SYMPOSIA

MULTIPART CLINICS

Monday Morning

"Why Membership and Certification in SAVE?"

C. P. Smith, SAVE National President '72-'73

What is SAVE all about, and what does it offer its members? How can the services offered by SAVE be best utilized? What services would the members really like to receive from SAVE? How can a member best participate in SAVE? How can a member attending the National Conference make best use of his time? How does the National SAVE Organization operate for the benefit of the members? How does a member align his personal goals in concert with the SAVE National objectives? What is the motivation for membership in SAVE? "What's in it for me?"

Robert L. Denig, Jr., SAVE National VP, Professional Development

- Why become Certified? Certification provides documentary evidence that the individual has the ability to meet a certain set of standards related to the discipline of Value Engineering. These standards pertain to minimum academic standards as well as practical experience required of a value engineer.

- Additionally the certification program was adopted to improve the image of value engineering by establishing professional standards and thereby gaining increased acceptance of value engineering/analysis as a useful discipline.

- The standards for certification were developed by an ad hoc committee and their recommendations were reviewed, redirected, studied and finally approved by the SAVE Board of Directors.

- The program finally adopted provides for its administration by a six member Certification Board appointed by the Board of Directors.

- This Board will rule on the qualifications of those who apply for Certification. In so doing they will comply with the eligibility requirements, procedures, certification maintenance, fees and standards set forth by the Board of Directors. Application requirements, grandfathering and the examination will be discussed in some detail.
and correlate VE activities in all divisions; conduct training activities; and to serve as a liaison agency to management. A corporate Value Engineering Committee was also established; the members of this committee are corporate, divisional, and subsidiary VE representatives. The committee meets on a regular basis - to exchange thoughts and ideas, discuss program progress, decide future activities, and to serve as a liaison agency to management.

Divisions and subsidiaries have appointed VE coordinators - and all VE activities within the respective division or subsidiary are channeled through these coordinators. VE groups have been established within the divisional organization and product engineering departments of some divisions; other divisions have established VE groups within their manufacturing organization.

To continue training IH cost influencing personnel in VE methodology, numerous seminars of one and two-week duration have been conducted for the majority of divisions and subsidiaries in the US, Canada, Mexico, Great Britain, Germany, France, New Zealand and Australia. Participating in each seminar are approximately fifty cost influencing personnel, representing fields such as product design, engineering, manufacturing, finance, purchasing, material control, etc. The VE proposals submitted by the seminar participants are forwarded to related design engineering, manufacturing, finance, purchasing, marketing, etc. departments for evaluation, cost effects, decision, implementation, etc. Current and future training plans consist of continuing orientations, seminars, and refresher courses.

In addition to seminars, a number of value studies have been conducted on a divisional and corporate basis. These studies are normally initiated by management, and consist of full-time effort by personnel concentrating on a certain product, business system, process, etc. The participants have previously received formal value training. For a divisional study, participants are generally selected from the division whereas, for a corporate study, the participants can be selected from all divisions and subsidiaries on an international basis.

Within IH, we consider Value Analysis activities as a cost savings procedure applied after a product, system, or process is in production or in effect. We consider Value Engineering activities as a cost avoidance procedure applied before a product, system, process goes into production or is effected, but after the product is designed, system approach has been decided, etc.

As a major extension of our corporate value efforts, four years ago Value Control activities were initiated in our divisions and subsidiaries. Within IH, we define Value Control as follows:
At the Magnavox Company, the Value Engineering Program includes a variety of related activities all of which are included in what we call The Value Engineering/Cost Improvement Program. The Program operates on the basis that cost improvement is the objective of the related activities whether they be the individual's application of value techniques or work simplification or plain ordinary old-fashioned cost reduction.

The formal value activities are conducted in several inter-related and formally organized activities. We conduct Profit Improvement training which includes value seminars, work simplification seminars, etc. for all management people; value task force teams are organized and assigned on an ad hoc basis; VECP support activities are provided by a Manager of Value Engineering in our government product facilities. This person also conducts the value task force activities in these plants.

Within the total company we have division and plant annual value engineering/cost improvement goals and reporting activity which is conducted by either a VE/CI committee or a VE co-ordinator for that plant. It is also the responsibility of this plant co-ordinator to conduct the employee suggestion, collection, evaluation and implementation activities. We use the employee suggestion method to conduct special idea gathering programs from various forms of publicity, motivation and token recognition.

Encompassing all of these activities we have an on-going recognition and motivation program called the Magnavox $10,000 Club. On an annual chapter basis we recognize individual's and team innovation that achieve cost improvement savings of over $10,000 a year. Recognition in this program is an annual dinner for the individual and his guest plus a certificate and various other token awards. One level above this annual chapter is a cumulative savings plateau identified as the Diamond Chapter. In this group when the individual reaches $250,000 of annualized savings, cumulative, his name is placed on the Diamond Chapter honor roll and he is given 5 shares of company stock as a token award.

The Magnavox program is open to all employees of the company both hourly and salaried which encompasses 17,000 people and 35 plants.
NECP Opportunities With the Department of Defense (Continued)

been completed to reform and revitalize the program. ASPR provisions are being simplified and improved.

The Defense Contracts Administration Services, DCAS, can assist defense contractors in their Value Engineering efforts. Through DCAS, arrangements can be made for presentation of Value Engineering information to contractor management and engineering personnel. Literature describing VE procedures, processes and benefits is available through DCAS.

DCAS Production Engineers will assist contractors in preparation and submission of VE Change Proposals. DCAS personnel, through your Administrative Contracting Officer, can often assist in resolving any problems arising after VE Change Proposals are submitted.

A renewed emphasis on contractual Value Engineering is evident in the Department of Defense - and this renewed emphasis is being felt through DCAS. Individual DCAS Regional Commanders are making Value Engineering a team effort, between Contract Administration, Quality Assurance and Production personnel to achieve greater savings through the DOD contractual Value Engineering program.

"VE-VA Challenges Met: Challenges Faced"

Moderator: R. Glenn Woodward, Manager Value Programs, Abbott Laboratories

L. D. Miles, Miles Associates

Challenges That Have Been Met

At the brink of Sudden Death each day of the first month, each month of the first year, each year of the first half decade, the techniques lost many battles, but thru each loss and each gain, became more virile.

"It's nothing new", "It's not needed", "It is valueless duplication", "It is only for neglected products", "There is no place for it in the organization", "It's only for mass production, not our order-made products", "It's only for order-made products, mass produced products have already had complete combing by our specialists", "No time for training", "No money in the budget for it", "If any of my men enroll for training, they will be fired".

How each of these and other challenges were met as strength, understanding and support grew.
"Design To Cost" (Continued)

Richard E. Biedenbender, Special Assistant for Cost/Value Engineering, OASD (I & L)

This paper reviews two areas:

(1) General trends in DoD budgeting and system costs - and their implications.

(2) Progress and problems in the area of design to cost.

Overall defense economics currently dictate much closer control of future production and support costs during the design and development process. As a result, unit production cost, which has been a major design parameter commercially, is now being viewed similarly in defense work. Timely feedback to the designer and the customer is a key element to successful design to cost work. Design to cost results can also be a significant factor in development contract fees.

The top-down unit production cost and cost-to-support approach provides improved motivation for proper employment of specialized programs, such as standardization, VE and reliability, which are economically oriented. Future emphasis on design to cost should contribute to more effective use of such specialized programs.
"Synergism -- When 1 + 1 > 2" (Continued)

Prospering Stage
Ascendancy over matrix organization or planned departure intact from it.
Rapid response of reward, teaching and punishment for synergistic, antienergetic and destructive acts respectively.
Dollars.
Realistic goals and yardsticks.

Declining Stage
Past history.
Strong associations within synergism.
Dollars.

Disruptive factors in synergism:

Formative Stage
Extraneous decision-makers.
Multiple ill-defined goals.
Front loading with specialists.
Weak relation to corporate objectives.
Grasping members out for their own benefit alone - manipulators.
Inadequate resourcing.

Prospering Stage
Placing supportive matrix organization needs over those of synergism.
Slow response to synergistic, antienergetic, destructive acts.
Non-fulfilled promises.
Underutilization of generalists, forced specialization, decreased responsibility, boredom.
Expansion, largeness.

Declining Stage
Continued presence of generalists not in administrative team.
Presence in any matrix organization.
Redeployed interests.
Know-it-all attitudes.

"VE by the Service Industries"

Moderator: Phillip Woods, Manager, Industrial Engineering, Trans World Airlines

VE is well known for its effectiveness in defense and manufacturing industries. Services is our most rapid growth industry. How does VE contribute to controlling cost in this industry?

Phillip Woods, Trans World Airlines

TWA's Value Analysis Story
What do you do when your company faces forecasted losses to the magnitude of $80 - $100 Million a year? Such was the case with
III. Profit Improvement Program:

- Competitive bidding the key
  - formal term contracts
  - term activates review process
- Constant review of products from simple ABC analysis.
- Constant surveillance of market for suitable substitute products.
- Follow up on new products to insure they do the job.
- Calculate usage ratio of reusable items to available airplane seat miles.
- Measure level of contribution -- both decreases and increases.

IV. Examples:

- Linen specification change
- Glassware specification and vendor change
- Material change in casserole plate
- Change in variety of frozen meals
- Set up new vendor for little paper napkin ring.

Arthur E. Harvey, Jr., U.S. Army Missile Command

V.E. as used to reduce the cost of hospital services.

"Value Engineering Programs in Small Companies"

Fred Haucke, Manager Value Engineering, Master Div., Koehring Co.

Program Plan - Koehring Master Division

In order to preclude the "conflict of interest syndrome" that usually boggs down a value engineering program which utilizes the task force team approach to analyze, develop and implement value improvement changes, a slightly different approach is planned.

The Value Engineering Department will be responsible for the bulk of the data collection, analytical and coordination functions, thus permitting the team members to pursue their primary responsibilities. Teams would be used for brainstorming sessions to generate and develop new concepts. Value Engineering would
"Value Engineering Programs in Small Companies" (Continued)

e) Impact on Sales  
f) Projected cost savings  
g) Alternatives  
Obtain management approvals  
Initiate implementation  
Monitor progress  
Confirm savings

Thomas F. Kerins, Value Improvement Program Coordinator, Reliance Electric Co.

Value Engineering as the base for a total Profit Improvement Program.

Huss Swai, Senior Value Engineer, Aeronca, Inc.

V.E. At Aeronca

I. Introduction

II. V.E. and the Subcontractor

III. Success of V.E. Programs and Causes

· The V.E. Program is contractually well defined  
· The Contract has a substantial cost base  
· Properly motivated customers and contractors  
· Participation of line personnel in V.E. activity, rather than primary dependance of V.E. specialists  
· Contract has an appropriate V.E. incentive  
· Innovative V.E. proposals  
· Use of V.E. goals  
· Subcontractor V.E. training programs

IV. Probable causes of fundamental problems

· Funds not available  
· Unlimited rights to data  
· Inadequate subcontractor incentive  
· Lack of authority  
· Informal policies of contractor  
· Insufficient motivation

V. Analysis

VI. Summary and Conclusions

VII. Recommendations
Tuesday Afternoon

"Why Membership and Certification in SAVE?"

(See Monday Morning)

"State and Local Government VE"

Moderator: William B. Dean, Manager, Value Engineering, Ordnance Division, Honeywell, Inc.

What has been the growth, acceptance and potential for VE in local government? Do the States learn from the Federal Government?

William B. Dean

Minnesota has launched a very aggressive program to lower costs. VE is an important element of this program.

Phillip L. Woods, Manager, Industrial Engineering, Trans World Airlines

Summary of "National Conference on Economy in Government"

Last month TWA, Congressman Larry Winn, and National SAVE sponsored a one and one-half day conference at TWA's Training Academy, entitled "National Conference on Economy in Government". The primary function of this conference was to promote the understanding and use of VA to all levels of government. Attending this conference were representatives of approximately 24 state and municipal organizations, ranging from state senators, executive assistants to governors, to budget directors, state fiscal officers, and representatives of highway and road commissions. The keynote address of the Conference was made by the Honorable Larry Winn, Representative of the Third District of Kansas, in which he openly challenged Government to test value analysis and to experience its proven results. The kick-off address the next day was by Mr. Larry Roush, Acting Commissioner, Public Building Service, United States General Services Administration, who many of you heard yesterday morning. During his presentation, Mr. Roush concentrated on the many areas in State and Federal Governments that have received the benefits of Value Analysis, and the potential that still exists. The rest of the conference was taken up with speakers who delved very deeply into the potential return of VA applied to such governmental areas as school systems, road construction, building construction, and of course, the paper work area of government. The conference was concluded by the participants meeting with conference speakers for indepth discussions to determine in detail on how they can initiate the VA effort for best results. It is anticipated
"Consumer Value" (Continued)

Albert F. Limberg, U.S. Food and Drug Administration

How will the consumer be effected by the new Product Safety Act?

George E. Brown, General Service Manager, American Motors Corp.

The consumer and the automobile. What is the study of the AMC "Buyer Protection Plan"?

John R. Steinmetz, Univac Division, Sperry Rand, Inc.

What role can and should VE play in the consumer value "arena"?

Wednesday Morning

SYMPOSIA

"Fishbowl"

A question and answer period which is available to all participants. Admittance will require submitting at least one question for the "Fishbowl." Those drawn out will be eligible for a token prize. A panel of experts will share their comments with you and solicit the aid of the audience to survey opinions for different points of view.
APPLICATIONS OF VALUE ENGINEERING IN METRICATION

Lloyd B. Wilson
National Director -- Metrication
SAVE

Chief Value Engineer
Hazeltine Corporation

Abstract

Value engineering will have a once-in-a-lifetime golden opportunity to show what it can do when the anticipated imminent metric conversion starts in the United States. Metric conversion will involve redesign of many product items. This is a "second look" design review effort at which value engineering excels. In doing this there should be numerous opportunities to show ways in which value engineering not only helped to minimize the cost of metric conversion for a given product but also simplified the design and thereby reduced the manufacturing cost of the metricated design.

In addition to the redesign of products which must have metric drawings, value engineering can also be applied in the numerous "spring housecleaning" type changes which will probably occur coincidental with metric conversion because they are convenient and less expensive to do when metric conversion occurs.

Metric conversion will involve, in addition to the cost problem, four other major types of problems--i.e., people problems, information problems, time problems, and technical problems. Value engineering, in its more general role as a highly effective problem solving process, can help in all of these problem areas.

The panel discussion during this session will cover the present status of legislation being proposed for metric conversion, the likely impact of metric conversion on industry, and how to make best use of lead time before formal conversion does occur in a particular company. The panel discussion will also cover ways to provide value engineers with needed information about metric conversion. A sample "Metric Conversion Rapid Access Reference Information Module" titled "LEAD TIME CONSIDERATIONS--PRIOR TO FORMAL CONVERSION" will be discussed as one possible way of meeting the metric conversion information needs of value engineers.