Terminal High Altitude Area Defense Missile Directorate
Nomination Category: Program/Project
Value Engineering (VE) Effort: Terminal High Altitude Area Defense (THAAD) and the Missile Directorate continue to use VE to provide the most effective THAAD weapon system at the lowest possible program costs. Analysis of the design requirements of the THAAD canister, the container that mitigates environmental effects on the missiles and minimizes induced impacts to the missile during operation and transportation, resulted in a more reliable design that is easier to manufacture. Additionally, analysis of the THAAD Missile Directorate Checkout Console, special test equipment built specifically for acceptance testing of THAAD production missile rounds, minimized parts procurement lead time and overall execution of fabrication processes. THAAD and the Missile Directorate demonstrated outstanding achievement in FY 2016 through the management of two efforts that achieved $4.54 million in net six year savings.

Nominee: Mr. David Furtwengler
Director, Test Resources Directorate
Nomination Category: Individual
Value Engineering (VE) Effort: In FY 2016, Mr. David Furtwengler, the Missile Defense Agency’s Director for Test Resources, initiated and actively participated in the very first DTR VE program. The objective was to aggressively improve MDA test support capabilities while lowering cost to the agency. As Director of DTR, Mr. Furtwengler leveraged his knowledge of the Aviation and Missile Command’s VE Office to quickly implement a new VE program within DTR. Mr. Furtwengler established an in-house VE team expediting VE methodology training for over 160 MDA personnel. This training quickly enabled participation from all DTR personnel. Once the entire directorate received training, Mr. Furtwengler facilitated several VE brainstorming sessions leading to multiple VE studies. Mr. Furtwengler proactively led the VE program by giving organizational priority for VE results that identified savings in DTR efforts. Mr. Furtwengler’s implementation of the DTR VE Program significantly improved the Test Resource Directorate’s support capabilities during critical weapon system testing and substantially reduced test resources lifecycle costs for MDA. As a result of applying VE, DTR exceeded the initial goal of $1 million and was able to report a FY 2016 savings of $17.156 million.
Nominee: Terminal High Altitude Area Defense and Test Resources Directorate Flight Test Facilities Value Engineering Team

Nomination Category: Team

Value Engineering (VE) Effort: The Terminal High Altitude Defense Test Directorate collaborated with the Test Resources Directorate and the Ballistic Missile Defense System Operational Test Agency to use VE to determine the most cost effective means of maintaining flight test program capabilities and procedures required for future missions. The team determined that MDA would benefit from executing near-term flight test at the Pacific Spaceport Complex – Alaska at Kodiak Island, Alaska. In addition, other MDA and DoD organizations will benefit from using the test infrastructure at Pacific Spaceport complex – Alaska. This effort resulted in a decreased logistics footprint, reduced transportation costs, and improved reliability of the facilities with savings of $21.72 million through FY 2017.

Nominee: Terminal High Altitude Area Defense Project Office

Nomination Category: Organization

Value Engineering (VE) Effort: The Terminal High Altitude Area Defense (THAAD) Project Office has demonstrated outstanding achievement in VE for FY 2016. Having participated in VE since 1994 and as two separate entities prior to 1990, the THAAD Project Office has reported in excess of $677 million in VE savings. The organization uses its integrated teams and cross-organizational collaborations and applies VE expertise to identify potential VE initiatives, maximize benefits, increase quality and reliability of components, and increase performance capabilities of the overall THAAD weapon system. One significant VE effort resulted in collaboration between the THAAD Project Office and U.S. Army Aviation and Missile Research, Development, and Engineering Center, Software Engineering Directorate to mitigate obsolescence on the Radar Training Laboratory portion of the Institutional Conduct of Fire Trainer, allowing the warfighter to continue to train on the most current version of the radar at the lowest cost to the program. The effort resulted in savings of $28.96 million for FY 2016. The THAAD Project Office achieved over $99 million in net six year savings for FY 2016.
Nominees:

**Nominee:** “Test Event Support via Asset Location” Team Members  
**Nomination Category:** Special  
**Value Engineering (VE) Effort:** The Test Support System laboratory is a critical flight test asset that provides technical analysis, design services, engineering solutions, fabrication, assembly, and integration of Test Support System/Telemetry Operations. TSS provided these services from a contractor owned facility resulting in additional expenses to the agency. Using VE, the Test Resources Directorate evaluated the TSS laboratory’s location to analyze facility efficiencies in order to reduce test event lifecycle support costs. This VE effort resulted in the relocation of the TSS laboratory function to MDA owned facilities and savings of $6.655 million over a six year period. The initiative represents 39 percent of the Test Resources Directorate VE Program’s FY 2016 savings of $17.156 million.

**Nominee:** “Wake Island Equipment Retrograde – Transportation Study” Team Members  
**Nomination Category:** Special  
**Value Engineering (VE) Effort:** The Test Infrastructure Division of the Test Resources Directorate deploys, operates, and performs retrograde of test assets in support of Ballistic Missile Defense System flight testing. DTRI accepted responsibility to manage the retrograde of test assets from Wake Island subsequent to the Flight Test Operational-02 Event 2a mission. Using VE, the Test Resources Directorate evaluated transportation options to reduce test event lifecycle support costs and determined the most cost effective alternative for transporting assets from Wake Island to the Continental United States. As a result, the team coordinated with the Flight Test Operational-02 Event 2a mission retrograde working group and the U.S. Air Force 611th Air Support Squadron to share use of the USAF Resupply Barge from Wake Island. The VE effort achieved the highest value by meeting the critical timeframe for retrograde completion as well as providing $1.45 million in savings.

**Nominee:** Terminal High Altitude Area Defense Planning and Training Devices Development Team  
**Nomination Category:** Special  
**Value Engineering (VE) Effort:** The Terminal High Altitude Area Defense (THAAD) Planning and Training Devices Development Team has generated savings of $3.482 million for the Missile Defense Agency since 2014. The team continues to use VE to provide the most effective THAAD weapon system for the warfighter at the lowest possible program costs. In previous FYs, the team’s VE efforts resulted in the use of proven Army software developers to integrate planning and training devices. The team’s use of VE in FY 2016 on the THAAD Portable Planner and Tabletop Trainer reduced costs; maintained performance, reliability, and quality; and enhanced customer satisfaction. The effort resulted in FY 2016 savings of $840 thousand, 9.7 percent of the THAAD VE program goal of $6.6 million.