Now, with the reason the Value Engineering system is needed clearly in view, some of the more important procedures will fit into a proper pattern.

Make more objective.

Establish procedures, techniques, and systems which will highlight the objective data available or obtainable on the specific situation.

Get into basic factors.

Reduce each consideration to extreme basics in order to as far as possible retard the effect of tradition, habit, attitude, etc. What are the absolutely basic factors which are being dealt with?

More clearly see and understand the basics. Study these basic factors more deeply. Divide them into sub-basics or parts of basics; regroup them into different basic factors; associate other basic factors with basic factors. Build up a logic, an understanding, and insofar as practicable, a "feeling", all based upon basics.

Divide into mind sized steps.

The individual requires a view of his objective but he then must have steps, one at a time, which are "his size" so that he can deal with them and reach the objective. Each step must be made on a basis of basics -- objective material -- pointed precisely toward the objective, then followed by other steps which will, when accomplished, achieve the objective.

Improve the information.

It is traditional for each man to gather a considerable amount of information before starting an important project. Experience has shown that he does not gather enough; that there is usually very pertinent information which he does not have. At the same time, a part of the "information" which he does have and which he believes, is not totally true.

Improve the assumptions.

Considerations are carried out in the framework of the information and assumptions at hand. Experience has shown that vital assumptions are not 100% correct. Certain assumptions are made which further investigation shows to be faulty. Improved assumptions are very essential.

Cause search.

Today, no one library, laboratory, or professional group of any type contains all of the information which would have a beneficia bearing on an important problem. The amount of this which become available and can be used in creating the best solutions is directly dependent upon the skill of search. Experience shows that search can be decidedly improved.

Cause creativity.

In possession of basic thinking work divided into mind sized steps, with improved information, with improved assumptions, some significant results of search are practical. Specific sub-problems can now be attacked with intense and skillful creativity. This, in essence, is combining bits of knowledge into new combinations in a directed framework which will promote solutions to the specific problem steps.

Overcome roadblocks or stoppers.

The experienced have learned to expect a whole family of stoppers to immediately confront the consideration of a new approach, the test of a new approach, or the use of a new approach. These roadblocks arise from the reasons of need pointed out in Section 4. They must be recognized for what they are and individually dealt with. Their roots are usually not in the basic situation but are from extraneous situations.

Cause better cost guides to be developed.

There are two overpowering requirements for competing in today's military or industrial competitive race. One is the securing of appropriate performance and the second is the securing of appropriate cost. For a few decades, very good aids and measures have been provided to aid decision making in the task of getting appropriate performance. Now, as it becomes necessary to achieve m higher standards in the amount of performance which is secured pe dollar, the same sort of guides or measures are needed for cost o iented decisions. The Value Engineering system contains procedur for the establishment of measures which are not based upon exper ience and tradition, but are rather based upon inherently basic and pertinent factors. Other guides and measurements are based upon appropriate search and comparison. The quality of the cost oriented decisions is in direct proportion to the quality of thes cost oriented measures.

Cause more cost decisions from basic and objective data.

L. D. Miles