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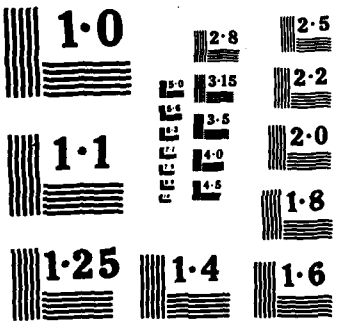

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AD-A156 071

1984 DOD VALUE ENGINEERING CONFERENCE REPORT

"VE - A TOOL THAT BENEFITS LINE MANAGEMENT"

PART V

WORKSHOP C : VEP/VECP ADMINISTRATION, NEGOTIATION, AND IMPLEMENTATION

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Value Engineering
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

This Conference Report summarizes and consolidates the proceedings from the 1984 DoD Value Engineering Conference held 1-2 November in Leesburg, VA. The findings and recommendations with supporting material from the five workshops are provided in addition to the complete plenary session presentations. An Executive Summary is presented in PART I.

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1984 DoD Value Engineering Conference Report

PART V

Workshop C: VEP/VECP Administration, Negotiation, and Implementation

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WORKSHOP "C"

(VEP/VECP Administration, Negotiation, and Implementation)

- Executive Summary

IMPEDIMENTS/RECOMMENDATIONS

The following impediments to the use of VE were identified along with some recommendations to overcome the impediments.

IMPEDIMENT	RECOMMENDATION
Need for up front funding.	(1) OSD budget as a line item (2) Develop a pool of funds program managers can draw on and repay out of savings. (3) Fund program requirements in early R&D. (4) Fund for collateral savings.
Lenthly VE Processing Time.	(1) Use change order to implement into Technical Data Package with subsequent negotiation of savings. (2) Require priority handling to get most savings benefit.
Lack of motivation of Program Managers.	(1) Assign VE savings goals. (2) Reward achievement and penalize failure or absence of achievement.
No procedures to apply VE to software.	(1) Set up experiment to prove methodology.
No motivation for sub-contractors.	(1) Assure 30 percent of savings to subcontractors. (2) Change FAR to allow this.
Move VE Actions into Early R&D.	(1) Change FAR to establish early VE baseline.

DCAS goals removed with subsequent drop in VE activity.	(1) Reestablish VE goals.
VECP disapprovals need review.	(1) Direct communication between contractors and PM with DCAS. (2) Invite contractor to CCB. (3) Require Engineering justification for refusal.
Lack of ongoing training in VE.	(1) Setup VE training goals for Services and DLA contracting officers and administrators.
Unsolicited VE proposals not allowed.	(1) Change FAR to allow.
Top management not involved.	(1) Make VE an item to be addressed at all program reviews.
Negotiation process overlooks VE.	(1) Include VE specialist in negotiation team.
VE not in contract award selection criteria.	(1) Include VE in proposal as one element in selection criteria.
Contracting personnel place low priority on VE.	(1) Include VE results as an element in performance standards.

Workshop C

Workshop C had to be divided into three sections because of the number of participants and the subject matter to be covered. Mr. Bill McAninch (NAVMAT) and Mr. James Lane (USAF) co-chaired session C-1. Basically we were looking at impediments to the VE Program from the program office/buying officer point of view. We addressed the titles that follow:

- Up front funding
- VECP processing time
- Motivating the Program Manager
- Applying VE to firmware/software
- Enhancing subcontractor participation
- Communication between PCO and PM
- VE in early R&D

The first was Up front funding. That has been covered before, but we went into it again in depth. It seems to be a major impediment in the program office. The first recommendation is to have OSD budget as a line item and either parcel the money out to the Services as they need it or as they perform VE. The is to tax a program manager with a certain percent say, one-half of one percent or one-tenth of one percent. This money would go into a fund to implement VECPs, a general pool. The PM would have to pay this back when the program started getting the pay-back from VECPs. The third proposal is a self-generating pool - just tax the VE savings on the instant contract and use it to establish a pool which the program managers could draw upon to be paid back out of the savings.

The IMIP concept which may not be well known to you, permits the contractor to absorb the cost of implementing VECP and then keep all the savings generated until the cost for implementation has been paid off. Then the contractor starts sharing the savings with the Government.

And finally, use the unappropriated funds, by use of the capital investment clause: In the case of multiyear contracts, that are terminated for the convenience of the Government the contractor's investment is indemnified.

VE processing time was also discussed. There is a need for a timely, objective review of VECPs. Timely meaning promptly - and objective meaning fairly. The first recommendation is to assign higher priority to VECPs. VECPs now get buried beneath everything else. The second recommendation is to make management accountable for the approval schedule. For each VECP, make management i.e. the program manager and the item manager responsible for having the VECP scheduled by the change board and having a technical evaluation completed prior to forwarding to the board for action.

Use of the change order following technical approval - VECPs are perishable commodities. The longer the wait the fewer items

will be affected by the VECP, and the less savings. Use the change order after technical approval and let the contracting officer negotiate the savings shares. As it is now, the issuing of the modifications is taking longer than it is to get technical approval. The DoD is losing a lot of money in this area.

We need to reduce the contract documentation requirements. Reduce the administrative lead time in the actual processing the contract modifications. In the case of most VECPs, it may save money. VECPs are savings, its money coming back. It seems a little absurd to have the same contract administrative control features as when we spend money. However, that's currently the provision in the FAR.

Motivating the program manager. This a major area. Get the program manager interested in the VE program, and the contractor is going to respond. The idea is to turn the program manager on to VE and explain what it can do for the program. The program manager is also burdened with assigned savings goals. VE savings goals are either based on the general procurement authority, VE savings in the past or something similar. Make VE results a part of job performance evaluations. It can be a part of GM/GS/SES objectives; or a part of an annual military personnel fitness report. There should be "sticks" as well as "carrots", to provide recognition and cash awards. If the PM does a good job, and is very successful, the result should be an achievement award as recognition for VE efforts or in cases where it's possible, a cash award .

We also need to, provide adequate resources to fund in PMs who don't have the money available to implement a lot of the VECP ideas.

Apply VE to the software/firmware areas of weapon systems. Software is currently a major cost in the price of weapon systems. Little or no VE savings are being reported in this area. There are many reasons for this, however, the most significant one is that no one seems to know how to do it successfully. The savings potential remains tremendous. The group was not successful in addressing the problem either. This doesn't mean that it can't be done. The area is too new, expanding too fast and is just too fertile for VE to dismiss. Therefore the recommendations were: First have the VE community attempt to define the VE potential in software. That is, where in the software area can the VE methodology be applied and how. There are a lot of qualified people in both software and VE. Focus their attention on the problem and see what can be developed. Finally, OSD should establish a pilot VE software program either as part of an on-going program such as "ADA" or maybe as an R&D contract with a computer/software firm. Software remains another area of investment and the savings potential is not being exploited. Subcontractors receive 40-60 percent of the money that does go to a prime. The actual VE return on this investment is very, very small. One of the ideas is to increase participation by subcontractors, by increasing the flow of VE

savings from them. One problem is that the current sharing arrangement is somewhat less than equitable to the subcontractor. By the time the prime gets half and then gives half of that to the sub, it impedes the availability of money that gets to the subcontractor. Change FAR/DAR to provide the minimum share to a subcontractor on a VECP to be one-third. The sharings would be in thirds. The DoD would get a third, the prime would get a third, and the subcontractor would get a third. That way everybody is sharing evenly, which is one of the concepts of VE.

Also track what the subcontractors VE achievements are. Often the prime denies the subcontractor the opportunity for VE when there is no favorable impact on the prime's profits. Send the information copy of the subcontractors VECP to the PCO to find out what the subcontractors are doing. This copy will not require a response from the Government.

Finally, modify the FAR to reflect that "any changes to the contract that results in a life cycle cost reduction will be considered a VECP".

Other ideas include improved communications on VECP priorities between the program manager and the PCO. Sometimes the program manager has goals and it's very difficult to make the PCO understand that, hey, to save $10 million dollars, the PM needs help available the PCO is worrying about other things. Build a team relationship for the PCO and program manager so they are both moving in the same direction as far as VECPs are concerned.

Use VE in early R&D. There is no request to do VE in the early R&D part of FSED. The DoD Directives and the DAR/FAR are both silent on this subject. Generally the further back in the acquisition cycle, the greater the return on the VE investment. Incentivize R&D contractors to use the VE process in early R&D. It should be considered, and there are probably ideas to do it.

VIEWGRAPHS PRESENTED BY

TOM KARR, Naval Air Development Center

CURRENT VE POLICY IN R&D CONTRACTING

FAR 48.201 - "...the Contracting Officer shall not include a VE clause in solicitations and contracts for Research and Development other than full-scale development."

* However, FAR does allow Head of Contracting Office to waive this restriction.

OBSTACLES TO VE IN R&D

- o Lack of firm configuration
- o Small quantities
- o No commitment to future quantities
- o High risk cost estimates

LACK OF FIRM CONFIGURATION

- o State-of-the-art
- o Development purpose feasibility or concept validation
- o Design goals only
- o Award based on design concept
- o Informal configuration management
- o Frequent specific changes

POTENTIAL APPLICATION VE AWARD FEE

- o Identify award fee pool
- o Statement of objectives
- o Establish evaluation panel
- *o Define VECP procedure

* Recommend new type of submittal - VECP (Value Engineering Change Concept) which would be less formal, less expensive to prepare, and would not require imperical estimate of "SAVINGS" since contractor award fee would be subjectively derived.

BENEFITS

- o Increased contractor attention
- o Award fee subjectively determined
- o Not subject to "Disputes" procedures

* Also generates increased creativity and gets VE into earlier phase of systems development where return on investment is greatest.

Session C-2 CONTRACT ADMINISTRATION

John Ware, VE coordinator (VEC) at DCASMA Springfield and Edward Bodart of McDonnell Aircraft Co., Co-chaired the session.

We addressed the lack of contractor participation in the DoD VE program and recognized two problem areas.

1. Administration of the DoD VE Program at the DCASMA level.

2. Changes to the FAR (which would enhance the VE Program).

Problems identified in the FIRST area are as follows:

INADEQUATE PROMOTION AND DCAS REMOVAL OF THE GOALS.

In order to correct this problem we recommend the following actions:

A. Dedicated VE positions (DCASMA/DCASPRO). Reportable to the commander and with the support of Management.

B. Established VE goals.

C. Specified VE MBO Objectives

D. Mandate Level of Effort.

E. Use of Monthly Visibility Charts.

F. Conducting of Periodic (Annual) Meetings/Workshops for DCAS personnel (VECs etc.) to provide exchange of information and ideas.

G. Recognition (Awards) for Contractors (and Government personnel) for outstanding performance in VE.

INADEQUATE REASONS FOR DISAPPROVAL OF VECPs.

The recommended alternate solutions for this problem are as follows:

A. A meeting of the contractor, DCAS (VEC) and the Procuring Activity/Engineering Support Activity (Evaluating Engineer etc.) to reconcile the differences between the VECP idea (as proposed) and the reasons cited for the disapproval action by the procuring activity.

B. Invite the contractor to the CCB meeting as a non-voting participant.

C. Require that disapproval or action be based on professional and reasonable (objective) judgement/reasons.

LACK OF VE TRAINING FOR CONTRACTOR AND GOVERNMENT (DESIGN LEVEL) PERSONNEL.

The recommended alternative solutions are as follows:

A. Establishment of goals similar to those used by the Navy.

B. Establishment of VE training available at DCASMA or the entry level of VECPs, such as DLA, Army, AFPRO, NAVPRO etc.

NO-COST ECPs AT THE PCO LEVEL.

The recommended alternative solutions are as follows:

A. Route all ECPs through the DCAS VECs.

B. Establish contractor VECP goals for the PCO or for the Program.

Problems identified with the SECOND area (Changes to the FAR) are as follows:

EVALUATION TIME EXCESSIVE

This is one of the most important problems (and the most frequent) about which we have heard form the field.

The recommended alternative solutions are as follows:

A. Enforce the 45 day limit for CCB approval. With an additional 90 day maximum for modification to the contract after CCB approval.

B. Establish higher priority for VE.

NO UNSOLICITED VEPs (UVEPs) ENTERTAINED AND VE NOT APPLICABLE TO PURCHASE ORDERS.

UVEPs have not been accepted since 1977 or 1978 and VECPs are not applicable to Purchase Orders.

Our recommended solution for this problem is to include both of them in the FAR.

LACK OF UP FRONT FUNDS (FOR ADMINISTRATION OF THE VE PROGRAM)

This has been addressed by others.

The recommended solutions for this problem are as follows:

A. Establish a pool for up-front funding by dedicating a percentage of the Instant Contract Savings for this purpose.

B. The use of Government testing facilities at no cost to the VE effort. This concludes our presentation problems as we see them and the solutions.

Session C-3 was co-chaired by Mr. Robert Banash, AMCCOM and Mr. Ted Tommearu, Honeywell, Incorporated. The function of the group was to examine the VE Program from the viewpoint of the VE Program Manager at the contracting activity. The concerns of VE Program Managers at higher organizational levels was felt to be served by this approach.

Viewgraph #1: VE PROGRAM MANAGEMENT

- O GENERATION
- O EVALUATION
- O SETTLEMENT

Narrative:

VE Program Manager must be concerned with all phases of the VECP process. The approach of the subgroup was to examine the impediments associated with each of the phases as shown and propose solutions. In practice, no matter which phase we considered, many of the same impediments emerged. That is, certain impediments affect all aspects of the VE Program. Similarly the solutions which were developed are not readily associated with the impediments which gave rise to them. That is, each solution would appear to resolve several impediments. This led one member of our group to prepare a matrix of impediments and solutions to show the relationship among them. Therefore, the impediments will be discussed without regard to the VECP processing phase; and the solutions will be discussed without regard to the impediments.

Viewgraph #2: IMPEDIMENTS FOR USE OF VECPs

- O LACK OF GOVERNMENT RECEPTIVITY
- O LACK OF TOP MANAGEMENT INVOLVEMENT
- O LACK OF VE FAMILIARITY
- O SLOW TURNAROUND TIME
- O INCOMPLETE VECPs
- O ADVERSARIAL GOVERNMENT/CONTRACTOR RELATIONSHIP

Narrative:

The first four impediments listed are self-explanatory and have been discussed in the conference opening presentations. The last two are not as readily apparent. The acceptance and processing of incomplete VECP is a detriment to the VE Program for both the Government and contractor viewpoints. The Government technical evaluator assigned to evaluate a VECP which is not fully developed or have sufficient economic justification views the program as a

waste of time. The contractor also develops a negative attitude as knowledge that his VECP is incomplete may take several months. As for the last bullet on the viewgraph, the contract resembles the forward edge of the battle area with the Government and contractor frequently each seeking to maximize their benefits under the rules of the contract. The philosophy of VE is supposed to be cooperation; but, for example, it's difficult for PCO to forget a bad deal during previous negotiations when it comes to dividing VE savings.

Viewgraph #3: MANAGEMENT INVOLVEMENT

- O VE AS AN ELEMENT IN PERFORMANCE STANDARDS
- O VE AS AN ITEM IN PROGRAM REVIEWS

Narrative:

This is the first of several viewgraphs which addresses actions to eliminate the impediments. The most important of our proposals is obtaining top level management involvement in the VE Program. Two action items are proposed to accomplish this. The deficiencies of the first (performance standards) are well known. Performance standard elements have increased to address a wide variety of concerns, thus, the VE Program would only be one among many others. However, it is an area that must be addressed and we would recommend its adoption. It could be inserted into top level management standards as a part of a general cost reduction standard. Having been placed in top management standards, the flow down would assure that it would reside in the standards of the managers responsible for the VE Program. The second element is to make VE an item of program review. Currently, management support is appears in a variety of policy letters where management stresses the importance of the program. However, this is off-line. VE needs to be on-line to show that is an expected responsibility of program managers to have an aggressive VE Program.

Viewgraph #4: TRAINING

- O REQUIRE CAVE TRAINING FOR PROCUREMENT PERSONNEL
- O VE MODULE AT ALL TRAINING SCHOOLS FOR PROGRAM MANAGEMENT PERSONNEL

Narrative:

Training on the Contractual Aspects of Value Engineering (CAVE) is recommended as a requirement for all procurement personnel. As part of the CAVE training, it is recommended that the nature of the course be expanded so that PCOs/contract specialists know the mechanics of VECP settlement and also develop attitudes favorable to the receipt of the VECPs. The second item is to have a VE module in all appropriate training, managerial and functional courses. This training could be presented by guest speakers who

have successfully implemented the VE Program in the course area. The problems and benefits of the program would be more meaningfully related by personnel who successfully implemented the Program.

Viewgraph #5: DEDICATE RESOURCES

- VE ADVOCATE AT EACH ACTIVITY
- FUNDS FOR VEPR (PROGRAM REQUIREMENTS CLAUSES)
- FUNDS FOR NEG ICS
- FUNDS FOR COLLATERAL
- INCLUDE VECP SPECIALIST AS PART OF NEGOTIATION TEAM

Narrative:

The Program needs dedicated resources. This was addressed by Mary Ann Gilleece in her presentation. Each buying activity must have a readily identifiable VE manager responsible for monitoring VE activity and serving as an ombudsman for contractors having difficulty with the program. Funds must be established for implementation of the program requirement clause. While procedures exists to budget for these funds through normal channels, funds should be available for newly discovered areas of opportunity. Similarly funds need to be available where there will be a negative instant contract savings. This becomes even more important as contractors look to life cycle savings. For example, a small gasoline engine replaced a power take-off unit of a truck engine - instant contract costs increased, but gasoline savings were enormous. Also, funds must be available for sharing the collateral savings. This is frequently a problem. Last item - each buying activity should have VECP specialists. CAVE training may not be sufficient for those PCOs who see few VECPs. The VE specialist may or may not be a fulltime position, depending on the number of VECPs handled by the activity. Successful performance by the VE specialist would result in the acceptance on the part of the PCO responsible for the contract and would dramatically speed VECP settlement time.

Viewgraph #6: CONTRACTS

- INCLUDE VE AS SELECTION CRITERIA
- DO NOT DELAY IMPLEMENTATION. USE 2 STEP PROCESS:

TECH MOD	COST MOD
1	2

Narrative:

A statement to include VE as a contractor selection criterior would improve communications between the PCO and the contractor.

A PCO would know that the contract required an active VE program on the part of the contractor, and the contractor would be informed that the buying activity was receptive to VECPs. VECPs are perishable and must be implemented at the earlist practical time. Implementation should not be delayed pending financial settlement. In fact, better data can be obtained after the settlement. Our team recommends a two-step process; technical implementation followed by financial settlement.

Viewgraph #7: COMMUNICATE

- O ENCOURAGE 1 ON 1 GOVERNMENT INDUSTRY MEETINGS ON VE PLANS GOALS, ETC.
- O PROMOTE/INFORM VE THRU EXISTING:

  BULLETINS
  NEWSLETTERS
  PAPERS

- O REVIEW OF VECPs BY ACOs

Narrative:

Encourage 1 on 1 communication. Meetings of program managers, PCOs, VE personnel, and the contractor should be held to discuss VE plans goals, VE potential, etc. Our team would recommend the promotion of the VE Program through existing bulletins, newsletters, and papers which serve the functional personnel in program management, procurement, and engineering. Promoting VE through VE journals would not have the effectiveness desired, as it would not be read by the functional people. Lastly, VECPs should be thoroughly reviewed by the ACO for technical completeness and economic justification.

Summary:

Following is a list of DoD actionable items:

- O Insure cost reduction is an element in performance standards of appropriate commanders.
- O Insure VE is an element in program reviews.
- O Make CAVE a requirement for procurement personnel.
- O Require that DoD schools develop VE attitude/orientation modules in courses for management personnel. Recommend module be taught by successful managers (Course graduates).
- O Require that VE capability be a contractor selection criteria - FAR change.

- Advocate technical implementation of approved VECPs followed by financial settlement. A FAR Policy modification may be necessary.

- Reaffirm responsibility of ACOs to review VECPs for technical completeness and economic reasonableness. Encourage ACOs to assist new contractors with VECP paperwork.

BIOGRAPHY

ROBERT L. BIDWELL IS DIRECTOR OF THE DOD PRODUCT ENGINEERING SERVICES OFFICE, WHERE HE EXERCISES EXECUTIVE CONTROL OVER A GROUP OF PROFESSIONAL ENGINEERS AND SCIENTISTS IN SUPPORT OF THE DEPUTY UNDER SECRETARIES FOR RESEARCH AND ENGINEERING (ACQUISITION MANAGEMENT) AND (RESEARCH AND ADVANCED TECHNOLOGY).

HE CAME TO DOD IN 1968 FROM THE MARTIN MARIETTA CORPORATION, ORLANDO, FLORIDA DIVISION, WHERE HE WAS ADMINISTRATOR FOR THEIR PLANT-WIDE VALUE ANALYSIS PROGRAM. DURING HIS EMPLOYMENT IN THIS POSITION, THE PLANT AVERAGED APPROXIMATELY $18 MILLION ANNUALLY IN DOCUMENTED VALUE ENGINEERING AND COST REDUCTION ACTIONS. PRIOR TO JOINING THE MARTIN CORPORATION, MR. BIDWELL SERVED 24½ YEARS IN THE U.S. ARMY AIR CORPS, QUARTERMASTER CORPS, AND ORDNANCE CORPS. APPROXIMATELY 14 YEARS WERE SPENT DIRECTLY IN INDUSTRIAL EFFORTS OF THE ORDNANCE CORPS. AN ADDITIONAL THREE YEARS WERE SPENT ON AN ADVISORY ASSIGNMENT TO THE NETHERLANDS ARMY, INVOLVING INDUSTRIAL AND MAINTENANCE-TYPE ACTIVITIES.

MR. BIDWELL WAS TWICE PRESENTED THE MAN OF THE YEAR AWARD BY THE MARTIN MANAGEMENT CLUB (1963 AND 1966); HE WAS SELECTED AS ONE OF THE 25 OUTSTANDING CONTRIBUTORS TO MARTIN MARIETTA CORPORATION (1968); LIFE MEMBER, SOCIETY OF AMERICAN VALUE ENGINEERS (1968); AND RECEIVED THE OSD MERITORIOUS CIVILIAN SERVICE AWARD (1975). MR. BIDWELL IS ALSO THE AUTHOR OF THE INSTRUCTOR'S GUIDE FOR TEACHING CREATIVE THINKING.

Biography

Lieutenant Colonel Francis E. Doherty, USAF

Current Position: Assistant for Contracting and Manufacturing Matters, Directorate for Industrial Productivity, Office of the Under Secretary of Defense (Research and Engineering).

Education: B.S. in Business Administration, Boston University.
M.S. in Industrial Management, University of North Dakota.
Graduate Air Force Education with Industry (EWI).
Defense Systems Management College Program Managers Course.

Professional Certification:
Certified Professional Contracts Manager, NCMA.
Certified Cost Analyst, ICA.

Experience: Prior to his current assignment, LtCol Doherty was a Staff Officer assigned to Headquarters U. S. Air Force, Directorate for Contracting and Manufacturing Policy. He was the Director of The DoD Task Force to Improve Industrial Responsiveness and had responsibility for the Air Force Value Engineering Program and was a member of various DAR subcommittees. Prior to this assignment, LtCol Doherty was Chief of the Pricing and Financial Services Division, Headquarters Air Force Systems Command and led a major government/industry study on contract financing. LtCol Doherty was Director of the E-3A (AWACS) Procurement Office and a procuring contracting officer at the Air Force Electronic Systems Division. He led a number of E-3A "Should Cost" Analyses as well as AWACS production contract negotitions. LtCol Doherty has been a guest speaker at the Industrial College of the Armed Forces, the Defense Systems Management College, the Air Force Institute of Technology, the Society of Value Engineers and the National Contract Management Association.

ARTHUR M. SCHUNK
CONTRACTS MANAGER

UNION CARBIDE CORPORATION
COATINGS SERVICE DEPARTMENT

REMARKS AT
DoD VALUE ENGINEERING CONFERENCE
LEESBURG, VIRGINIA

November 1, 1984

During the past 43 years, I have been employed by Union Carbide Corporation in several divisions and staff departments.

My assignments have been in office management, accounting, financial control, administrative services, recruiting, employee relations, and now government contracting.

This conference and other recent initiatives within the DoD should convince all of us that the DoD is sincere in the promotion of Value Engineering - and in its desire to increase contractor participation in VECP activity.

I've promised Bob Bidwell that I would avoid grinding axes today. We've all done enough of that in recent years and it's time we started working together - Government and contractor alike - in maximizing the benefits available through Value Engineering.

The message that VECP is not a dirty word is starting to flow down to the operating levels in the DoD. Past adversarial relationships can and will be overcome. We need that.

Although not an engineer, I do have 10 years of experience with Value Engineering Change Proposals and will confine my remarks to VECP's rather than Value Engineering per se.

As a Contracts Manager in the Coatings Service Department of Union Carbide Corporation, I have authored about a dozen successful Value Engineering Change Proposals and about an equal number that have not been successful for various reasons.

According to the FAR definition, Value Engineering Change Proposal means a proposal that:

(1) Requires a change to the instant contract to implement; and

(2) Results in reducing the overall cost to the agency without imparing essential functions or characteristics.

That simple definition often appears to be misunderstood or perhaps has not even been read by many people who become involved in the preparation, analysis and evaluation of VECP's.

In our business, we have spent a lot of time trying to convince the PCO and others that an engineering effort was not reallly required for an idea to be a legitimate VECP.

If I could make but one recommendation, it would be that all Government and contractor personnel who become involved with VECP's should be required to read the FAR sections on Value Engineering.

Contractors often leave out some of the requirements - even though they are minimal. PCO's and others often expect a sophisticated engineering analysis when it is not required. Both of these misunderstandings cause problems, conflict and delay.

Another brief statement in the FAR that has caused many problems and has soured some contractors , as well as some PCO's, on VECP's reads as follows:

> "The Contracting Officer's decision to accept or reject all or part of any VECP and the decision as to which of the sharing rates applies, shall be final and not subject to the disputes clause or otherwise subject to litigation under the Contract Disputes Act."

That statement is misleading and I think it should be changed. We are all aware of many cases where the Armed Services Board of Contract Appeals and others in authority have reversed the PCO's decision or sent the VECP back to him for reconsideration.

In our own situtation, Coatings Service has escalated one VECP to the Secretary of the Air Force and another to the Secretary of the Army following PCO rejection. Both PCO's were advised to reconsider and eventually approved the VECP's. We were paid a share of the savings in both cases.

The only reason for mentioning this is to establish credibility for my remarks and also to demonstrate that it is not always necessary to enter into costly litigation if you are unable to agree with the PCO's decision.

Coatings Service is a relatively free standing business within Union Carbide Corporation. There are 10 Coatings Service plants within the U.S. and about an equal number overseas - either now operating or under construction.

We do not have a Value Engineering Department and our VECP's have not utilized the Value Engineering discipline - VECP's have, however, placed more than a quarter of a million dollars on our bottom line during recent years. That's a lot of money considering that Government business is only a small portion of our total sales. There was very little cost associated with obtaining our share of the savings. If you add all of that to the money that we have saved from not having to do the work - we have more than paid my salary for the period involved - and I have spent very little time writing and negotiating VECP's. The small amount of time spent on VECP's has paid substantial dividends.

Coatings Service is the originator of metal and ceramic thermal spray coatings widely used throughout industry and Government for the improvement of life cycle cost. This work can be done at the time of original equipment manufacture, as well as at the time of repair and overhaul.

All of our contracts with the Government involve the repair of parts. Such repair avoids the purchase of new parts and - in and of itself - represents a value engineering action. Frequently, our engineers assist Government and commercial customers in the development and execution of the customer's own value engineering projects. We're not in the business of writing VECP's, but we are conscious of the need for saving money and reducing life cycle cost.

Coatings Service VECP's have consisted of three types, each of which has resulted in some approvals and our sharing in the savings.

First there is the "classic" type. I define a "classic VECP" as one which proposes a change to the contract work specification and reduces the price because of the reduced work involved. The contractor's share is paid from the price reduction.

Next is the type which actually increases the contract price. This changes the repair specification to provide for the salvage of parts which would otherwise be condemned. The cost of the added work procedure usually increases the contract price. The savings is derived from the avoidance of purchasing a new part. This does create a funding problem which warrants further study and discussion.

The other type of VECP which we have used successfully is the "no cost" VECP. This facilitates settlement when the dollar value is not large. The contractor retains the instant contract savings and the Government retains future contract savings. Both sides also save from the reduction in record-keeping and administrative costs.

We have not had a V.E. requirements clause in any of our repair contracts but I am sure there would be mutual benefits from a funded V.E. effort in fixed price repair contracts.

There are a few recommendations I would like to make at this time. You have probably heard most or all of them before - so I'll keep them brief and will refrain from further comment.

* Rewrite the DAR sections on Value Engineering in plain, simple language. Legal review or participation is desirable but legalese is confusing to most of us. It invites challenge and litigation.

* Create a Value Engineering advocate with sufficient motivation and authority to speed up the flow of VECP's and to assist and/or monitor the PCO's involvement.

* Establish realistic and workable timetables for VECP processing.

* Require periodic and informative reports to the contractor concerning actions taken or planned for unresolved VECP's.

* Provide for contractor attendance and/or participation in the evaluation process for his own VECP's.

* Continue the education process and arrange for the contractor to attend educational sessions along with his cognizant PCO so that they both are reading from the same set of rules.

* Develop a method for VECP resolution that would not interfere with or provide a challenge to the Government Employee Beneficial Suggestion and/or cash award programs.

* Create a newsletter or letters to publish VECP activity. This could plant seeds for future VECP's. We are trying here to encourage increased VECP submittal.

* Publish case studies (in some detail) of disapproved or disputed VECP's. Sometimes we could learn more from those than from the approved ones.

* Provide assistance, guidance and incentive for the PCO so that he does not regard VECP's as a nuisance or as a contractor's effort to get something for nothing.

* Provide DCAS and other VE monitors with the tools, authority and incentive for following VECP's through to resolution.

* Provide a clear process wherein the contractor can require an objective review of disapproved VECP's without the need for costly litigation.

* Create a VE Committee or review board for automatic review of disapproved VECP's before they become the subject of litigation.

I would be willing to discuss any or all of our own VECP's and some of our Unsolicited Value Engineering Proposals with anyone who might care to do so.

Thank you.

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