



OFFICE OF THE UNDER SECRETARY OF DEFENSE

3030 DEFENSE PENTAGON
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RESEARCH
AND ENGINEERING

MAR 12 2018

MEMORANDUM FOR: SEE DISTRIBUTION

SUBJECT: FY 2017 DoD Value Engineering Achievement Award Nominations

Value engineering (VE) plays an integral role in accomplishing the Department of Defense's (DoD) enduring mission to provide the military forces needed to deter war and protect the security of our nation. Formally implemented in the DoD in 1954 through the Bureau of Ships, VE analyzes supplies, services, buildings and systems to achieve best value, or the best relationship between worth and cost, while exceeding the required performance, reliability, quality, and safety of essential functions. DoD civilian and military personnel focus their use of VE, either on its own or in conjunction with other value improving initiatives, on gaining full value from every dollar. As part of the DoD Honorary VE Awards Program, the VE Achievement Award recognizes DoD civilian and military organizations, teams, individuals, or programs/projects for demonstrating exemplary VE accomplishments.

DoD Instruction 4245.14, "DoD Value Engineering Program," which implements title 41, U.S.C., section 1711, and Office of Management and Budget (OMB) Circular No. A-131, "Value Engineering," requires DoD Components to "provide annual nominations for the DoD Honorary VE Awards Program." Please prepare your DoD VE Achievement Award nominations using the "DoD VE Achievement Award Nomination Guidance" (Attachment 1). The FY 2016 DoD VE Achievement Award recipients (Attachment 2) are exemplars of DoD Components' efforts to effectively and efficiently improve military worth and reduce acquisition and ownership costs.

I look forward to honoring award recipients at the DoD VE Achievement Awards ceremony on June 28, 2018, and thank you for soliciting and promoting the submission of nominations to honor those who have executed superior VE efforts. Please have your VE Senior Management Official submit your nominations no later than May 1, 2018 to the Office of the Deputy Assistant Secretary of Defense for Systems Engineering, 3040 Defense Pentagon, Room 3C160, Washington, DC 20301. My point of contact is Mr. Andrew Monje at 703-692-0841 or andrew.n.monje.civ@mail.mil.

Mary J. Miller
Performing the Duties of the
Assistant Secretary of Defense
For Research and Engineering

Attachments:
As stated

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DoD VE Achievement Award Nomination Guidance

Contents

| | |
|--|----|
| Purpose..... | 2 |
| Applicability | 2 |
| Policy | 2 |
| Criteria | 2 |
| Procedure | 2 |
| Award Nomination Categories | 4 |
| 1. Program/Project | 4 |
| 2. Individual | 4 |
| 3. Team | 4 |
| 4. Organization..... | 4 |
| 5. Special..... | 4 |
| Award Nomination Fact Sheet Format | 5 |
| Special Award Fact Sheet Format..... | 6 |
| Example Fact Sheet: Program/Project | 7 |
| Example Fact Sheet: Individual or Team..... | 9 |
| Example Fact Sheet: Organization..... | 11 |
| DoD Component Score Sheet (for internal organization use) | 13 |
| APPENDIX A DoD IG Issue Resolution Agreement..... | 14 |
| Background..... | 14 |
| A. VE Definition (Criteria) for Accounting (Reporting) Purposes..... | 14 |
| B. Savings and Cost Scope and Calculation | 15 |
| C. Savings and Cost Documentation | 15 |
| D. VE Integration With or Differentiation From Other Programs..... | 16 |
| Function Analysis/Best Value Alternative Worksheet (Example 1) | 17 |
| Function Analysis/Best Value Alternative Worksheet (Example 2) | 17 |
| Function Analysis/Best Value Alternative Worksheet (Example 3) | 18 |

DoD VE Achievement Award Nomination Guidance

Purpose

The Department of Defense (DoD) Value Engineering (VE) Achievement awards are intended to stimulate VE activity for the purpose of achieving essential functions throughout DoD at the lowest life-cycle cost, consistent with required levels of performance, reliability, quality, and safety.

Applicability

DoD VE Achievement awards apply to all DoD Components.

Policy

The DoD VE Achievement Awards program is designed to honor those individuals and organizations who made a significant VE contribution within fiscal year (FY) 2017. There are five award categories: (1) Program/Project; (2) Individual; (3) Team; (4) Organization; and (5) Special.

Criteria

FY 2017 VE savings related to the award nomination must have been 1) documented and accounted for in accordance with the “Department of Defense Inspector General Issue Resolution Agreement: Defining VE for Reporting Purposes,” at Appendix A and 2) validated by appropriate budget officials¹. Except for the special category, prior FY VE efforts are not eligible for nomination. In-house VE nominations must demonstrate the use of the VE principles or methodology consistent with the “Department of Defense Inspector General Issue Resolution Agreement: Defining VE for Reporting Purposes,” at Appendix A.

Procedure

Award selection considerations include net savings; savings as a percent of the affected budget; product, process, or service improvement; VE savings/improvements related to mission of an organization; VE program growth; leadership; innovation; scope of potential applicability; uniqueness of idea; cross-functional and/or inter-agency teaming; integration with other improvement initiatives/activities; and new VE activity.

A. Annually, each DoD Component may submit one nomination for each of the first four categories and up to three nominations for the special category. Except for the special category, each VE effort uniquely identified by number/title may be used to support only one nomination. All nominations will be submitted to the USD(R&E) POC via the Component VE senior management official. Each nomination must have met the appropriate criteria described in this document. Each nomination will be supported by a fact sheet. A brief citation will be drafted from the fact sheet by the appropriate DoD Component VE senior management official, upon selection, for inclusion in the award certificate. The DoD Component Score Sheet is for internal use purposes only to assist

¹ The change in criteria is due to the pause of the reporting requirements of OMB Circular No. A-131 by Office of Management and Budget Memorandum M-17-26, “Reducing Burden for Federal Agencies by Rescinding and Modifying OMB Memoranda,” June 15, 2017.

DoD VE Achievement Award Nomination Guidance

the Component VE POC during the awards selection process.

B. The award nominations will be reviewed by the DoD VE Management Advisory Group (MAG). The VE MAG will present their recommendations to the Deputy Assistant Secretary of Defense for Systems Engineering for concurrence. Upon concurrence, the award recommendations will be forwarded to the USD(R&E) to approve and announce the winners.

DoD VE Achievement Award Nomination Guidance

Award Nomination Categories

Categories listed below are intended to be flexible, and almost any nomination could be placed in any one of the categories depending on the accomplishment to be recognized. Competition for the categories below is within each Service/Agency. Nominations should be written using the fact sheet formats provided with this package; example award submissions are located after the fact sheet formats.

1. Program/Project

This category is military or civilian personnel who have generated VE savings on a specific construction project, system, item, or family of items, and have made a noteworthy contribution to the application/implementation of VE to areas under their cognizance.

2. Individual

An individual military or civilian who:

- a. is a member of a DoD organization in the areas of engineering, logistics/supply support, testing, budget management, planning, etc., and/or
- b. is a member of a Value Engineering Program Office, Integrated Product Team, Contract Administration Office, etc., and has made a noteworthy contribution to the implementation/application of VE to areas under his/her cognizance.

3. Team

Teams of military or civilian personnel who:

- a. are members of a DoD organization in the areas of engineering, logistics/supply support, testing, budget management, planning, etc., and/or
- b. are members of a Value Engineering Program Office, Integrated Product Team, Contract Administration Office, etc., and have made a noteworthy contribution to the implementation/application of VE to areas under their cognizance.

4. Organization

This category is a military or civilian activity with a distinct title that has made a noteworthy contribution to the application/implementation of VE to areas under their cognizance. Examples of Organization are:

- F-18 Program Office
- U.S. Army Aviation and Missile Command
- DLA Value Management Office

5. Special

These special awards recognize outstanding contributions to the VE Program that demonstrate innovative approaches and applications and/or expand the benefits of VE. VE contributions worthy of this special recognition may be drawn from those actions during the last five fiscal years.

DoD VE Achievement Award Nomination Guidance

Award Nomination Fact Sheet Format

Submitting Activity:

Year:

Category:

Nominee:

- Name
- Title
- Location (for field commands and installations)
- Mailing Address (include a complete mailing address)
- Telephone Number

Reference: (questions about nomination)

- Name
- Title
- Telephone Number

Description of Achievement:

- Savings/Cost Avoidances—Identify net six-year savings (current fiscal year's actual savings and five subsequent years projected savings); savings as percentage of reporting activity budget; and return on VE investment. How were savings validated? Are there documented case files?
- Mission of organization (place where VE savings were generated) and how savings or other improvements contributed to fulfilling this mission.
- Product/Process/Service Improvement—Description may include but is not limited to: customer satisfaction; quality; performance; reliability; maintainability; operation and support savings; effectiveness; efficiency; and/or cycle time reduction.
- VE Program Management—Description may include but is not limited to: leadership; program growth; new activity; institutionalization of VE application/methodology; scope of potential application; innovation; proactivity; cross-functional or inter-agency teaming; and/or integration/support of other improvement initiatives/activities.
- Summary of Significant VEPs/VECPs.
- Succinctly (no more than one page for each) describe up to three VEPs/VECPs associated with the nominee. Include identifying number, title, description, net cost savings/avoidances to DoD, and other benefits.

DoD VE Achievement Award Nomination Guidance

Special Award Fact Sheet Format

Description of VEP or VECP

- Descriptive Title
- Identifying Number
- DoD Sponsor Organization

Nominee Name

- Title
- Organization
- Telephone Number
- Mailing Address (include a complete mailing address)

Reference: (questions about nomination)

- Name
- Title
- Telephone Number

Dates of Approval and Implementation

Before and After Description

- Savings/Cost Avoidances—net savings to DoD; cost of development, testing, implementation, etc.
- Benefits other than Cost Reduction—improving: product, process, service, performance, reliability, maintainability, operability, effectiveness, efficiency, cycle time reduction, environmental protection/conservation/restoration, energy conservation, safety, etc.
- Unique/Unusual Application—software, environmental problems, organization, process, service, etc.
- Unique/Unusual Approach—innovation; proactivity; cross-functional or inter-agency teaming; integration/support of other improvement initiatives/activities, etc.

DoD VE Achievement Award Nomination Guidance

Example Fact Sheet: Program/Project

Submitting Activity: U.S. Navy

FISCAL YEAR:

Category: Program/Project

Nominee: STANDARD Missile Program Office, PMS422

Name and Rank of Program Manger
Program Manager, STANDARD Missile
STANDARD Missile Program Management Office
Program Executive Office for Theater Surface Combatants
2531 Jefferson Davis Highway
Arlington, VA 22242-5165
Telephone: DSN _____ or Commercial _____

Reference: (questions about nomination)

Mr./Ms. _____
Value Engineering Project Engineer
Telephone: DSN _____ or Commercial _____

Description of Achievement:

Savings/Cost Avoidances

- The STANDARD Missile Program Office achieved net six-year savings of \$93 million from VEPs and VECPs.
- FY XX VE Savings as a percent of the STANDARD Missile Program Budget were 1 percent.
- Value Engineering Change Proposals (VECPs) savings were validated through the contract modification/settlement process.
- Value Engineering Proposals (VEPs) savings were validated by appropriate budget officials with saved funds made available for reapplication.
- Known Return on Investment for VECPs was 5.6:1.
- All VE actions have been properly documented and are on file in the VE office.

Product/Process/Service Improvement

- Value Engineering Process Improvement IPT was started resulting in a 45 percent reduction in VE processing time and a 63 percent increase in VE submittals.
- Value Engineering was expanded beyond prime contractors to subcontractors and suppliers.

DoD VE Achievement Award Nomination Guidance

- Non-traditional VEs were encouraged, resulting in process improvement VEs, overhead reductions VEs, and business innovation VEs.

VE Program Management

- The STANDARD Missile Program Office established a joint Government/contractor Value Engineering Integrated Products Team (VEIPT) to increase VE participation across contractor product lines. This VEIPT will provide synergies from various programs and increase savings to the DoD.
- Program office personnel collaborated with field sites, prime, and subcontractors to identify and pursue VE opportunities.
- This program office incorporated Value Engineering clauses into seven active STANDARD Missile contracts.

Summary of Significant VEPs/VECPs

XYZ Company, Anytown, USA
Transceiver Producibility

VECP A001

Prior to VE: Transceiver design required 11 testable levels.

Following VE: Redesign of transceiver used a higher scale integration to reduce the number of testable levels to seven. Savings to the Government are \$24.0 million.

Status: Implemented

XYZ Company, Anytown, USA
Control System Redesign

VECP R001

Prior to VE: The Control System for STANDARD Missile variants contained unique parts that increased unit costs and complicated production activities.

Following VE: These assemblies were redesigned for higher scale integration, parts commonality and producibility. The result of these efforts will save the Government \$55.3 million.

Status: Implemented

DoD VE Achievement Award Nomination Guidance

Example Fact Sheet: Individual or Team

Submitting Activity: U.S. Air Force

FISCAL YEAR:

Category: Individual or Team

Nominee: (Individual) Name and Rank of the Individual
Program Manager, Air Force Mission Support System (AFMSS) Production
U.S. Air Force Materiel Command, Electronic Systems Center
1234 Tiger Road
Hanscom AFB, MA 01731-1625
Telephone: DSN 478-11xx, ext. 50xx or Commercial (781) 271-xxxx

OR

(Team) Air Force Mission Support (AFMSS Program)

| <i>Individual's Name</i> | Title | Location |
|--------------------------|-------|----------|
| | | |
| | | |
| | | |

Reference: (questions about nomination)

Lieutenant Colonel _____
Program Manager, Wing/Unit C2 Systems
Telephone: DSN _____ or Commercial _____

Description of Achievement:

Savings/Cost Avoidances

- ESC/XXX reported net six-year savings of \$7.5 million.
- VE savings were 8.73 percent of reporting activity procurement budget.
- VECP savings are validated through actual contract modifications and future documentation. VEP savings are documented by verifying that saved funds are available for reapplication and that programmed funds are no longer required for original purpose.
- Documented files are available in the ESC/ACU office.

DoD VE Achievement Award Nomination Guidance

Product/Process/Service Improvement

- Dynamic business and innovation management instituted by Lt _____.
- Combined Total System Performance Responsibility (TSPR), F-XX contract, with Mission Planning System (MPS) procurement saved the F-XX program office \$600,000. Customer satisfaction was greatly increased. Without this action, the program office would not have been able to purchase mission essential hardware.
- Worked extensively with contractor, _____, to optimize their manufacturing process and inventory control as well as modify the Air Force MPS upgrade plan that realized a 33 percent reduction in production-to-delivery cycle time.
- MPSs experienced a remarkable performance increase of at least 70 percent in all benchmark tests due to meticulous efforts by Major _____ to “right size” technical specifications.

VE Program Management

- Major _____ spearheaded effort to reengineer AFMSS procurement strategy based on value-added activities by specifically focusing on commercial competition, synergistic Government-Vendor relationships, and providing state-of-the-art technology to the Warfighter at a reduced cost. Consequently, this has become the new AFMSS procurement methodology.
- Major _____ thought outside the box, linked multiple fiscal year requirements into one MPS hardware chassis, and created the upgrade plan that reduced cost, guaranteed success, and garnered HQ ACC praise.
- He sponsored multiple cross-functional and inter-agency teaming and teleconferences with ACC, OO-ALC, CTF, AFOTEC, and contractors to ensure value-added practices were shared and implemented.
- Major _____ innovative leadership, which focuses on a value-added approach, creates success in any program he is involved with.

Summary of Significant VEPs/VECPs

For up to three VEPs/VECPs identified by number/title, in-house organization, provide a before VE and after VE paragraph succinctly describing the change and its benefits.

See Example for Value Engineering Program/Project

DoD VE Achievement Award Nomination Guidance

Example Fact Sheet: Organization

Submitting Activity: U.S. Army

FISCAL YEAR:

Category: Organization

Nominee: U.S. Army Aviation and Missile Command

Name of the Commander or Director
Commander
U.S. Army Aviation and Missile Command
1234 Caissons street
Redstone Arsenal, AL 35898-5000
Telephone: (DSN) _____ or Commercial _____

Reference: (questions about nomination)

Mr./Mrs. _____
Program Manager, Value Engineering
Telephone: (DSN) _____ or Commercial _____

Description of Achievement:

Savings/Cost Avoidances

- The U.S. Army Missile and Aviation Command (AMCOM) achieved net six-year savings of \$198.3 million.
- Value Engineering Change Proposals (VECPs) savings were validated through the contract modification/settlement process.
- Value Engineering Proposal (VEPs) savings were validated by appropriate budget officials, with deobligated funds made available for reapplication and programmed funds deleted as no longer required for their original purpose.
- The information relating to savings as percent of reporting activity budget, and the return on the VE investment is as follows:
_____.
- All VE actions have been properly documented and are on file in the VE office.

Product/Process/Service Improvement

DoD VE Achievement Award Nomination Guidance

- 69 VEPs were implemented during Fiscal Year ____.
- 25 VECs were implemented during Fiscal Year _____.
- VEC average processing time was 160 days well under 220-day target.

VE Program Management

- MACOM utilized an aggressive goal setting policy.
- Despite a reduction in Total Obligation Authority, AMCOM's goal was increased by 16 percent to \$60 million, \$18 million higher than any other AMC major subordinate command
- MACOM VE personnel collaborated with the U.S. Army Simulation, Training and Instrumentation Command, the U.S. Army Communications-Electronics Command, the U.S. Army Armament, Munitions and Chemical Command, and the U.S. Army Tank-Automotive Command to identify and pursue VE opportunities.
- 300 AMCOM employees were trained in various aspects of VE.

Summary of Significant VEPs/VECS

For up to three VEPs/VECS identified by number/title, in-house organization, provide a before VE and after VE paragraph succinctly describing the change and its benefits.

See Example for Value Engineering Program/Project

DoD VE Achievement Award Nomination Guidance
DoD Component Score Sheet (for internal organization use)

Service: _____

Category: _____

Nominee: _____

SCORE

Public Relations/Promotional Value (0-10) _____

Savings/Cost Avoidance (0-30) _____

- Net six-year Savings (current fiscal year's actual savings and five subsequent years projected savings)
- Percentage of Reporting Activity Budget
- Return on VE investment

Product/Process/Service Improvement (0-30) _____

- Savings/improvement contribution to organization's mission
- Quality/Customer Satisfaction
- Performance
- Reliability
- Maintainability
- Effectiveness
- Efficiency
- Cycle Time

VE Program Management (0-30)..... _____

- Leadership
- Program Growth
- New Activity
- Institutionalization of Application/Methodology
- Scope of Potential Applicability
- Innovation
- Proactivity
- Cross-functional or Inter-agency Teaming
- Integration/Support of Other Improvement Initiatives/Activities

TOTAL SCORE (0-100) _____

Evaluator: _____

DoD VE Achievement Award Nomination Guidance

APPENDIX A

DoD IG Issue Resolution Agreement: Defining Value Engineering for Reporting Purposes

Background

The DoD Value Engineering (VE) Quality Management Board (QMB) was tasked with developing guidance that differentiates the application of VE techniques and the reporting of VE savings from other cost reduction initiatives. Other initiatives include such efforts as the Navy's AEGIS Affordability Management Program, directed feasibility studies, logistics engineering change proposals, suggestions, and VE savings realized by foreign military sales customers. Additional examples of other initiatives include recent acquisition reform programs, as well as efforts from other cost-reduction initiatives. These include the DoD Spare Parts Breakout Program and other activities normally expected in the performance of functions such as inventory management and purchasing.

The DoD Inspector General's (IG) Office agreed to work with the QMB to develop this guidance in a consensus-building format.

Agreement was reached to clarify guidance in the following areas:

- a. VE definition for accounting purposes
- b. Savings and cost scope and calculation
- c. Savings and cost documentation
- d. VE Integration with or differentiation from other programs

The QMB DoD IGeneral (IG) Issue Resolution Working Group reached consensus as follows in the above four areas:

A. VE Definition (Criteria) for Accounting (Reporting) Purposes

The results of value improving activities may be included in annual VE reporting if one of the following two criteria applies:

1. Results from an approved VE Change Proposal (VECP)

-or-

2. Results from a change that improves value of required function (where value is a function of performance and cost) using function analysis to determine best value (an example worksheet showing the minimum elements of function analysis is included at the end).

DoD VE Achievement Award Nomination Guidance

B. Savings and Cost Scope and Calculation

Savings

All cost savings and cost avoidances that are included will be net savings to the Government. It is allowable to report savings up to six years consistent with budget projections in the Future Years Defense Program (FYDP) that is current at the time the value improving project is implemented. Savings may be reported in the years they occur during the FYDP period or as an estimate projected against the FYDP budget profile. Life cycle savings may be reported up to ten years.

VECPs. For acquisition savings, report the Government's share during the VECP sharing period; thereafter, until the end of the FYDP period, 100 percent of the net savings may be reported. For collateral savings (life cycle savings other than acquisition), Government share of average annual collateral savings for the FYDP period may be reported.

VEPs (value-improving projects other than VECPs). For acquisition savings, 100 percent of the net savings for the FYDP period may be reported. For collateral savings (life cycle savings other than acquisition), 100 percent of average annual collateral savings for the FYDP period may be reported.

Cost

On a project-by-project basis, development and implementation costs are those costs above normal Government administrative costs that result directly from developing and implementing each individual value improving project, such as any net increases in the cost of testing, operations, maintenance, and logistics support. The term does not include the normal administrative costs of processing the value improving project or the costs of running the VE office. The annual report will sum project-by-project costs and add the annual cost of running the VE office (work force and other required resources) for a total VE program cost.

Return on Investment (ROI)

ROI equals total net VE savings to the Government divided by total VE program costs (savings and cost as defined above).

C. Savings and Cost Documentation

To be included in the performance metrics data, each value improving project must be documented and include the following minimum essential documentation elements:

1. Unique project number or identifier

DoD VE Achievement Award Nomination Guidance

2. Identification of development and implementation costs to the Government above normal administrative costs consistent with the Federal Acquisition Regulation. Government costs are those agency costs that result directly from developing and implementing the value-improving project, such as any net increases in the cost of testing, operations, maintenance, and logistics support. The term does not include the normal administrative costs of processing the value improving project.
3. Description of gross and net savings to the Government: acquisition and/or collateral (life cycle cost other than acquisition)
4. Description of technical changes
5. Validation of savings (either through actual documented savings or documented estimate of future savings and/or cost avoidances using established financial analysis procedures - approval and date)
6. Approval of technical change and date
7. Identification of who did the study or analysis or submitted idea
8. Program approval and date
9. Identification of items to which VE proposal applies
10. Date project initiated or proposal submitted for approval
11. Cost and savings figures for each of the years identified
12. Date of construction/etc.—include customized instructions on completing form (applies to construction projects only)
13. Indication of the above VE criteria met (if not VECP, must document minimum elements of function analysis)

D. VE Integration With or Differentiation from Other Programs

DoD Components are encouraged to integrate VE with other similar programs. To be reported, projects must meet the minimum criteria and documentation requirements listed above. Savings reported through multiple channels are allowed.

DoD VE Achievement Award Nomination Guidance

Function Analysis/Best Value Alternative Worksheet (Example 1)

(For reporting purposes, the minimum elements necessary to constitute function analysis required for other than VECs are: project identification; function definition; alternative(s) identification; and alternative selection.)

Project Identifier:

Example 1. Finnigen Pin Sparing.

Function Definition (Use Verb-Noun Descriptor):

Example 1. Obtain Finnigen Pins.

Function Performance Alternatives:

Example 1. a. Purchase from OEM.
 b. Find alternate source.
 c. Reverse Engineer for Competition.

Selected Alternative:

Example 1. Use alternate source. (Other suppliers; lower cost)

Function Analysis/Best Value Alternative Worksheet (Example 2)

(For reporting purposes, the minimum elements necessary to constitute function analysis required for other than VECs are: project identification, function definition, alternative(s) identification, and alternative selection.)

Project Identifier:

Example 2. Mark I Mod O Disposable Coffee Receptacle.

Function Definition (Use Verb-Noun Descriptor):

Example 2. Hold Coffee.

Function Performance Alternatives:

Example 2. a. Paper cups.
 b. Styrofoam cups.

DoD VE Achievement Award Nomination Guidance

Selected Alternative:

Example 2. Paper Cups. (Biodegradable, no disposal cost)

Function Analysis/Best Value Alternative Worksheet (Example 3)

(For reporting purposes, the minimum elements necessary to constitute function analysis required for other than VECs are: project identification, function definition, alternative(s) identification, and alternative selection.)

Project Identifier:

Example 3. Flag/Senior Management Liquid Containment Vessel.

Function Definition (Use Verb-Noun Descriptor):

Example 3. Impress Associates.

Function Performance Alternatives:

- Example 3. a. Gold Leaf embossed ceramic.
b. Cut Waterford crystal.

Selected Alternative:

Example 3. Gold Leaf Embossed (Stars do not show well on Crystal)

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 reinstating 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.

ATTACHMENT 2

Nominating Organization - U.S. Army, continued

Nominee: 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.

Nominating Organization - U.S. Army, continued

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.

Nominating Organization: Department of the Navy, continued

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.

Nominating Organization: U.S. Air Force

Nominee: Mobility Directorate - C-130 Contracting Division

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.

Nominating Organization: Missile Defense Agency, continued

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.

Nominating Organization: Missile Defense Agency, continued

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.
