

DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY MATERIEL COMMAND
5001 EISENHOWER AVENUE, ALEXANDRIA, VA 22333-0001

AMC REGULATION
No. 70-8
CHANGE 1

4 August 1997

Research, Development and Acquisition

AMC VALUE ENGINEERING PROGRAM

AMC-R 70-8, 31 December 1996, is changed as follows:

1. Pen and ink changes:

a. **Page 1**, Series Title. Change “Military Publications” to “Research, Development, and Acquisition.”

b. **Page 1**, Supplementation. In the last sentence, change “Industrial Engineering Activity (AMXIB)” to “Army Materiel Systems Analysis Agency (AMXSY).” Also, change “IEA” to “AMSAA” wherever it is mentioned throughout the regulation.

This change is necessary, as the Industrial Engineering Activity (IEA) will become part of the Army Materiel Systems Analysis Agency, effective 1 October 1997.

c. **Page 2-2**, first line. Change the title “Value Engineering Program Manager (VEPM)” to “Value Engineering Manager (VEM).” Also, change “VEPM” to “VEM” wherever it appears throughout the regulation.

2. File this change in front of the regulation.

C1, AMC-R 70-8

The proponent of this regulation is the United States Army Materiel Systems Analysis Activity (AMSAA). Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) to the Director, USA AMSAA, Attn: AMXSY-A, Rock Island, IL 61299-7260

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Research, Development and Acquisition

AMC VALUE ENGINEERING PROGRAM

Supplementation. Local supplementation of this regulation is prohibited, except upon approval of the Adjutant General’s Office. Requests for exception, with justification, will be sent through command channels to The Army Materiel Systems Analysis Activity (AMXSU), Rock Island, IL 61299.

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Summary. This regulation covers the Army Materiel Command Value Engineering Program.

* This regulation supersedes AMC-R 70-8, 19 May 1987

This regulation prescribes policy, responsibilities, budgeting and verification and general procedures for the planning, management, review and assessment of activities for conducting the Army Materiel Command Value Engineering Program. It has been revised to update responsibilities and reporting procedures.

Applicability. This regulation applies to Headquarters, AMC; AMC Separate Reporting Activities (SRAs), AMC Major Subordinate Commands (MSCs), including their subordinate installations and activities; Army Program Executive Officers (PEOs), program/product/project managers (PMs) who obtain functional support from AMC MSCs/ installations/activities; PMs reporting to HQ AMC/MSCs; and separate organizations/activities reporting to HQ AMC or receiving funds from HQ AMC.

Interim Changes. Interim changes to this regulation are not official unless they are authenticated by the Adjutant General. Users will destroy interim changes on their expiration dates unless sooner superseded or rescinded.

Suggested Improvements. The proponent of this regulation is The Army Materiel Systems Analysis Activity (AMSAA). Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to AMSAA (AMXSY-A), Rock Island, IL 61299-7260.

INTRODUCTION

1-1. Purpose. This regulation prescribes policy, responsibilities, and general procedures for the planning, management, review and assessment of activities for conducting the Army Materiel Command (AMC) Value Engineering (VE) Program. It implements the National Defense Authorization Act for FY96, Public Law 104-106, Section 4306. It implements the basic policies and concepts of Office of Management and Budget Circular A-131, Value Engineering; Federal Acquisition Regulation (Chapter 1, Subchapter G, Parts 48 and 52); Department of Defense Instruction 5000.2, Defense Acquisition Management Policies and Procedures; and Army Regulation 5-4, Department of the Army Productivity Improvement Program (Chapter 2, VE Program).

1-2. Explanation of Abbreviations and Terms. Abbreviations and special terms used in this regulation are explained in the Glossary.

1-3. Scope. a. This regulation applies to Headquarters, AMC; AMC Separate Reporting Activities (SRAs), AMC Major Subordinate Commands (MSCs), including their subordinate installations and activities; Army Program Executive Officers (PEOs), program/product/project managers (PMs) who obtain functional support from AMC MSCs/ installations/activities; PMs reporting to HQ AMC/MSCs; and separate organizations/activities reporting to HQ AMC or receiving funds from HQ AMC.

b. This regulation encompasses the use of the VE methodology as described in DoD Handbook 4245.8H, "Value Engineering," on all Army systems, subsystems, items, and materiel (in accordance with AR 70-1) for which AMC is the materiel developer or for which AMC supports the materiel development. It also includes the materiel change programs; nondevelopmental items; facilities; and Army/AMC administrative, technical, fielded systems, and logistical operations, as well as the contractual aspects of VE specified in FAR Part 48.

1-4. Objective. The objective of the AMC VE Program is to obtain total value improvement of Army system acquisitions, operations, support, procedures, supplies and services by--

- a. reducing overall cost
- b. improving quality and schedules, and
- c. simplifying Army materiel/systems to provide measurable improvements in operational availability and logistics support.

1-5. References. Required and related publications are listed in Appendix A.

CHAPTER 2

POLICY AND RESPONSIBILITIES

2-1. General. Army policy is to seek, find, and implement better and more economical means of doing business. In this process of analysis, studies can be subsidized to take advantage of opportunities to secure financial and other benefits (e.g., savings, cost avoidance, efficiencies, and productivity improvements).

2-2. Policy. a. AMC organizations shall establish VE programs and employ the VE methodology as set forth in DoD Handbook 4245.8H. The VE programs shall be tailored to fit the missions performed (e.g., commodity, service, supply, or facility oriented missions). Also, the AMC VE Program shall support VE policy issued by the Army Acquisition Executive (AAE) for PEOs and PMs who obtain functional support from AMC's MSCs, installations, and activities.

b. In-house VE efforts, also known as Value Engineering Proposals (VEPs), will be reported and accredited toward the savings goal when financial benefits are verified. In addition, both of the following prerequisites must be satisfied before reporting:

(1). The study/analysis is documented as a planned VE effort prior to the preparation of any specific change proposal.

(2) The study/analysis itself is accomplished using "function analysis" (DoD Handbook 4245.8H) and documentation that a function analysis was actually conducted is included in the project file.

c. Contractor VE efforts, also known as Value Engineering Change Proposals (VECPs), will be reported with data reflecting technical decisions and appropriate contract modifications.

2-3. Responsibilities. a. HQ AMC will have the following responsibilities:

(1) The HQ AMC Deputy Chief of Staff for Research, Development and Acquisition (AMCRDA) will--

(a) Approve policy for the AMC VE Program.

(b) Measure progress toward AMC Value Engineering Master Plan (VEMP) goals at the quarterly AMC Commander's Conference.

(c) Designate a full-time VEM to manage the AMC VE Program and to serve as the staff interface with HQ DA and DoD on all VE matters.

(d) Establish and maintain contracting policy for the VE program.

(e) Disseminate decisions and appropriate guidance concerning all contested procurement settlements of VECPs to all procurement activities under HQ AMC.

(f) By 30 June, provide general guidance and objectives to the MSC Commanders and VEMs in the areas of budget objectives, VE goals, strategies, training, staffing, contractual projects, and task team efforts. Accompanying the guidance document shall be a letter from the Commander of AMC requiring each MSC to submit a formal VEMP in accordance with AMC guidance by 30 August.

(g) Approve the AMC VEMP including the goals formulated by the MSCs.

(2) The HQ AMC Deputy Chief of Staff for Engineering, Housing, and Installation Logistics (AMCEN) will ensure that VE is used during the planning, design, construction, operation, and maintenance of facilities.

b. The Army Materiel Systems Analysis Activity (AMSAA) will have the following responsibilities:

(1) Provide management of the AMC VE Program in accordance with AMC Regulation 10-13.

(2) Serve as the technical focal point for AMC VE reporting and supporting organizations.

(3) Manage the Value Engineering Management System (VEMS) and chair the VE Functional Coordinating Group (FCG). Conduct a minimum of two FCG meetings per year in conjunction with the spring SAVE International conference and the fall Electronic Industry Association (EIA) Value Management Group (VMG) meeting.

(4) Monitor the availability and effectiveness of VE education and training within AMC and in the private sector.

(5) Conduct VE Staff Assistance Visits (VESAVs) to VE reporting organizations/elements.

(6) Compile and publish the AMC VE Program Execution Report (RCS: AMCRD-306) and DA Statistical Summary of VE Activities semi-annually not later than the first working day of the second month following the end of the second and fourth quarters of the fiscal year.

(7) Promote the practice of VE through contacts with industrial associations, professional societies, universities, and other Government agencies.

(8) Administer the VE Awards and Publicity Program.

(9) Prepare and maintain this regulation and implementing guidance.

(10) Consolidate the MSC VEMPs and calculate the AMC savings goal total by adding the Fiscal Year savings goal of each MSC. Provide the document to AMC by 30 September.

(11) Manage funding for the AMC VE Program.

c. The Director of the AMC Logistics Support Activity (LOGSA) is responsible for performing the central system design agency role for the automated VE reporting functions of the AMC VE Program and will--

(1) Budget for, operate and maintain the VE database and the VE reporting system.

(2) Submit consolidated quarterly VE data to AMSAA, ATTN: AMXIB, not later than ten working days following the end of the quarter.

(3) Provide training and documentation for the VE reporting system.

(4) Provide ad hoc VE output reports for HQ AMC and AMSAA.

(5) Appoint a member to the FCG.

d. Commanders of AMC Major Subordinate Commands will--

(1) Appoint and charter a full-time, high grade VEM to manage the Command's VE Program.

(2) Prepare and update a Command VE Master Plan.

(3) Budget for the funds to operate and attain the goals of the VE Program.

(4) Provide functional support to PEOs/PMs in VE reporting actions such as preparation of VE master plans and quarterly progress reports.

(5) Assign a representative to the AMC VE Functional Coordinating Group.

(6) Send VE reporting data utilizing the VEMS on a regular basis to LOGSA, for inclusion in the VEMS database. Send final data for the quarter not later than the close of business on the fifth working day following the end of each quarter.

(7) Submit the annual VEMP and saving goals to the AMSAA VEM.

(8) Insure that appropriate personnel are trained in the Principles and Applications of Value Engineering (PAVE) and the Contractual Aspects of Value Engineering (CAVE).

(9) Establish procurement policies and practices applying to the VE Program as set forth in parts 48 and 52 of the FAR. VE Program reporting organizations shall:

(a) Actively elicit VECs from contractors.

(b) Promote VE through contractor meetings and the dissemination of promotional and

informational literature regarding the VE provisions of contracts.

(c) Observe the following guidelines and time limits for processing VECPs:

1/ Acknowledge the VECP receipt by contracting officer in accordance with the FAR and send a proposal evaluation/decision timetable to the submitting contractor within 45 days.

2/ When the VECP does not contain sufficient documentation to enable the government to evaluate the VECP, then within one week of receipt of the VECP return to contractor as incomplete and request resubmission.

3/ Expedite financial settlement of approved VECPs to meet the target date specified in the AMC VEMP. Use interim contract modifications to incorporate VECPs so that savings are not lost while waiting for contract pricing, audits or negotiations to conclude.

4/ Record and justify delays when a technical approved VECP is not financially settled as specified in the AMC VEMP. Place this documentation in the project file.

(d) Use the voluntary VE Incentive Clause (VEIC) provided in the FAR for facilitating the submission of VECPs in supply or service contracts for spare parts and repair kits exceeding \$100,000.

(e) Incorporate the mandatory VE Program Requirements Clause (VEPRC) provided in FAR Paragraph 52-248.1 Alt I in all production contracts over \$10 million, except where the Head of Contracting Activity (HCA) determines and documents that such use is not appropriate.

e. As contained in VE policy issued by the AAE, the PEOs and PMs who obtain functional support from AMC MSCs/installations/activities will--

(1) Appoint a VE Project Officer/Point of Contact to manage and coordinate assigned VE functions.

(2) Program, budget, and allocate funds to support VE efforts.

(3) Prepare and approve a VE Master Plan.

(4) Establish and maintain contracting policy for support of the VE program.

CHAPTER 3

PROCEDURES

3-1. Verification. a. VEP savings are reported and accredited to the savings goal after being verified by the appropriate funding certification official.

b. The verification attests that saved funds are/ were on hand, or were formally budgeted for and are no longer required for the originally intended purpose, and have been made available for other appropriate uses. This verification will be documented in the project file.

3-2. Reporting. a. By 30 June, AMC shall provide guidance to the MSCs to give general direction and objectives, VE goals, strategies, training, staffing, contractual projects, and task team efforts. This guidance shall be used by the MSCs in developing the MSC VE Master Plans for the following Fiscal Year. Accompanying the guidance document shall be a letter from the Commander of AMC requiring each MSC to submit a formal VEMP in accordance with AMC guidance by 30 August.

b. The MSC VE Master Plan will contain VE goals developed by individual MSCs and supported PEO/PM activities. The plan will describe specific methods for achieving the objectives listed in the AMC Master Plan Guidance and should address continuous improvement in the areas of budget objectives, VE goals, strategies, training, staffing, contractual projects, and task team efforts. Each MSC shall submit a final MSC VE Master Plan to AMSAA.

c. AMSAA shall consolidate the Master Plans from each MSC and compute the sum of all MSC/PEO savings goals for a total AMC savings goal. A copy of this consolidated information shall be provided to HQ AMC by 30 September.

d. AMC shall approve the savings goal for each MSC. The final AMC VEMP shall consist of the AMC guidance section and the master plans from each MSC.

e. AMSAA shall review and consolidate the summary data with other information from VEMS to publish the AMC VE Program Execution Report (RCS: AMCRD-306) and the DA Statistical Summary of VE Activities. These reports shall be published semi-annually not later than the first working day of the second month following the end of the second and fourth quarters of the fiscal year.

3-3. VE Staff Assistance Visits. Conducted by teams led by the AMSAA VEM, VESAVs substantiate the accuracy of reported VE savings, assess overall VE program management, evaluate compliance with AMC VE Program guidance and identify potential improvements for the VE Program. Usually, one visit per year is performed at each reporting MSC.

3-4. Awards and Publicity. Public recognition of significant VE achievements by individuals, groups, or organizations sustains and strengthens in-house and contractor participation in the Army VE Program.

a. Monetary awards. Each VE reporting element administers an in-house awards program in accordance with AR 672-20 and AR 5-17. Individuals or groups who submitted and/or developed ideas which were implemented as a VEP will be considered for a monetary award.

b. Honorary awards. Each VE reporting element will support the honorary VE awards program administered by HQ AMC and will contribute nominations for the Department of Defense, as well as AMC Honorary VE Achievement Awards. Individuals, Army organizations, and contractors are eligible.

c. Publicity.

(1) AMSAA publicizes AMC VE Program accomplishments by publishing an annual brochure describing outstanding project achievements, ingenuity and applicability; exhibiting VE results at appropriate conferences and Government/Industry meetings; and preparing handouts and other publicity information to foster participation.

(2) Each MSC assists in meeting AMC publicity needs by providing objective VE project data and camera-ready graphics to AMSAA or its designated representative. Each MSC publicizes VE throughout its own organizational structure as it sees fit.

The proponent of this publication is the U.S. Army Materiel Systems Analysis Activity. Users are invited to send comments and suggested improvements to the Director, AMSAA, ATTN: AMXSY, Rock Island, IL 61299-7260.

Appendix A

Section I. Required Publications.

- AR 5-4 "Department of the Army Productivity Improvement Program" (Chapter 2) June 27, 1990
- AR 5-17 "Army Ideas for Excellence Program" November 19, 1990
- AR 672-20 Incentive Awards (Reprinted w/Basic Incl C1-2) June 1, 1982
- AR 70-1 "Army Acquisition Policy March 31,1993
- DoDI 5000.2 "Defense Acquisition Management Policies and Procedures" March 15, 1996
- FAR "Federal Acquisition Regulation" (Parts 48 and 52)
- DFARS "Defense Federal Acquisition Regulation Supplement"
- OMB CIR A-131 "Value Engineering" May 21, 1993
- DoD 4245.8H "Value Engineering"
- DA-P 11-4 Operation and Support Cost Reduction

Section II. Related Publications.

- CAGE Code Federal Procurement Data System, Contractor Identification File
- AMC-P 11-3 Value Engineering
- PL 104-106 National Defense Authorization Act, Section 4306 (1996)

Glossary

SECTION I. Abbreviations and Acronyms.

AAE. Army Acquisition Executive
AMC. United States Army Materiel Command
AMSAA. . . Army Materiel Systems Analysis Activity
AR. Army Regulation
CAVE Contractual Aspects of Value Engineering
DA Department of the Army
DoD. Department of Defense
DoDI. Department of Defense Instruction
EIA VMG. . . Electronic Industry Association Value Management Group
FAR. Federal Acquisition Regulation
FCG. Functional Coordinating Group
FY Fiscal Year
HCA Head of Contracting Activity
HQ Headquarters
LOGSA United States Army Logistics Support Activity
MSC Major Subordinate Command
OMB Office of Management and Budget
PAVE Principles and Applications of Value Engineering
PEO. Program Executive Officer
PM Program/Product/Project Manager
RCS. Report Control Symbol
RDA. Research, Development and Acquisition
SRA Separate Reporting Activity
VE Value Engineering
VECP Value Engineering Change Proposal
VEIC Value Engineering Incentive Clause
VEM Value Engineering Manager
VEMP Value Engineering Master Plan
VEMS Value Engineering Management System
VEP Value Engineering Proposal
VEPRC. . . . Value Engineering Program Requirement Clause
VESAV. . . . Value Engineering Staff Assistance Visit

SECTION II.

Terms.

a. Cost avoidance.

A reduction in identified future requirements for which funding has been requested and programmed in the budget year or future budget year.

b. Current year savings.

Saved funds that are on hand, are no longer required for the originally intended purpose, and are made available for other appropriate uses.

c. Savings.

A combination of cost avoidance and current year savings which meet the VE reporting requirements.

d. Study.

An effort, review, analysis, project, task, or evaluation whose purpose is to ascertain whether the optimum relationship between a function and its cost has been effected. Once it has been determined that the cost is higher than considered necessary, the study will be expanded to include appropriate recommendations for obtaining the required optimum relationship.

e. Value Engineering (VE).

The broad term used to identify all actions which discern and eliminate unnecessary cost in the requirement, design, development, operation and commercial support, and procurement of Army materiel without sacrificing essential quality, reliability, maintainability, performance, or mission accomplishment. It is a function oriented, planned effort by trained personnel using specific techniques. It encompasses activities variously referred to as value improvement and value analysis.

f. Value Engineering Change Proposal (VECP).

Any specific proposal, developed and submitted by a contractor under his/her VE contract provision, that will, if approved, require a contract change to implement, and result in a net contract price reduction or a Life Cycle Cost reduction.

g. Value Engineering Contract Incentives. Special provisions in Part 48 of the FAR, as follows:

(1) Value Engineering Incentive Clause (VEIC).

The clause used in procurement and construction contracts to motivate contractors to submit, on a voluntary basis, proposals for beneficial changes in drawings, design, specifications, or other contractual requirements. The purpose is to stimulate cost reduction and to provide for compensation to contractors on acceptance of such proposals. VE activities under this clause are funded by the contractor.

(2) Value Engineering Program Requirements Clause(VEPRC).

This clause requires the contractor to perform specific value engineering work in designated areas of contract performance at a stated level of effort. VE activities under this clause are funded by the government. A value engineering incentive clause may be included in addition to

the mandatory VEPRC and areas of contract performance not designated under the VEPRC are included under the voluntary VEIC.

h. Value Engineering Management System (VEMS).

The management information system which is employed at the MSC level to standardize and improve VE reporting. MSC data is regularly reported to the VEMS central database.

i. Value Engineering Proposal (VEP).

A specific proposal developed by government personnel using VE methodology which results in a net Life Cycle Cost Reduction. The term is also applicable to any contractor originated change proposal developed as a result of the application of VE techniques, which would not necessarily require a contract change for implementation.

j. Value Engineering Techniques.

The specific techniques described in DoD Handbook, 4245.8H, Value Engineering, employed in applying VE to individual projects.