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Special Note
Contributions to Value World are welcome; please send them to Value World Editors, 220 N. Story Rd., Suite 114, Irving, Texas, 75061. Editorial changes and publication of an article or other contribution in any particular issue are at the discretion of the Editorial Staff. All material for Value World must be received on the 15th of the month preceding publication (i.e. November 15th for Jan./March issue).

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Carlos Fallon, CVS

IMPROVEMENT

As we learned from Charles W. Bytheway in the 1965 proceedings, everything can be improved. Everything! The wheel? Yes, the wheel! Both the Japanese and the West Germans have been successfully using electromagnetic forces to replace wheels in their high-speed trains.

Because our population pressure and present road system have not yet created the need for such high-speed trains is no reason to let our technology ignore such a future need. The North American continent simply cannot afford to be left behind. We have to keep our tools sharp.

I want to recommend the two books I consider necessary for the value specialist who wants to continue improving. You don't have to order these books right away. Ask your library to get them. If they can't order them for you, they can borrow them from another library — but by all means, get your hands on the books and read them. Here they are: Peters, Thomas J. and Waterman, Robert H. Jr. In Search of Excellence. New York: Harper & Row, 1982. Ohmae, Kenichi. The Mind of the Strategist. New York: McGraw-Hill, 1982.

Dr. Ohmae's previous Japanese book The Corporate Strategist has sold more than 100,000 copies, which is very high for a Japanese publication. His doctorate is from M.I.T. and he is now Managing Director of the Tokyo office of McKinsey & Company, one of the most respected management consulting firms in the world.

The author of the other book is also part of McKinsey & Company's New York team. The subtitle to the book is Lessons from America's Best Run Companies. Robert H. Waterman, Jr. still works in and out of McKinsey's New York office where he is a director.

Thomas J. Peters, who was a Principal at McKinsey, has set up his own consulting firm in California.

Believe me, these two books, written with an ocean between them, very honestly show that there is more to value than least cost.

Most of my readers will have some manufacturing or buying experience. I ask you now, which of your suppliers could you depend on for quality, reliability, timely delivery, and a fair price? You will find them In Search of Excellence. Nothing like your own experience to tell you which way to go.

It may be that you have this question in mind, "What is a good company strategy for growth and profit?".

In The Mind of the Strategist there are answers; many answers to many varying problems. Dr. Ohmae clarifies a serious problem in our system thinking; organic processes are analogous rather than digital; not black-or-white, yes-or-no.

I was told once by a design engineer that linear programming is robust because it is linear. By robust, of course, he meant not likely to generate errors. True. Everything is simpler if it is linear. But, as Dr. Ohmae points out, life itself, is not ruled by zero-and-one, yes-or-no; but it presents an infinite variety of possibilities in between.

This brings us to improvement. The subtitle of Chapter 9, page 279, of In Search of Excellence is called Hands on, Value Driven. This chapter makes it clear that in all the companies rated as excellent, a definite system of shared values is central. Instead of the cumbersome superordinate goals (p. 280) he calls them "shared values" (p. 281).

These shared values are informally but unquestionably supported by management. All manner of legends, myths, and parables filter down to let all wage-earners know how management feels about the company's shared values.

Can Value Analysis be Improved?

Certainly. The most important contribution is in helping a company establish a system of shared values suitable to their own individual needs. No general manager is happy laying off workers because the economy is down. He has to look into the systems of shared values. Shared with whom?

Managers and investors share in the value of the company's profit. With whom do the hourly workers share their values? All they want is a decent, safe place in which to work. Nowhere in their union contract does it say that they are peasants and that managers are gentry. Using their economic power to lord it over their subordinates undermines a basic task of modern management; the task of administering a decent, safe, and happy work environment. All wage-earners should find more than meeting their economic needs in the one third of their lives they spend at work. In most successful companies managers maintain a happy work relationship with their subordinates.

Many suggestions have surfaced but not one of them is satisfactory to everybody. The issue is the stability of the livelihood of the work force. I think it might be a matter of cost comparison — the cost of layoffs and of replacing lost skills, etc., but we are still looking for answers.

LEARNING AND USING

The learning and using of the cost improvement organized job plan must be approached the same as a child learning to walk. The child must first learn how his arms and legs work, then how to use them to crawl and then how to walk. Only after this step-by-step process can he progress to running and jumping. Without going through this development process, the child could be seriously injured.

Similarly, an individual or group must approach the use of the job plan in much the same manner. Each individual must first learn what it is and how it is used, then apply it in every detail to a series of small problems or projects. Only after this step-by-step learning process should the individual progress to major problems or large applications of the job plan. Without going through this development process, the individual could end up with serious problems or confrontations.

One of the major problems encountered when working with new users of this job plan, is that they want to move too fast. They hear the fundamentals and the first broad brush description of the job plan and they think that they are instant specialists. The real problem is that the individuals try to learn too fast instead of learning to last. From seeing this happen too many times in many organizations, my recommendation is to secure a full understanding of the fundamentals of the job plan, apply it to a small project and build gradually. Build one success upon the preceding one; gradually build in magnitude.

A.E. Mudge, CVS

You Hold the Key to Unlocking Successful Value Engineering / Cost Improvements

SUBMIT YOUR IDEAS TODAY!

Value World July/September 1983
Benjamin Franklin’s Junto
Selections from
THE AUTOBIOGRAPHY
of
BENJAMIN FRANKLIN

For twenty years, SAVE has been trying to discover ways to support VE-learning for chapter members and for members where there are no chapters. If we look back 250 years to Ben Franklin’s Junto, we can rediscover his way to:

(1) Support VE-learning in chapters, and
(2) Organize VE groups where SAVE membership cannot support full chapters.

(Marginal notes by John A. Jonelis, 5/17/83)

I should have mentioned before that, in the autumn of the preceding year, I had formed most of my ingenious acquaintance into a club of mutual improvement, which we called the JUNTO; we met on Friday evenings. The rules that I drew up required that every member, in his turn, should produce one or more queries on any point of Morals, Politics, or Natural Philosophy, to be discussed by the company; and once in three months produce and read an essay of his own writing, on any subject he pleased. Our debates were to be under the direction of a president, and to be conducted in the sincere spirit of inquiry after truth, without fondness for dispute, or desire of victory; and to prevent warmth, all expressions of positiveness in opinions, or direct contradiction, were after some time made contraband, and prohibited under small pecuniary penalties.

About this time there was a cry among the people for more paper money, only fifteen thousand pounds being extant in the province, and that soon to be sunk. The wealthy inhabitants opposed any addition, being against all paper currency, from an apprehension that it would depreciate, as it had done in New England, to the prejudice of all creditors. We had discussed this point in our Junto, where I was on the side of an addition, being persuaded that the first small sum struck in 1723 had done much good by increasing the trade, employment, and number of inhabitants in the province, since I now saw all the old houses inhabited, and many new ones building; whereas I remembered well that when I first walked about the streets of Philadelphia, eating my roll, I saw most of the houses in Walnut Street, between Second and Front streets, with bills on their doors. “To be let;” and many likewise in Chestnut Street and other streets, which made me then think the inhabitants of the city were deserting it one after another.

This was 1727 when Ben was 21; five years before the birth of George Washington.

Our debates possessed me so fully of the subject that I wrote and printed an anonymous pamphlet on it, entitled The Nature and Necessity of a Paper Currency. It was well received by the common people in general; but the rich men disliked it, for it increased and strengthened the clamor for more money, and they happening to have no writers among them that were able to answer it, their opposition slackened, and the point was carried by a majority in House. My friends there, who conceived I had been of some service, thought fit to reward me by employing me in printing the money: a very profitable job and a great help to me. This was another advantage gained by my being able to write.

The utility of this currency became by time and experience so evident as never afterwards to be much disputed; so that it grew soon to fifty five thousand pounds, and in 1739 to eighty thousand pounds, since which it arose during war to upwards of three hundred and fifty thousand pounds, trade, building, and inhabitants all the while increasing, though I now think there are limits beyond which the quantity may be hurtful.

And now I set on foot my first project of a public nature, that for a subscription library. I drew up the proposals, got them put into form by our great scrivener, Brockden, and by the help of my friends in the Junto, procured fifty subscribers of forty shillings each to begin with, and ten shillings a year for fifty years, the term our company was to continue. We afterwards obtained a charter, the company being increased to one hundred; this was the mother of all the North American subscription libraries, now so numerous.

At the time I established myself in Pennsylvania, there was not a good bookseller’s shop in any of the colonies to the southward of Boston. In New York and Philadelphia the printers were indeed stationers; they sold only paper, etc., almanacs, ballads, and a few common school books. Those who loved reading were obliged to send for their books from England; the members of the Junto had each a few. We had left the alehouse, where we first met, and hired a room to hold our club in. I proposed that we should all of us bring our books to that room, where they would not only be ready to consult in our confabulations, but to borrow such as he wished to read at home. This was accordingly done, and for some time contented us.

Six of the nine original members of the American Philosophical Society were members of the Junto. The society still continues. It was designed by Franklin to give a common ground of association to those in the various American colonies who were pursuing studies in science and philosophy.

The Junto could extract the gist of a matter, and devise means for better solutions. Today, we call that “determining the function”, and the “job plan”.

Our club, the Junto, was found so useful, and afforded such satisfaction to the members, that several were desirous of introducing their friends, which could not well be done without exceeding what we had settled as a convenient number, viz., twelve. We had
from the beginning made it a rule to keep our institution a secret, which was pretty well observed; the intention was to avoid applications of improper persons for admittance, some of whom, perhaps, we might find it difficult to refuse. I was one of those who were against any addition to our number, but instead of it, made in writing a proposal that every member separately should endeavor to form a subordinate club, with the same rules respecting queries, etc., and without informing them of the connection with the Junto. The advantages proposed were, the improvement of so many more young citizens by the use of our institutions; our better acquaintance with the general sentiments of the inhabitants on any occasion, as the Junto member might propose what queries we should desire, and was to report to the Junto what passed in his separate club; the promotion of our particular interests in business by more extensive recommendation, and the increase of influence in public affairs, and our power of doing good by spreading through the several clubs the sentiments of the Junto.

The project was approved, and every member undertook to form his club, but they did not all succeed. Five or six only were completed, which were called by different names, as the Vine, the Union, the Band, etc. They were useful to themselves, and afforded us a good deal of amusement, information, and instruction, besides answering, in some considerable degree, our views of influencing the public opinion on particular occasions, of which I shall give some instances in course of time as they happened.

* * *

I began now to turn my thoughts a little to public affairs, beginning, however, with small matters. The city watch was one of the first things that I conceived to want regulation. It was managed by the constables of the respective wards in turn; the constable warned a number of housekeepers to attend him for the night. Those who chose never to attend paid him six shillings a year to be excused, which was supposed to be for hiring substitutes, but was, in reality, much more than was necessary for that purpose, and made the constableship a place of profit; and the constable, for a little drink, often got such ragamuffins about him as a watch, that the respectable housekeepers did not choose to mix with. Walking the rounds, too, was often neglected, and most of the nights spent in tippling. I thereupon wrote a paper to be read in Junto, representing these irregularities, but did not perhaps exceed the value of fifty pounds, paid as much as the wealthiest merchant, who had thousands of pounds' worth of goods in his stores.

When more and more persons became interested in joining the Junto, the original club was not permitted to expand because the values of the discussion group would be lost. Instead they formed additional Juntos.

Perhaps our SAVE chapters should be limited to 12 members. Or perhaps, we should organize Juntos as well as chapters.

Franklin described the members of his original Junto: they were not unlike the members of our present-day SAVE.

On the whole, I proposed as a more effective watch, the hiring of proper men to serve constantly in that business; and as a more equitable way of supporting the charge, the levying a tax that should be proportioned to the property. This idea, being approved by the Junto, was communicated to the other clubs, but as arising in each of them; and though the plan was not immediately carried into execution, yet, by preparing the minds of people for the change, it paved the way for the bill obtained a few years after, when the members of our clubs were grown into more influence.

About this time I wrote a paper (first to be read in Junto, but it was afterward published) on the different accidents and carelessnesses by which houses were set on fire, with cautions against them, and means proposed of avoiding them. This was much spoken of as a useful piece, and gave rise to a project, which soon followed it, of forming a company for the more ready extinguishing of fires, and mutual assistance in removing and securing of goods when in danger. Associates in this scheme were presently found, amounting to thirty. Our articles of agreement obliged every member to keep always in good order, and fit for use, a certain number of leather buckets, with strong bags and baskets (for packing and transporting of goods), which were to be brought to every fire; and we agreed to meet once a month and spend a social evening together, in discoursing and communicating such ideas as occurred to us upon the subject of fires, as might be useful in our conduct on such occasions.

* * *

**Reflections**

Carlos Fallon, our VE philosopher emeritus, has considered the foregoing and his response, in part, is:

I think Franklin had a wonderful idea. I don't believe in limiting chapter membership, but I think each chapter should have a value task group . . .

On page one of your enclosure is the suggestion that road blocks be subject to a small pecuniary penalty. Attached is the "small pecuniary penalty" for the road block I am about to raise.

The Spanish word Junta simply means a gathering. In Franklin's day, it did not have its present-day connotation of a gathering of extreme-rightist military men. Today, government by junta is government by military men who think that the army way is more orderly than democracy. Following my characteristic resistance to change, I like the term "value task group" instead of junta. Maybe someone with a more flexible mind can come up with a better name for our discussion groups. These could be assigned at one chapter meeting for the meeting to follow. They could be given a subject in advance.

WEBSTER'S NEW COLLEGIATE DICTIONARY, 1973

**Junta** /junk-ta/ n. p\r fr. fem. of juncto joined, fr. L junctus, pp. of jungere to join — more at YOKE\r 1: a council or committee for political or governmental purposes; esp: a group of persons controlling a government esp. after a revolutionary seizure of power\r 2: JUNTO\n
**Junتو** /jent-(,)o/ n. pl juntos [prob. alter. of junta] \r a group of persons joined for a common purpose
ACTIONS

The SAVE Regional VP's discussed the application of the Franklin-type juntos for improving the VE knowledge of members. They accepted Carlos Fallon's suggestion and changed the name to "Value Study Group". The result is that the National Business Office will make study courses available for:

(1) Chapters, to increase the VE knowledge of their newer members.

Example- A group of members study a lesson and then assemble prior to regular chapter meetings for discussion. The discussion is led by an experienced member who uses the study guide's answer sheets to grade papers and administer tests.

(2) Small groups of persons (members or non) who are not served by chapters.

Example- Some cities have sufficient VE-interested persons to form a Value Study Group but not sufficient to form a chapter. Those groups could meet on a regular basis to study, share and discuss. They would have an experienced member, or take turns, administering the study course. SAVE National could help support their efforts through the Regional VP and Chapter rebates.

STUDY COURSE AVAILABLE FROM NBO

Value Foundation's 10 lesson study course: Basic Value Analysis plus text, Value Analysis; Fallon, soft bound. Available at $20.00 each in packets of six or more; includes one set of answers for homework and two tests to be administered by an experienced member. Call, or write to, the National Business Office.

The course is also available at $75.00 each as an individual correspondence course. This includes the guide, the texts, mailing envelopes, and available telephone consultation. Call, or write to, the Value Foundation, 986 National Press Bldg., Washington, D.C., 20045, Tel. (202) 347-7007.

FUTURE

You will hear more about all of this from your Regional Vice President. And, if you or your chapter are interested in increasing your VE acumen, hopefully he will hear more from you.

JOHN A. JONELIS

Executive Survival Kit

Value has to be merchandised

Q It seems as though everyone is on a quality kick today. Yet, when we try to sell quality, it seems that buyers are really interested in price. Are we in this country really serious about improving quality?

A Yes, I think we are. But we have to clarify our thinking. As I have said before, I am not convinced that the level of quality is as low as some believe it is. More often, the impression of low quality is the result of indifferent service after the sale.

A major cause of the quality confusion is the attitude in this country that you can expect something for nothing. A few decades ago, people bought on value. For instance, when a so-called popular-sized car was purchased, the price was reasonably modest. The buyer did not expect to get the same quality as his neighbor who bought a luxury car at twice the price. Both received the value they were seeking. The buyer of the lower-priced car felt that he received every bit as much value for each of his dollars.

In recent years, however, buyers began to expect Cadillac quality at Chevrolet prices. If they didn't get it, these buyers became disgruntled and organized protests. There was a solution: buyers could stop buying until a given supplier accommodated their standard of value. To some extent, this happened after World War II. Americans became more worldly in their outlook, and it became chic to buy foreign goods, including automobiles.

In those early days, buyers were buying on price—not quality. The imported cars couldn't compare with those of Detroit for quality, but they were low-priced and economical to operate.

The foreign manufacturers recognized that price might get them into our market, but it couldn't keep them there. They began to improve their products, and many did indeed become better values. Whether real or imagined, many people—both as consumers and as industrial buyers—believed that imported products were of higher quality, and usually these products were lower in price. The fact that lower prices were often made possible because the foreign supplier was subsidized by its government was not relevant or even known to many buyers.

While this was going on, American management was becoming overly enamored with the bottom line. Too few CEO's paid attention to quality and service. Companies began to develop purchasing techniques which, among other things, rewarded purchasing agents who could trim their purchase prices. It would have been more beneficial to have given rewards for reducing costs through improved design, better quality, and dependable delivery. These buyers forced suppliers to cut corners.

Rarely did a purchasing agent return inferior goods and dismiss the supplier until evidence was presented that guaranteed quality at a given level. Why didn't the buyers do this? Well, the user company had schedules to meet. And no purchasing agent was going to accept the responsibility for his own manufacturing facilities going down because of a lack of purchased parts caused by his refusal to accept shipments.

People are always going to buy on price unless we learn how to merchandise quality. It can be done. One foreign car builder does it all the time. We will have to do it by stressing value. You and other CEO's can make this happen. When you sell, make sure that your customer understands how you as a supplier are providing the best value. Your assistance in design, your dependability on delivery, and your service after the sale are as much a part of what the customer pays for as the product itself.

On the buying side of the equation, I hope you will insist that quality is an important ingredient in what you consider value.

Reprinted with permission of Industry Week. The late Herbert E. Markley, is former president of The Timken Co.
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VALUE ENGINEERING

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Value World July/September 1983
THE VE DECISIONS OF 1982

by Howard M. Pryor
Professor of Contracting Management, School of Systems and Logistics,
Air Force Institute of Technology, Wright-Patterson AFB OH

Our first case of the year, the Cardan Company (1) came about as an appeal of the contracting officer decision that the contractor was not entitled to a value engineering share where the contractor proposal corrects an error in the Government work specification. If the nature of the change seems almost superfluous, the issues are certainly much more consequential.

The facts were simple: the contract directed the contractor to accomplish site renewal work to include the sowing of seed over about six acres. The work specification called for five species of seed to be applied at the rate of 20 pounds per 1,000 square feet of area. This is the equivalent of 871 pounds of seed per acre. The Cardan bid included $30,024 for this seed. ($5.86 per pound X 871 pounds X 6 acres.)

About five weeks after contract award, the president of Cardan discussed the possible reduction in seed amount per acre with the Assistant Area Engineer and stated a willingness to submit the idea as a VECP if the Corps of Engineers was interested. The following day the Assistant Area Engineer told Mr. Cardan to go ahead and submit his proposal.

In about thirty days, a Cardan letter proposed to reduce the seed ratio to 218 pounds per acre. The letter pointed out that this ratio had been used for other government site renewal work in the same locale.

In a memo of the same date as the Cardan letter, the Air Force asked the Corps of Engineers to review the seed specification as to type and quantity and “to revise if necessary.” During the hearing, it was admitted that the Air Force knew of Cardan’s identification of the seed error and of Cardan’s intent to submit a VECP at the time the Air Force directed their request to the Corps.

In about 2½ weeks, a letter from the Contracting Officer’s Representative (COR) informed Cardan that a reduction in the seed was being processed because of the Air Force request mention above. This letter was followed, in two days by a contract modification proposal revising the seed mix and setting the ratio at 150 pounds per acre.

After two more weeks the contractor was once again informed of the seeding change and was asked for a cost proposal related to the deductive change order. A companion letter stated that the Cardan VECP was being rejected because of the change in the requirement prompted by the Air Force.

The contractor immediately restated his position as to the validity of his VECP. About four weeks later, the contractor was told, orally, that his VECP would fail because the VE clause in his contract stated that a VECP could not be based solely on a change in deliverable end item quantities. Within a week, Cardan pointed out, by letter, that the end item under the contract was not “deliverable seeds” but rather undeliverable grass. The contractor subsequently filed his claim.

The contractor position: a government error called to the government’s attention saved the Government money. As long as a contractor proposal results in an acceptable quality and is not simply a reduction in end item quantities, it should be a valid VECP.

The Government position: a contractor should not share in the results if his submittal only achieves, through a better estimating procedure, a correction to a Government overdesign. The Government cited the Holloway (2) decision in support of their position.

It should be noted that the ASBCA refused to accept Holloway as a precedent, pointing out that the Engineering Board had indulged in adverse comment about a VE share that had been agreed to and was not part of the dispute. Next the ASBCA disagreed with the effect of the Engineering Board decision’s implication that a VE settlement could be used to punish one contractor for a design mistake made by a second contractor. Again, the ASBCA found no merit to the Government wish to use Holloway as a precedent.

The ASBCA decided in favor of Cardan, for $15,350. It was acknowledged that there might be ambiguity in the contract as to what was the end item of performance in the contract as related to seeds. The ASBCA felt that more than delivery of seeds, per se, was called for and if the language was actually ambiguous, the matter would be resolved against the government, as drafter, in favor of the contractor.

The decision says, in part, “while it may be true that it was contemplated . . . that the greatest savings would result from proposal relating to complicated engineering problems, we know of nothing . . . which states that proposals must relate to such problems.

The Cardan decision may well become one of the more widely cited cases since it squarely answers one of the questions consistently raised during the brief history of contractual value engineering: should a contractor share in the results of calling an error in the specifications to the attention of the Government? The Board thoroughly squelches any notion that this is somehow ‘unfair’ to the Government. If the whole idea of contractual VE is to save the Government money, then the cause of the analysis or the procedure that leads to the VECP are not integral to the acceptance or rejection of the contractor proposal.

The second case of the year, the J. A. McDermott Corporation (3) centers around the fundamental concepts of the nature of a VECP. The contractor’s idea seemed to have resulted in a change to contract technical requirements but a savings to the Government was not supported by the evidence.

McDermott received a contract for 900 vehicle warning lights. The unit included a skirt; the skirt finish was to be in accordance with a Military Standard (MIL-L-45325D). At least two different approaches were set forth depending on whether stainless or a plastic material was used for the skirt. The technical requirements of the contract became somewhat confused by the appearance of Amendment #1 to MIL-L-45325D which was never made part of the contract but which was treated as though it had been, by the contractor and by the Government.

About 3 months after award, McDermott submitted a VECP that addressed the material used in the skirt and the means of providing color to the skirt. The VECP used Amendment #1 to the MIL-STD as a point of departure.

In a remarkable degree of promptness, the Contracting Officer responded in three weeks rejecting the VECP on the basis that Amendment #1 permitted both material change and the color change. In the view of the Board, the matter might have rested there as a kind of “Mexican stand-off” had not the Government in about two months of the VECP rejection issued a Cut Sheet that amended the MIL-STD. The Cut Sheet, which also was apparently referred to as Amendment #2, seemed to incorporate the color change idea of the VECP in the view of the contractor. In the view of the Contracting Officer, the Cut Sheet merely clarified the wording of Amendment #1.

In a final decision, twenty three months after the first rejection, the Contracting Officer again rejected the contractor’s VE claim for the reasons given above. McDermott filed an appeal to this action.

The Board thought the Contracting Officer was erroneous in stating that the color change was permissible under Amendment #1. As the Board saw the matter, the color change was acceptable only after the Cut Sheet enlargement; it was in fact a contract change. The author, using language not utilized by the
Board, might say that there was constructive acceptance of the contractor’s idea.

Before the contractor could begin to celebrate his victory, however, the Board proceeded to deny full status as a VECP to the contractor submittal. As the Board decision points out, a long standing prerequisite of a VECP is that it reduces overall costs to the Military Department. The parties were given an opportunity to reopen the record to show the effect on costs of the color change. While McDermott submitted some unit cost information involved in material changes, the contractor somehow failed to provide clear evidence as to cost reduction attributable to the coloration change. Therefore the contractor proposal lost its eligibility for award under the VE clause in the contract and the appeal was denied.

For some years now, there have been dialogues between the contractor and the Government where the contractor comes up with an idea that reduces cost and the contractor feels that automatically qualified the idea as a VECP. Not so, says the Government; there are other attributes that a proposal must have to be considered a VECP. It must be initiated, and/or developed and/or documented and/or prepared and/or submitted by the Contractor. It must require a change to the instant contract to be implementable in the instant contract. It must not adversely affect any essential function and so on. Reducing costs, solely, does not qualify a proposal; there are many ways for a contractor to reduce costs that will not qualify for submittal as a VECP.

The McDermott decision now points to the other side of the coin; a contractor proposal may have one or more of the other attributes that have evolved over the years but if it does not offer a reasonably high potential for reducing overall costs to the agency, then it cannot qualify as a VECP.

The third case for 1982, the Raytheon Co. (4) was a move for reconsideration by the ASBCA of their decision dated 17 Nov. 81. For a discussion of that decision see an earlier article (5). The contractor again maintains that the terms, “cost reduction proposal” and “value engineering change proposal” used in the same contract clause are ambiguous. The ASBCA was asked to rule this ambiguity against the drafter, namely the Government and the Board was asked to resume an attitude of liberal interpretation evidenced in an Airmotive decision (6).

The Board refused to be placed in a position that would call for free unstructured modes of interpretation. By indirection the Board reminds all of us that in their interpretation basic rules of contracting are not set to one side in dealing with value engineering.

The ASBCA quoted from an earlier Court decision, Martin Lane (7), that a test for ambiguity goes to an objective examination of the contract language to establish, “whether the contract is susceptible to more than one reasonable interpretation. The decisions of this court teach that a contract amenable to only one reasonable construction in light of all of its provisions, should be enforced according to its tenor as a whole, without regard to possible ambiguity in only one provision.”

In restating their earlier decision on Raytheon, the Board again found no basis for resolving an ambiguity against the drafter and the Board found no need to provide any additional interpretation, liberal or otherwise.

The fourth case for the year, K.I.M. (8), came into being as a result of the contractor asking for senatorial intervention in its behalf. The Senator, in turn, asked the General Accounting Office to check into the complaint. One of the basic responsibilities of the Comptroller General (CG) is to conduct investigations on behalf of the legislative branch of the Federal Government.

K.I.M. had developed a modification kit that would extend the service life of a vacuum pump used in certain Navy ground support equipment. K.I.M.'transmitted their idea to PRD Electronics, a firm holding contracts with the Navy for such equipment. At the time the idea was conveyed to PRD, K.I.M. did not have any contract with PRD nor with the Navy.

The Comptroller General (CG) directly stated a rule that has been variously verbalized over the years, “the Value Engineering Program is a purely contractual matter...” The Value Engineering Program (was) to encourage contractors to submit cost saving changes to contracts. Contractors are awarded a share of the savings that result... A valid VECP can only be submitted, and thus, an award can only be made, under an existing written contract containing a value engineering clause.”

The CG immediately established that since K.I.M. had no existing contractual relation at the time the idea was submitted to PRD, no entitlement to a VE award could exist.

Further developments, however, revealed that the idea was submitted to the Navy by PRD as an ECP. As a result PRD ordered a substantial number of modification kits from K.I.M. Further orders for the modification kits seemed likely.

The unexpected turn of events, apparently left a small company a happy one. There should be a clear warning in this case, nevertheless, that a good idea that is passed on without contract coverage is at high risk. We have only to ask what happens to contractors that do have such contractual coverage and find they must fight for their rights to conclude that a naive reliance upon the good intentions of others may be short lived.

The fifth case centered around some wood acquired by Midwest Contractors (9), which passed into the possession of the Government, and whether the contractor had ever been paid for it, in full. It reportedly came into being because of an unfortunate delay in the decision to proceed with the VECP submitted by the contractor.

The contractor called for Midwest to install 70 carpors, made of wood, onto family housing units at Fort Sill OK. Contract award was on 27 March 1980. Eighteen days after award, the Contractor submitted his VECP proposing to install metal carpors instead of wood. Although not part of the record, Midwest had apparently successfully submitted the same idea under an earlier contract.

In thirty nine days, Midwest was advised, orally that the VECP would be disapproved. Midwest therefore released a purchase order for wood. Twenty five days after the oral rejection, the Resident Engineer asked if savings were still feasible; the Midwest answer was a partial affirmative. The contractor was instructed to proceed with the VECP albeit somewhat belatedly. Even though Midwest quickly alerted their suppliers, a substantial amount of the wood arrived on site. As Midwest had no place for long term storage, the lumber was delivered to the Government for indoor storage at Fort Sill.

The appeal to the ASBCA was grounded on the claim by Midwest that the lumber delivered to the site and turned over to the Government was never fully paid for. It may be noted that the cost of the wood, shipped but not used, was $40,518. The amount claimed by the contractor was $22,284.90.

To our ultimate loss, the administrative judge did not disclose the logic used in reaching a decision in favor of Midwest. The Government moved for reconsideration (10) but the Board rather tersely upheld the earlier decision.

The administrative judge did suggest a sound rule for the parties to follow; namely application of the terms of the VEI clause. Since we do not have access to all of the testimony or the files involved, we can only speculate as to why the sound rule was not followed. A key sentence of the contract clause (11) used said, “Instant contract savings... are the estimated reduction in the Contractor’s cost of performance resulting from acceptance of the VECP.”

A brief summary of the numbers provided may be of assistance:

<table>
<thead>
<tr>
<th></th>
<th>Gov’t</th>
<th>Cont’r</th>
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<tr>
<td>(1) FFP</td>
<td>$781,170</td>
<td>$781,170</td>
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<tr>
<td>(2) Total VECP</td>
<td>93,078</td>
<td>93,078</td>
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<tr>
<td>(3) Sub Total</td>
<td>686,092</td>
<td>686,092</td>
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<td>(4) Contr Share</td>
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<td>(5) Sub Total</td>
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<td>739,284.90</td>
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<tr>
<td>(6) Wood Shipped</td>
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<td>40,518.00</td>
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<tr>
<td>(7) Total</td>
<td>$757,518</td>
<td>$779,802.90</td>
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</tbody>
</table>

An explanation of some of the above amounts is in order. $93,078 was the total amount of savings for wood, had the VECP acceptance been timely. Because of the delay in reaching a decision, $40,518 in wood was purchased and delivered. Ily transfer this contractor-acquired property became govern-
In about a month (23 Feb 76) the prime contractor, Erickson, proposed by letter to use the Type AM foundation where appropriate, in the manner described by the COR.

In about six weeks (9 Apr 76) the COR replied to Erickson agreeing to the use of the Type AM foundation but only in stipulated circumstances. It was noted that PHDC/D had already installed six of the Type AM foundations on the basis of oral Government permission.

Six months later (18 Oct 76) Erickson asserted a VE claim on behalf of PHDC/D based on 943 Type AM installations. The record showed a total of 1459 Type AM footings were installed during the life of the contract.

Five months ensued before answering COR letter (22 Mar 77), citing the April 76 letter of the COR, stated that the footing method had been agreed upon at the time by the parties. The VE claim was rejected as untimely.

Erickson responded to the Mar 77 letter transmitting the subcontractor position that the COR letter was considered to be nonresponsive.

After eleven months, (15 Feb 78), a meeting was held of all of the parties to discuss the VE claim. Since little is shown in the record as to this meeting it must have been inconclusive.

On 8 May 78 the subcontractor PHDC/C filed a more detailed claim for a VE share amounting to $1,440,367.73; the claim being denied by the Contracting Officer. This appeal was only one of thirty five appeals related to this prime contract.

The Erickson decision is a perfect example of how a decision brief will sometimes pose more questions that it answers. For instance we don’t know (a) what if anything the subcontractor said about VE; (b) whether the prime contractor was conversant with VE; (c) were the savings to the Government on the order of $2.8 million?

With our frustratingly incomplete information we can only pass on the decision of DOE Board of Contract Appeals. The claim was denied. In the view of the Board, the contractor should have identified his proposal, at the time of submittal, as a VECP, even though the contract clause did not require it. It may be noted that DOD stopped requiring an explicit identification by April of 1974. It has been stated that this state was not stressed by the DOE attorneys.

The Board points out, with more relevance, that if the Contractor had submitted the information called for in the VE clause, the Government might have been on notice what type of proposal was being submitted. Nothing in the record shows that PHDC/D was invoking the VE clause or is there any evidence that the Government recognized or treated it as a VECP.

Three cases cited in the appeal are dismissed by the DOE Board as not being relevant to the issues. The Kromer (13) decision is cited as being more relevant. From the point of view of this author (14) that might be an unfortunate choice: as we saw in Kromer, there was some doubt as whether or not the contractor did, in fact, submit a VECP.

In a similar vein as we go over the scanty facts provided we find that the contractor did submit an idea; it was accepted; it involved a deviation from the contract and there were some (?) savings. The ASBCA has held in the past that suggestions by government personnel do not preclude share entitlement.

On the negative side it might be said that it does not appear that the contractor(s) intended that the February 76 proposal be handled as a VECP. It is clear that after eight months or so they did want it to be so treated. If the DOE Board had addressed this issue, it would have been more helpful; can a contractor submit a “no-cost” change and then be permitted to change his classification if it retroactively becomes apparent that the “no-cost” change, in fact, reduces costs, appreciably?

Further checking has revealed that the high dollar savings were predicated on the assumption that all of the AM footings were substitution for R footings - the high cost form - which did not seem to be supported by the evidence.

The seventh and final case of the year Honeywell (15) raises but does not answer the issue of interactive VECP’s.

On 1 Mar 76, the Army awarded a contract to Honeywell for a contract for ADAM units. The ADAM is an artillery delivered anti-personnel mine of a wedge shape, fitted into pie-shaped assemblies and stacked within an artillery projectile. Integral to safe handling of the rounds is a Safe and Arming Assembly including, among other parts, a gasket. The gasket was the central theme of the VECP’s discussed below.

On 26 Jan 77, Honeywell submitted a VECP-019R1 proposing a change in the gasket from the lead, specified, to a cork and rubber combination. On 3 Aug 77 the VEC was accepted and future sharing was agreed upon. Honeywell agreed to forego any instant savings share. The VECP had an effect upon labor as well as material.

A follow-on contract, awarded 4 May 78, incorporated VECP-019R1. A second VECP submitted under the follow-on contract, proposed a change from the cork and rubber gasket to a fiber gasket. This VECP, VECP-035 contained the following reservation:

“This proposal is not intended to supercede VECP-019R1 . . . The savings associated with VECP-019R1 will remain in effect for future contracts and the use of this alternate material retains full value of VECP-019R1.”

VECP-035 was submitted 10 Nov 78. It is a part of the record that the company engineers discussed this reservation with ARRADEC personnel in advance of its use. Further the reservation was discussed with DCAS person-
nel during periodic VE reviews. In the record there was no indication of any Government objection to the wording of the reservation.

The Government accepted the second VECP on 19 Jan 79. The reservation statement was not incorporated into the contract modification but the Government agreed that the reservation had been accepted and incorporated into the contract.

On 21 Nov 79, Honeywell submitted a letter outlining a proposal to definitize the sharing associated with the second VECP. This letter was amended by a Honeywell letter of 12 May 80 which corrected computational errors in the earlier letter.

Between these two letters, the Army had arrived at a position of being unhappy with the course of events for two reasons: they allegedly found that the actual cost of cork and rubber gaskets was about $356 per 1,000 units while the VE sharing had been based on an estimated of about $50 per 1,000 units. The “over payment” was calculated to total over $82,000. Secondly the Army felt Honeywell should repay future shares relating to VECP-019R1 on units in the contract that used VECP-035. When the Contracting Officer requested the repayment per above on 10 May 80, the contractor filed a timely appeal.

The Government raised a basic issue when they pointed out that future sharing is related when a VECP is “used” in the follow-on contract. It was their contention that when a fiber gasket took the place of the cork and rubber version, a future share based on the “use” of cork and rubber was wiped out.

The Board held that while the Government position was technically correct, such an approach would be contrary to VECP policy and would discourage submission of sequential, interactive VECP’s.

The Board then side-stepped the issue by saying, in this dispute, a reading of the VE clause together with the reservation language leads to support of the contractor position, i.e. Honeywell did not have to repay future shares for the overlapping units. The parties were warned to avoid payment of saving shares under the second VECP that had already been reflected in the savings share of the first VECP.

In responding to the Government claim that there was “inadvertence” or lack of contracting officer authority, the Board found no evidence that any mistake of law or fact could be laid to responsible Government employees, the claim for refund was denied and the Honeywell appeal sustained.

In conclusion, the reservation clause may have blurred the issue a little but the use of sequential, interactive VECP’s would seem to be encouraged and rightfully so.

Reference List
1. Cardan Co., 82-1 BCA 15,628, 4 Feb 82
2. Holloway Constr., 79-1 BCA 13,551, 16 Nov 78
3. J.A. McDermott Corp., 82-1 BCA 15,655, 11 Feb 82
4. Raytheon Corp., 82-1 BCA 15,663, 19 Feb 82
5. Value World, Vol 5 #2, Jul/Sep 82, p. 5
6. Airmotive Eng., 74-1 BCA 10,517, 1 Mar 74
7. Martin Lane vs US, 15 CCF #83,669, 16 Oct 70
8. K.I.M. Associates, Comp Gen #B203876, 19 Mar 82
9. Midwest Contractors, 82-1 BCA 15,722, 31 Mar 82
10. Midwest Contractors, 82-1 BCA 15,953, 20 Jul 82
11. DAR, 7-602-50 (1977 Aug)
12. Erickson Air Crane, 83-1 BCA 16,145, 30 Sep 82
13. Kromer Inc., 80-2 BCA #14,465, 8 May 80
15. Honeywell Inc., 83-1 BCA 16,180, 19 Nov 82

A paper originally scheduled to be delivered before the Annual Conference of the Society of American Value Engineers, Chicago, IL., May 1983 by Mr. Howard M. Pryor.

The views expressed herein are those of the author and do not necessarily reflect the views of the Air Training Command, the United States Air Force, or the Department of Defense.

VOICE OF INDIA

S.S. Venkataramanan, CVS
SAVE Director International Affairs - India

India's interest in VE began in the mid-1960's - a relatively early start compared to many other countries. This was when the Tata Iron & Steel Co. Ltd., Jamshedpur sent a couple of their engineers to USA for training in industrial engineering with emphasis on VE. Almost simultaneously, the Automobile Products of India Limited, Bombay instituted a VE cell in their Bombay works and organized a good bit of successful VE work, much of it piloted by Ashok Kumar Sethi who later was to become the first President of the Indian Value Engineering Society (INVEST).

Subsequently however, there was a slump and not until 1971 when the Indian Army constituted a small VE cell at their Headquarters in New Delhi, did VE appear on the scene again. Meanwhile, quite a few other companies had been making use of VE techniques but without fan-fare or formalities and usually on a part-time basis. With the founding of INVEST in October, 1977 all this history could be collected and published. The popularity of VA/VE increased greatly thereafter.

During the last six years, the INVEST gathered strength every year and now has a membership of 229 including 50 corporate members. It has successfully organized three National Conferences attended by 100 to 150 delegates on each occasion and held four exhibitions for the benefit of the public. The national headquarters is at New Delhi and four chapters have been formed at Bangalore, Hyderabad, Jamshedpur and Chandigarh. Much of the credit for this successful work goes to its present President, P.N. Handa and the chapter organizers, M.S. Vittal at Bangalore, S.S. Iyer at Jamshedpur and Bharat Heavy Electricals Limited, a corporate member and one of the biggest Indian companies, in Hyderabad. The Fourth National Conference of INVEST took place May 12 - 14, 1983 in New Delhi.

Today, there are at least 40 companies and Government departments systematically using VA/VE and the popularity is growing. Two leading academic institutions, viz., the Indian Institute of Management - Bangalore and the Indian Institute of Technology - New Delhi have offered VE as an elective subject of three credits for their students. A correspondence course has been organized from Bombay by Nagam H. Attreya, a SAVE member interested in VE since 1977. R.P. Billimoria, a top public sector official, has organized the first recognized school of VE in New Delhi intended specifically to train people to become CVSSs. The school completed its first course in 1982 and some of the students have applied to SAVE for the CVS examination this year.

While further growth of VE in India is sure, it will not be without its ups and downs. Much will depend upon the dedication and zeal with which VE enthusiasts use and spread the benefits derived from VE. This is the big task under way in India.
Society of American Value Engineers

VOLUNTEER FOR NATIONAL OFFICE

I feel I am qualified for the following National Office(s) and am interested in serving in this capacity (or suggest another qualified individual):

Check one or more:

- President
- Executive Vice President
- Vice President - Administration
- Vice President - Finance
- Vice President - Communications
- Vice President - Professional Development
- Vice President - Northeast Region
- Vice President - Southeast Region
- Vice President - North Central Region
- Vice President - South Central Region
- Vice President - Great Plains Region
- Vice President - Great Lakes Region
- Vice President - Northwest Region
- Vice President - Southwest Region
- Vice President - International

Name: ____________________________________________
Home Address: ____________________________________________
Business Address: ____________________________________________
Home Phone: ____________________________________________
Business Phone: ____________________________________________

BASIC FUNCTIONS AND RESPONSIBILITIES OF SAVE NATIONAL OFFICERS

PRESIDENT
Provide leadership, management and overall direction to all SAVE activities and operations. Promote growth and stature of the Value Engineering profession. Preside at Board of Director and Executive Committee Meetings and the Annual Business Meeting.

EXECUTIVE VICE PRESIDENT
Executive Director for the line organization of the Society. Assist the President as requested in the overall administration of SAVE and act for him in all functions relating to the Regional Vice Presidents, the Vice President -International, Chairman and National Directors reporting to him.

VICE PRESIDENT - ADMINISTRATION
To make recommendations for developing and managing the overall area of SAVE administration. Establish effective communication channels and follow-up all Board action items. Report to the Board, through the President, those action items and milestones completed and delinquent. Additional duties will be as specifically directed by the President.

VICE PRESIDENT - FINANCE
1. Recommend and develop new sources for increasing income.
3. Recommend financial guides and controls.

VICE PRESIDENT - COMMUNICATIONS
To develop, promote and direct a strong and active public relations activity for the advancement of Value Engineering and the Society of American Value Engineers.

VICE PRESIDENT - PROFESSIONAL DEVELOPMENT
Promote, encourage and assist in professional development and the furtherance of research in the value discipline. Establish and maintain professional standards relating to the performance and conduct of Value Engineering practitioners.

REGIONAL VICE PRESIDENTS
1. Manage activities and insure complete liaison between the Chapters and the National Officers.
2. Provide assistance and consultation to help Chapter Presidents supervise the Operation of the Chapters.
3. Represent the regional members on the Board of Directors.
4. Assure that the Chapters in the region operate within the policies of the Society.

VICE PRESIDENT - INTERNATIONAL
1. Promote the growth of Value Engineering throughout the world by developing and expanding international affiliations with SAVE.
2. Coordinate activities and insure complete liaison between the International affiliates, Chapters, Members, and the National Officers.
3. Supervise the operation of international affiliates.
4. Represent the international members on the Board of Directors.
5. Assure that the international membership operates within the policies of the Society.
Society of American Value Engineers

VOLUNTEER FOR NATIONAL DIRECTORSHIP
OR COMMITTEE CHAIRMANSHIP

I feel I am qualified for the following National Directorship(s) or Committee Chairmanship(s), and am interested in serving in this capacity (or suggest another qualified individual):

Check one or more:

- Controller
- National Director - International Affairs - ASIA
- National Director - International Affairs - EUROPE
- National Director - International Affairs - MIDDLE EAST
- National Director - International Affairs - CANADA
- National Director - International Affairs - INDIA
- National Director - International Affairs - Other
  (Please specify)
- National Director - Membership
- Chairman - Membership Review Committee
- National Director - Chapter Development
- Chairman - Board of Review
- National Director - Chapter Effectiveness
- National Director - Officer Development
- National Director - Chapter Programs
- National Director - Constitution & Bylaws
- National Director - Honors & Awards
- National Director - Public Relations
- National Director - Federal Liaison
- National Director - Value Management in State and Local Governments
- National Director - Information Services
- National Historian
- National Director - Inter-Society Relations
- National Director - Certification Requirements
- Certification Board
- National Director - Career Advancement
- National Director - College Relations
- National Director - Technological Advancement
- National Director - National Standards Committee
- National Director - Annual Conference Technical Program
- Editor, Proceedings
- National Director - Conferences
- National Director - Interactions Editor
- National Director - Value World Editor

I cannot serve as a Director or Committee Chairman but volunteered to work on the following committee(s):

Name: ____________________________________________

Home Address: ______________________________________

Business Address: ______________________________________

Home Phone: ______________________________________

Business Phone: ______________________________________

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BASIC FUNCTIONS AND RESPONSIBILITIES OF SAVE COMMITTEE DIRECTORS (ND) AND CHAIRMEN

Reporting to Executive Director and Executive Committee

CONTROLLER

Acts in consort with Executive Director in the operation and administration of financial and other business functions of the Society within operating policy and procedures on a day-to-day basis.

Reporting to Vice President - International

ND - International Affairs - ASIA, CANADA, EUROPE, INDIA, MIDDLE EAST AND OTHERS

1. Encourage the technical and professional development of the Value Disciplines (VE, VA, VM, VP, etc.) for the area represented through the creation of an organizational link with SAVE.

2. Act as spokesman representing the interests of the organizations and memberships of the area represented to the SAVE Board, and represent the SAVE Board to those being represented.

Reporting to Executive Vice President

ND - MEMBERSHIP

Promote, encourage, and assist in developing and expanding the membership of SAVE.

CHAIRMAN - MEMBERSHIP REVIEW COMMITTEE

Review and classify applications for membership in SAVE.

ND - CHAPTER DEVELOPMENT

Promote, encourage and assist Chapter expansion.

ND - CHAPTER EFFECTIVENESS

Provide standards of performance and measurement by which Chapters can grow and develop. Provide incentives for the Chapters to meet these standards.

ND - OFFICER DEVELOPMENT

Promote, encourage, advise and assist in the establishment and operation of developmental programs for officers of the Society. This is to be done so that orderly and effective steps may be taken by both individuals and organizational components of the Society to achieve and maintain competent growth patterns and high level of efficiency for staff and line officer personnel.

ND - CHAPTER PROGRAMS

Develop techniques, methods, and ideas to assist Chapter Program Committees in planning and preparing the type of programs that increase membership, attendance, and professional development of local Chapters and members.

Reporting to Vice President - Administration

ND - CONSTITUTION AND BYLAWS

Maintain the SAVE Constitution and Bylaws currently effective, as a guide for the conduct of the affairs of the Society; monitor and review Chapter Constitution and Bylaws to assure their conformance with Society approved practices and to obtain reasonable uniformity in Chapter practices.

ND - HONOR & AWARDS

To direct and coordinate all Honors, Awards, Resolutions, and Citation activities concerned with individuals. Also responsible for establishing criteria for these Honors and Awards.

Reporting to Vice President - Communications

ND - PUBLIC RELATIONS

Develop and promote the public relations, policies, and programs for the specific discipline assigned.

ND - FEDERAL LIAISON

To foster, encourage and on request assist in the establishment of Value Engineering Programs in Federal Government Agencies.

ND - VALUE MANAGEMENT IN STATE AND LOCAL GOVERNMENTS

To foster, encourage and assist in the establishment of Value Management Programs in State and Local Governments.

ND - INFORMATION SERVICES

Develop and maintain systems to promote the exchange of information between members; develop and maintain systems to monitor trade magazine articles; assist in communicating VE capabilities to other societies, organizations and associations.

NATIONAL HISTORIAN

Conduct a review of available material to obtain pertinent facts and information needed to permit writing of the history of SAVE.

ND - INTER-SOCIETY RELATIONS

Initiate and promote greater cooperation with other professional societies in the field of engineering, science, and management by joint programs for exchanging information and sponsoring conferences and meetings with such societies having interests and objectives compatible with those of the Society of American Value Engineers.

Reporting to Vice President - Professional Development

ND - CERTIFICATION REQUIREMENTS

Assist the Vice President - Professional Development, in the development, review and administration of the Certification Program.

ND - CAREER ADVANCEMENT

Provide assistance to Members to plan, search and secure more gainful employment of their Value Engineering talents.

ND - CONSTITUTION AND BYLAWS

Maintain the SAVE Constitution and Bylaws currently effective, as a guide for the conduct of the affairs of the Society; monitor and review Chapter Constitution and Bylaws to assure their conformance with Society approved practices and to obtain reasonable uniformity in Chapter practices.

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Reporting to Vice President - Communications

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ND - VALUE MANAGEMENT IN STATE AND LOCAL GOVERNMENTS

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Reporting to Vice President - Professional Development

ND - CERTIFICATION REQUIREMENTS

Assist the Vice President - Professional Development, in the development, review and administration of the Certification Program.

ND - CAREER ADVANCEMENT

Provide assistance to Members to plan, search and secure more gainful employment of their Value Engineering talents.

ND - COLLEGE RELATIONS

Develop a program to encourage universities and colleges to offer Value Engineering courses and seminars and to promote the interest of both instructors and students in the value engineering discipline.

ND - TECHNOLOGICAL ADVANCEMENT

Advance the art and science of Value Engineering

DIRECTOR - NATIONAL STANDARDS COMMITTEE

Establish uniform and recognized definitions and terms which identify and describe the activities, techniques, and disciplines employed in the Value Engineering profession.

Reporting to National Director - Conference

ND - ANNUAL CONFERENCE TECHNICAL PROGRAMS

Develop and manage Conference Technical Program.

Reporting to National Director - Annual Conference Technical Programs

EDITOR, PROCEEDINGS

1. Solicit and select speakers for annual conference, in coordination with the Conference Staff.

2. Select papers to be printed in the annual Proceedings.

a) Establish guidelines, editorial policy, and due dates for the papers.

b) Edit papers before acceptance, to comply with (a) above.

c) Ensure that the accepted papers meet SAVE professional standards established in (a) above.

3. Perform such other related duties as directed.

Reporting to Executive Director

ND - CONFERENCES

Exercise administrative control and guide the operation of all National and Regional Conferences, particularly with regard to theme, program, scheduling, organization planning, and financial planning. Approve and coordinate all conference dates to avoid conflict.

Reporting to Executive Committee

ND - INTERACTIONS EDITOR

Manage and edit publications of the SAVE INTERACTIONS Newsletter.

ND - VALUE WORLD EDITOR

Advise on publishable manuscript materials; recommend policy matters and potential sources of manuscript materials.
CLIP AND SAVE

SAVE 1983-1984 BOARD OF DIRECTORS
and NATIONAL DIRECTORS (ND) and COMMITTEE CHAIRMEN

(1) Denotes National Board of Directors Member
(2) Denotes Executive Committee Member

President (1,2)
William F. Lenzer, CVS
Value Engineering, Inc.
10712 North Stemmons Freeway
Dallas, TX 75220
Phone: 214/357-0870

Executive V.P. (1,2)
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7281 Steinmeier Dr.
Indianapolis, IN 46250
Phone: 317/352-2723

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Value Engineering Dept. (T2)
Detroit Diesel Allison, Div. of GM
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Phone: 317/242-5985

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New York, NY 10048
Phone: 212/466-8852

Immediate Past President (1,2)
and Nominating Committee Chairman
John W. Bryant, CVS
4 Pinebrook Lane
S. Easton, MA 02375
Phone: 617/238-9541 or
714/548-8018

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Northern Telecom Canada Ltd.
304 The East Mall
Islington, ON M9B 6E4
Phone: 416/232-2000

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R. Glenn Woodward, CVS
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College Park, MD 20740
Phone: 301/935-5338

V.P. - International (1)
William J. OP de Beeck
26 Lombard Street
2580 St. Katelijine Waver
Belgium Europe
Phone: 03/317 17 17 ext 1704

V.P. - Northeast Region (1)
Hal Goldman, CVS
Goldman Associates
470 Park Ave. South
New York, NY 10016
Phone: 212/381-3422

V.P. - Southeast Region (1)
and Certification Director
Peter S. Megani, CVS
E-Systems Inc./BCI Division
P.O. Box 12248
St. Petersburg, FL 33733
Phone: 813/381-2000 ext 2401

V.P. - Northcentral Region (1)
John H. Maurer, CVS
Westinghouse Productivity Center
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Pittsburgh, PA 15230
Phone: 412/778-5129

V.P. - Southcentral Region (1)
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Value Engineering, Inc.
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Dallas, TX 75220
Phone: 214/357-0870

V.P. - Northwest Region (1)
Douglas M. Hood, CVS
821 N.W. Flanders
Portland, OR 97209
Phone: 503/223-2876

V.P. - Southwest Region (1)
Julian J. Pennello, CVS
1509 Mission Ave.
Carmichael, CA 95608
Phone: 916/440-3476 ext 264

V.P. - Great Plains Region (1)
Teresa A. Barlow, CVS
Barlow Associates
2272 Chestnut St.
Quincy, IL 62301
Phone: 217/224-9751

V.P. - Great Lakes Region (1)
Eugene R. Smith, CVS
2215 N. Allison Ave.
Speedway, IN 46224
Phone: 317/244-9149

ND - Membership
Glenn Lee Adams
AVCO Aerostructures Div.
P.O. Box 210, Dept. 530
Nashville, TN 37202

ND - Chapter Effectiveness
William H. Lynch
450 West Rd., 400S
Kokomo, IN 46902

ND - Chapter Development
John D. Jackson, CVS
1745 Hilltop Circle
Fort Worth, TX 76114
Phone: 817/777-2224

ND - Chapter Programs
Rafael R. Dominguez, CVS
Bendix Corp., H.V.S.G.
901 Cleveland Street
Elyria, OH 44036
Phone: 216/329-9386

ND - Individual Honors and Awards
Howard H. Burroughs
Western Electric Company
P.O. Box 1104, Dept. 5352
Indianapolis, IN 46206
Phone: 317/352-2517

ND - Constitution & By-Laws
Howard Rookes
Route #3
Marion, IA 52302
Phone: 319/395-2204

ND - Federal Liaison
Harold Tufty, CVS
Value Engineering Digest
986 National Press Bldg.
Washington, DC 20045
Phone: 202/347-8998

ND - Public Relations
Russ C. Brannen, CVS
28717 Osborn Road
Bay Village, OH 44140
We feel all the loose ends have been tied together and we know of no previous commitments that have not been honored.

We as a Board have,

1. Cleared out more of our dead inventory ($17,793 last year down to $15,105 this year), but have more to go.

2. The inventory control system is working and you can get answers, if you need them. And, it's on the money.

3. Paid chapter dividends on time and the full amount when we know where to send them.

4. Entered into new contracts on books and publications.

5. Challenged the State of Texas on their levying of personal property taxes.

6. As some of you know, rejected Rita Bates plea for a word processor for the last two years due to our financial condition. But, this year we did a study on our typesetting costs and found that we could justify it. But, instead we purchased a Osborne Computer and a Qume Daisywheel Printer. (Typesetting $8,000 - Computer & Printer $3,600). This produces camera-ready copy, as seen in the May edition of Interactions.

7. Returned to the membership more than in the past, even in this past year's economic slide. We have lost membership, and figured on that, but membership even slipped further than anticipated. (124 less or about $5,000).

8. Had our share of turnover in the way of secretaries this past year, but feel we have a fantastic staff on board at the present time. Also, Rita's bout with the flu played havoc with our Office operation and will take a while to get back on an even keel. We would like to thank everyone for their help and assistance.

It has been our intent that Expense and G&A would match Income (not including Conference Income) so that this Society could grow. We are not at that point and probably won't be there for a few more years.

You have handouts covering our financial status from this year, prior years and we would entertain any questions from the floor at this time.

Functionally,

James A. Dziekonski, Controller
and
Beverly A. Zolezzi, CVS
Vice President - Finance

1982-1983 year ending April 30, 1983
Presented May 24, 1983

<table>
<thead>
<tr>
<th>INCOME</th>
<th>EXPENSE</th>
<th>GEN. &amp; ADMIN.</th>
<th>DIFFERENCE</th>
</tr>
</thead>
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<tr>
<td>Membership</td>
<td>59,436</td>
<td>26,016</td>
<td>46,255</td>
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<tr>
<td>Dues &amp; Fees</td>
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<tr>
<td>Conference</td>
<td>69,036</td>
<td>42,446</td>
<td>10,590</td>
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<td>Publication Sales</td>
<td>26,799</td>
<td>16,658</td>
<td>1,913</td>
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<tr>
<td>Publications Rental</td>
<td>1,160</td>
<td>86</td>
<td>417</td>
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<td>Certification</td>
<td>1,584</td>
<td>3,543</td>
<td>445</td>
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<td>Chapter Dividend</td>
<td>11,021</td>
<td>11,047</td>
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<td>Interest</td>
<td>2,039</td>
<td>— 0 —</td>
<td>10</td>
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<tr>
<td>Workshop</td>
<td>— 0 —</td>
<td>377</td>
<td>365</td>
</tr>
<tr>
<td>Totals</td>
<td>171,075</td>
<td>100,173</td>
<td>61,143</td>
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</tbody>
</table>

Value World July/September 1983
Society of American Value Engineers, Inc.
Financial History
Presented May 24, 1983

As of the close of Business, April 30th each year

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sales</td>
<td>144,868</td>
<td>142,772</td>
<td>154,220</td>
<td>171,829</td>
<td>165,313</td>
<td>164,815</td>
<td>171,075</td>
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<tr>
<td>2. Direct Mat.</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>3. Direct Labor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4. Overhead</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>6. Programmed Expense</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>60,320</td>
<td>61,498</td>
<td>60,680</td>
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<tr>
<td>7. Before Tax Profit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7,122</td>
<td>10,222</td>
<td></td>
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<tr>
<td>8. State Taxes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>31</td>
<td>463</td>
<td></td>
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<tr>
<td>10. Cash</td>
<td>20,056</td>
<td>12,778</td>
<td>20,400</td>
<td>30,445</td>
<td>39,052</td>
<td>39,052</td>
<td>49,451</td>
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<tr>
<td>11. Receivables</td>
<td>4,573</td>
<td>6,571</td>
<td>11,678</td>
<td>6,709</td>
<td>15,210</td>
<td>2,870</td>
<td>10,035</td>
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<tr>
<td>12. Inventory</td>
<td>20,316</td>
<td>16,494</td>
<td>20,360</td>
<td>18,561</td>
<td>17,852</td>
<td>17,793</td>
<td>15,105</td>
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<tr>
<td>15. Work. Invest</td>
<td>18,654</td>
<td>2,888</td>
<td>(517)</td>
<td>17,211</td>
<td>28,262</td>
<td>53,197</td>
<td>67,585</td>
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<tr>
<td>16. Fixed Invest</td>
<td>17,761</td>
<td>18,389</td>
<td>18,977</td>
<td>17,116</td>
<td>16,977</td>
<td>16,977</td>
<td>18,228</td>
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<tr>
<td>17. Total Invest</td>
<td>36,415</td>
<td>21,277</td>
<td>18,460</td>
<td>34,327</td>
<td>45,239</td>
<td>73,174</td>
<td>85,813</td>
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<tr>
<td>18. Equity</td>
<td>28,813</td>
<td>12,193</td>
<td>7,932</td>
<td>24,604</td>
<td>35,416</td>
<td>70,174</td>
<td>79,933</td>
</tr>
<tr>
<td>19. Debt</td>
<td>7,602</td>
<td>9,084</td>
<td>10,528</td>
<td>9,723</td>
<td>(9,823)</td>
<td>(3,000)</td>
<td>(5,880)</td>
</tr>
<tr>
<td>20. Ret. on Sls.</td>
<td>(2.4%)</td>
<td>(11.6%)</td>
<td>(2.8%)</td>
<td>9.7%</td>
<td>6.5%</td>
<td>4.3%</td>
<td>5.7%</td>
</tr>
<tr>
<td>21. Ret. on Inv.</td>
<td>(9.4%)</td>
<td>(78.1%)</td>
<td>(23.1%)</td>
<td>48.6%</td>
<td>23.9%</td>
<td>9.7%</td>
<td>11.4%</td>
</tr>
<tr>
<td>22. T.I. to Sls.</td>
<td>25.1%</td>
<td>14.9%</td>
<td>12.0%</td>
<td>19.9%</td>
<td>27.4%</td>
<td>44.4%</td>
<td>50.2%</td>
</tr>
<tr>
<td>23. Debt Ratio</td>
<td>20.9%</td>
<td>42.7%</td>
<td>57.0%</td>
<td>28.3%</td>
<td>(21.7%)</td>
<td>(4.1%)</td>
<td>(6.9%)</td>
</tr>
<tr>
<td>24. Ret. on Equ.</td>
<td>(11.9%)</td>
<td>(136.3%)</td>
<td>(53.7%)</td>
<td>67.8%</td>
<td>30.5%</td>
<td>10.1%</td>
<td>12.2%</td>
</tr>
</tbody>
</table>

* Jim Dziekonski appointed VP-Finance September 22, 1979 to complete unexpired term of Alice Mozley

** Translation from depreciated assets per depreciation schedule to fixed assets at appraised value. ($9,723 adjustment)

*** Accountant's translation from accrual to cash basis of accounting per Wignall, Chapman, McGee, and Company (Auditors)
SOCIETY OF AMERICAN VALUE ENGINEERS, INC.
IRVING, TEXAS
COMPARATIVE BALANCE SHEET AS OF
APRIL 30, 1983

<table>
<thead>
<tr>
<th></th>
<th>1981</th>
<th>1982</th>
<th>1983</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ASSETS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash on hand and in bank</td>
<td>$30,445</td>
<td>$39,052</td>
<td>$49,451</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>6,356</td>
<td>10,185</td>
<td>10,137</td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>353</td>
<td>1,213</td>
<td>1,421</td>
</tr>
<tr>
<td>Conference advances</td>
<td>—</td>
<td>3,371</td>
<td>7,861</td>
</tr>
<tr>
<td>Inventory</td>
<td>18,561</td>
<td>17,852</td>
<td>15,105</td>
</tr>
<tr>
<td>Furniture and Fixtures</td>
<td>6,895</td>
<td>6,895</td>
<td>6,895</td>
</tr>
<tr>
<td>Office equipment</td>
<td>9,780</td>
<td>10,082</td>
<td>11,333</td>
</tr>
<tr>
<td>Security deposit</td>
<td>441</td>
<td>441</td>
<td>503</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>$72,831</td>
<td>$89,091</td>
<td>$102,706</td>
</tr>
</tbody>
</table>

| **LIABILITIES**     |          |          |          |
| Credits for returns | $        | $        | $720     |
| Accounts payable    | 12,617   | 560      | 604      |
| Payroll taxes payable | 43      | 648      | 724      |
| Chapter rebates payable | 3,349   | 6,927    | 6,402    |
| Conference income (advance payments) | — | 16,040 | 35,382 |
| Dues received in advance | 22,495 | 19,425 | 31,788 |
| Society fund balance | 34,327  | 45,491   | 27,085   |
| **Total liabilities and fund balance** | $72,831 | $89,091 | $102,706 |
What Did We See in '83?
1983 Conference Report
by C. P. Smith

If you were looking for "innovation" at a SAVE International Conference, let's hope you were in attendance at the 1983 SAVE, International Conference, recently conducted in Chicago, Illinois.

Here, you would have immediately noted that Hoshang Karani, Robert Redford, Tom Cook, Don Lenef and their associates were very creative in expanding the normal three concurrent session configuration to a four concurrent session arrangement. How they did it, we really don't know, but suddenly we now have added a new series of technical sessions known as "Outreach - Other Worlds". As the Conference rolled along toward its very successful conclusion, we realized the "Chicago Crowd" had done it again! We had another winner on our hands with the fourth session. Our attendees want more of this in the future.

Then right along in the same vein of International Outreach, our President, Bill Lenzer, arranged for special "executive communication" sessions geared to meaningful expansion of value applications and recognition throughout the upper management levels of American Industry and Commerce, plus the International environment of value that has become such a vital growing force for SAVE and all it stands for during the past 3-5 years.

Meanwhile, close examination of the technical programs in progress revealed many interesting approaches for education in value. Beginning on Sunday, we caught George Fridholm conducting the perennial Introduction to VE Session. Then you ask, what happened to Art Mudge? Well, you take a look at Monday's schedule and see that Art is now conducting a special "Executive Session" for Industry Leaders, listed as "By Invitation Only".

Also on Sunday, in the Exhibit Area, we all had an opportunity to meet the authors and publishers, which was a good touch for all concerned. This year video tapes were in abundance for our view and edification in the exhibit area.

Monday's opening session was a dynamic, energetic kickoff for our Conference thanks to Jack Reichert, CEO, Brunswick Corporation. There must have been 325 people out there in the audience who wished they had a boss like Jack who would speak about them the way he spoke about Hoshang Karani. We think Tom Cook was sort of proud of Hoshang also. After the kickoff, we had a terrific game plan ready for the technical sessions. Let me share a few of the titles with you; Government and Defense Collateral Savings, Life Cycle Costing, VE in Transportation, Evaluating VE in Construction, One Person VE, One Day Studies, The Third Wave, A More Constructive Community, Workshops for Problem Solving - Analysis of Creative Products, Center on the Client Communications Results through Creativity. Diversion was provided in sessions on VE in Department of Transportation, Waste Water Treatment, VE and Sizzle, Strategy Workshop, Value Purchasing, Problem Solving and Neuro-Linguistic Programming!

Then if you prefer panels, we had them on value, quality circles, construction/design modifying techniques, management mandate, and then further International Exchange of techniques - the International Discussion Session, various application testimonials and continuing workshops.

In conjunction with this very heavy dose of technical transfusion and mental enhancement, certain functions were also very successful for the lighter side of Conference attendance. The Ladies Program gave a beautiful insight to the inner beauty of an otherwise sort of plain appearing City of Chicago. The "Special Nite" gave us an opportunity to "go to the top of the world" in the Sears Tower and see the four corners of the earth from the top of Chicago.

So whatever you wanted in a SAVE Conference was ready for you in Chicago. Get your reservation in early for Sacramento in '84 so you don't miss any nuggets in the SAVE Goldrush of '84.

We'll Show You More in '84!
Habit is One of the Deepest Laws of Nature

Habit is generally understood as a stereotyped form of response; doing the same thing always in the same way, under the same conditions. Habits are automatic reactions and responses that we've learned to perform without having to THINK or DECIDE. Because our habits are so intimately familiar to us, their effects are often overlooked.

Usually, when we think of the word HABIT, it's a bad habit that we have in mind. This is because it's usually easier for us to recognize the role a bad habit plays in our life. We all recognize that "smoking can be hazardous to your health" or "overeating is bad for you", but how often do we think of the benefits of habit when getting dressed or driving a car. Being able to do these things without THINKING or DECIDING gets us through our day efficiently and smoothly. We have Thinking Habit Patterns and Decision Making Habits that cause us to do things that are both good and bad for us.

Habit Limits Our Options

If we allow our thinking and decision making patterns to become inflexible, we stunt our opportunity for growth. We limit our options for ways to accomplish a task or behave in a particular manner. As we age, our habits cause us to become "set in our way." They cause us to be less creative, less receptive to new ways, and we become more judgemental.

Negative Habits

Negative thinking habits restrict growth and limit change. We use killer phrases like: "It can't be done . . .", "We've always done it that way . . .", "I'm too old for that!". We limit our own progress by operating from a negative position.

We come by negative thinking unintentionally because we live in a negative society. Family structure, education, place of work, and other institutions teach us the automatic "NO". The first word a child learns after mama and daddy is "NO". If children hear themselves being called "stupid," "naughty," etc., they develop negative thought patterns, and will get in the habit of thinking they are "stupid," or "naughty". Children are conditioned to develop negative habits that later support negative attitudes. We can choose to condition them in a positive way so they can develop the habit of thinking they are worthwhile and can search for options. We can choose to change our own habits in a positive way, it's just as easy to "be on time" as it is to be five minutes late for a meeting. It's much easier to "do something right the first time", it's beneficial to you and those around you to "develop safe work habits".

The following synopsis of a poem, of unknown authorship, makes the point of early negative conditioning very well.

Once a little boy went to a big school. When he found his way around, school didn't seem so big and he was happy.

One day the teacher said "Today we are going to make a picture". The little boy took out his crayons and paper and started to draw, but the teacher said, "Wait! It is not time to begin." When everyone was ready the teacher said "we're going to make flowers," and she showed the class how to draw a red flower with a green stem. The little boy liked his picture better but he turned the paper over, and drew a flower just like the teacher's. The same thing happened again and again with clay, paper cutouts, and many other things. The little boy started to make what he had thought of, but the teacher told him exactly what to make and he did.

Then one day the boy and his family moved to another city. He had to go to another, even bigger, school. His first day in school the teacher announced "Today we are going to make a picture." The little boy waited for the teacher to tell him what to make. But the teacher said nothing. Finally, when the teacher noticed the little boy wasn't drawing she said, "Don't you like to make pictures?" "Oh yes" said the little boy, "What are we to make?" "I don't know until you make it," said the teacher, "How shall I make it?" said the little boy, "Why, anyway you like" the teacher said. "If everyone made the same picture, how would I know who made what?" "I don't know," said the little boy as he began to draw a red flower with a green stem.

Conditioning

Habits usually are not created by one monumental experience or an individual activity. Habit occurs one bit at a time. We are usually conditioned very gradually, unaware of acquiring that habit until it has control of us. Since conditioning is so subtle and easily picked up, intentionally surround yourself with positive inputs (positive people, motivational books and tapes, etc.) If you don't, the automatic "NO" can take control, then you're not as useful to yourself or your job.

Resistance to Change

Habit causes us to cling to the past. Resistance to change is a powerful force in a person's life. There is the story of a group of people in South America who for generations have gone blind and died in their late 30's. It was discovered that an insect living in the walls of their mud huts was the cause of their blindness and eventual death. Once the cause of the problem was discovered, this group of people had several alternatives:

- They could fumigate the huts.
- They could burn the huts to the ground and rebuild.
- They could relocate to an area free of insects, or
- They could do nothing.

They chose to DO NOTHING! Because of fear and resistance to change, they chose blindness and early death. We make a lot of sacrifices to stay with our comfortable rut, called Habit.

There is Hope — You Can Change

Habits can be useful if they help us be progressive and productive. However, if habits immobilize us or cause us to be inflexible, we are our own worst enemy. Behavior can be changed; you alone control your destiny, the future is up to you.

Confucius said, "Habits take us where we were yesterday and our attitudes keep us there."

Habits and Attitude go hand-in-hand; change one and you will automatically influence the other. Our habits support our attitudes and, at the same time, we cultivate habits as a result of our attitudes.

Attitudes can enrich our lives or rob us of the enjoyment of life. With the wrong attitude, we accept the ROADBLOCKS to progress. A negative attitude allows us to accept roadblocks as reasons, rather than the excuses they are, to keep us from acting. We become satisfied with only what it takes to get by. We may get by, but do we really live?

You can enrich your life with a positive attitude. Minute-by-minute living can be more rewarding for yourself and others. You can develop the attitude, there is a better way . . . search for alternatives. Create a WIN-WIN situation.

A WIN-WIN attitude takes cooperation, being willing to share the spotlight - wanting (Continued on Page 23)
Introduction

Logisticians are familiar with the terms of Logistics Support Analysis (LSA), Level of Repair Analysis (LORA), Sensitivity Analysis, Life Cycle Cost, Design Reviews, Design to Cost, and many others. We need to incorporate into the logisticians "tools of the trade" the knowledge and desire to apply Value Analysis (VA) techniques to the logistics support system, and to its technical as well as business aspects. This will result in a 25% to 40% improvement in product cost with additional increases in value, quality, reliability, and productivity.

The use and application of the Value Analysis techniques provides the Program/Project Manager with an advantage in management of a program. When applied to the logistics support elements a more improved, complete and cost-effective logistics support package will result. Likewise, utilization of the VA techniques assists management in surfacing the problems or opportunities within the logistics support business. It provides techniques for establishing priorities for the opportunities, identifying the corrective action required, and provides the appropriate VA techniques for the resolution of problems.

Logistics Value Management Planning - Value Management Planning can be appropriately applied to a logistics organization or the management of a logistics program which supports items in DoD inventory. Also, this planning can be applied by the DoD and the military services in managing their programs/projects.

A review of the elements of a Value Job Plan and a review of the type of information required as well as the tasks required for implementation will provide us an insight as to the make-up of a central value management organization. Disciplines that are shown in the value job plan are those in the area of finance, engineering, manufacturing operations, and program management (multi-function discipline).

Program management would be an ideal discipline for integration in the central value management organization because that discipline has experience in defining, organizing, and selling multi-function programs and running those programs as a business. It is proposed that a typical central value management organization consist of a representative from the controller's department, a representative from engineering, a representative from manufacturing operations, and a representative that has had multifunction program experience. The central value management organization provides leadership and functions as a catalyst in achieving the company or logistics program goals. The central value management organization should report to high level Manager or to an organizational position that will enhance the Value Management activities.

Strategy

The implementation of Value Management in a program, business unit, or support system requires a strategic approach. A representative strategy is outlined as follows:

1. Establish a central value management organization that will provide leadership and function as a catalyst in achieving the goals.
2. Train the value management organization and the function/department value representatives in Value Analysis utilizing the resources available.
3. Apply VA by product/hardware workshops on logistics-deliverable products. This will result in lower product costs, higher reliability and quality for those products, as well as, training in the application of the value process. Through workshops teamwork will become prevalent and barriers will be overcome.
4. Establishment of VA will increase the sensitivity to "VALUE" and enhance the Value Engineering Change Proposal (VECP) activity. This will result in more proposals and potential savings as profit margin.
5. Apply VA (after it has been established) to non-hardware areas such as proposals, software, technical publications, purchasing, spares documentation, quality, components, shippers, work processes, facilities, program management, etc.
6. Apply VA to business systems areas.

Logistics Applications

Project candidates and selections are formulated from inputs obtained from the functional and program areas. The candidates can be categorized as: product candidates; process candidates; business system candidates. Some examples of product candidates are:

- Profitability of a functional product
- Proposal process
- Purchasing resale process
- Provisioning documentation process
- Technical publications process
- Software

An example of a system candidate would be a computer system that is proposed for an expansion to a completely automated business system.

Some product candidates would encompass:

- A conceptual design of an item of test equipment.
- A test equipment item that has been produced previously and the reorder quantity and value is sufficient for a workshop candidate.
- Spare parts regardless of the support phase, includes post production spare items. Through application of the value job plan to post production spare item, results are obtained in the refinement of the manufacturing process as well as in the selection of alternative materials, design improvements/changes and test methods/levels.

Value Management/Value Analysis of the maintenance and logistics activities will also provide lower operational costs. The total cost of ownership is affected by operating, maintenance and other logistics costs. Reducing these costs (in excess of any attendant increase in procurement cost) results in a lower life cycle cost. Larger potential savings justify the investment for the value study and subsequent implementation expenses during the operational phase. Value studies in the maintenance areas during the operational phase have been very successful. During maintenance of equipment, failures, major points of wear, and trouble areas become ap-
The collective skills, knowledge and experience of maintenance and repair personnel. Some of the applications and benefits of using VA techniques in maintenance-oriented activities are:

- A value program can respond to unforeseen problems that develop after an item has been in service, such as early failure incidents, excessive frequency of replacements in the field or depot, excessive or repeated increases in the cost to manufacture or repair, restricted availability or replacements, or changes in mission (function).

- The inspection, repair, overhaul, testing and acceptance of items undergoing depot-level maintenance. Maintenance and repair personnel are in the best position to observe the condition of items received after varying service intervals the types, causes and effects of damage

**Summary**

Value Management/Value Analysis has developed specific techniques that have application in business systems, procedures, processes, services, and products. This also encompasses the significant opportunities that are available in Logistics Support.

**Value Management** provides a vital and key contribution to logistics planning tasks. Application of the VA techniques to logistics elements and system could result in an estimated 25-40% improvement in costs with additional increases in quality, reliability, and productivity. A successful value task must follow the Value Job Plan completely with no short cuts. Preparation and utilization of a Logistics Value Management Plan will provide the discipline for thinking in terms of "Value" and seeing that the process is seeded within the logistics disciplines.

Logistics Value Management Planning requires:

- A central Value Management organization
- Training of the identified personnel

**REFERENCES**

1. Miles, Lawrence D., Techniques of Value Analysis and Engineering, McGraw Hill Book Co., Inc. 1941

Edward B. Lowe received a BSEE degree from the University of Cincinnati in Ohio, and a Master of Science degree in Electrical Engineering from Drexel University in Philadelphia, Pennsylvania. He recently completed the National Security Management Course of the National Defense University in Washington, D.C., and has completed the Advanced Logistics Engineering course from George Washington University in Washington, D.C. Mr. Lowe is a member of the Society of Logistics Engineers (SOLE), SAVE and participant in the National Security Industrial Association (NSIA). Mr. Lowe has twenty years of experience in logistics that have addressed all the elements of logistics support. His most recent eight years of experience have been in Integrated Logistics Support Program Management.

**Habits and Attitudes Continued**

- UP TO YOU! What will you do with this most precious gift?

**FEELING POSITIVE FEELS GOOD! ! !**

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Value World July/September 1983
PSYCHOLOGICAL ASPECTS OF VALUE ANALYSIS

by Fred Spiegl
Staff Value Engineer Space Division

Value Analysis (VA) or Value Engineering (VE) is basically a scientific problem solving method. Yet, in a field of many effective problem-solving techniques, VE/VA has demonstrated a much higher success than others, especially in the cost-effective areas. Even those who have practiced this methodology ask what makes it so outstanding - we have more than an academic concern. The practitioner also has found a managerial paradox - the very tool that efficiently serves management goals does not enjoy commensurate support in return. This lack of support is primarily due to a lack of understanding of the tremendous benefits that VA provides more than commonly used problem solving techniques. Most of the answers are evident in the behavioral aspects of VA. If we examine the behavioral aspects of this successful method we will find the reasons for the potential improvements which many organizations enjoy by fully implementing the sound psychological aspect of VA.

Much of VA is practiced in group decision environment. An integrated team is generally productive for complex tasks. Also, consider that people's individual behavior tends to be constrained in most task situations. We bring people together in a group decision mode primarily 1) to bring more information to the situation; 2) to analyze information more critically; and 3) create ideas in cross-talk.

At the same time we should recognize that there may be situations in which the manager: 1) already has all the information he needs; 2) is perfectly capable of processing the information himself; and 3) does not require the commitment of others for implementation. In some situations VA may not be appropriate or required. Notwithstanding, research shows that decisions are put into action more effectively with group consensus. Decisions imposed from the outside or by a minority are not likely to be lasting or effective. Restrictive authorization is a poor tool for effecting important changes and attitudes.

Consequently, it profits us to understand the basic methods available to change opinions, attitudes and habits:

1. Coercion or power has an important role in relationships. This role may be from implicit to explicit, ranging in acceptance of authority from mutual respect of private property to an agreement not to use physical force.

2. Brainwashing, which is commonly used in various forms involves a rather subtle exploitation of some well-known truths under which some people may be forced to change their attitudes and behavior. The line between coercion and persuasion becomes very delicate.

3. The brainwashing that some of us deplore, utilizes principles not very different from the education that most of us value positively.

4. Manipulation seems a sometimes slippery method commonly used by such phrases as:
   "You've got to make them think it is their idea."
   "You've got to make them like you."
   "You've got to sell yourself."
   "You've got to be sincere."
   These are all forms of manipulation.
   The manipulative model tends to develop dependent relationships. The manipulators are sensitive to needs of the other person and tend to act by indirect influence rather than by direction. In many situations this is a useful, acceptable and moral method.

5. Perhaps a much more powerful model of influence on human behavior is called the collaborative model. The collaborative model is similar to that of the Alcoholics Anonymous concept and depends on a person wanting to be helped. It is predominantly an argumentative process in which the responsibility never leaves the person that desires to change.

6. Counselling and psychiatry have moved rapidly in this direction, non-directive therapy being a current predominant form of behavior modification. But many people may be psychologically weak and not willing to change until the pain becomes crippling enough to warrant help. Yet others may see the problems more clearly and want more immediate action. People may not feel the tension of their unsatisfactory behavior and may have different aspiration levels.

One of the reasons VE is most successful in Japan is a strong compulsion for people wanting to change once the VE change teams have agreed on results.

7. Effective performance appraisals also provide a successful approach to encouraging and implementing VE by providing the following:
   People want to know where they stand;
   Employees want recognition for extra effort; and
   Employees would like feedback about where they can improve their work and get more pay.

We can encourage performance on a continuing basis with people on all levels of management. Personal motivation, training and reinforcement used to generate sufficient desire are recommended methods in the daily working routine. VA consequently has been and is a proven successful tool to bring about major changes effectively and lasting.

References

THE WORLD IS CHANGING SO FAST... that you couldn't stay wrong all the time even if you tried, says the newsletter of the Assn Execs of Upstate NY.

CALL FOR PAPERS 1984 CONFERENCE

To present a paper to the SAVE International Conference you must have a paper published in the Proceedings.

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Mr. John Deininger, President of Signode, a well-known manufacturing firm here in the Chicago area. Mr. Deininger, you were part of a seminar this morning, that took place here at the Hyatt Regency, discussing Value Engineering as a means of making American industry more competitive. Just how did you go about doing this, and why do you feel this is the answer to making us more competitive?

Mr. Deininger: Well, Value Engineering, which has been around for some time, we find it purely a formal discipline of applying it through and immersing all the employees into this skill, it enables us to achieve outstanding performance. At Signode, we employed this form of program last September, and since have applied it to three products and have had significant savings in the magnitude of 40-50% on each product.

TV Interviewer: Well I would say that certainly has value. Now a few years ago we were told, at least here, there would reports that we were sort of overloaded with engineers, and now it develops that we have a shortage. Is this program of Value Engineering an impact on that situation?

Mr. Deininger: Not as far as adding more engineering to the work force, but I think that we have done to prove to ourselves that our engineers are able to work more productively with this new concept.

TV Interviewer: Now then, before this concept came about, just how did you go about completing or computing these tasks before you, and just what is the primary thing that makes the difference in your results?

Mr. Deininger: I think that our company was typical of most U.S. companies that traditionally operated with diverse functional areas, where engineering, manufacturing, marketing were operated pretty much on a separate basis. But we found that by bringing all parties together to use this functional cost approach in analyzing the product that we were able to come up through group dynamics of investigating and problem-solving that achieves these results.

TV Interviewer: Do you mean that you are actually working in tandem with your competitors?

Mr. Deininger: No, I’m talking about the inter-departmental multifunctions of different people from different departments working together and the formed teams that actually concentrate on a given product to find alternative ways to improve how it functions or to lower its cost, and primarily to provide better value to our customers.

TV Interviewer: As for the engineers themselves, Mr. Deininger, is this going to open up any positions for extra engineers, either in this field, or some other areas?

Mr. Deininger: What we’re finding is that the engineering is complemented by other people. From manufacturing, from marketing and other disciplines, so to improve their insights as to what the product is expected to do, and how it provides greater value for the customer, and in so doing, I think we are complementing the engineers to be more effective and efficient.

TV Interviewer: Thank you Mr. John Deininger, President, Signode Company, Chicago area. Mr. Deininger, thank you very much, and good luck Sir.

LIFE...is what happens to you while you are making other plans.

“T.G.I.M.”

For a number of years in the past, we have seen pins or signs with the letters “T.G.I.F.” As we all recognize these four letters stand for the statement, “Thank God It’s Friday”. It goes without saying that many individuals, in the past and present, have had the feeling.

In today’s economic environment each of us must take another look at the particular situation. When we do, we may and should be replacing “T.G.I.F.” with “T.G.I.M.” or “Thank God It’s Monday.”

Keep in mind, as you read this, that you are among the fortunate ones today. You do have a job to come to on Monday morning. This is reason enough to “T.G.I.M.”. Being among those employed you have the opportunity to assist your company in reducing its costs through the Cost Improvement Activity.

You may ask why this second reason is so important. By reducing our costs, while retaining the necessary quality and reliability, we become the low cost producer. This in turn adds to our and other’s job security. Then as the economy turns upward, we will be among the first companies to recover from the recession, thereby necessitating the rehiring of our fellow workers that were not as fortunate as ourselves.

Yes, I say, “Thank God It’s Monday.”

A.E. Mudge, CVS

Mr. Deininger: What we’re finding is that the engineers are complemented by other people. From manufacturing, from marketing and other disciplines, so to improve their insights as to what the product is expected to do, and how it provides greater value for the customer, and in so doing, I think we are complementing the engineers to be more effective and efficient.

TV Interviewer: Thank you Mr. John Deininger, President, Signode Company, Chicago area. Mr. Deininger, thank you very much, and good luck Sir.

LIFE...is what happens to you while you are making other plans.

“When You’re Hot, You’re Hot!”

The words of this popular song are used by many of us when we win something, gain a victory in a tennis match, handball, or whatever. It is used by many teams to be boastfully modest.

But where are the other words that go with these, “When you’re not, you’re not!” We usually don’t hear them or don’t want to hear them. Why? All of our training has been devoted to preparing us to be winners, not losers. We all know that in sports there will be winners and losers. The object is to have more victories than defeats. Seeing the replay of the game can show the errors that were made. Then the errors can be counted and new strategy planned for the upcoming game, with confidence that these changes will change the outcome of the next game.

In industry, for the most part, we haven’t learned this simple little lesson. There is a great tendency to criticize the opposition, minimize the things that produced results, and continue on our merry way not changing a thing when we pursue the next job. When, in fact, we should:

1. Replay the events.
   a. What did they do right?
   b. What did we do wrong?

2. Correct the errors that were made.
   a. What has to be corrected?
   b. How can they be corrected to make sure they don’t occur again?

3. Plan a new strategy.
   b. Have we planned for achievement? Including price?

4. Have confidence.
   Do you have that inner feeling that tells you you have a winner?

Then, when our competitor asks how you achieved the result, you can say , “When You’re Hot, You’re Hot!”

James A. Dziakowski, CVS
VALUE PAVES THE WAY -
General Dynamics, Fort Worth Division

Value Engineering (VE) techniques have paves the way to Cost Reduction success at General Dynamics, Fort Worth Division. Three thousand two hundred twenty eight employees have received certificates for completion of two week VE Seminars. The lessons learned help employees develop ideas for the Cost Reduction and Employee Suggestion Programs. In turn, ideas submitted as Employee Suggestions have become VE Change Proposals.

Results have been excellent. Recently 235 men and women were honored at the annual Awards Banquet for outstanding performance in Cost Reduction in 1982. Each employee documented a savings of $100,000 or more for the calendar year. Sixty-seven of these received recognition for having saved more than $1,000,000 each. In total, over $221 million in savings was documented for 1982.

The Fort Worth Facility lead all of the General Dynamic Divisions for Employee Suggestions in 1982 and was recognized by the National Association of Suggestion Systems for having obtained the highest dollar savings per employee. The Fort Worth Division saved an average of $332 per employee which was best in the nation for Aerospace Equipment Manufacturers.

In addition the Fort Worth Division was selected as the 1982 recipient of the U.S. Air Force Contractor VE Achievement Award.

Vice President and General Manager, Herbert F. Rogers, in a ceremony at the Pentagon on April 19, 1983, accepted a plaque and certificate on behalf of the entire division. The certificate as signed by Secretary of the Air Force, Verne Orr, and reads as follows:

"General Dynamics has demonstrated a sincere interest in reducing F-16 weapon system costs through a concerted Value Engineering effort. Value Engineering Change Proposals approved by the F-16 System Program Office in Fiscal Year 1982 contributed to a cost avoidance of 24 million dollars. General Dynamics Fort Worth Division's continued effort to provide quality Value Engineering Change Proposals is most commendable."

The Cost Reduction and Value Control Programs compliment each other at General Dynamics, Fort Worth Division. Both are promoting cost reduction as a way of life for all employees, while providing our customer the utmost in value for each dollar they spend.

Perry C. Bales
Division Cost Reduction Coordinator
Editor, "Cost Reflections"
General Dynamics, Fort Worth Division

VE SAVINGS IN EPA REGION IV

Charles R. Jeter, EPA Regional Administrator reported recently Value Engineering has saved more than $100 million on 48 wastewater treatment projects in EPA's Southeast region (Region IV) since 1975. "VE has been particularly successful in the Southeast, with Region IV showing an average net savings of eight percent on construction projects, and a net return of $25 for each dollar spent on VE."

EPA began using value engineering on a voluntary basis in its $18 billion national construction grants program in 1975, and later required it for any project costing $10 million or more. The procedure is voluntary for projects costing less than $10 million.

The reason a dollar won't do as much for people as it once did is that people won't do as much for a dollar as they once did.

ESTIMATING SOFTWARE ANALYZED IN JUNE OF ISSUE COST ENGINEERING MAGAZINE

"Computer-Assisted Estimating—Analyzing the Options" by Lawrence C. Bacher will be featured in the June issue of Cost Engineering magazine, which also supplies a handy reference list of commercially available estimating software.

The entire issue will be dedicated to computer topics and will also feature two articles co-authored by Steven Zimmerman and Leo M. Conrad, "Programming the Critical Path Method in BASIC" and "Programming PERT in BASIC".

For more information on the June issue and other issues of Cost Engineering, contact Judith L. Walls, editor and advertising manager, or Tracy Novak, associate editor at the American Association of Cost Engineers Headquarters, 308 Monongahela Building, Morgantown, WV 26505-5468 304/296-8444.

Take comfort in simple rules that never change

Theories may come and go, and modes of management may vary, so isn't it reassuring to know that there are a few simple laws that never change?

Here they are: 1. Nothing is as easy as it appears to be. Everything takes longer than expected, and if anything can go wrong it will, and at the worst possible time; 2. Anytime things seem to be going better, something has been overlooked.

3. Nothing is impossible for the person who doesn't have to do it; 4. All employees have the right answers to all problems. These answers evaporate when people are promoted to a position of responsibility; 5. Once a job has been fouled up, any attempt to correct the situation only makes it worse; 6. It is always difficult to make things simple; 7. It is always simple to make things difficult; 8. The specialist learns more and more about less and less, and ends up knowing nothing about everything; 9. The generalist learns less and less about more and more, and ends up knowing nothing about everything; 10. Whatever happens, there is always someone who knew it would.

You will gain a new sense of security by placing your absolute trust in these laws — try it, and see.

Capsules Comments, quoted in Candy Wholesaler, Nov. 1982 Nat'l Candy Wholesalers Assn.

A teenager can do at least one thing his parents cannot and that's to answer a telephone in the middle of the first ring.
CALENDAR OF EVENTS

SAVE-NATIONAL

JULY, 1983
22-23 Executive Committee Meeting, Irving, TX

AUGUST, 1983
1 Dues not paid are considered delinquent
15 Deadline for October Interactions and Oct/Dec Value World

SEPTEMBER, 1983
15 Deadline for November Interactions
23-24 SAVE Board of Directors Meeting, Easton, MD

SAVE CHAPTER MEETINGS

As most SAVE Chapters usually take a break during the summer months, we have not received their scheduled meeting dates for the upcoming year. If you intend to be in the area, contact the local President for current information on their meeting schedule.

056 - Northern Ohio - Contact President Rafael R. Dominguez 216/329-9386
Preliminary Schedule
September 14 Joint Meeting with NCS CAD/CAM Society
October 12 Panel Discussion

067 - Dallas/Fort Worth - Contact President Mike Deming 214/266-4780
Preliminary Schedule
September 13 Gerry Ennis, Factory for the Future
October 13 Quality Circles

OTHER ITEMS OF INTEREST

Federation of Materials Societies
Sept. 6-9 International Conference on Lasers, Canton, China, sponsored by the Optical Society of China. Contact Prof. Wan Daheng, P.O. Box 8211, Shanghai, China.
Sept. 26-28 6th International Symposium on Ceramics, Bologna, Italy, Contact Secretaria del SIMCER, Centro Ceramico Via Martelli, 26-40138 Bologna, Italy.
Nov. 14-17 Annual Meeting of the Materials Research Society, Boston, MA. Contact MRS Secretariat, 110 Materials Research Lab, University Park, PA 16802.

Institute of Industrial Engineers, 25 Technology Park/Atlanta, Norcross, GA 30092 404/449-0460
August 11-13 Three day seminar "Productivity Measurement and Improvement Strategies", covers control system fundamentals, productivity process modeling and various systems of measurement, improvement and management planning to link the entire process and Techniques, Dallas, TX.
August 15-17 Three day seminar on robotics at the IIE Education Center in Technology Park/Atlanta. Designed to acquaint participants with the variety of equipment available, and how and where robots might be used most effectively, includes a full-day laboratory experience and a workshop session.

University of Wisconsin-Extension, Management Institute, 432 N. Lake Street, Madison, WI 53706 Joan Hamann 608/262-2668 or Sandy Courter 608/262-2703.
August 25-26 Two day seminar "Informal and Formal Report Writing Using the Word Processor" designed for managers of all levels, engineers and technical personnel.

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FROM THE SAVE BOOKSTORE

SUBSCRIPTIONS
VALUE ENGINEERING & MANAGEMENT DIGEST - A publication of the Tufty Communications Co. (One year subs.) International Subscribers add $15.00 for Air Mail Postage. ______ $150.00

CORRESPONDENCE COURSES
AN INTRODUCTION TO VALUE ANALYSIS & VALUE ENGINEERING 14.4 CEU's - Independent study course emphasizes the application of VA/VE to products and services, uses the text, "Techniques of Value Analysis and Engineering", 2nd Edition by Lawrence D. Miles. $182.00 Tuition and Service Charge. $34.95 Text, ______ $216.95 Total

FUNCTION ANALYSIS FOR ARCHITECTS, ENGINEERS, AND BUILDERS 10 CEU's - Independent study course designed to introduce architects, engineers and builders to the principles of Function Analysis (Value Management/Engineering) uses the text "Value Management for Construction", Macedo, Dobrow and O'Rourke, 1978. $182.00 Tuition and Service Charge, $39.50 Text, ______ $221.50 Total

VIDEOTAPE RENTALS
"COST IMPROVEMENT'S CONTRIBUTION TO FINANCIAL FLEXIBILITY" by Andre R. Horn, Chairman of the Board, Joy Manufacturing Company (Tape #3) (NEW - RELEASED MAY, 1983)
"VALUE ENGINEERING AT JOY MANUFACTURING COMPANY" by Jim Wilcock, former Chairman of the Board, Joy Manufacturing Company (Tape #1)
"VALUE ENGINEERING FOR MANAGEMENT" by George J. Rabstejnek, President, Harbridge House, Inc. (Tape #2)

All three videotapes are available for two weeks rental. Please request Letter Agreement for Tape #1, #2 or #3. The Letter Agreement, signed by your President of Vice President, must be returned to the Business Office with your check for $50.00 (per videotape) before the videotape can be shipped to you for your meeting.

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