from the desk of
LARRY MILES

Oct 7 1977

Dear Anne Kocowa:

Thank you for your attached.

Please fill in second line

Thank you.

WILL SOON SEND SHORT ONE
NOTES ON MILLER'S AWARD TO
COMPANIES.

Best regards,

LARRY MILES
WHAT I EXPECT FROM JAPANESE VALUE ENGINEERS AND THEIR COMPANIES

Lawrence D Miles

On this tenth anniversary of the founding of the SOCIETY OF JAPANESE VALUE ENGINEERS I have come kilometers, to give honor and respect to the Japanese people. These people, tho small in number in the world, have by their ability, skill and diligence, become leaders throughout the earth.

* Japanese ART has inspired all of the world's peoples for over 1000 years.
* When INDUSTRY became important, Japanese achievement startled the world.
* When INVENTION became important, the Japanese bought existing knowledge and, using that as a starting point, are penetrating the unknown.

For the world's top creations in art, in electronics, in optics, in transportation, we honor Japan. So skillfully do they plan, so effectively do they create, so well do they blend the technical and the human in manufacturing, that billions of yen of their achievements are sold on the counters of the finest stores throughout the world.

Well we know that for 50 centuries, the ancestors of these people lived apart - developed their own culture, then were forced into a new way of life for which their homeland was ill equipped, lacking minerals, lacking fuels, lacking areas. And well we know the successful adjustment they have made to adverse conditions.

The world turns on. What now do I see?
I see an active tenth of the world planning, creating, researching, producing, consuming.
I see millions who want to earn the world's commerce, and fairly well know how to do it.
I see many of them with some resources of fuels, minerals or areas.
I see many with nearby, or nearly captive markets.
I see many of them working to further improve themselves. Value Engineering seminars throughout the world attest to that.

What does this mean to us? It means that others have the determination to achieve the industrial expertise which the Japanese now have, and they are doing something about it.

On this side of the Pacific, I see the desire of the Japanese to hold their winning position, and their plans and actions to do something about it.

That's the reason I am here - to help.

**EXACTLY WHAT ARE WE TALKING ABOUT**

To win, each job must be done a little better. Each problem must bring a little better and a little quicker solution. Each unit of material resource or human resource must bring a little more benefit.

To understand each other fully, I will ask you the following questions, which you may well want to ask your associates. To communicate fully, I will then answer them. The answers are simple, correct and exact.

1. **What are people using Value Analysis/Engineering trying to do?**
   A. End all costs which do not contribute to USE or AESTHETIC functions which the customer wants.

2. **How are they trying to do it?**
   A. By a depth study of all functions and the creative development of alternatives which would produce them.

3. **What is the specific approach?**
   A. To study functions. Identify them, classify them, separate them, group them. Create specific problems, then solve the problems.

4. **What constitutes "value" in a product or service?**
   A. Good quality, with costs a little lower than competition.
5. Who causes good value, or poor value, in a product or service?

A. Good value is caused by each involved person getting a little better answers than competition does.

6. How do the approaches reduce cost without lowering quality?

A. By concentrating on the functions which the customer wants, getting them for competitive cost, and eliminating costs which are not essential to customer function.

7. Why concentrate so intensively on function? USE, AESTHETIC, BASIC?

A. USE is what the customer wants and wants to pay for. It does something for him. AESTHETIC is what the customer wants and wants to pay for. It pleases him, or someone he wants pleased. Many functions must usually be accomplished within a product. Most of them are functions related to other parts - not to the customer. BASIC function either USE or AESTHETIC, or both is exactly what the customer wants from the product or service.

8. What do we mean by "evaluate a function" in yen?

A. By some intelligent, skillful means, determine about what, considering the state of the art at the present time would be the lowest cost to provide it, and it only.

9. Why do we do it?

A. The creative work in evaluating it often gives a head-start toward providing it for much lower cost. Equally important, having a practical target or goal helps in determining how much work to do on that item.

10. How do we do it?

A. Single it out. Concentrate study, search, creativity on it until costs which meet the need, appear.
11. What do we mean by DISCIPLINED thinking?

A. Not letting the mind grapple in a traditional manner with a problem, but using all mental energy and time in a specific order which will get better solutions in less time. First, Information and Knowledge search. Second, Analysis of the knowledge and exact problem formulation. Third, Creativity. Fourth, Judgement, which does not mean ruling out choices, but rather selecting one that meets the cost needs and improving its performance factors until it also fills the function and quality needs.

12. What do we mean by "Mind Tuning"?

A. Making sure each person in a discussion agrees at each moment on "Exactly what we are trying to do".

13. Is it always needed?

A. Yes, 5 minutes or 5 hours of it. Otherwise, all minds "pulling" in exactly the same direction.

14. Is it necessary to have Analysis before Creativity?

A. Yes, experience taught us that. Otherwise we may get an answer to the wrong problem. Optimum "Problem Setting" is done in Analysis thinking.

15. How do we get large benefit by using Value Analysis principles in purchasing?

A. The buyer understands and buys Function, as nearly as possible. He invites good vendors to understand his Function needs and to use their expertise to provide it. He learns to overcome roadblocks or stoppers, to secure information only from the most knowledgeable source, and deal with the factors of past practice and habits. He can make important earnings contribution. At the present time, I am writing a page each month on the purchasing approaches for a Purchasing Magazine.
My task here is to make sure that you, and your companies compete successfully throughout the world. That means that I have to "tell it like it is", and that's what I'll do.

When you have learned, have accepted, and have started to use the fundamentals, as I have just now described them, you are in the same position as the beginning music student who has just learned what the keys of the piano are, where they are and what they do. You are in a position to develop the maximum skill of which you are capable. You by no means have that skill. As the beginning piano student will "pick out" a pleasant tune, which he could not before he learned the keyboard, so will you be able to make pleasing and useful small contributions, which you could not, before your function based thinking.

By using, and improving, and additional learning, and doing, doing, doing, you can develop great skill in using the approaches to accelerate your achievement and increase it.

Earlier training was 4 weeks, full time "learn it" and "do it" training. Many men could then succeed in the simpler tasks; and begin the development of skill. Some wanted to teach the system to others. It was quickly found that expertise develops as a skill develops, from good use and good experience. Teaching could not be allowed by all who wanted to teach. Men could not be established as lead Value Engineers, simply because they had taken the beginning training and wanted to be. A minimum was set. It was: 1. The basic training seminar. 2. 6 months of full time experience under good leadership. 3. More training, by being a "Project Leader" at another basic training seminar. 4. Six months more of full time experience doing supervised VE work.

At the end of this year, if he had done well on his "doing" and his assistant teaching assignments, we could recommend him as the head teacher of a group, or the Value Engineer, in a new area.
Anyone who feels it is simple and easy to exhaust the full potential of VE, doesn't understand it. If his belief is important, find a way to teach him. Communicate it as a step-by-step method to mentally get from where we are to where we want to be. Some steps are simple. Some vital steps require great skill.

- How would you like to help cause the VE thinking system to become the Way of LIFE, at all levels of your company? The chairman of the board, the president of the managing director, and all lower levels? It's very difficult, because our leaders are strongly individualistic, and we usually do not have a good means of communicating to them. It is starting to be done, and the results are tremendous. The best results have come when one chief executive officer communicates to another. Sometimes one to one, but sometimes an executive officer is so enthusiastic about his results that he will set up a group of about 6 at a time, and tell them the story. This often produces great results. Some important specific benefits which come when top management uses the VE principles will be reported elsewhere.

In communicating, to help others understand the large potential benefits and skill from the VE Approaches, and the essential training required to get this benefit it is often helpful to compare the system of techniques to other systems, for example the jet aeroplane.

The jet is an arrangement of parts. VE is an arrangement of techniques.

Most of the jet parts existed before. Most of the VE approaches existed before.

A few new ones were added by the jet. A few new approaches were added by VE.

All jet parts were arranged to excel in one purpose.

All VE techniques were arranged to achieve one purpose.

Many jet parts were like previous parts, but with small, but vital change.

Many VE concepts are like previous concepts, but with small, but vital change.

Finally, the enormous potential of the jet would be unused unless humans developed new skills to utilize it.

And the enormous potential of VE lies unused until new skills are developed to utilize it.
In this great system, my role is the "Coaching of Champions". The Japanese you folks are champions. Your attitudes and actions show that you always will I list six essentials. They apply to the Japanese Value Engineer as well as to the Japanese athlete.

First, you must want to be a champion
Second, you must understand the game.
Third, you must understand your competition.
Fourth, you must know the winning plays.
Fifth, you must constantly learn seemingly small, but vital points that make the difference between winning and losing.
Sixth, you must be dedicated to developing more skill by doing your very best in each action each day.

I expect the Japanese Value Engineers to follow these steps and to become the best in the world.

Some suggestions to promote growth in skill, follow.
SOME SUGGESTIONS FOR INDIVIDUAL SELF-BUILDING

1. Check yourself. Are you becoming more expert and VE skilled?
2. Study advanced VE techniques. Be sure you become skilled in Function Analysis Systems Technique (FAST).
3. Do something extra. Enroll in something that will develop VE skill.
5. Are your associates learning? Organize something to develop them.
6. As each man, you or your associates, develop VE skills you can achieve more.

Are your jobs growing to absorb that contribution?

You are a brilliant resourceful people. Make VE thinking your "Way of Life" and you are 15 years ahead of the best on earth.

USE OF THE VE TECHNIQUES GOES FORWARD WITH SIX GREAT THRUSTS

1. Less non-contributing, unnecessary cost in all areas of human endeavor, including systems, services, products, government groups.
2. More, better, and more appropriate performance per unit of resources used. Resources include peoples minds, their labor and skill, materials, fuels, energy.
3. Better and more appropriate management and administrative practices and decisions.
4. Great benefits in the construction industry. Equally attractive, much more appropriate architecture, excavations, foundations, structures of all kinds, built in less time, at much lower cost.
5. Great benefits in the procurement and purchasing profession. Buyers will more nearly understand, locate, and buy exactly what is needed, and at lower costs.
6. Great benefits in the government areas. Much more of the desired services for the same cost.
IN CONCLUSION

As you increase in productive thinking skills, if you find that your mental growth is temporarily stopped, face it squarely with the question, "What's Stopping Me?" Then use our own thinking system to bring the best answer.

"Exactly what am I trying to do?"
Penetrating information development - What Are The Facts?
"Exactly what problem shall I solve?"
Depth creativity into alternative solutions.
Selecting one or two of the best solutions, then making them better.

Great Success to you all.