

## Space Systems Division



# CN Total Quality Management NEWS



## Strategic Defense Initiative Programs

"TOTAL QUALITY IN OUR WORK AND OUR PRODUCTS"

JULY 1990

### COMPUTER RESOURCES TEAM GETS RESULTS

A process action team (PAT) consisting of five CN personnel and an individual from SC have been working on centralizing CN computer-communications requirements and acquisition. As a result of their work, the PAT has been able to make improvements and provide interim streamlining of the process.

The team consists of facilitator Ms Eva Fava from CNI, Mr Harry Bothwell from CNI, Maj Thurmon Deloney from CNL, team leader Capt Glen Treankler from CNZ, 1Lt John Campbell from CNS, and 2Lt Mike Callaghan from SC.

In order to make their improvements, the team first received formal training on how to function as a PAT from the Technology Exchange Center, the TQM consultant to SSD. Next, the PAT gathered data to determine the time interval between generating a communication-computer systems requirement document (CSR) and taking delivery of the equipment. They were then able to streamline the processing of these CSRs, eliminating 3 levels of review, as well as 2 steps in the process.

The result of their work should reduce the processing time by more than 7 work days. This is just a start in their effort to apply TQM to make improvements in CN.

*"The ancestor of every action is thought." Ralph Waldo Emerson*

### AWARENESS COMPLETED

Great news... all CN personnel have completed the four hour TQM Awareness class.

The training session consisted of a review of TQM principles, ideas about change (a videotape on "paradigms"), methods to input ideas for improvements, and an explanation of process action teams.

In general, the response to the class was enthusiastic. "I was expecting four hours of pain," explained Mr Larry Sirwaitis of CNW. "Instead, I found it an enlightening experience. I learned some very interesting information about TQM."

**"Think in terms of being in a business and having pride in the product or service you provide your customer."**

### VICE PRESIDENT SUPPORTS TQM

Vice President J. Danforth Quayle will be the keynote speaker at the National TQM Symposium for Academia at West Virginia University on July 18th. He is scheduled to explain his support of TQM and the role of academia in national competitiveness.

Besides being an advocate of TQM, Vice President Quayle is a supporter of SDI, especially the Brilliant Pebbles concept. This points out the importance of maintaining our strong position on TQM within the SDI programs.

### TQM INTEGRATED INTO SYSTEMS ENGINEERING

The System Engineering and Integration program office (CNI) has been using the CN Vision and Goals (see page 3) as a guide for implementing TQM. Lt Col Joe Rouge, CNI director, states that they are aggressively applying innovative and cost effective methods, new acquisition processes, technology transfer, and teamwork to improve the way work is done in CNI.

An example of this is the integration of costing with design engineering in the early stages of development to determine cost drivers, which is being led by Capt Tom Shaefer. *Javelin*, a commercial software program, is being used as a tool in this integration. Its use for concurrent cost and design engineering has been demonstrated to SDIO and has received favorable responses.

Another innovative activity improving the acquisition process is being led by Capt Tim Fisk, who is pulling together all SDI simulations. Capt Fisk has set up a Simulation Working Group, consisting of Air Force, Army, and SDIO personnel to study the process to improve the SDI simulations. The results will be given to our customer, SDIO, to facilitate cost reductions and integration.

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*"Well done is better than well said."*

*Ben Franklin*

**WANTED:**

## IDEAS FOR IMPROVEMENT

Many workers and managers within CN have good ideas of how we can satisfy our external customers or improve the way we do our internal business. Now, through the CN TQM initiative, it is possible for people with ideas to express them and have those ideas put into action. The medium for doing that is the CN *Idea for Improvement* form.

If you have thoughts or ideas of how to improve things within our work environment, simply fill out an *Idea for Improvement* form and send it to the TQM Implementation Manager at CN (TQM). The ideas will be considered and acted upon, and you will get a response within one week of submission.

A decision will then be made as whether to take immediate action, to form a Quality Tiger Team to work the action, or to establish a PAT to study process improvement. In any case, something will be done to try to make an improvement.

Of course, if your idea is something that can apply to the SSD Suggestion Program, where you might earn some money, you are encouraged to use that route also.

Use the form at the end of this newsletter and send in your idea for an improvement. Let's get into the TQM spirit, let's make things work more effectively, and let's make our jobs a little easier.

**"Always bear in mind that your own resolution to succeed is more important than any other one thing."**

**Abraham Lincoln**



*For some reason, whenever TQM is mentioned, Durwood falls asleep.*

## PAT STREAMLINES TDY ORDERS

If you have ever processed TDY (temporary duty) orders, you know what an ordeal that can be. However, things are looking brighter now, since a CN process action team (PAT) has completed streamlining the processing of those orders.

As a result of the work by this PAT, authentication, fund certification, and publishing of TDY orders can now be done in Building 80, building A2, and building 115, instead of having all people to go to building 130.

Maj Carolyn Fisher from CNI led a TQM team of Ms Donna Picard from CNIP, SMSgt Ron Berry from CNO, SSgt Anna Tutwiler from CNO, Lt Col Henry Rendon from ACF, TSgt S. Ugwu from ACF, SMgt Glen Johnson from ACF, and Maj Bill Denton from IM to improve the processing of TDY orders.

Savings in time and money are expected from this TQM improvement, and its effectiveness in CN will be examined before it is recommended as a Space Systems Division initiative.

## COL SCANLAN EXPLAINS SSTS SUMMER STUDY IN SPACE NEWS

A study will be made this summer by SDIO to examine the feasibility of fielding hundreds of small, inexpensive surveillance satellites, as opposed to the present Space Surveillance and Tracking System (SSTS) configuration.

SSTS program director Col Tom Scanlan stated in *SPACE NEWS* (June 4-10, 1990), "We want to see if we can do the job smarter and more cheaply."

The article went on to explain that this proposal was inspired by the Brilliant Pebbles concept, as well as arguments from the Defense Science Board for a "rethought SSTS that is less complex and less costly than the current version."

Col Scanlan's efforts directly follow his commitment to TQM. He is looking for better ways to do things in order to satisfy the SSTS program's customer's and user's needs.

## "55 MIN" PROMOTES COMMUNICATION

In order to maintain good communications with CN personnel, Col Bill O'Brien is visiting one program office each week and spending "55 minutes" with the SPO.

Thus far, Col O'Brien has completed his first round with each program office, answering questions and discussing issues of interest.

The response to the "55 minutes" has been very favorable. All parties involved are learning more about each other and how to do business in a more effective manner.

## ***CN ESTABLISHES VISIONS AND GOALS***

Every well-run organization must have a vision of where it is going, as well as specific goals to achieve. Following the Space Systems Division lead, the SDI Programs team has developed our own vision, goals, and objectives, as stated below. Included is the SSD vision.

### **SSD VISION STATEMENT**

We, the Space Systems Division team, commit to:

- Strengthen the security of the United States and revolutionize our warfighting capability through full exploitation of space.
- Offer creative, responsive, and affordable space systems solutions to meet our users needs.
- Be recognized leader in space systems acquisition through continuous improvement in our acquisition processes.
- Focus, develop, demonstrate, and rapidly transition enabling and revolutionary technology.
- Demand a level of technical and managerial excellence and ethical conduct that will instill public confidence and support for the U.S. space program.
- Improve working and living environments conducive to optimal mission accomplishment, family well-being, and individual achievement for meaningful, productive careers.

### **SDI PROGRAMS VISION STATEMENT**

We, the SDI programs team, are dedicated to enhancing the SSD vision.

We also commit to:

- Find the most innovative/cost effective answers to our users' needs,
- Establish new acquisition processes to rapidly deploy systems,
- Transfer technology benefits to all DoD,
- Promote both internal and external teamwork.

### **SDI PROGRAM GOALS**

Our CN Goals are:

- To meet our user's needs --- By developing and executing a responsive program.
- To enhance our products --- By promoting a commitment to quality at all levels.
- To emphasize pride of performance --- By encouraging personal commitment to excellence.
- To improve the working environment --- By providing individual development and improvement opportunities and by providing positive organizational direction and focus.
- To eliminate adversarial organizational relationships --- By emphasizing external and internal teamwork.

### **SDI PROGRAMS 1990 OBJECTIVES**

- Accomplish Program Management Agreement (PMA) requirements between the Air Force and SDIO.
- Develop innovative acquisition strategies that are responsive to customer requirements and available resources.
- Emphasize TQM training and implementation activities at all levels within the SDI programs team.
- Establish a program to provide positive recognition for individual and team efforts within the organization.
- Develop a system for increasing emphasis on individual training and professional development.
- Implement a lessons learned program which encourages communication within our programs and promotes teamwork.

**TQM IN SYSTEMS ENGINEERING (cont'd)**

In order to improve the transfer of technical information, Mr Bob Leong has put together an integrated master schedule system, using an off-the-shelf software program, *Open Plan*, which has been customized to schedule five tiers of milestones, from SDIO to contractor level. Through this system, SDI technologies can be transferred between programs.

Maj Nick Anstine, CNI Deputy of Systems and Technology, is in charge of focussing technical transfer through the use of Program Element (PE) focal points. He is concerned with integration efforts and wants to assure that programs are uniformly managed and provide a consistent Air Force position.

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**SDI Programs' Systems Engineering and Integration is aggressively applying TQM to achieve user and customer satisfaction.**

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The PE focal points are in the areas of KEW, DEW, SATKA, BMC3, and Survivability, parallel with the SDIO PEs. Mr Dan Burley, KEW PE focal point, feels that relations with SDIO are improving as a result of this freer exchange of information.

2Lt Doug Price is working the CNI management plan which, along with SPO calls and working groups, encourages teamwork within CNI.

Lt Col Rouge states that he is committed to make his organization work more effectively, especially through empowering the workers and delegating authority. He also feels that many of these activities are not only TQM, but they are simply good management.

**ORIENTATION PROGRAM STARTED**

"What does 'CN' stand for?"

"Who is the boss?"

"What sort of work do we do?"

"Who do I coordinate this package with?"

"And where is the candy machine in this building?"

These might be typical questions asked by people new to the SDI Programs. Since TQM promotes effective communication, a CN Orientation Program is being put

together by 2Lt Erin Heim for Col Bill O'Brien. Now, many of the questions that newcomers may have, and even questions from old-timers, can be answered through this program.

The CN Orientation Program will consist of three sessions: an SSD overview, a general CN orientation briefing, and a special session for project officers to cover involvement with procurement, the comptroller, as well as training for career development.

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**GEN YATES SEEKS TQM OBJECTIVES**

In a recent letter to Space Systems Division and other Air Force Systems Command (AFSC) organizations, Gen Ronald W. Yates expressed his views on TQM objectives and the direction he plans to go with establishing those objectives within AFSC.

Gen Yates feels that user satisfaction is paramount to the future of AFSC. He explained, "Responsiveness is the name of the game. Your objectives must begin and end with the user." He also said that TQM objectives should inspire the personnel to demonstrate their ingenuity and creativity in striving for continuous improvement.

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**WINNING BACK YOUR CUSTOMERS**

How can an organization regain customers they have lost to competitors? The book *"Winning Back Your Market"* by Jagdish Sheth (John Wiley & Sons, 1985) addresses this issue with strategies to win back customers or get new ones, akin to principles of TQM.

Similar marketing strategies may be applicable to our "business" within the SDI Programs. For example, sending technical experts from SBI to our customer, SDIO, to assist in Brilliant Pebbles work seems to have a positive effect on the perception that the Air Force's SDI Programs is a quality and responsive organization.

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*CN Total Quality Management NEWS*

*Col Bill O'Brien, Program Director, SDI Programs*

*Col Jim Simmons, Deputy Program Director, SDI Programs*

*Lt Col Jim Ledbetter, TQM Implementation Manager*

*Mr Ron Kurtus, Deputy TQM Implementation Manager*

*If you have any questions, comments, or contributions to the CN Total Quality Management NEWS, contact:*

*Ron Kurtus, (213) 643-2746, AV 833-2746.*

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# CN TQM INITIATIVE

## *IDEA FOR IMPROVEMENT*

Do you have an idea of some improvement of the way we do things here at work? Can you think of some ways we can do a better job in satisfying our external customers and users? Do you see some need and a way to improve the process?

If so, please submit your IDEA FOR IMPROVEMENT to the CN TQM Implementation Manager. Try to keep your ideas to topics we can do something about, within our realm of influence.

1. Your IDEA FOR IMPROVEMENT:

2. What problem brought about this idea?

3. What are the advantages of this improvement and who will benefit from it?

4. Who are the people involved in the process that should be improved?

5. Are you willing to get involved in the improvement process?

YES \_\_\_ NO \_\_\_ MAYBE \_\_\_

NAME \_\_\_\_\_ ORGANIZATION \_\_\_\_\_

PHONE \_\_\_\_\_ DATE \_\_\_\_\_

YOU MAY ALSO BE ABLE TO SUBMIT YOUR IDEA TO THE SSD SUGGESTION PROGRAM

## **ACTION ON YOUR *IDEA FOR IMPROVEMENT***

The idea suggested on the other side must be analyzed and evaluated to determine its value, practicality, and feasibility. If it is a program or office specific process, it should be directed to that area. If it applies across CN, it will be considered at that level. Determination of the process and people involved is necessary, as well as the means of measurement.

1. Who are the people involved? (local, across CN, across SSD, AF, etc?)

2. Is there a process involved here? What is the process?

3. Who is in charge or involved in that process?

4. Measurement or survey to find extent of problem:

a. Date of measurement:

b. Who did you involve in measurement?

c. Results:

5. Action to take:

a. Recommend idea to \_\_\_\_\_ for immediate action

b. Form a Quality Tiger Team to decide action, consisting of:

c. Form a Process Action Team to make further study, consisting of:

d. Reject as not feasible at this time

SIGNED \_\_\_\_\_ TITLE \_\_\_\_\_