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On the coast—Ensanada, Mexico. Fishermen, harvesting the one large fish from the day's catch, while sea gulls look on approvingly. Life seems so simple here, yet—is it not a good one?
VALUE WORLD

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Magazine for
AMERICAN SOCIETY FOR PERFORMANCE IMPROVEMENT
790 Broad Street, Newark, NJ 07102

and
NATIONAL ASSOCIATION OF SUGGESTION SYSTEMS
435 North Michigan Ave., Chicago, IL 60611

and
SOCIETY OF AMERICAN VALUE ENGINEERS
29551 Greenfield Road Suite 210
Southfield, MI 48076

TECHNICAL ARTICLES

GETTING IT ALL TOGETHER:
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By
Harry Coffin

VE APPLIED TO IDEA PROGRAMS
By
Thomas Gilmore

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EDITORIAL POLICY: Provide readership with informative, interesting and timely communication relative to Value Analysis, Value Engineering, Idea Programs, Productivity, Motivation, Creativity and Performance Improvement; VALUE WORLD will act as a vehicle enabling the readership to express themselves professionally in advancing the state of the art. VALUE WORLD is dedicated toward establishing a mutual bond among those seeking to better the quality of working life and to establish a communication network through which participating technical society members can interact for mutual benefit.

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Contact:

SAVE
Society of American Value Engrs.
29551 Greenfield Road
Suite 210
Southfield, MI 48076

NASS
National Assoc. of Suggestion Systems
435 N. Michigan Ave.
Chicago, IL 60611

ASPI
American Society for Performance Improvement
790 Broad Street
Newark, NJ 07102

INTERNATIONALE—
Axel Peter Reid is a familiar face at American Technical Conferences. He is typical of our International friends who have provided great contributions in advancing the state of the art.
At Honeywell, the scenario in which Value Engineering functions is primarily a product related environment. We recognize, as do many other companies, that there are significant savings to be reaped in many non-hardware areas. A VE study on the Employee Suggestion System was one of our first ventures into a non-hardware area. The study resulted in a projected annual savings of $46,000 against an annual Suggestion System cost of $218,000.

All but one of the VE team’s (15) recommendations were implemented. The revised system has been monitored closely during 1975, and indications are that the actual savings may exceed the projected savings.

This paper is an attempt to document the study and the study results. It takes the reader step-by-step through the pre-study planning, the various techniques and approaches used during the study, and the ultimate results. Before proceeding with the description of this value study, it is important that several aspects and “key words” associated with the Honeywell Employee suggestion System by identified:

ECR/SUGGESTION—An ECR, Error Cause Removal, is the vehicle by which an employee can submit constructive ideas which will result in a savings or improvement to the company.

A high percentage (85% of all ECR’s originate in
the factory and are normally evaluated by Production or Quality Engineering personnel.

**TANGIBLE AWARD**—If the results of implementing an acceptable idea can be measured in terms of a gross savings, the suggestor receives a tangible award (up to a maximum of $1,000) equal to one-sixth (1/6) of the first year's gross savings.

**INTANGIBLE AWARD**—If the results of implementing an acceptable idea cannot be measured in terms of a gross savings, the ECR form provided a matrix of factors and a scaled point system to calculate an award ranging from $6 to $44.

**ECR SUBCOMMITTEES**—After evaluation, all ECR's go through an Industrial Engineering Subcommittee established to (1) reduce the overall costs of administering the ECR program, (2) streamline the ECR processing, and (3) reduce the backlog of ECR's in the system.

It was decided that the basic Value Engineering Job Plan would be used, augmented by elements of (F. Fifield's) Administrative Value Analysis, Work Simplification Charting, and FAST Diagramming.

Individuals who have positive attitudes, who can work smoothly together, and who have the proper backgrounds and disciplines are necessary ingredients for a successful Value Engineering Task Study. The Value Engineering team was structured as follows:

- VE Team Leader
- ECR System Manager
- Production Engineering Supervisor
- Production Operating Foreman
- Quality Engineering Supervisor
- Quality/Inspection Foreman
- Industrial Engineer/Member Board of Judges

A Value Engineering study should normally be conducted within a specified time frame and in an environment where the team members can concentrate 100% on the task at hand. This study was scheduled for half days over a two week period, to be followed by a written and oral report to the Board of Judges, and culminating in a presentation of recommendations to the Directors of Production and Quality.

**THE STUDY**

The first day began with mind-tuning, that is, all the team members were tuned in as to exactly what the study objectives were and what the groundrules were. The information phase began with a presentation from the ECR System Manager in which he traced through the paper flow from start to finish and discussed system policy and procedures.

The information phase continued into the second day with the objective for that day being to generate verification and into an ECR Subcommittee for review and award evaluation.

**ECR BOARD OF JUDGES**—In addition to having the responsibility for policy matters, the Board of Judges reviews all subcommittee recommendations for awards over $100 and resolves any and all disputes.

Prior to this study, the ECR/Suggestion System Manager and the Value Engineer met to discuss preliminary aspects of the study. Objectives were

<table>
<thead>
<tr>
<th>Quantity</th>
<th>%</th>
<th>Savings</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1050</td>
<td>25%</td>
<td>$542,000</td>
<td>75%</td>
</tr>
<tr>
<td>3175</td>
<td>75%</td>
<td>$159,000</td>
<td>25%</td>
</tr>
</tbody>
</table>

**FIGURE 1**—ECR Trend Data

<table>
<thead>
<tr>
<th>Approx. Percent of Total</th>
<th>1972</th>
<th>1973</th>
<th>1974</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rejected</td>
<td>52%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ineligible—No Cash</td>
<td>8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Documentation (Ave. $5)</td>
<td>11%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety (Ave. $10)</td>
<td>6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intangible</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$10</td>
<td>5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$11-$15</td>
<td>3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over $15</td>
<td>4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tangible</td>
<td>10%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FIGURE 2**—ECR Rejections V.S. ECR Acceptances, By Type

<table>
<thead>
<tr>
<th>Quantity</th>
<th>%</th>
<th>Savings</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1050</td>
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<td>75%</td>
</tr>
<tr>
<td>3175</td>
<td>75%</td>
<td>$159,000</td>
<td>25%</td>
</tr>
</tbody>
</table>

**FIGURE 3**—Tangible Award V.S. Intangible Award
a "list of shortcomings and operational problems of the system." The AVA approach proved extremely valuable and was useful in focussing on potential areas for development and improvement later in the study. Perhaps most important, it can create a spontaneity within a team, result in a well informed team, and indicate areas in need of information gathering. In addition, it provides the VE team leader with some invaluable indicators: If the problem list is overly externalized and superficial, the team probably needs reorientation to the task; whereas, if the problems listed are very few or not pertinent, some candor is probably lacking.

The problem listing session identified a large number of areas for potential improvement. Most important, it brought the team to the realization that the system fostered some basic conflicts between those submitting ECR's and those evaluating the ECR's.

The third day the team was led into defining ECR System functions. With FAST Diagramming in mind, (but intentionally not yet presented at this point) the VE team leader led the team through the generation of a function list. In developing the function list, the team was instructed to define functions based on what the system was actually doing, not what we would like to do.

At the next step, the team was asked to select the basic function or the basic purpose for existence of the ECR system. The team narrowed their choices down to three functions, (improve company, promote communication, motivate people), but could not decide which one was the basic purpose for the existence of the ECR system. The discussion became somewhat heated and the team members were obviously perplexed, in that they could not agree on the basic function. At this point, the basics of FAST Diagramming were introduced. The "How" and "Why" questioning approach quickly developed the relationships between all the functions. Why did the Value Engineer intentionally let a conflict situation develop within the team? And, was it dangerous? the team realized that their normal mode of reasoning was not helping them gain agreement on the basic purpose of the system. When the disciplined approach of FAST was applied and quickly put the functions in their proper perspective, the team saw and accepted and was anxious to apply the techniques of a disciplined approach. And yes, it could have been dangerous to intentionally create a conflict situation, depending on the nature of the team members, but in this case, knowing the personalities of the team members, it was judged safe.

With the FAST Diagramming of the ECR System completed, the fourth day of the study began the task of function—costing. In order to be certain that all the activities were identified and costed, work Simplification techniques were used to chart the ECR System activities. Time elements were assigned to all the activities on a Work Simplification Chart. As a result, the team determined the average processing time for an ECR to be three (3) hours.

The fifth day the team allocated the cost of the activities against the functions which they supported. These costs were placed directly on the FAST Diagram, thus enabling the team to identify the high cost functions and determine the relative worth of the functions.

The sixth day the team began the speculation phase, and continued with it into the seventh day. The speculation phase was broken down into two distinct areas:

1) Generating alternative means of performing the functions identified on the FAST Diagram, and

2) Generating solutions to problems previously defined in the "list of shortcomings and operational problems of the system."

It is interesting to note that many of the solutions to the system problems were functions which were never previously identified or performed. The FAST technique was applied at this point and additional functions, which the team felt would enhance system operation, were added to the FAST Diagram.

An example of speculation on one functional area, 3 items, which the team felt was excessively high in cost (40%) was:

- Evaluate ideas $65,000
- Motivate evaluator $2,000
- Conduct evaluation review $22,000

Earlier data, Figures 2 and 3 reveal that approximately 75% of the accepted ECR's were "intangible" awards and resulted in only 25% of the total savings. (note the inverse relationship). In addition, the average "intangible" award was $15. The teams speculative ideas revealed that the intangible awards could be standarized at $15 in lieu of being variable and consequently an Industrial Engineering Review and Subcommittee Review could be eliminated for .75% of the ECR's.

An example of a problem area which the team felt must be resolved was that the evaluators of ECR's were not properly motivated. In fact, two aspects of the system actually had a demotivating effect on the evaluators:

1) The delinquency reporting system, being computerized and having monthly inputs and outputs, often reported inaccurate status of ECR's. This often resulted in an evaluator having to go through some unnecessary work in explaining and justifying the fact that he no longer had the ECR he was charged with.

2) Evaluators often felt that they were deluged with "menial" ECR's which in fact could have been evaluated by the subcommitoor's foreman. Here we see a dilemma develop: Some
To generate possible solutions to these problems, the team applied the FAST technique, in conjunction with speculation, and questioned, "How can we positively motivate the evaluator?" As a result, additional functions shown in broken lines, Figure 4, were added to the FAST Chart.

The team felt that formal education and training sessions, in conjunction with a standardized $15 intangible award, would increase the number of ECR's being evaluated at the Foreman level.

The eighth day, the team entered into the evaluation and execution phases. The speculative ideas were screened and the best ideas were selected.

Next, the team developed a revised Work Simplification Chart which embodied the team's recommended changes to the ECR system activities. The new chart proved valuable, in that the team was assured that all activities were identified, which, in turn made the job of costing out the revised system much easier.

A revised FAST Diagram was structured next. Armed, now, with "before" and "after" FAST Diagrams and Work Simplification Flow Charts, the team informally surveyed six departments who were the major contributors to the ECR Program. The teams proposed changes were discussed with submitters, their foremen, Engineers, and subcommittee members. Minor changes resulting from the survey were incorporated into the teams recommendations. The final job of developing comparative “before” and “after” costs completed the execution phase.

The reporting phase included a written report and an oral presentation to the ECR/Suggestion System Board of Judges. Next, the study results along with the Board of Judges recommendations for implementation were presented to the Director of Production and the Director of Quality. All of the team’s (15) recommendations except one have been implemented to date. The major study results are summarized. Minor recommendations on training, forms and system ground rule changes are not shown.

SUMMARY

The Directors of Production and Quality directed the incorporation of (14) out of (15) of the VE team's recommendations. The necessary changes were made to forms and procedures. Training sessions were conducted in accordance with the team's recommendations. After monitoring the new system for nearly one year, indications are that the annual projected savings of $46,000 will be exceeded.
# Figure 5

## Summary of Recommendations and Savings

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Savings Element—Processing</th>
<th>Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Eliminate Intangible award matrix and standardize Intangible Safety and Documentation Awards at $15, $10 and $5 respectively.</td>
<td>10 Min/ECR</td>
</tr>
<tr>
<td>2</td>
<td>If Intangible, Safety and Documentation Awards are standardized, there is no need for an I.E. evaluation of the savings calculation.</td>
<td>15 Min/ECR</td>
</tr>
<tr>
<td>3</td>
<td>Eliminate subcommittee action on all ECR's except tangible awards and disputed evaluations.</td>
<td>10 Min/ECR</td>
</tr>
</tbody>
</table>

**Total:** 35 Min/ECR

**Annual Savings Processing:** $24,000

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<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Savings Element—Administrative</th>
<th>Annual Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Eliminate MBO ECR Submittal Goal for Exempt Engineering. Approximately 800 ineligible ECR's were submitted in 1974. Estimate that 50% or 400 were also documented as cost reductions. A savings will be realized by eliminating those ECR's which are redundant with cost reductions.</td>
<td>400 ECR's @ 1 hour each = 400 Hours</td>
</tr>
<tr>
<td>5</td>
<td>Eliminate one factory subcommittee and restructure other subcommittees to reflect a better cross-section. Elimination of one factory subcommittee and addition of P.E. representation on Tool Room/Maint. Subcommittee. Less meeting time required due to elimination of Subcommittee action on Intangible ECR's.</td>
<td>Present: 24 People x 24 Meetings x 2 Hr./Mtg. = 1152 Hrs. Proposed: 19 People x 24 Mtgs. x 1.5 Hr./Mtg. = 423 Hrs.</td>
</tr>
<tr>
<td>6</td>
<td>Establish requirement for initial phone contact between originating supervisor and selected investigating department. If the originating Supervisor would contact the department prior to sending the ECR: 1) Improper routing would be eliminated. 2) The originating Supervisor may be prompted into evaluating the ECR, rather than forwarding it for someone else to answer, thus eliminating unnecessary review costs &amp; delays. (5 Min. review, 2 Min. routing)</td>
<td>Est: 1600 ECR's x .116 Hr./ECR = 185 Hrs.</td>
</tr>
<tr>
<td>7</td>
<td>When tangible ECR's have been evaluated and forwarded to the Subcommittee the monthly tab run (#800 Report) should immediately be updated to change investigator responsibility. Current reporting will eliminate some of the monthly searching and memo-writing which presently exists only to justify delinquencies.</td>
<td>Est.: 40 Dept's. Spend 1 Hr./Mo. Tracking &amp; Justifying Delinquencies. 40 Dept's x 12 Hr/Yr = 480 Hrs.</td>
</tr>
<tr>
<td>8</td>
<td>Restrict the distribution of the &quot;600&quot; Tab Run. It is not used in all areas. By restricting the distribution of the &quot;600&quot; Tab Run (Originating Department List) there will be a savings in distribution cost and copy cost.</td>
<td>50 Hrs./Yr. For bursting and distribution plus material and copying cost.</td>
</tr>
</tbody>
</table>

**Processing & Administration Savings**

**Less Study Costs and Implementation Costs**

**Net Savings**

| Total | $50,000 | $4,000 | $46,000 |
INTRODUCTION

It is paradoxical that the differences or similarities between Value Analysis and Work Simplification Programs do not appear to be clear in the minds of many Managers of Improvement Programs. These two types of improvement programs can effectively co-exist within an organization but this requires a proper perspective of its mutual purpose, goals and necessary management techniques. This has proved to be true in a number of companies in recent years.

The achievements of improvement in an organization have never been or may never be the result of a similar management technique. The very essence of management success rests with effective co-existence and harmonious blending of many types of functional disciplines within the organization. New techniques such as Zero Base Budgeting, for example, qualify for the functional analysis method practiced in Value Analysis. This is significant and noteworthy. It should remind us of the commonness of semantically different labelled Programs.
DEFINITION AND PURPOSE

All improvement programs should have one common element. That element is the progression of individuals and groups of individuals to become self-motivated achievers. Self-motivation includes group dynamics in addition to individual initiative. All other factors play a secondary role in improvement since it has been unequivocally proved throughout the history of mankind that improvement takes place only through positive motivation or desperate necessity. The latter reason does not qualify for business organizations' long-term effectiveness. Technical expertise also does not ensure progressive improvement in an organization. Any doubts regarding this statement can be dispelled rather quickly through a survey of personnel within an organization. Brainpower is abundant but it is stifled quite often in an unconducive atmosphere. Why, for example, can engineer think of himself as merely a "hired hand"? This is not uncommon as one may think. We have often witnessed productive ideas emanating from non-professional persons at a faster rate than professional personnel simply because they are encouraged to achieve and are given the opportunity to do so without inhibitions or unnecessary interferences.

WORK SIMPLIFICATION

This leads to the degree of difference (or similarity) between Value Analysis and Work Simplification. Work Simplification is often used as a generic term to indicate general improvement in office or factory operations. Work Simplification, used as an improvement program has been practiced and used by Allen Mogensen, however, in an expanded context. Mogensen and his followers refer to it as a philosophy. He defines Work Simplification as the organized application of common sense to a method of drawing on the know-how of all to find and apply improvements in all areas of endeavor. The uninhibited nature of Work Simplification which have trouble with this simplistic definition. The key to success in applying Work Simplification, however, is simplicity by and of itself. As in any worthwhile improvement program it has two aspects within the Program which are indisputable. These are problem solving techniques and application of good human relations. In both instances the Work Simplification Program employs fundamental and easy to understand principles. On an intellectual level, perhaps, a broader spectrum of people can become involved in Work Simplification than in Value Analysis. In reality, this becomes the major difference in people capability among the two improvement systems.

Value Analysis certainly is structured into a similar pattern. Problem solving and human relations are also the basic ingredients of Value Analysis. Carlos Fallon states it quite simply as being organized common sense. He also notes that the father of Value Analysis, Larry Miles, has degrees in education and engineering.
**WORK DISTRIBUTION CHART**
This shows the distribution of work. It is a useful technique of finding what work is being done, how much time is spent on it, and who is doing it. It helps to determine each person’s contribution to the work of the organization. The work distribution chart is developed from the TASK LIST and the ACTIVITY LIST. This is particularly useful in clerical and non-productive areas.

**FLOW DIAGRAM CHART**
This diagram shows the physical arrangement of work areas. On it is plotted the flow of material, paper, or personnel. It is useful in analyzing problems of space utilization and travel of people or material from one spot to another.

**FLOW PROCESS CHART**
This is the most universal tool of improvement. It is used to break an activity down, detail by detail, in the order in which it happens. The flow process chart is both a detailed record listing the sequence of a job, and a device for visualizing the method of improving it.

**RIGHT AND LEFT HAND CHART**
This chart is applicable when the details of the motion of a person’s hands are involved. It can be used when a more precise description of a single detail or a few details of the flow process chart is needed for analysis. When completed, it represents a graphic representation of the coordinated activities of both hands. It is used to study repetitive type activities.

**MULTIPLE ACTIVITY CHART**
This chart is used when an activity involves both men and machines or when a group of people is being used to do a job. The multiple activity chart emphasizes time of occurrence, which in some instances is very important. Idle time and delay time of humans or machines can be readily ascertained from this chart.
TOOLS OF PAPERWORK SIMPLIFICATION

SEQUENTIAL FLOW CHART
This is sometimes called a Systems or Procedure Flow Chart. It is used for picturing of the flow of paperwork in a system. It is applicable when every document is to be depicted, graphically, in such a way as to show the step-by-step handling of each document and the relationship between all documents in the system. The flow is charted Horizontally.

FUNCTIONAL FLOW CHART
The functional flow chart is also used to show the flow of paperwork. Since it separates the activities by departments, it is especially useful when several departments are involved. It shows the relationship between all documents as well as the relationship between the functions of departments. The flow is charted Vertically.

PAPERWORK SIMPLIFICATION CHECKLIST
This is used as an aid to analyze the VALUE of a document, a report, or any paper form used in the organization. It is of assistance in finding improvements involving the design of a form. It may also serve to streamline the whole procedure involving the document.

FIGURE 2

His training encompasses the social as well as the physical sciences, hence his early efforts at emulsifying the oil and water of these two arbitrarily separated fields. "Nothing succeeds like success" is appropriate in view of the development of the Value Analysis and Value Engineering progress from industrial corporations into hospital administration, federal, state and local governments and the construction industry. The test of greatness of most things is endurance through time and Value Analysis has successfully fulfilled that criteria.

How, then, is value Analysis so different from from other improvement programs? It is difficult to rationalize that V.A. expertise can be learned by a broad spectrum of personnel within an organization. Our experience indicates that it is not for everybody. Function analysis appears to be simple in principle, but in the hierarchy of mental processes, it must rank in the higher order of rationalization. Most Value Analysis Managers are resigned to the fact that many V.A. participants are reluctant to follow the systematic and organized approach necessary to the V.A. discipline. Those persons who do not use verb-noun functional analyses, for example, will not be able to extend the problem study. A FAST diagram cannot be properly concluded without fulfilling the necessary preliminary first steps. Figure 3 is a FAST diagram of charting Ground Rules in Value Analysis. (courtesy of Value Analysis Incorporated).
Defining the scope of a V.A. problem is relatively easy under most circumstances. Confining the analysis within the scope of the study, however, becomes unusually difficult for a large segment of problem solvers. This suggests then that the exceptionally disciplined mind is vital for V.A. study techniques. This does not preclude that persons with limited intelligence factors will not succeed in V.A. work. There will be exceptions but it is not likely to be the rule. Thus, the conclusion is that Value Analysis will attain analytical technical success more often with professionally trained personnel. This leads us to the oft repeated statement that if the Value Analysis analytical study approach is not used the project, in essence, becomes a cost reduction effort. This is partially true and it becomes the epitome of Value Analysis and Work Simplification differences. Both types of programs employ systematic and organized directional paths to solve problems but at a different level of technical complexity.

CONCLUSIONS

Work Simplification and Value Analysis have the same purpose. This purpose is to make continuous improvements in the organization concurrently while motivating people. Both types of programs achieve results in cost savings while improvements in personnel relations are not directly measurable in dollar terms. Value Analysis should be practiced by professionally oriented persons in the organization while Work Simplification can reach down to the ranks of both professional and non-professional personnel.

These programs complement each other effectively provided:

1. Management attains a clear conception of understanding of the two techniques.

2. Personnel are selected for the programs at their sufficiency skill levels.

3. Coordination of the programs are controlled and administered in a cooperative attitude by each Manager of his respective program.

4. Proper level of training is performed in a professional manner.

I have limited mention of top management involvement. Nearly all improvements or motivational programs will eventually falter or drop dead from exhaustion unless the chief executive stands behind it. Mr. James W. Wilcock explains this phenomenon in lucid terms in his talk before the 15th Annual Conference of SAVE in Baltimore, Maryland. The transcript is reproduced in PERFORMANCE (July-August 1975). After reading Mr. Wilcock’s transcript it should be apparent that two conclusions are logical. The first conclusion is that with chief officer involvement and professional administrators, a program will go successfully. The second conclusion is that unless you have top management involvement don’t start a program. A phrase “The only thing worse than a quitter is the person who is afraid to begin” does not apply here. Wisdom works in both directions.

MOTIVATIONAL THEORY

I have observed with a great deal of interest, groups of Value Analysis learners delving into the more difficult psychological theories. Maslows “Hierarchy of Needs” and Herzberg’s “Motivator-Maintenance Theory”, for example, creates a spark of interest. The interest and memory retention of these types of theories appear to be short-lived, though, merely because they are general theory for the masses. An individual charged by his employer to effect improvements requires universal and specific guidelines to live by in his work world. He needs the human common denominators that most people understand and respond to even though it may be to variable degrees of responsiveness. The fostering of creativity and innovativeness are directly blended into the interweaving factors of motivational understanding and problem solving skills. In other words, a person who treats others as he would like to be treated and who has a good command of the Value Analysis analytical tools will do a good job in improvement.

This pre-supposes, of course that the program is formally sanctioned and involvement in the program is forthcoming from upper management. I disagree that the Value Analyst must spend a great amount of time in “evangelistic selling”, of the program. What a waste of repetitive effort! It is management’s job to sanction and motivate the continuation of the program. This does not imply a negation of the need for enthusiastic endorsement by V.A. participants. That enthusiasm will be derived from pride of self and the organization’s improvement progress.
WANT FEEDBACK?

by Nancy Petrich

Nancy Petrich is the Secretary of the Value Assurance Department of Honeywell, Defense Systems Division in Minneapolis. Nancy started her career as a secretary in 1972 and is currently working toward a BA in Journalism through the University of Minnesota. She served as Registrations assistant and Conference Committee Secretary for the 1976 S.A.V.E. International Conference, and was elected Director of Communications for the 1977-78 Twin Cities Chapter year.

In the past two years, I've become familiar with something which I had never heard of before — Value Engineering. I'm not a practicing professional in the field, not a CVS or a value manager, not even an engineer. I'm a secretary in the Value Engineering Department of Honeywell. I doubt very much if, by writing a paper, I could contribute anything to the technology, as other VE papers do, but I can give you my impressions of Value Engineering as an outsider. Have you ever wondered what your secretary thinks of your work?

First, I should give some background as to how I got into this Value Engineering thing. I used to work in the Production Control Department of another large company. Unfortunately for them, Value Engineering was something that didn't exist within their business plan, and they had a great many financial problems to prove it. Whenever they found themselves in a bind, the first reaction was to cut some costs out of the manpower budget in one way
or another, as if that were the only flexible cost in the operation. During the years I worked there, I witnessed many cuts in pay for the employees, and so many lay-offs that it's almost comical now, as I think back. We secretaries were responsible for putting together little going away celebrations when people from our group were terminated, either voluntarily or otherwise. I am not exaggerating when I say that there was a period of four or five months when I was arranging a good-bye party at least once every other week! Needless to say, that kind of work has a very upsetting effect on one's nerves.

I kept working my hardest, fastest and best I could so that I wouldn't be declared excess, until one very bad weekend when I finally got smart. I had, by that time, absorbed five other people's jobs besides my own. That was taking a bit of extra time to keep up with. All overtime was forbidden, of course, so I was keeping it up by working late without pay and by taking work home. That wasn't going over too well with my family.

One Friday afternoon at 3:00 I was informed that our girl who submitted all of our department and the Purchasing Department's paperwork to Keypunch was going to the hospital the following Monday, she would be gone for a week, and I was expected to hold down her job while she was gone. I never done anything like her job and didn't have the first idea of what to do. I had an hour and a half to learn, having received the assignment at 3:00 with a quitting time of 4:30. So, I joined her in her office. It didn't take me long to see that this was going to be more than a 1½ hour project. There were complicated keypunch codes to learn, keypunch rules and regulations that varied with each kind of submittal, and last, but not least, I had to learn to keypunch. My trainer agreed that it would take Wonderwoman more than 1½ hours to absorb all the details well enough so as not to mess up all the computer printouts, which were the result of her efforts.

So, both of us being the conscientious type, we agreed to meet at work on Saturday for some proper training. This, of course, had to be done without claiming overtime. We worked that Saturday, and I learned enough of her work to squeek by the next week, and all was well. Until Monday. Someone had seen us working Saturday and had, evidently, spoken to our boss about it. So, in turn, he gave me a tongue-lashing. I explained to him that I wasn't going to record it on my time card, so the budget wouldn't be affected, and that I couldn't possible have learned all that in the 1½ hours allowed. Then he really blew up, because to work overtime without getting paid for it was illegal and I could have gotten the company in big trouble! I left that meeting feeling utterly helpless. I was in trouble if I didn't do my job — but I was in trouble if I did, too! I felt very low the rest of the day, but after I got home and really thought about it, the — sorry for myself — turned to anger.

When I got to work the next morning, the first thing I did was load my typewriter with an interoffice memo form and fill it with notice of my resignation.

After a couple of months unemployed, I realized that no amount of value engineering could replace my old income, so I set out to find another job. I found one at Honeywell in their Value Engineering Department.

As I started my new job, I had a good understanding of my functions — typing, dictation, phone handling, filing, etc. But, what was Value Engineering? My boss made several attempts to explain it to me, but there were so many facets to pick up in mere explanations. As I did my day to day work, I began to notice what it was — all around me.

Want Feedback? Ask your Secretary.

My first hint that this company was doing something different and better was when the girl I was replacing told me she had worked for the same boss for five years, and the only reason she was leaving was because she was about to become a mother. At my previous job, I'd never had the same boss longer than six months. They didn't keep bosses, either. Then I began to wonder why we had such an adequate budget for supplies, etc. I had a typewriter that worked; (the one I left behind had two crooked keys that typed higher than the rest,
but the budget didn't allow for calling a repairman, much less a new machine.) And, I didn't have to turn in empty typewriter ribbon spools or dry ink pens in order to get new ones. I just assumed that this company must have better management. It does, but that's just a part of the difference.

Shortly after I started working for Honeywell, our department had scheduled one of the VE seminars which they conduct two or three times a year. My boss asked me to sit in on the 40-hour seminar and workshop, and through this experience I finally began to realize what VE was all about. The seminar included two live project task studies. On the final day, when I heard the oral study reports presented, I was amazed and impressed with the $1,673,985 that the two teams of ordinary people were able to eliminate from the costs of the products with their proposals. I started to pay more attention to the copies we received in the mail and the papers I had to log and file. The people writing all these forms, better known as VECP's, were saving unbelievable amounts of money in their product lines, just by documenting their ideas. I remembered how my fellow workers at the old job used to come up with some good ideas for saving money, too, but unless they ranked in upper management, nobody wanted to hear their ideas. At Honeywell, there were all these VECP's coming across my desk. They weren't ideas from any special group of elite people, but from regular engineers, technicians, etc. On a smaller scale, there were the ECR's. These are the company's Employee Suggestion Forms covering most any facet of the business, not just product lines. I noticed that they had the blank forms posted in halls throughout the building, and that many of my friends were writing them — secretaries even! The next thing I knew I was writing one. I still didn't take them too seriously, until a few weeks later when my supervisor called me into his office and presented me with a $15 check for my approved ECR. Now, extra cash is a more serious matter! Somebody actually listened to my idea!

By now I was inspired! The company's Value Engineering and cost reduction program had to be the answer to why Honeywell could keep people and supply them with decent working tools and my old company couldn't!

I guess I had more exposure to Value Engineering than some girls in the same type of job, because one of the engineers I worked with was President of our local SAVE Chapter, and my boss and another engineer Chapter Board Members, and I had the honor, too, of working for the General Chairman of the 1976 SAVE Conference. Obviously, I did a lot of SAVE work and met many local and national SAVE people by phone. I soon got curious about SAVE. Curious enough to attend one of the Chapter meetings.

That first meeting, the speaker was a futurist, Mr. Earl Joseph of Univac. He is a scientist whose work is to try to foresee and plan futures. He lectured on some fascinating possibilities and probabilities for the future, and how we can form our own destinies using techniques such as ours. I realized that my guys didn't just go out and party when they went to SAVE meetings. They really learned some interesting things. From that meeting on, I continued to attend seminars such as the University of Wisconsin. I soon joined the Chapter.

The Conference was fast approaching, and I was very busy helping the Conference Committee prepare. When the time finally arrived, I was happily included, working with the registration chairman, and helping out with arrangements wherever I was needed. I didn't have the time to attend many sessions or gain much more knowledge, but I met some of the wonderful people I had come to know by name and telephone voice only. Among them was our current President of SAVE, Jimmie L. Carter; our founder, Larry Miles, and Jerry Kaufman, SAVE Past President. In talking with Jerry one day at the conference, he challenged me to write a paper for SAVE. I've spent the past six months thinking he was kidding. But, if Honeywell is interested in my ideas, maybe some SAVE members would be interested in a secretary's impressions of VE.

To sum it up, my impression is that VE is a most logical, common sense and necessary element in business management, and I'm quite amazed that it's as new as it is. It's complicated, yet basic business sense. I very much believe in what I'm doing and I have real inspiration in my job because I feel that my work is important to the good of the company. Whenever I get that tired of working feeling, I just have to think back to my old job where Value Engineering and cost reduction wasn't practiced, and compare it to my present job where I'm part of the group practicing it, and I'm proud to be where I am. We've saving the company money where it should be saved — by making the product more cost effective. And we're saving, I'm sure, much more than my former employer did by cutting salaries and scrimping on supplies. That all leads to a company that can afford to have sufficient manpower to get the job done, and that manpower can be secure with the knowledge that they will have proper tools to do the job, without fear of whether they'll be there tomorrow to finish it.
HOW DO YOU COMMUNICATE?

Everyone advocates better communications — with our children — with our boss — with our peers. We in VE need to procure and impart information. We need to get our ideas accepted. For the most part the information we exchange is recorded. It is the written proposal that finally is accepted — not our oral presentation of it.

A study of business communication showed that 30% of it was to clarify previous communication. Engineers are no better or worse than businessmen in this respect.

The goal of our writing should be clarity. Our writing should be understood on first reading.
should not require study in detail. There are many things we can do to improve the clarity of our writing. I would like to discuss only one.

Some time ago a test was made using college English majors. An article consisting of 271 words (5 sentences, average word/sentence, 54) was given to a group of students who were asked to answer some questions after one reading. This is the article:

American London Shrinkers Corp. has spent a year and a half experimenting and compiling data on the shrinking and finishing of manmade fibers used in combination with woolen and worsted yarns and is now equipped to handle all types of blends, it is made known by Theodore Trilling, president.

The trend toward blends in suiting and coating woolens and worsteds brought with it the need for a variety of alterations in the shrinking and sponging operation, Mr. Trilling adds, pointing out, for example that the Orlon content in a fabric turned yellow, the rayon and acetate content tended to moire and the 15 to 20 per cent of nylon now often used to give added strength tended to shine.

No new machinery is involved, just alterations in the processing, such as a change in the action or the weight of the apron of the leader, but it took a lot of trial and error observations, testing to make sure that further shrinkage would not take place, and tabulation of the data before the “we are now in a position” statement could be made, it was added.

Special reports of the tests and their results have been passed along to the mills and selling agents of these blends, and in some cases they have served as a guide in the correction and improvement of these fabrics, Mr. Trilling states.

He adds that his firm has been offering its 100 per cent woolen and worsted finishing and shrinking service to the industry for the past 55 years and that with the alterations to handle blends now completed, an important step has been made.

Only 9% of the students correctly answered the question of what the article was about.

A shorter version (265 words, 21 sentences, average word/sentence 12+) was given to another group.

American London Shrinkers Corp. has come to the end of an 18 month search.

One year and a half ago that firm set out to find a safe way to shrink, sponge and handle blended materials without damage. Much experimentation was required. Many volumes of data were gathered. The trial and error method was given a thorough test.

And now — success.

Theodore Trilling, president of American London Shrinkers, has announced that the problem has been solved.

Exactly what was the problem?

The trend toward blends in suiting and coating woolens and worsteds created the necessity for developing some alterations in shrinking and sponging operation.

Mr. Trilling mentioned the “change color” problem. He pointed out that the Orlon content tended to moire. The 15 to 20 per cent of nylon, used to give strength, tended to shine. These “color changes” do not occur in the new process.

No new machinery is needed, Mr. Trilling said. He made clear that only alterations in the processing are necessary. He referred to alterations such as a change in action, the weight of the apron or the leader.

The firm’s president emphasized that many tests were required to make sure no further shrinking would occur.

Reports of the tests and results have been passed on to the mills and selling agents of these blends, Mr. Trilling said. In some cases the new information has served as a guide in the correction and improvement of fabrics, he added.

This is an important step in the industry, according to Mr. Trilling.

The same paragraphs were tested on workers and on executives. Other material was prepared and tested and in every case the version with more sentences and less words/sentence produced greater comprehension. However the key is that it is not the length of the sentence, nor even (within limits) the words/sentence that produced the change.

What increased the comprehension is that in each test the second version had in almost every case, only one idea to a sentence.

To improve clarity then one of our tools should be to seek only one idea/sentence. We can not always maintain this ratio but it should be our goal.

What is to be gained? Our reader will understand the first time he reads it. It will not rest in his “to be studied later when I have more time” box. The reader’s understanding may make him more favorably disposed to our idea.
PART II  SELLING THE IDEAS

Experts on presenting ideas agree that seven conditions must be met to get agreement from thinking people. The idea should:

1. Fill a need
2. Correct a cause
3. Be based on knowledge
4. Offer best solution
5. Be practical
6. Be beneficial
7. Be saleable

Unfortunately new ideas, no matter how good, often create resistance. To make sure that your ideas fill a need you should analyze the need and potential for cost reduction.

You must treat the CAUSE not the EFFECT if you are to reach the "right" solution to a problem.

Before people will agree with you they must have some confidence that you know your subject... that you are dealing with a problem that is definitely within your job knowledge and experience. In other words, you must know and understand the facts.

YOUR IDEA MUST BE SOLD TO:
YOUR SUPERVISOR
YOUR ASSOCIATES
YOUR EMPLOYEES

Why do you want to "sell" your supervisor?

• Authority is sometimes required.

• Help from Boss — if he is sold may help:
  —Sell others.
  —Obtain cooperation from other departments

• Get recognition for the idea.
  Why should you try to sell your idea to associate supervisors (in both line and staff)?
  • Helpful to have their OK and support, particularly when the idea affects them.
  • Test idea for selling to others.
  • Sharpen sales presentation.
  • Prior approval, in itself, is a strong sales talk.
  Why is it necessary to sell your ideas to the operators?
  • Probably won't work if operator isn't sold.
  • Training is easier if operator believes in it.
  • Production and quality will stay up during changeover.

To sell your idea you must make a presentation, either in writing or orally. In either event this presentation should cover five essential points:

1. Get attention
2. Explain
3. Listen
4. Compare
5. Request

The 1st STEP in presenting an idea is to GET ATTENTION.

• Set up a date and time to discuss.
• Ease into subject — don’t explode.
• Briefly state problem so he can catch up with you.
• Briefly list benefits of interest to him.
• Make proposal sound easy to apply.

The 2ND STEP in presenting an idea is to EXPLAIN your idea.
• People will agree only if they understand the whole idea.
• An idea rarely sells itself — it usually needs help from you.

When people show signs of disagreement, you must learn to LISTEN — This is the 3RD STEP.
• Listen for meaning and feeling.
• Sort out bias, propaganda, and opinions from facts.
• Analyze arguments — look for the big idea.
• Evaluate arguments — arrange them in logical order.

When you have heard and understood the objections or counterproposals, you are ready to review the issue in light of the counterarguments. This is COMPARE — the 4TH STEP in presenting an idea.

How can you review and rediscuss the issue without making it a fight?
• Tell back his idea.
• Compare changes from both methods.
• Compare benefits and liabilities from both methods.
• Eliminate points on which you both agree.
• Restate your benefits.

After the objections and counter proposals have been discussed you are ready for the 5TH STEP — REQUEST.

Why is it a good idea to make a clear-cut request for approval, test, or a fair trial?
• Make it clear what you want.
• A tryout request often keeps the idea alive.

Tends to close discussion and bring matter to a head.

9. Install

When you have “sold” your idea and received approval, the next step is to install it. This actual installation of your new idea is a very important step.

You might have an outstanding idea, however, if the change is not carefully planned, it is worthless.

Make certain that you —
• Plan methods, procedures, and schedules for the installation of your change.
• Inform everyone who will be involved in the change.

After you have done this, and not before.
• Install the new idea.

10. Follow Up

This is often considered to be the “make-or-break” step in the systematic approach. Failure of proper and effective “followup” may result in a drift back to the old method or less than full realization of the benefits of the change.

“Make the change work.”

Anyone can write memos or issue verbal orders. The professional manager personally follows up.

Project Submission

Your idea has been installed and a followup investigation was determined that change is in effect as planned. Now you must formally present your project for credit and evaluation.

The Management Improvement Project Report Form, Figure 1 — Part I, is available for this purpose.

Maximum Evaluation of your project depends on the manner in which you complete this form. A complete, concise, and understandable presentation will ensure you of an equitable evaluation.

The following are guidelines to aid you in properly completing the P.D.Q. project report.
• Identify your project correctly. The project/study explanation should clearly define the problem you have solved.
• Describe the past and improved methods in an understandable manner. Bear in mind that the MIP administrator may be unfamiliar with the area and/or your problem. Avoid the use of departmental slang or phraseology. Attach drawings, sketches, pictures, or any other supplementary information that might aid in your explanation.
• Make certain that the project is in use, and that the installation date is shown in the space provided.
• Do not submit the project unless your own and two supporting signatures are shown.
• List any intangible benefits that may result from your project.
• Tangible benefits (cost savings) are to be indicated in the “cost analysis section” of the project and analysis form, and your sources identified. Savings projections cannot be made unless the “present” and “improved” costs are shown for each category. Show cost computations as necessary to support totals.

RESULTS

Audited savings become a matter of record, and project summaries are circulated throughout the Company for broader utilization. Formal recognition is given for meritorious supervisory performance:

For increasing the efficiency of the operations by emphasizing the major areas of cost control, and by establishing goals of good production and quality performance.

For supervisors who demonstrate, by extra effort and ability, that they are operating in their departments in an exceptionally efficient manner.

By having a part in the development of the Management Improvement Program, you come to understand that it is your Program, that you stand to benefit from it, and that you are responsible for the Program in your area of influence. You develop an awareness that this is your opportunity to contribute to your own development and to the growth of Collins Division of Rockwell International.

S.A.V.E.
IT'S RAINING AGAIN

Dolly Leavantry picked beans from her garden with urgency that Tuesday evening, July 19, in Johnstown. The rain was beginning to splash down, darkness was approaching, and the rich earth was turning to mud. Dolly, then, wisely scurried on home. Later, her husband — a Methodist Minister — would remark, looking out the kitchen window: "Boy, the water is really gushing down the street." Unapparent to all at this time, in just a few short hours more than a hundred people would lose their lives in a modern Johnstown Flood.

One wonders how this can happen in a scientific age when we can predict weather, build dams, and have the very best in communications and transportation. Additionally, we have agencies and civil defense groups that prep for just such happenings. The answer is — it can. And it does. And we see how fragile life really is. A half-years supply of rain had fallen, eleven inches, during that brief period.

The route for our annual trip to family camp took us through Johnstown, Pennsylvania, synonomous with disastrous floods. Traveling east on Route 56, we were prevented from continuing because the road was apparently washed out; shifting plans we skirted Johnstown to the north and dropped back south on 403. Closer in, we met barricades and a National Guardsman who deterred us from continuing, and too, we had seen ample evidence which told us to retrace and head north again. Over to Route 271 and south to another barricade; the scenery was a vivid glint of what had happened to the Valley below. So much so, that it kindled a frontiersman family spirit to continue through and experience the drama of the situation.

Once into Conemough, reasons for despair were quite apparent. It began to get a little frightening. We didn’t know how to get out, forgot how we got in, and dead ends everywhere. I stopped at a Fire Station which seemed to be the hub of activity and inquired of the best way to get south and out of the city. Signs around us read, “Get boiled water here”; “Messages sent by amateur ham radio operators”. Two natives that I asked were very apologetic and said that they didn’t know how I could get out of the city — because nearly everything was closed. But ask Mr. Halinski, he might know. I did. And Mr. Halinski was not sure but he thought so.

"Go down near the Bethlehem Steel Mill, turn left up over a steep hill (never mind the one-way sign), turn left and fish your way up over the mountain. Mind you, it’s only open one lane most of the way and its not good and occasionally you might have to get off the road on a side street or private road and back again. But I think you can get through. Then turn right at Airport Road and continue down to the bottom of a hill and a bridge; turn left and head east.” Difficult directions to say the least.

Three times, Mr. Halinski detailed to this errant traveler how to escape the dilemma. Here he was, helping us! Despite their circumstances, despite their heavy losses and sadness, they could suffer an intruder and obligingly help him on his way. Johnstown people are quality people! As I wound up the steep hill past the steel mill, my car scraped from the severe angle. I saw the homes that had been planted on this 45° angle hill, near the smoke pattern, which was not prime real estate. But it was home for them.

Later when the directions needed untangling, in Holtzapple, a man of 70 years of age or so said, “You might miss the turn ahead, Follow me and I’ll lead you there in my truck”. Embarrassed, I protested but he insisted. He jumped into his truck which poetically said on the side — LUV. It was a LUV truck all right. And I’m convinced Johnstown is an all right city — because of it’s people! These people will work their problems out with just a little bit of help from those of us more fortunate. And may God bless them.

As I sit here in Camp Allegheny writing this, 6 days after that frightful storm, it’s raining again. But this time more gently.
PROBLEM BECOMES OPPORTUNITY –
One Value improvement was accomplished as a result of an OSHA ruling for the Construction Machinery Co., Waterloo, Iowa. This company turned a minus into a plus when OSHA insisted that the woven material in the brake linings be eliminated due to asbestos fiber releasing in the air.

The VA Team changed the product design so that the brake lining was molded in four segments instead of one piece. The lining is riveted to the assembly used to power hoist. Cost of lining decreased from $37.86 to $8.12.

Purchasing Magazine
VA Issue

NICE WORK IF YOU CAN STAND IT –
Scientists in Bristol, England are paying volunteers $6.80/day to sit and do nothing but stare at a T.V. set. All the set has on it is landscape. The objective is to determine how quickly a person gets bored and what action can be taken to improve monotonous jobs.

WFRA Radio

GETTING MEMBERS TO MEETINGS –
Finding new methods for making the SAVE Chapter meetings informative and interesting is a continuous quest. The Chicago Chapter of SAVE believes that V.A. Team projects from individual companies should be displayed. These projects offer pre—meeting viewing and discussions which stimulate member interest. This supplement to the main chapter program can induce newer members of the V.A. profession to meetings.

It is improbable that the main topic of the monthly meeting will attract all SAVE members due to varying interests. It is likely, however, that most V.A. practitioners or V.A. observers will be drawn to project work from the real world.

Chicago Chapter – SAVE

GENERAL DYNAMICS IS DYNAMIC –
General Dynamics has held its 71st V.E Seminar. Six teams of six manufacturing and engineering personnel participated, including four from the Air Force. Projects studied during the 40 hour workshop, were F16 assemblies. Savings amounted to 41% and are undergoing study for incorporation. Instructors were Certified Value Specialists.

Bob Churchill, Dallas, TE

WANT FRIENDS?
YOU CAN MAKE MORE FRIENDS IN TWO MONTHS BY BECOMING REALLY INTERESTED IN OTHER PEOPLE THAN YOU CAN IN TWO YEARS BY TRYING TO GET OTHER PEOPLE INTERESTED IN YOU.

Dale Carnegie

CHANGING TRENDS –
Until recently, I believed the Value Manager would have to be part VA Salesman to top management.

At this point in time, the pressure is probably coming from two directions — one direction still being that of selling VA to unbaptized top management in some companies. But pressure is also coming from top management down, and there are VA managers having to do a quick—step to keep up with their top management enthusiasm.

Dick Walter
New Philadelphia, OH

STALEMATE –
During one Metropolitan New York Chapter Meeting, Frank Healey spoke about the shifting of ideas to find the one that would solve the technical problem yet help reduce cost of the overall project. It is this process that the construction community has yet to apply. It seems simpler for the architect to request the mechanical or electrical consultant to simply cut quality in order to reduce cost. In answer, the consultant will condemn the architectural design as the real culprit. Too often the stalemate is the result of three fatal phases, “The boss always wanted it done this way” or—“Our quality control wouldn’t approve a change” or — the most damaging of all — “Don’t ask me to rock the boat.”

How do we get through to the A/E that the time is now? The place is here? The application of value, supervised by someone who will tenaciously require an analysis of every idea submitted is the reasonable answer.

Nathan Borsuk, NY
Frank Healey, NJ

READER ACTION POINT –
WE WELCOME YOUR LETTERS.

What idea or change in your job assignment would help you to be more productive/or improve the quality of working life? That ist: Either to do your job more effectively or — make you feel better about your job.
DEAR THUNDER:
Thanks for publishing my thoughts on Lions versus Lambs in your first issue of Value World. Truthfully, your caption was better than my letter........

Best of luck with your new effort. Regards,

Gordon A. Frank
Burke, VA

SIR:
You deserve a lot of credit for taking on the job of Managing Editor of Value World.

I have just read my first copy – with pleasure.

J.T. Hohmann, Jr.
East Hartford, CT

DEAR TONE DEAF:
Here is a “Song of Praise for Value World:”

When I was so young I started school
As a music major with a scholarship, too
I wasn’t tone deaf. I had no Tonette.
The piano was the instrument I played the best.
Yes, the piano was the instrument I played the best.

But a lot has changed since those college days,
And Value Engineering replaced my music craze.
And Value Engineering replaced my music craze.

So when Value World came to my door,
I read every page and I wanted more.
I thought of an unusual way
To send the message that I had to say
To send the message that I had to say.
So here it is said in this little song,
"I hope there is an encore before too long."

Anonymous Intellectual

DEAR EDITOR:
You’ve probably heard from other readers that somehow Maslow’s triangle got turned upside down. (Motivation Theory – July).

One ascends the triangle, or pyramid, from physiological needs to self-actualization

Burke B. Cochran, Jr.
Los Angeles, CA

GENTLEMEN:
Congratulations! Value World turned out super. I sent one to my boss and one to his boss.

Jack Jonelis
Indianapolis, IN

WOMEN – WHY NOT?
The Value Engineering 40 hour evening workshop has been continuously conducted at General Electric's Re-Entry and Environmental Systems Division in Philadelphia for over five years.

This very successful course covers a thirteen week period and until recently the participants have nearly always been of the male category.

A very interesting event happened recently when the title of the course was changed back to the one used by our hero and originator: Larry Miles – i.e., Value Analysis.

Within a short period of time seven women enrolled when the term engineering had been dropped. Two of these women were computer operators, one was a flight analyst, another from the Purchasing Dept., and the remainder were secretaries.

The ladies were grouped into one team and applied VA techniques to an aerospace structure. One of the several ideas that have since been implemented featured a new method of moulding plastic foam material. When asked how the idea originated, the answer came back that similar methods were used in baking cakes.

We welcome the ladies to our VA workshop and hope that this becomes a regular feature.

LARRY DAVIS, CVS.
NORRISTOWN, PA

CURRENT IMPRESSIONS –
Value Analysis is a potent tool for reducing costs without loss of required function. It is most effective where it is the least glamorous, in conceptual design or early management planning (doing it right the first time).

V.E. has suffered from several ills over the years i.e. lack of technical competence of those in V.E. operations; credit claimed falsely and playing the numbers game in cost reduction programs.

If top management is convinced that V.E. works, is kept informed and not embarrassed by incomplete staff work, they will support V.E. Staff the operation with those technically competent in value engineering and success is assured.

Richard Meyers, PE
Pacifica, CA
S.A.V.E.
"THE UPHILL BATTLES OF WORK"

Vacations and leisure time are the so-called cures of work. But are they adequate fulfillment and respites from unfulfilled professionalism?

Those devoted year in and year out to a cause such as value engineering, need more than relief from a day on the job. They need an implemented success from time to time in their professional work. Pushing the "wet noodle" uphill, so to speak, on a day to day basis gets old without the self-satisfaction of accomplishment.

My cure for the doldrums of pressuring others on the job for change (sometimes winning but many times losing), is to seek the personal rewards of self-implementation of value change. Imagine the thrill of thinking up an idea, developing it and implementing it at your own risk and expense without having to ask anyone's permission except the members of your team. It's marvelous!

I've always felt that the better salesman was one that used his own product. At least he has experienced its strengths and weaknesses. So it is with value engineering. I've taken it home and used it to reduce functional cost in many areas such as: buying carpeting, taking vacations, seating people in the dining room, purchasing antiques, and even installing a foot scraper by the front door. In applying value engineering techniques at home with my family or at work with my staff, I have become much better in the skill of its application. But more so, I have gained much satisfaction in being able to implement ideas at a rapid pace to see how well they worked.

One such recent example occurred at the office. It was time to reorder business cards ($500 for $17.50) since our annual reorganization had once again disrupted telephone numbers, titles, etc. Questioning the cost/worth ratio of the function of the cards with my staff led us to redesign our cards as shown to the right. This resulted in a 1/3 savings of cost, paper, and energy to print. We shared a new cost of $20.00 for 1,000 cards. However, the best bonus is for the client that has our cards. Now, he can ask for two other people to serve him if the one he is calling isn't in.

Thinking back on it now, however, we had much fun in developing this idea and fun in implementing it without any frustration.

The uphill battles of work are much easier to take in stride with the satisfaction of self-implemented change. Every accomplishment — great or small — starts with the same decision: "I'll try."
Get to know us.

We're the Truck People from General Motors.

We build a line of trucks 75 years long.

GMC builds a line of trucks for every job. Trucks for people, trucks for freight, trucks for fun.

GMC. Quality and leadership in the truck industry. With over 75 years of design, engineering and production innovation.
Society of American Value Engineers

“RACING FOR VALUE – 1978”
INTERNATIONAL CONFERENCE
MAY 7-10, 1978 INDIANAPOLIS, IND.

Indianapolis’ newest hotel, the fabulous Hyatt Regency is the site for the 1978 International Conference.
Hyatt Regency Indianapolis
Merchants Plaza
Washington at Capitol

OPPORTUNITY FOR EXHIBITORS

Value Engineers in Industry, Government and Construction are constantly searching for less expensive, better ways to fulfill functions which allow them to improve products or services. One of our finest methods of making productive searches is through you, the Exhibitor. We invite you to participate in our 1978 International Conference.

We encourage your participation to display “YOUR VALUE IDEAS” to other value conscious persons with the same objectives as yourself, “better ways to fulfill functions to improve products or services.” These local, national and international representatives will become your sales engineer of the future as they adopt “Your Value Ideas.”

CALL FOR PAPERS

For the first time, our Society will convene in a structure that has been totally VALUE Engineered from concept to completion. We will share with our keynote speaker the areas in construction where VALUE principles were used to reduce costs. As he relates the VALUE management techniques that were applied we will all agree that the results are not only functional but with enough esteem VALUE to make us aware of the beauty and yet be comfortable.

We are requesting that papers submitted concentrate on the “HOW TO” concept and yet cover your particular field of endeavor, Design To Cost, FAST, Human Relations, Value Management, Education, etc. The “HOW TO” areas we wish to cover are as follows:

“HOW TO” Sell Management
“HOW TO” Prepare Program
“HOW TO” Educate Personnel
“HOW TO” Obtain Results
“HOW TO” Implement Proposals

Through this basic concept we hope to educate all who attend the 1978 Conference with a thoroughly rewarding series of presentations.

Your 1978 SAVE International Conference Committee is issuing a call for papers using the “HOW TO” concept illustrated above in order to allow you to share your successful programs with all who attend.

EXHIBIT DIRECTOR
Walter T. Baun
Detroit Diesel Allison, Div. GMC
Dept. 7894-T26
P. O. Box 894
Indianapolis, Indiana 46206
(317) 243-5983

SUBMITTAL REQUIREMENTS:

100 word biography
Black and white photograph
150 word abstract of paper

SUBMIT TO:
Mr. Robert L. Campbell
P. O. Box 24590
Speedway, Indiana 46224

SCHEDULE:
October 1, 1977 — Abstract Due
November 1, 1977 — Notification
February 1978 — Submit Paper

DON’T FORGET!

The Joy Award for best paper
The Demars Award for best paper in the construction field.

— LADIES PROGRAM —

Be sure to bring the ladies to Indianapolis. Visits to an Early Settlers Community, the Lilly Home and Gardens, as well as the famous Indianapolis Motor Speedway are being planned in order to make your visit a memorable one.
REGISTRATIONS ARE ARRIVING ALREADY...is yours among them? The sooner you send us the registration form, the faster you’ll receive your workshop selection list and the hotel reservation card. HOTEL RESERVATION CARDS are to be sent direct to the Fairmont Hotel so the sooner you register, the more likely of getting the room of your choice.

WHAT ABOUT THE WEATHER IN NEW ORLEANS? According to everything we have read (and some firsthand experience), it should be delightful. Days will hit the 70's with as low as 55 during November having been recorded. New Orleans is one of those cities that might have a shower of rain that lasts long enough to clean the pavements and give the air a fresh spring smell, so a raincoat or umbrella would be a good addition to your packing list. Evenings most often require a light wrap.

WHAT TO WEAR WHILE YOU'RE THERE... NASS Conference sessions are normally rather informal, comfort being the keyword to dress. SPECIAL INTEREST program participants should plan on comfortable shoes since much of the best of New Orleans can be seen while walking. RIGHT NOW, start looking through your wardrobe for that special sumptious dress that you've been waiting to wear because FRIDAY NIGHT MARDI GRAS will be a splendid event. Gentlemen will want to plan on tie and jacket. While we cannot have a complete Mardi Gras, much of the fun and carnival atmosphere will prevail complete with Dixieland Jazz for listening and dancing. The innovation this year of the President's Reception on Wednesday evening will find all types of dress...from long dresses to "direct from the airport" wear.

NEW ORLEANS is a unique combination of the casual and the formal...some restaurants require jacket and tie, while others like you to "come as you wish." A little of each, formal and informal, would be a wise packing guide.

TO SEE THE MOST OF THE HISTORIC NEW ORLEANS...you may wish to plan on one of the tours presented by the Tour Services available in New Orleans. Information on these will be available in the Reception Room -- they range from 1-1/2 hours to 6 hours -- and in price from $5 to $26 for a full day's tour. For a unique experience, one of the stern wheelers might be put on your agenda...cruises are as short as 2-1/2 hours and as long as a full day of seeing outlying sights.

THE FAIRMONT HOTEL, as is true with many fine facilities, will require identification upon your arrival. Credit cards are accepted from all major credit card companies with the exception of Carte Blanche, for payment of bills. If you get carried away with the gift buying opportunities of the City, the Hotel will cash personal checks up to $100 (per day) with credit identification as long as you are a registered guest.
CONFERENCE REGISTRATION FORM

YES! I want to be a part of "Now's The Time"! Please register me for the 35th International NASS Conference at the Fairmont Hotel in New Orleans, LA: November 16–19, 1977.

Name: ____________________________________________

Badge should show my name as: _____________________________

Firm or Govt. Agency: ______________________________________

Division: _____________________________ Street: _____________________________

City: _____________________________ State/Province: _____________________________ Zip: _____________________________

Our organization is a member of NASS: Yes _____ No: _____ Number of NASS Conferences attended: ______

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NOTE: Advance Registration discount applies only when registration is accompanied by payment or billing instructions.

Enclosed is check for $_______ (U.S. Funds) Please bill $_______ P. O. No. __________

TAX DEDUCTION FOR EDUCATIONAL EXPENSES: Treasury regulation par. 1.162-5 permits an income deduction for educational expenses (registration fees and cost of travel, meals and lodging) undertaken to: (1) maintain or improve skills required in one’s employment or other trade or business, or (2) meet express requirements of an employer, or a law imposed as a condition to retention of employment, job status or rate of compensation.

ADVANCE SPECIAL INTEREST PROGRAM: Program for delegates’ spouses or guests. Includes tour of New Orleans, champagne brunch and banquet.

Name of Special Interest Program Participant: ____________________________

Badge should show participant’s name as: ____________________________

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Your registration acknowledgment will contain hotel room information so that you may make your own reservation. Rates for the conference: Moderate: single $28–$36; double $40–$48; Deluxe: single $38–$46; double $50–$58. Send the hotel reservation card direct to the Fairmont, which will confirm room to you.

NOTE: Refunds can be made only if written cancellations are received before November 1, 1977.

Return completed registration form to:

NASS CONFERENCE
National Association of Suggestion Systems
435 North Michigan Avenue, Chicago, Illinois 60611
(312) 644-0075
The FIRST Encyclopedia of Value ever published is now available from the Society of American Value Engineers.

This publication contains information on all branches of knowledge in Value Engineering as presented in the Society of American Value Engineers Annual Conference Proceedings from 1963 through 1976 with the exception of 1965 which is no longer available. Contents are presented in abstract form of over 410 published papers arranged alphabetically by subject.

To aid in the search for knowledge in Value Engineering, a primary subject index is provided for reference in identifying works of various authors published under these major subject headings in the SAVE Annual Conference Proceedings. An Appendix is also included with an alphabetical listing of over 775 Key Word listings contained in the abstracts presented in the Encyclopedia of Value.

Abstracts include author identification, proceedings year of publication, and page number of the Proceedings where full text of referenced paper is presented. Copies of SAVE Proceedings you may need in your work may be purchased from the SAVE National Business Office.

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Volume I of the CESSNA GUIDEBOOK starts out with the first Cessna airplane of 1911 and progresses in chronological order through World War II. Following World War II we detail the history of the model 120, 140 and 150. The CESSNA GUIDEBOOK by Mitch Mayborn and Bob Pickett presents in a clear and useful format all basic data on these aircraft. From ATC number, total number built to unusual events and the historical importance of each type of aircraft. These are 112 information packed pages. 11 pages of 3-view drawings, four pages of tables and specifications, a complete list of prewar civil registrations with c/n and model, 43 pages of detailed aircraft descriptions of 86 different models of Cessna. 40 pages of historical advertising and 8 pages in our “scrapbook” format. 8¼ x 11-inches. $6.95.

Book 3

All new 1975 publication, the RYAN GUIDEBOOK is the combination of Dorr B. Carpenter’s extensive knowledge of Ryan airplanes and Mitch Mayborn’s knowledge of aviation history and publishing. Dorr has owned six ST types and one PT-22 and writes with a great knowledge and feeling of the topic. The RYAN GUIDEBOOK lists all 316-ST series aircraft by c/n, with first owner, present owner and identification. The final disposition or current status is also shown. This is just one bonus in addition to the description of 70 basic Ryan types, many pages of nostalgic advertising, 300 photographs and four super detailed drawings of the STA, the FR-1, the SCW and the Brougham by Paul Matt. Table of PT-21, NR-1, PT-22 civil registrations and c/n comparison. Performance figures. $10.95 Hardback/$7.95 Paperback.

Book 4

GRUMMAN GUIDEBOOK

"The name Grumman on an aircraft is like Sterling on silver," stated a Navy admiral in World War II. Volume I: GRUMMAN GUIDEBOOK starts with the first floats built for the U.S. Navy in 1930 and follows development of the company through the following types of aircraft: XFF-1, F2F, F3F, F4F Wildcat, Duck, Goose, Widgeon, the Gulfhawks, XP-50, and Skyrocket.

112 pages. 275 photographs, eight 3-view drawings with markings for modelers. 8¼ x 11-inches. Color cover. This book is written for anyone who has loved Grumman aircraft over the years. More importantly, it is book full of detailed and accurate references and photographs - many which have never before been published. Hardcover edition limited to 500 serially numbered copies: $14.95. paperback edition: $7.95.
NOW'S THE TIME

35th ANNUAL NASS CONFERENCE
New Orleans — November 16-19, 1977

NEW ORLEANS ... and the FAIRMONT HOTEL ... an unbeatable combination! One of the most famous cities in America and one of its historic elegant hotels (more information later on both!) will provide the perfect setting for our 35th CONFERENCE.

INNOVATIONS THIS YEAR ... to help make this your greatest Conference include THE PRESIDENTS RECEPTION on Wednesday evening from 5:00 to 8:00 PM — a unique opportunity to make new friends or greet old ones — and start off your Conference in true Southern Hospitality style. For your continued enjoyment of the city and the Conference ... THE RECEPTION ROOM, where you will meet members of the Board of Directors, will be open during the majority of the days you are there to provide you information on New Orleans and the Conference.

SPECIAL INTEREST PROGRAM for spouses and friends at a lower-than-you-would-believe registration fee so that everyone will be able to participate. INCLUDED will be a Thursday tour of the best of old New Orleans and historical highlights (luncheon included) and Friday will start with a champagne brunch at 10:00 AM, featuring entertainment appealing to both ladies and gentlemen. ALSO INCLUDED: The Friday night reception, banquet and entertainment. A SUPER PACKAGE approved by the NASS Board of Directors to help make this Conference as special for your family as it will be for you as a delegate.

KEYNOTE SPEAKER of world renown: Bob Richards will open the Conference Thursday with a message that will motivate you through the entire Conference ... and we're sure, long afterward.

SPECIAL BREAKOUT SESSION BY INDUSTRY/GOVERNMENT ... the opportunity to meet with members of your industry/government section have been arranged. Trading problems and solutions with your counterpart could be worth the entire Conference fee!

IDEA CENTER ... goes one step beyond to encourage members to do what they ask of their employees ... PARTICIPATE! ADDED INCENTIVE: Special registration rates for those willing to share the wealth of their knowledge. SEE the information enclosed.

THESE INNOVATIONS should help make the Conference an interesting one ... but even more important to your total Conference enjoyment and learning experience is the care with which Conference Chairman, First Vice President Paul Bailey, has planned a program for maximum educational opportunity yet providing enough flexibility in your schedule to enjoy the NEW ORLEANS area.