

## Space Systems Division



# CN Total Quality Management NEWS



## Strategic Defense Initiative Programs

"TOTAL QUALITY IN OUR WORK AND OUR PRODUCTS"

MAY 1990

### TDY ORDERS TO BE STREAMLINED

In an effort to improve the way we do business, Col Bill O'Brien, Director of SDI Programs, has initiated streamlining the whole TDY (temporary duty) process within CN. The objective is to cut the time and paperwork involved.

Col O'Brien has assigned Maj Carolyn Fisher as leader of a TQM Process Action Team (PAT) to study the matter. Maj Fisher said the team is looking into improving such areas as funding and authorizing orders to streamline the TDY process.

Meanwhile, in the Boost Surveillance and Tracking System (BSTS) program office, Deputy Program

Manager Lt Col Clif Groves has initiated a TQM improvement to streamline the processing of TDY travel orders by secretaries. The CNB TQM Implementation Manager, Mr Adan Covarrabias is organizing that improvement.

Mr Covarrabias surveyed CNB secretaries to find problem areas, and he then formed a Quality Tiger Team to come up with ways to streamline the process. The recommendations made by this team should be implemented soon.

The improved CNB methods may be applicable to other CN offices. Likewise, the CN streamlining could also be applied throughout SSD. This is an example of TQM making our work easier.

### TQM GOING STRONG IN CN

TQM is being rapidly implemented in all the CN (Strategic Defense Initiative Programs) offices here at Space Systems Division (SSD). The CN TQM initiative has become a showcase for other SSD organizations.

Two CN offsites have been held to work out strategies for TQM implementation. A vision statement and corporate goals have been established, following the lead provided by the SSD Corporate Council. The individual program offices are putting together their own visions and goals.

Training in TQM has been extensive. All CN personnel have been introduced to TQM in a one hour orientation. Each program office is presenting their own training on specific aspects of TQM, according to their needs. A 4 hour TQM Awareness training is scheduled for all CN personnel this month.

Process Actions Teams (PATs) and Quality Tiger Teams have been implemented on both the CN and program level to work on improving processes and saving money.

Most CN military and civilian personnel are enthusiastically looking into ways they can improve the way they do business and how they can employ TQM in their jobs.

Quality is the wave of the future and CN personnel are on the leading edge of that wave.

### L. A. LAKERS SHOW USE OF TQM

What does the Los Angeles Lakers basketball team have to do with Total Quality Management (TQM), especially concerning us working with the Air Force at Space Systems Division? The answer is that Laker Coach Pat Riley applies many of the principles encouraged in TQM to make his team a winner. These same principles can promote excellence for us working on SDI programs.

A half hour video *Teamwork with Pat Riley* is being shown in the various CN program offices as part of TQM training. This video shows how teamwork is not only important in basketball, but it is also essential in business and technical organizations such as ours.

Teamwork means everyone is invol-

ved in getting a job done, with no one person dictating decisions. The leader of a team works to bring out the strengths of each team member.

Superstar player Magic Johnson is example of binding a team together. Magic would rather orchestrate the team than be a one-man show. He is "the stick that stirs the drink."

TQM helps to make the Lakers a strong team, and it can help us in the same way.

**"Excellence is not just doing something right the first time;**

**It's doing something right all the time."**

Buck Rogers, IBM

## QFD IN SSTS SUCCESSFUL

The Space Surveillance and Tracking System (SSTS) program office has tried the application of Quality Function Deployment (QFD) to help derive requirements and eliminate risk in several program areas. Among them, using QFD in the SSTS management information systems (MIS) has been the most successful and is continuing.

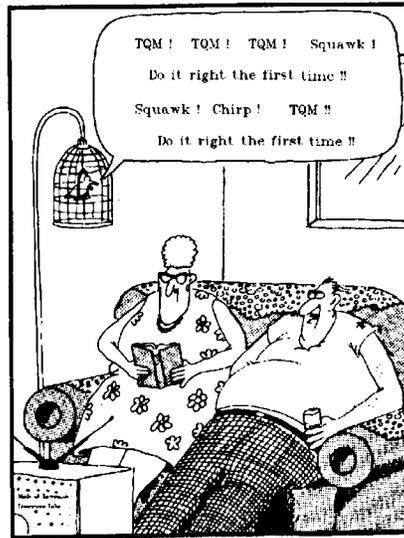
QFD is a powerful TQM tool that assures proper interpretation of customer needs and flow of requirements. A cross-functional team establishes a requirements matrix and assigns weights of customer importance to the requirements. This up-front planning assures a better process or product downstream.

SSTS employed outside consultants to train personnel in QFD methodology. A team of Capt Rob Aube, Capt Debbie Albiol, 1Lt John Campbell, and 1Lt Junichi Kamita applied this training and other studies to using QFD in the MIS area in SSTS.

CNS program director, Col Tom Scanlan, has voiced his interest and support of using QFD. Other CN programs are investigating the possibility of using QFD, as well as having their contractors use the method, to ensure consistency of requirements and customer satisfaction. QFD is an excellent application of a TQM tool.

## 4-DAY WORK WEEK WORKS

CN reports that their experiment on a 4-day work week has been successful thus far. Ms Joyce Anderson initially suggested trying the schedule as part of the TQM effort to increase productivity and morale.



*Shut that bird up! I hear enough of that TQM stuff at work!*

## SECOND CN OFF-SITE SUCCESSFUL

Program managers and their deputies recently attended the second CN TQM off-site. The purpose of this all-day meeting was to discuss TQM issues and strategies.

Lt Col Gene Dionne, STARLAB Program Director, explained the lessons learned concerning Subcontractor Management. An important item discussed was how visiting and encouraging the subcontractors (with the contractor's approval, of course) is important in getting good results in a program.

Capt Tom Geoghan, TQM representative from Contracts (PK), then explained how TQM is being implemented in that organization. This information was helpful in providing insight on how we can better apply TQM within CN.

CN program offices and even their 4-letter offices are encouraged to occasionally hold offsites to promote teamwork, understanding, and other TQM characteristics.

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## COMMUNICATE WITH YOUR BOSS

Excellence in your work requires good communication with your boss or supervisor. This is true at all levels. The following nine items are recommended steps to keep your boss happy through effective communication, from the book *Smart Moves* by Deep and Sussman, Addison-Wesley Publishing Co.

1. Give a short background on a topic before explaining it in detail to your boss. Don't expect your boss to be up on every development in your area.
2. Be direct, crisp, and brief. Your boss is a busy person.
3. Anticipate questions and needs for information. Be prepared before you see your boss.
4. Learn the boss' style of writing and relating to others. This facilitates getting letters you write signed by the boss.
5. Accept criticism in stride. Use it for self improvement.
6. Take praise well. Avoid false modesty. Rather, simply say, "Thank you."
7. Correct your boss with tact. Disagree, but don't dispute.
8. Praise, but don't flatter. The boss needs praise too, but not insincere praise.
9. Don't offer unsolicited promises to gain favor. Delivery of excellence is more powerful when it has not been discounted in advance by a promise of delivery.

Your boss or supervisor is your customer. Satisfying that customer is a primary goal, according to the TQM philosophy. These ideas should help in that communication.

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## BSTS SENDS SECRETARIES TO VISIT CONTRACTORS

In order to improve the effectiveness of how the CNB secretaries interface with the contractors, concerning phone calls, messages, and such, Col Dave Thomas, Boost Surveillance and Tracking System (BSTS) program director, has sent several secretaries in his organization to attend a contractor design review. This is part of Col Thomas' TQM initiative, and the response to it has been positive.

Since secretaries are an important part of the communication link with the contractors, Mr George Tatum and Mr Adan Covarrabias recommended sending some of them to visit the contractors during the BSTS final design reviews (FDR) as part of TQM. Mr Covarrabias is a member of the CN Secretary-Supervisor PAT, which is working on various secretary effectiveness issues.

It was felt that by familiarizing the secretaries with elements of the program they are supporting, letting them personally meet people whom

they interface with on the phone, and seeing what the managers must go through during TDY, the secretaries would be better able to perform their functions.

Ms Dorothy Loeb and Ms Becky Well attended the FDR at Lockheed in Sunnyvale, CA. Ms Loeb said that seeing the hardware displays of the contractors and sub-contractors has improved her understanding of the work done in the program office. She also felt that meeting people at the contractors will help her in receiving phone calls from them for her supervisor, Col Thomas.

Program Analyst Ms Pat Brooks and secretaries, Ms Bernice Stamps and Ms Mary Dew, are scheduled to attend the FDR at Grumman in New York.

The improved effectiveness of the secretaries should make this effort well worth its while, as well as to instill more team spirit within the program office.

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## SATISFY CUSTOMER WITH PRESENTATIONS

An important principle of TQM is to satisfy your customers with a quality product. The "product" you provide may often be in the form of a presentation or briefing. Your customers may be at SDIO, another SSD office, or someone within your own program office.

In order to provide your customer with a quality presentation, both the viewgraphs and what you say must communicate the information effectively.

Good viewgraph design will help your customer retain interest. Viewgraphs shouldn't be "eye charts". Each should provide enough infor-

mation, but not so much as to confuse the audience. Many individuals are now making their own viewgraphs, using the PC and such software programs as *Harvard Graphics*.

When giving a briefing, you should not read each word. Rather, elaborate on important bullets. Since giving presentations is such an important part of our jobs, it is worthwhile to take training classes in that subject.

Think of your presentation as your product. Follow TQM and try to satisfy your customer with the best product you can provide.

## AWARENESS TRAINING REQUIRED

Four hours of TQM Awareness Training will be required for all personnel in Space System Division by the end of June. This training has begun for CN personnel.

Everyone already has had the one hour TQM Orientation Training, which gave an introduction to the principles involved in TQM. Awareness Training delves into more specifics, explains productivity enhancing tools that can be used here and by our contractors, and initiates individual involvement in TQM.

The various program offices are also providing TQM training in the form of videos, discussion groups, guest speakers, and consultants.

Training is an important aspect of TQM, enhancing its understanding and implementation.

## COLONEL WHITED SUPPORTS DEW TQM

Col Chuck Whited, who recently took over in CNL as the Directed Energy Weapons (DEW) program director, states that he is a firm supporter of the principles of TQM. He said he believes there will be many direct benefits from the application of those principles.

"TQM is inherent in good management. I anticipate initiating several improvements in our procedures using TQM," explained Col Whited. "I look forward to using TQM to begin streamlining some of the acquisition processes within DEW in the near future."

He plans to have an off-site for all CNL personnel in late May. A major topic at the offsite will be the discussion of how to effectively implement TQM in CNL.

## SECRETARY-SUPERVISOR PROCESS TEAM MAKING PROGRESS

The Secretary-Supervisor process action team (PAT) has been successful in determining ways to improve the productivity of secretaries and the interface with their supervisors. Secretaries and supervisors from the various CN program offices have been working in this PAT since February to develop improvements.

The first process studied simply concerned the factors involved in getting a memo typed. Recommendations have been defined to improve how the supervisor gives the assignment, how the secretary does the work, and how the supervisor then rewards for excellent work.

One suggested productivity tool that secretaries, and others using word processors, can use is a grammar checker. After seeing a demonstration of a grammar checker program, Mrs Joyce Anderson, supervisor for CNW secretaries, said she will order that software for use in her organization.

### Civilian Personnel Visits PAT

Ms Cindy Hickson, from Civilian Personnel, recently spoke to the members of the Secretary-Supervisor PAT concerning career opportunities, position description, and personnel regulations. This information was valuable in the study of how to improve the attitude of the secretaries, as well as their opportunities for advancement.

As a result of the existence of this process action team, various CN organizations have been looking into their own ways to improve secretarial effectiveness and job satisfaction. For example,, efforts to make the processing of TDY orders easier (see story on page 1) and to get secretaries more knowledgeable about the contractors (see story on

page 3) have been started in CNB. Also, there has been increasing emphasis on training for secretaries throughout CN.

The Secretary-Supervisor PAT is presently developing a manager survey to try to measure the results of the various initiatives for improving secretary performance.



*Extinct; Did not follow TQM!*

## DEMING - TQM GURU

Dr. W. Edwards Deming is known as the "guru" of the DoD TQM initiative. Dr. Deming's 14 Principles are a major basis for TQM.

Dr. Deming is revered in Japan for his work in quality. The award given yearly for the best company in Japan is called the *Deming Award*.

His 4-day seminar is required for all SSD program managers. Deming is truly the TQM guru.

## TAGUCHI METHODS REDUCE VARIATION

"Quality depends largely on design," states world-reknown engineering expert Dr. Genichi Taguchi, who emphasizes the importance of designing a process or product that is immune from variation. He has shown that any variation from the ideal function, requirement, or specification represents wasted effort and increased cost.

In other words, a well-designed set of instructions will result in work that has a minimum of variation or errors, and an automobile that's designed to reduce variations will have parts that fit properly and have a greater reliability.

In the work we do and the products we deliver to our customers both here at Space Systems Division and in Washington, variation or deviation from what is required should be minimized. Our contractors should also be striving to reduce the variations in what they deliver to us.

The methods of Dr. Taguchi are an important element of the TQM initiative, not only in the area of technical development, but also in other aspects of our work. Air Force engineers, managers, and administrators should be looking at ways to apply these principles and should be encouraging the contractors to use latest methods to improve quality and reduce costs.

### *CN Total Quality Management NEWS*

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