

What are your questions?

Questions from audience...

How can you use value engineering at the development stage to produce savings in both development and production?

I would like to better understand the interface between research and development and production in order to reduce lead time and cost.

Does this apply, for example, in missile systems across the board from the largest to the smallest part or groups of parts?

I would like to see examples of how it has been effective in the past.

Is a separate organization needed or is it part of the work of a normal staff?

How can we make design engineers value conscious?

Eng - Purch VP  
Research - Identify sooner  
2-1 4 million  
Highlights  
New system of techniques  
Value - appropriate performance  
- appropriate cost

Eng. VP named VA  
Now also VE

Improved Q, Reliability  
Shortened development and pre-mfg time.

On military 50-60% unnec.  
compet. comm'l 25-40

New depth of knowledge of anatomy of unnecessary costs

KAPL

Will show

What VE tech. system is  
Where problem and op. areas are  
Some suggested actions  
Some examples of how it works

All function based

Ident. function strip ea. situation to its heart

Eval. by comparison

Spacer stud

Filter circuit

200 gals.

People - not technical problem

90% of cost in R & D product is ~~known~~ known technology

People who don't know VE tech. see familiar parts and say -

Have always done it!

Rules - written and unwritten  
practices

Personal loss at decision making.

Decide 1/2 cost and 1/2 time - make arrangements to do it

Vibration transfer (get cons.  
(get training

Won't be one out of ten that can't be made more reliably for 1/2 the cost as far as technology concerned.

Mgt. of Armed Services and of industry must create the people environment and/or people changes then double the weapons in less time can become a reality.