

TQLO Publication No. 92-01

Department of the Navy Office of the Under Secretary of the Navy Total Quality Leadership Office

## Department of the Navy Total Quality Leadership Source Guide



by Joyce Ward



В

19

)2

This document has been approved for public rolease and sale; its distribution is unlimited.

139



Total Quality Leadership Office 2611 Jefferson Davis Highway, Suite 2000, Arlington, VA 22202 TEL: (703) 602-8991 • DSN: 332-8991 • FAX: (703) 602-8942

## DEPARTMENT OF THE NAVY TOTAL QUALITY LEADERSHIP SOURCE GUIDE

Compiled by

**Joyce Ward** 

DTIC QUALITY INSPECTED 5

Office of the Under Secretary of the Navy Total Quality Leadership Office Airport Plaza II, Suite 2000 2611 Jefferson Davis Highway Arlington, VA 22202

#### **JUNE 1992**

Statement A per telecon Bobby Ryan TQL Office 2611 Jefferson Davies Hwy Arlington, VA 22202

NWW 8/20/92

Accesion For	
NTIS CRA&I DTIC TAB Unannounced Justification	
By Distribution /	
Avelader	a na a na aireanna A na bhag
Dist Stars	i je sa tina tina tina tina tina tina tina tin
A-1	

#### TOTAL QUALITY LEADERSHIP SOURCE GUIDE

Washington DC: (703) 602-8990 DSN: 332-8990 fax: (703) 602-8942

#### FOREWORD

In 1989, Secretary of the Navy H. Lawrence Garrett III formed the Department of the Navy (DON) Executive Steering Group (ESG) to lead and guide the quality transformation throughout the Navy and Marine Corps. One of its actions was to create a Total Quality Leadership Office to provide technical guidance to the ESG and to ensure that its plans for TQL training and implementation would be consistent across the Department. The TQL Office is located within the Office of the Under Secretary of the Navy.

The *TQL Source Guide* is a product of the TQL Office, intended to help meet the educational needs of DON organizations undertaking TQL implementation. It includes documents related to the DON's strategic plan, documents developed by the ESG to guide future actions of the Department. Included is a vision statement, a set of guiding principles, and a set of strategic goals. The *TQL Source Guide* also describes the Department's TQL education and training policy and courses associated with that policy. Materials to support the education and training effort are listed as well as instructions on how to order them. This publication ends with a listing of TQL points of contact, most of them located within the Department of the Navy. These points of contact can direct interested readers to others involved in TQL training and implementation.

If you have questions or need additional information, please contact my office representative, Ms. Joyce Ward, at (703) 602-8966, DSN 332-8966.

Linda M. Stoler. Linda M. Doherty, Director Total Quality Leadership Office

### **TABLE OF CONTENTS**

page	•
Strategic Plan for Total Quality Leadership	
Vision Statement	
Guiding Principles	
Strategic Goals	
Department of the Navy Education and Training	
Policy11TQL Courses13Deming Seminar Schedule16	
Books	
In stock at ASO 17 Recommended; Not in stock at ASO 23	
Readings	
Videotapes	
Ordering Reference Materials	
How to Order	
TQL Points of Contact 39	



### DEPARTMENT OF THE NAVY STRATEGIC PLAN FOR TOTAL QUALITY LEADERSHIP



On February 10, 1992, strategic goals for the Department of the Navy (DON) were signed out by the Secretary of the Navy, the Chief of Naval Operations, and the Commandant of the Marine Corps.

This document is the first of its kind in the history of the Department. It says, in effect, that the entire organization will focus on quality as it plots its course for the future. It also means that the leadership accepts responsibility and accountability for changing the things that need changing and for finding more efficient ways to do business. Emphasis is on a fully integrated Navy-Marine Corps team.

The strategic goals represent one of three documents that are the foundation for the DON strategic plan. The other two documents, a vision statement and a set of guiding principles, are reprinted here as well. Strategic goals essentially describe the results to be realized in working toward the vision of the organization.

The vision statement, guiding principles, and strategic goals were drafted by the DON Executive Steering Group, formed by Secretary Garrett in 1989 to lead and guide the transformation to Total Quality Leadership (TQL), the approach to be used to implement total quality efforts within the Department. The group is made of 28 top leaders within the Department, including the Vice Chief of Naval Operations and the Assistant Commandant of the Marine Corps. Under Secretary of the Navy Dan Howard chairs that group.

All three documents make reference to the support establishment. Mr. Howard explains what is meant today by that term. "Our concept of the support establishment has changed. The Department of the Navy does not fight wars, the Commanders in Chief fight wars, so in that sense the entire Department is a support establishment. That means that our customer ultimately is the individual Sailor and Marine. The guiding principles document begins with the statement that 'the purpose of the DON support establishment is to provide our Sailors and Marines with the ability to go anywhere, anytime, to defend the nation's interest successfully and survive."

To reach the strategic goals, "strategies" and "actions" need to be determined. Toward that end, the ESG is forming working groups made up of senior military and civilian leaders who will define them. As their work progresses, more guidance will be provided to the Department at large.



### DEPARTMENT OF THE NAVY VISION, GUIDING PRINCIPLES, AND STRATEGIC GOALS



### VISION

The fully integrated Navy-Marine Corps team remains the world's premier force to carry out the national will in an increasingly hostile global maritime environment. It deploys a high quality, multi-purpose, flexible force designed to meet a variety of the most likely contingencies.

In order to respond to the volatile and unpredictable nature of the world-wide threat, our forces must provide deterrence through presence and an ability to project power quickly.

The combined force is sustained in this mission by a support establishment which has dramatically decreased the time necessary to field new weapons systems, alter training cycles, accomplish overhauls, etc.

These and other supporting services, including medical care, are of a uniformly high quality because our leadership accepts responsibility for continuously improving all the systems and processes which govern our support establishment.

The support establishment consists of:

Leaders prepared to exercise their responsibilities with quality as the principal focus.

Properly maintained necessary shore and support facilities.

Acknowledged experts in the technologies key to maritime operations.

Acquisition and maintenance strategies which will strengthen the public/private relationships to produce quality products and services faster and at competitive prices.

Well-trained professionals dedicated to excellence with confidence and pride in their Navy and Marine Corps.

### **GUIDING PRINCIPLES**

The purpose of the DON support establishment is to provide our Sailors and Marines with the ability to go anywhere, anytime, to defend the nation's interests successfully and survive.

In achieving this purpose, the following principles will guide our decisions and actions:

We will accomplish the mission.

We recognize the central fact that our Sailors and Marines are the best prepared and that our units have the highest rates of operational readiness in our history. They are at the heart of our ability to perform the mission. We must maintain that quality.

We are all responsible for accomplishing the mission. That is our first loyalty. We must strive to find new ways to cooperate within the DON which look beyond a single service warfare community or traditional role and responsibility. Pride, professionalism and a sense of community are extremely important but we must ensure that they are not rigid barriers to our interoperability. The valuable process of competing for resources and roles must not be carried to divisive and destructive extremes.

We accept responsibility for taking control of and improving all the systems and processes through which we support Sailors and Marines. We can ensure that the weapons, ammunition, training, transport, health care, housing and all other goods and services which constitute that support are of predictable high quality and available on time and in sufficient quantity for any task they may be called upon to perform.

We must use innovation to meet current and future requirements and challenge ourselves to develop creative methods, including new technologies, to enhance our support to our operating forces.

We are committed to honesty and integrity, recognizing that the public trust and defense of the nation requires the highest standards of moral conduct. By integrity we mean that we will make decisions which are in the best interests of the Navy, the Marine Corps and the nation without regard to personal consequences.

We have adopted the term "Total Quality Leadership (TQL)" as the general term under which we will pursue total quality efforts. However, we understand that it is the concepts and content of those efforts that is important--not what they are called.

### **STRATEGIC GOALS**

We, the leaders in the Department of the Navy, will optimize the effectiveness of the Navy-Marine Corps team by leading our people and managing our systems as an integrated force within a quality-focused organization. We will work to influence our future by translating our vision, mission, and guiding principles into goals, strategies, and actions so that resources and improvements are aligned with the same intent.

We believe that everyone has a legitimate contribution to make in accomplishing these goals; Navy and Marine Corps; military and civilian; operational and support. In starting this translation, we have developed a vision and identified five major strategic goals for the Department of the Navy. These strategic goals are: Integration; Human Resources, Education, and Training; Acquisition; Innovation and Technology; and Facilities. We believe that continuous improvements in these areas are mandatory if the Department of the Navy is to meet the challenges that confront us.

#### The Department of the Navy will:

#### Integration

--operate a fully integrated Navy-Marine Corps team that will provide maximum operational capability, capitalizing on the synergism of our operating forces and our support establishment.

Specifically, the DON will:

- --develop broad strategies and tactical doctrines that maximize naval service combat effectiveness within the framework of joint and combined operations of the National Military Strategy.
- --create and maintain a consolidated naval acquisition, maintenance, and logistics infrastructure that is efficient and responsive to the building, support, and sustainability needs of our naval service forces.
- --integrate the focus and efforts of staffs and management organizations to facilitate interaction; and educate our personnel, both military and civilian, in multiple disciplines that affect naval service capabilities and applications.

#### Human Resources, Education, and Training

--continuously improve the quality of our military and civilian work force through fact-based, innovative systemic changes affecting recruitment, training, and quality of life.

Specifically, the DON will:

- --identify and remove the barriers to equal opportunity for all our people.
- --improve the military recruiting system through better requirements determination, resource allocation, and day-to-day operations.

#### Human Resources, Education, And Training (Cont'd)

- --improve determination of military training requirements, feedback systems, delivery of training to meet fleet requirements and foster student success; properly fund training and eliminate redundancies in the system.
- --improve the civilian recruiting and hiring system through better requirements determination and resource allocation and by assessing national versus local recruiting responsibilities and needs.
- --improve civilian training by improving requirements determination, training delivery, and by adjusting resources to match requirements.
- --enhance the working environment to improve the performance of quality military and civilian personnel.

#### Acquisition

--continuously improve the acquisition process to achieve timely design, development, test, manufacture, and support of maritime weapon systems for our Navy-Marine Corps team.

Specifically, the DON will:

- --reduce the time from concept definition to fleet introduction.
- --stress reduced operating and support costs in all aspects of system design; field fully supported systems with emphasis on interoperability and operational availability.
- --foster contractor/government working relationships, emphasizing teamwork built on trust, sound business practices, and the highest standards of ethical behavior. Ensure that an industrial capability for unique naval requirements is maintained.

#### Innovation and Technology

--continuously improve the process of identifying and introducing new technologies. Ensure our recognition as a world leader in key maritime technologies. Create a climate that fosters innovation and invention.

Specifically, the DON will:

- --improve the process of selecting and evaluating technology opportunities; focus DON investment on those technologies that form the foundation of future Navy-Marine Corps system developments; introduce cost-effective technologies into our system as they become available.
- --improve the interaction with our sister services, academia, industry and our allies to support the DON technology investment.

#### Facilities

--operate an adaptable and responsive shore facilities establishment that is properly sized and properly supported to allow continuous improvement in the quality of service to the operating forces; that consists of well-maintained and attractive facilities, resulting in improved living and working conditions and increased productivity at all its installations; and that consistently performs in an environmentally responsible manner and contributes to the quality of life in the communities of which it is a part.

Specifically, the DON will:

- --define and implement "quality standards" for facilities that support mission requirements, family and bachelor housing, family support functions, and morale, welfare and recreational activities.
- --provide the resources to achieve the defined quality standards over time and maintain the support establishment at these levels; in addition to traditional military construction, consider innovative financing and management arrangements (e.g., cost-sharing, public-private venture, leasing).
- --integrate environmental awareness into all DON planning, management, and operations to comply with all applicable environmental laws and to protect the natural resources found on Navy and Marine Corps installations. Minimize waste, conserve energy, and adopt pollution prevention measures to avoid adverse impacts on the environment.

Our vision and associated strategic goals require a significant transformation throughout the naval services. By pursuing our vision, we believe we will enhance our ability to determine our future. Achieving these strategic goals will be neither quick nor easy; however, we believe that our people are capable of meeting the challenges confronting the Navy-Marine Corps team. We recognize that all members of the team have valuable contributions to make to our strategic efforts. As leaders, we will strive to provide the direction and support required for this transformation.

Gen Carl E. Mundy Jr.

H. Lawrence Garrett III Secretary of the Navy

ADM Frank B. Kelso II Chief of Naval Operations

### DEPARTMENT OF THE NAVY TQL EDUCATION AND TRAINING

### POLICY

An All Navy message describing the Department of the Navy's TQL education and training policy was released on 14 April 1992 by Acting Secretary of the Navy Dan Howard. It reads as follows:

1. Announcement of the opening of the DON TQL training sites at the Naval Amphibious Schools in Coronado, CA, and Little Creek, VA, and the policy guidance for the distribution of quotas for the courses initially announced in Reference A. Quota allocation for the 3rd and 4th quarter of FY-92 for each of the TQL courses will be on a pro-rated basis to SECNAV (Secretary of the Navy) (5%), CNO (Chief of Naval Operations) (70%), and CMC (Commandant of the Marine Corps) (25%). The frequency of course offerings will increase from April to September in conjunction with the ramp-up of "master trainers" [TQL trainers] at the TQL training sites. The sites will be fully staffed and operating at full capacity by October 1992.

2. The focus of the DON's TQL training program is to provide education and training for senior leaders and key members of their organizations who will fill roles of TQL coordinators and/or quality advisors. The courses will assist each command's TQL leader and TQL coordinator in developing implementation plans and will prepare quality advisors to coach and provide just-in-time training to teams working on process improvement. Each TQL course for command TQL coordinators and quality advisors is designed to provide in-depth background and understanding of various aspects of TQL through lecture/discussion, case studies, exercises, readings, homework assignments and other materials. Attendees at the DON TQL training sites will be provided all course materials (student guide, instructor guide, hardcopy of viewgraphs, books, etc) at no cost to DON organizations. Travel and per diem are the responsibility of the nominating organization.

[Paragraphs 3 and 4 describe the five TQL courses and their prerequisites. This information is provided in the next section of the *TQL Source Guide* and, therefore, is not included here.]

5. Course quotas will be sub-allocated with claimancy by SECNAV, CNO, and CMC. Command[s] may further distribute to subordinate commands on a pro-rated basis or in support of their TQL implementation strategy. The DON ESG guidance follows: TQL implementation and training proceed top-down through the DON. Prior to sending command personnel to TQL training, the organizational leader must attend the SLS [Senior Leaders Seminar]. Command leaders should send their TQL coordinators and quality advisors to the DON TQL training sites in preparation for establishing their own TQL implementation strategy, and in-house training capability to assist teams in their process improvement efforts.

6. Chief of Navy Technical Training Command (CNTECHTRA) will provide central quota administration. Commands within the major claimancies will advise CNTECHTRA on the actual distribution of quotas by command. Procedures for allocating quotas and providing this information to CNTECHTRA will be contained in a separate message.

Department of the Navy Total Quality Leadership Source Guide • Joyce Ward

#### TQL COURSES

This section describes the five TQL courses created for the training of command-level TQL coordinators and quality advisors. Following each course title is the course number and course length. The Senior Leaders Seminar (SLS) is also described here. It is designed for senior leaders (flag officers, commanding officers, executive officers, Senior Executive Service personnel, and civilian service managers). The schedule for the 4-day Deming Seminar concludes this section.

This education and training program is administered by the Chief of Naval Education and Training (CNET). While the SLS is occasionally offered in the Washington, DC, area, the main program curriculum is offered at the following locations:

Naval Amphibious School	Naval Amphibious School - Little Creek
TQL Code 10, Bldg. 401	TQL Department 9, Bldg. 3504
Naval Amphibious Base, Coronado	Norfolk, VA 23521-5200
San Diego, CA 92155-5084	(804) 464-7452/51
(619) 437-5167/66	DSN 680-7452/51
DSN 577-5167/66	Fax (804) 363-4875
Fax (619) 437-5169 (DSN 577-5169)	DSN Fax 864-4875

Upon completion of their education and training, students will be prepared to teach, advise, coach, and assist leaders and members of their commands in the practice of TQL. Attendance is recommended for those who will serve as their organization's TQL coordinators and quality advisors.

All books listed under the individual course descriptions will be provided to command-level TQL coordinators and quality advisors at the training sites. Books for end-users (i.e., the "students" of the TQL coordinators and quality advisors) must be purchased from the Aviation Supply Office by their commands. The books the students will need are marked with an (\*) asterisk.

#### 1. FUNDAMENTALS OF TQL (CIN P-500-0003), 10 Days

Provides in-depth information on the Deming philosophy including systems theory, variation, psychology, theory of knowledge, quantitative tools and the DON approach to TQL. Only through completion of the full 10-day course will attendees be certified to instruct the 3-day "Fundamentals of TQL" and the 1-day "Introduction to TQL" courses. There is no prerequisite for this course.

Books: The Deming Management Method; The Deming Route to Quality and Productivity: Roadmaps and Roadblocks; Safer Than a Known Way. Videos: Continuous Improvement -- Batavia; Deming Library, Volume I- XX; Discovering the Future: The Business of Paradigms; If Japan Can. . .Why Can't We? (NBC White Paper). The red bead experiment is conducted in this course.

#### 2. IMPLEMENTING TQL (CIN P-500-0002), 5 Days

Provides guidance for initiating actions to begin a quality transformation in DON organizations. Specifically, it provides information on managing change, conducting strategic planning for a quality transformation, developing an in-house TQL education and training plan, chartering and structuring improvement teams, establishing TQL administrative and technical support mechanisms, and developing a command-specific implementation plan. The course is designed to provide TQL coordinators with the necessary background to assist organizational leaders in their implementation efforts. Prerequisite: CIN P-500-0003 or command-taught version or the 4-day Deming Seminar.

Books: Leaders: Strategies for Taking Charge; The Transformational Leader. There are no videos. A General Model for Strategic Planning Poster (Stock #0120-LF-020-6500) has been designed for this course.

#### 3. METHODS FOR MANAGING QUALITY (CIN P-500-0006), 10 Days

This course is designed for TQL coordinators or quality advisors, so they can assist teams of middle managers in the initial activities of process management, such as identifying customers and their requirements, identifying processes critical to meeting those requirements, streamlining and standardizing processes, improving processes, and making the transition from initial activities to ongoing continuous process improvement. It provides skills training in the use of the seven management and planning tools. Prerequisite: CIN P-500-0003, command-taught version, or the 4-day Deming Seminar.

Books: Analyzing Business Process Data: The Looking Glass; Management for Quality Improvement, The 7 New QC Tools; \*The Memory Jogger Plus; Process Quality Management & Improvement Guidelines. Videos: Discovering the Future: The Business of Paradigms; The Abilene Paradox. A managing quality model poster has been designed for this course.

#### 4. TEAM SKILLS AND CONCEPTS (CIN P-500-0005), 10 Days

This course provides attendees with the basic instruction to be given to members of commands who will serve on teams, such as executive steering committees, quality management boards and process action teams. The topics covered include: Team Development and Dynamics, Characteristics of Successful Teams, Communication Skills, Decision Making, Documentation, and Roles of the Team Leader and Quality Advisor. The attendees will be prepared to deliver course materials as either a comprehensive 4-1/2 day course or in modules as just-in-time training to teams. Prerequisite: CIN P-500-0003, command-taught version, or the 4-day Deming Seminar.

Department of the Navy Total Quality Leadership Source Guide • Joyce Ward

Books: Please Understand Me: Character and Temperament Types; \*The Team Handbook; Sixteen Types; The Keirsy Temperament Sorter. Videos: Building High Performance Teams; Managing the Journey; Meetings, Bloody Meetings; The Abilene Paradox; Who's On First; Why Quality?. A storyboard has been designed for this course.

#### 5. SYSTEMS APPROACH FOR PROCESS IMPROVEMENT (CIN P-500-0004), 8 Days

This course provides instruction in using quantitative methods to improve processes. These methods and tools are presented in the context of system improvement and optimization. Attendees will work numerous exercises and examples to prepare them to assist teams in data collection and analysis for process improvement. This course is designed specifically for quality advisors and/or TQL coordinators. They will be prepared to train teams in the use of quantitative methods, e.g., the seven QC tools, to improve processes. The modular format of the course supports just-in-time training on specific quantitative methods as needed by teams. Prerequisite: CIN P-500-0004; all the above or command-taught versions of the above.

Books: \*Statistical Methods for Quality Improvement; \*The Memory Jogger Plus; Tools and Methods for Improvement of Quality. Videos: A Japanese Control Chart; Deming Library, Volume IX (The Funnel Experiment); The Tribus Tapes: Deployment Flow Charting.

#### **SENIOR LEADERS SEMINAR, 4 Days**

The Senior Leaders Seminar (SLS) is part of the DON curriculum, but it is not a formal part of the TQL education and training program designed for TQL coordinators and quality advisors. It is conducted for senior leaders by a separate cadre of instructors. Senior leaders include flag officers, commanding officers, executive officers, Senior Executive Service personnel, and civilian service managers.

Course content: This 4-day course covers concepts and principles of TQL, the DON structure for TQL, strategic planning, quantitative methods and tools, teamwork, Deming's 14 points, profound knowledge, and activity implementation roles and responsibilities. Includes lecture, exercises, videos, and student guide.

All books are given to the attendees at the seminar. They include: The Deming Management Method; Deming Management at Work; The Memory Jogger Plus; The Transformational Leader. Videos used include: The Deming Library, Volumes II, VII, VIII, IX, XIII, and XVI; Continuous Improvement -- Batavia; Discovering the Future: The Business of Paradigms; A Japanese Control Chart. Department of the Navy Total Quality Leadership Source Guide • Joyce Ward

#### **DEMING SEMINAR SCHEDULE**

Deming's 4-Day -- Quality, Productivity, and Competitive Position

16-19 June 1992	Seattle, WA
29 June - 2 July 1992	Costa Mesa, CA
11-14 August 1992	Indianapolis, IN
1-4 September 1992	Atlanta, GA
6-9 October 1992	St. Louis, MO
27-30 October 1992	Charlotte, NC
17-20 November 1992	Pasadena, CA
15-18 December 1992	San Jose, CA
12-15 January 1993	Maui, HI

For more information on the Deming Seminars, contact Quality Enhancement Seminars, 1081 Westwood Boulevard, Suite 217, Los Angeles, CA, 90024; Telephone: (213) 465-1733 or 824-9623.

These seminars are also available for groups via Satellite Network by Quality Enhancement Seminars and George Washington University. A per person registration fee covers all books and materials needed for the seminar.

Maggie Ryan, Quality & Productivity, Inc. 1201 S. Barton Street, Suite 153 Arlington, VA 22204 (800) 333-4152 Mary Lou Bishop, GWU Satellite Network Academic Center, Room T-308 Washington, DC 20052 (800) 932-2337

### BOOKS

#### IN STOCK AT ASO

The following books are now stocked at the Aviation Supply Office (ASO) in Philadelphia, PA. The ASO stock number and price are listed under each book.

# **Donnell, A. & Dillinger, M. (1990).** *Analyzing Business Process Data: The Looking Glass.* Indianapolis, IN: AT&T Quality Steering Committee (Select Code 500-445). ASO price \$21.00; Stock #0120-LF-020-5700.

For some, the collection and analysis of numbers (data) while working on process improvement represents unfamiliar and uninviting territory. This book was developed to make tools and techniques of statistical quality control attractive and accessible to those who are not statisticians.

## Walton, M. (1990). *Deming Management at Work*. New York: G.P. Putnam's Sons. (ISBN 0-399-13632-0). ASO price \$11.00; Stock #0120-LF-020-8200.

Walton devotes Chapter 5 to the U.S. Navy and Total Quality Management (TQM). This book also includes profiles of Florida Power & Light, Hospital Corporation of America, and others.

# Scherkenbach, W. W. (1991). *Deming's Road to Continual Improvement.* Knoxville, TN: SPC Press, Inc. (ISBN 0-945320-10-8). ASO price \$25.00; Stock #0120-LF-020-9400.

Deming states in the foreword that this book is notable for "clarity of principles, bountifully illustrated by examples." Scherkenbach divides his chapters into two sections: Understanding the Deming Philosophy. . .Revolution in Thought, and Operationalizing the Deming Philosophy. . .Evolution in Practice.

# Bennis, W., & Nanus, B. (1985). *Leaders: The Strategies for Taking Charge.* New York: Harper & Row. (ISBN-06-015246-X). ASO Price is \$14.00; Stock #0120-LF-020-5900.

This book tells how leadership is the pivotal force behind successful organizations and that if we are to have vital and viable organizations, leadership is necessary to develop a new vision and to mobilize change toward this vision. This book analyzes the performance of 90 top leaders and describes the qualities that managers need to take charge and lead.

# Mizuno, S. (Ed). (1988). *Management for Quality Improvement: The 7 New QC Tools.* Cambridge, MA: Productivity Press. (ISBN 0-915299-29-1). ASO price \$46.00; Stock # 0120-LF-020-7000.

Mizuno describes seven new tools developed by the Japanese Society for Quality Control Technique Development. They are intended for managers to assist them in planning, troubleshooting, and communicating at each stage of the quality improvement process. According to Mizuno in his Introduction, "Quality Control has entered a new era of development....A new era demands new tools."

## Kohn, A. (1986). *No Contest: The Case Against Competition*. Boston, MA: Houghton Mifflin. ASO price \$6.00; Stock #0120-LF-020-8400.

Kohn offers a simple alternative to the destructiveness of competition -- cooperation. It makes people happier, more secure and productive. He argues that it will take collective commitment to restructure our institutions.

#### Deming, W. E. (1986). *Out of the Crisis*. Cambridge, MA: Massachusetts Institute of Technology. (ISBN 0-911379-01-0). ASO price \$43.00; Stock # 0120-LF-020-8600.

Deming explains what top management must do in this new economic age to improve its productivity and competitive position. Change must be led by top management. Long-term commitment to this new management philosophy is essential.

# Keirsy, D., & Bates, M. (1984). *Please Understand Me: Character and Temperament Types.* Del Mar, CA: Prometheus Nemesis Book Company. (ISBN 0-9606954-0-0). ASO price \$9.50; Stock #0120-LF-020-7100.

The author tells us in Chapter I that "people are different from each other, and that no amount of getting after them is going to change them. Nor is there any reason to change them, because the differences are probably good, not bad."

# AT&T (1989). *Process Quality Management & Improvement Guidelines*. Indianapolis, IN: AT&T Quality Steering Committee. (Select Code 500-049). ASO price \$21.00; Stock #0120-LF-020-7200.

These guidelines are based on quality management practices that have proven effective in AT&T and other companies. Applying these procedures will help managers increase the effectiveness and efficiency of their processes and, consequently, achieve a higher level of customer satisfaction and reduce costs. The guidelines were designed for process owners and managers, but the concepts and techniques are useful to all employees.

## McConnell, J. (1988). Safer Than a Known Way. Dee Why, Australia: Delaware Books. (ISBN 0-9588324-3-9). ASO price \$15.00; Stock #0120-LF-020-7300.

McConnell describes a quality approach to management that improves productivity and competitiveness as well as secures the long-term future of a company, its shareholders, and employees.

## Keirsy, D., & Bates, M. (1984). *Sixteen Types.* Del Mar, CA: Prometheus Nemesis Book Company. (ISBN 0-9606954-0-0). ASO price \$3.00; Stock #0120-LF-020-8100.

A 48-page booklet from *Please Understand Me* featuring portraits of the types. Includes a sorter (a self-scoring test).

# Kume, H. (Ed.). (1989). *Statistical Methods for Quality Improvement*. U.S. Distributor: Quality Resources, One Water Street, White Plains, NY 10601. (ISBN 4-906224-34-2). ASO price \$27.00; Stock #0120-LF-020-7400.

Kume produced a collection of articles written by quality control experts. It explores statistical methods and illustrates how the correct application of these tools improves the production process and reduces product defects.

### Walton, M. (1986). The Deming Management Method. New York: Dodd, Mead. (ISBN 0-399-55000-3). ASO price \$12.00; Stock #0120-LF-020-6000.

Walton describes Deming's 4-day seminar on quality management, paying particular attention to the obligations of management. Applications of his methods by some of America's most innovative firms are also presented.

# Scherkenbach, W. W. (1986). The Deming Route to Quality and Productivity: Road Maps and Roadblocks. Washington, DC: CEEPRESS. (ISBN 0-941893-00-6). ASO price \$17.00; Stock # 0120-LF-020-8700.

Scherkenbach helped guide Ford Motor Company's implementation of the Deming philosophy during the 1980s, an effort that led to Ford's economic recovery. He gives a very thorough accounting of Deming's 14 points, concentrating on management theory rather than on tools and techniques. The book is very readable and contains a collection of his "observations, ideas, and interpretations of a philosophy formed and practiced by an 'apprentice statistician."

## Goldratt, E. M., & Cox, J. (1986). *The Goal.* Croton-on-Hudson, NY: North River **Press.** (ISBN 0-88427-061-0). ASO price \$12.00; Stock # 0120-LF-020-8300.

Goldratt tells us about "a process of ongoing improvement." Written as a novel, the story tells how a plant manager whose factory is in serious trouble learns a whole new set of definitions for "throughput," "inventory" and "operational expense." He also learns how to eliminate bottlenecks and achieve continuous improvement.

### Keirsy, D., & Bates, M. (1984). The Keirsy Temperament Sorter. Del Mar, CA: Prometheus Nemesis Book Company. ASO price \$.35; Stock #0120-LF-020-8100.

A brief self-scoring test of personality type from *Please Understand Me*.

## Brassard, M. (1988). The Memory Jogger. Methuen, MA: GOAL/QPC. ASO price \$3.60; Stock #0120-LF-020-6200.

This handbook is a pocket guide of tools for continuous improvement and provides a brief summary of these tools for easy reference.

## Brassard, M. (1989). The Memory Jogger Plus+. Methuen, MA: GOAL/QPC. ASO price \$25.00; Stock #0120-LF-020-6100.

This attractively packaged book features the seven management and planning tools for continuous improvement. These tools can be combined into a "cycle of activity that turns the output of one tool into the input of a related technique. This creates a continuous flow of analysis that really focuses any planning process." Up front planning can prevent expensive and time-consuming "rework." This book contains pocket cards for easy reference and use in team meetings.

## Schoites, P. R. (1989). *The Team Handbook*. Madison, WI: Joiner Associates, Inc. ASO price \$22.00; Stock #0120-LF-020-6300.

This is a "how to" book. Its purpose is to help project teams succeed in improving quality and productivity, and in all their efforts to improve processes. The approach to projects differs from more conventional approaches in three ways: (1) the approach is focused on the pursuit of quality as taught by W. Edwards Deming; (2) the approach relies heavily on the understanding and application of data; and (3) includes methods for formation and maintenance of groups, planning and managing projects, and designing and conducting meetings.

### Tichy, N. M., & Devanna, M. A. (1990). *The Transformational Leader*. New York, NY: John Wiley. (ISBN 0-471-62334-2). ASO price \$9.90; Stock # 0210-LF-020-6400.

This book focuses on the role of the leader in transforming organizations to become competitive in the global marketplace of the future. The authors provide senior executives and managers with guidelines for transforming their own companies.

# Gitlow, H., Gitlow, S., Oppenheim, A., & Oppenheim, R. (1989). *Tools and Methods for the Improvement of Quality*. Boston, MA: IRWIN. (ISBN 0-256-05680-3). ASO price \$42.00; Stock #0120-LF-020-9300.

The authors focus on the Deming philosophy and tie all discussions of statistical topics to this philosophy. They deal with how to improve a stable process and focus attention on modern inspection policies. It is the only statistical quality control book that covers quality improvement "stories." Included are examples and mini-case studies.

## Byham, W. C., & Cox, J. (1988). *ZAPP! The Lightning of Empowerment*. NY: Harmony Books. (ISBN 0-517-58283-X). ASO price \$10.50; Stock #0120-LF-020-8800.

This book deals with the basic principles of empowering people and helping employees take ownership of their jobs, so that they take personal interest in improving the performance of the organization.



#### **RECOMMENDED; NOT IN STOCK AT ASO**

The following recommended books may be purchased through your local bookstore. They are not used in any of the DON TQL courses at this time.

### Ishikawa, K. (1986). *Guide to Quality Control (2nd ed.).* U.S. Distributor: Quality Resources, One Water Street, White Plains, NY 10601. (ISBN 92-833-1036-5). \$22.95.

This guide to quality control techniques provides instructions for making and reading graphs, including Pareto diagrams, histograms, and scatter diagrams.

### Imal, M. (1986). Kaizen: The Key to Japan's Competitive Success. New York, NY: McGraw-Hill. (ISBN 0-07-554332-X). \$24.95.

Kaizen means gradual, unending improvement, doing "little things" better; setting--and achieving--ever higher standards. Imai has produced a comprehensive handbook of 16 KAIZEN management practices Western managers can put to work. It enables a company to seize competitive opportunities quickly--in either a slow-growth or fast-growth economy. He shows how it can work in any culture (not just Japan).

## Messina, W. (1987). Statistical Quality Control for Manufacturing Managers. New York, NY: Wiley. (ISBN 0-471-85774-2) \$49.95.

Messina offers a practical guide to tools and techniques for improving quality, increasing productivity, and enhancing the competitive position of a manufacturing line. He leads the reader logically from the basics to SQC manufacturing applications and strategies. He describes new methods for performance appraisals, operation certification, just-in-time, and more.

# Statistical Quality Control Handbook. (1984). Charlotte, NC: Western Electric Company. Contact AT&T Technologies, Government Sales Clerk, Select Code 700-444, P.O. Box 19901, Indianapolis, IN 46219, (800) 368-5977. \$29.00.

From the book's preface: "The methods and procedures. . .are based on quality management practices. . .proven effective in AT&T and other companies. Applying these procedures will help managers increase the effectiveness and efficiency of their processes and, consequently, achieve a higher level of customer satisfaction and reduce costs. Although the guidelines were designed for process owners and managers, the concepts and techniques are useful to all employees."

# Wheeler, D. J., & Chambers, D. (1986). Understanding Statistical Process Control. Knoxville, TN: SPC Press, Inc., 5908 Toole Drive, Suite "C," Knoxville, TN 37919. \$50.00.

The author believes this book can be useful to those who have had no formal training in statistical techniques. He includes examples, case histories, and a variety of graphs to explain how SPC techniques work.

### Ishikawa, K. (1985). What is Total Quality Control? The Japanese Way (Lu, D. J., Trans.). Englewood Cliffs, NJ: Prentice-Hall. (ISBN 0-13-952433-9). \$26.95.

The authors explain how to produce higher quality goods at much lower costs by looking at quality as a company-wide issue. Total quality control is an approach that applies to every stage of market research, design, production, and sales.

### READINGS

The following TQL reports are available from the Defense Technical Information Center (DTIC), Building #5, Cameron Station, Alexandria, VA 22304-6145, (703) 274-7633, DSN 284-7633. There is a fee for these reports and your command must be a registered user. You may also obtain them from the U.S. Department of Commerce, National Technical Information Service (NTIS), 5285 Port Royal, Springfield, VA, 22161, (703) 487-4650. Charges for copies at NTIS are higher than at DTIC.

#### TQM PRINCIPLES

# Backaitis, N., & Rosen, H. (Coeditors). (1990). *Readings on Managing Organizational Quality* (NPRDC Technical Note 90-19). San Diego: Navy Personnel Research and Development Center. (DTIC Report #AD-A224888)

This volume of readings has been compiled for those interested in learning about new management philosophies that are helping to bring about the transformation of American industry. This philosophy is based on assumptions that reflect the ground rules of today's global economy. It emphasizes the role of leadership at various levels of the organization. It describes changes in policies, structures, and relationships with customers, suppliers, and internal organizations.

#### Backaitis, N., & Rosen, H. (Eds.). (1990). *Managing for Organizational Quality--Theory and Implementation: An Annotated Bibliography* (NPRDC Technical Note 90-25). San Diego: Navy Personnel Research and Development Center. (DTIC Report #AD-A225040)

This bibliography provides resources to those interested in learning about managing organizations for quality improvement. Major subject areas cover the competitive position of U.S. industry; the quality philosophy, and management principles for improving quality, productivity, and competitive position; management of organizational change and transformation; roles of management and leadership; tools for improving work processes; the effect of reward systems; teamwork; customer-supplier relationships; strategic accounting and statistical education.

#### Goldberg, E., Hulton, V., Konoske, P., & Monda, M. (May 1987). Introduction to Total *Quality Management: Selected Readings* (NPRDC Technical Note 87-23). San Diego: Navy Personnel Research and Development Center. (DTIC Report #AD-A208 155)

This technical note orients managers to the basic concepts of TQM. It is not intended to provide a comprehensive study of quality management, but rather to aid in planning for an implementation of the Deming approach to TQM. The report is organized into four sections: An overview of quality management, its background and general concepts; implementation strategies and practices; case studies from various organizations; and other relevant publications produced by NPRDC on the same topic. The articles are still relevant and timely and have been used by numerous DON organizations as part of their education packages.

# Greebler, C., & Suarez, G. (April 1989). *Total Quality Management Implementation: Selected Readings* (NPRDC Technical Note 89-17). San Diego: Navy Personnel Research and Development Center. (DTIC Report #AD-A208-155).

These readings were prepared to assist managers in implementing TQM. Articles were chosen on the basis of how well they prepared managers to take on these new challenges, including how to apply TQM in white collar, administrative, and service organizations. The readings are organized into four sections: management and leadership focus; guidelines for the development of TQM; quality improvement strategy; and case studies from the public sector.

#### **PROCESS ANALYSIS AND IMPROVEMENT METHODS**

#### Houston, A., & Dockstader, S. (December 1988). A Total Quality Management Process Improvement Model (NPRDC Technical Note 89-3). San Diego: Navy Personnel Research and Development Center. (DTIC Report #AD-A202-154).

This report proposes a model for the systematic improvement of an organization's products or services through analyzing and correcting the processes that create them. The model is an elaboration of the Plan-Do-Check-Act (PDCA) cycle developed by Shewhart and Deming for process analysis and improvement. The thrust of this project was to enhance the performance of naval logistics organizations through application of TQM principles and methods.

It describes the approach of integrating the procedures of process improvement with an organization made up of cross-functional teams to improve both vertical and horizontal communications. The authors provide a detailed description of the roles and activities of two important teams -- Quality Management Boards and Process Action Teams -- and how they function within the context of the PDCA cycle. The appendices include an exercise for developing a process flow chart, exercises in creating Pareto charts, a format to follow in writing up a case study, and a fictitious case study to demonstrate the use of the format.

#### CASE STUDIES

# McDaniel, D., & Doherty, L. (February 1990). *Total Quality Management Case Study in a Navy Headquarters Organization* (Technical Note 90-10). San Diego, CA: Navy Personnel Research and Development Center. (DTIC Report #AD-A219412)

This report documents the efforts of Fleet Support and Field Activity Management (AIR-04), Naval Air Systems Command, to implement TQM. It describes AIR-04's TQM implementation plan and its selection of the engineering change proposal (ECP) as the first process to undergo continuous improvement using TQM methodology. The report chronicles the development of a TQM Executive Steering Committee and Quality Management Board (QMB), the education and training process, and the selection of the ECP process for analysis. Flow charts and statistical control charts were especially useful during process analysis. Flow charting helped to identify areas where concurrent review would be beneficial, and control charts allowed the QMB to identify variation that was out of control.

The QMB learned during the initial go-around that timeliness of ECP's was of less importance than financial and schedule executability, completeness and accuracy of documents, and clarity of implementing instructions. Recommendations address process definition, work prioritization, just-in-time training, emphasis on immediate results, and documentation of future actions.

#### Shettel-Neuber, J., & Sheposh, J. (February 1988). Process Restructuring as a Means for Improving an Aircraft Overhaul Program. (NPRDC Technical Note 88-21). San Diego, CA: Navy Personnel Research and Development Center. (DTIC Report #AD-192538)

This case study documents improvements in F-14 aircraft overhaul at a naval industrial facility that resulted from a team's analysis and redesign of work processes. The team revised and optimized the overall work plan for F-14 overhaul based on information obtained through the disassembly of a test aircraft by skilled artisans.

Paperwork that directs the overhaul was modified to reflect changes in the work process, and general housekeeping was performed in the aircraft disassembly areas. Benefits of the team's efforts included improvements in the work processes and in the overall efficiency of the F-14 overhaul program, leading to reduced turnaround time.

The case study demonstrates the value of focusing on process analysis and restructuring to improve an overall operation, the types of process improvements that can lead to better outcomes, and the role of management in support of such an effort.

#### **IMPLEMENTATION**

## Federal Quality Institute (June 1990, to be reissued with updates in Summer 1992). *Presidential Award Criteria and Scoring Guidelines*. Available from: FQI, Washington DC Information Network, (202) 376-3753. Order #PB91-154823CCL.

Third of three booklets that comprise the *Federal Total Quality Handbook*. The President's Award for Quality and Productivity Improvement is given annually to an agency or major component of an agency that has implemented Total Quality Management (TQM) in an exemplary manner, and is providing high quality service to its customers. The booklet describes the criteria and scoring guidelines used to evaluate organizations.

FQI has recently published two other documents on TQM -- one that is an introduction to TQM principles and one that deals with training. They are available as well by calling the number given above.

### VIDEOTAPES

#### THE DEMING LIBRARY

**CC-M Productions.** (1987-1989). *The Deming Library* (20 videotapes). *The Deming Library* is the first complete video training seminar that covers all aspects of Dr. W. Edwards Deming's philosophy. Deming enlists the help of journalist Lloyd Dobyns, producer Clare Crawford-Mason, Harvard Professor Robert B. Reich, and Ford CEO Donald Petersen. *The Deming Library* of 20 videotapes is available through ASO for \$1,177; Stock #0120-LF-020-4400. Videotapes cannot be purchased individually.

#### Yolume I: The New Economic Age (33 minutes)

Deming and Professor Reich explain the new global economy and their mandate for change in American managerial thinking.

Volume II: The 14 Points (40 minutes, 2 parts) Deming's 14 Points are described in detail.

#### Volume III: Corporate Leadership (25 minutes)

Deming and Donald Petersen, then-CEO of Ford Motor Company, discuss corporate leadership's role in implementing Deming's principles.

#### Volume IV: Adoption of the New Philosophy (21 minutes)

In 1981, Deming began working with top managers at Ford Motor Company. In 1987, as a result of the changes they instituted, Ford set an industry record for net income. Top Ford management tells the story behind this remarkable achievement.

#### Volume V: Communication of the New Philosophy (22 minutes)

Do work standards help achieve quality or do they stand in the way of improvement? Why is it often easier to change the attitudes of a supplier than those of your own departments? Deming and top Ford managers discuss these issues.

#### Volume VI: Application of the New Philosophy (24 minutes)

Ford's team of managers, workers, and suppliers is introduced. This volume illustrates the Ford experience, where the difference is apparent in work place attitude, the quality of new Ford cars, and the bottom line.

#### Volume VII: The Red Bead Experiment and Life (25 minutes)

Deming's famous red bead experiment demonstrates why it's impossible for current American managerial techniques to lead us to quality improvement. Quality must be built into the system. Department of the Navy Total Quality Leadership Source Guide • Joyce Ward

#### Volume VIII: Lessons of the Red Bead Experiment (25 minutes)

The red bead experiment does more than point out faults in traditional management techniques. It reveals the strategies that can cut costs, increase profitability, and provide for long-term growth of organizations.

#### Volume IX: The Funnel Experiment (23 minutes)

Deming's funnel experiment demonstrates that profound knowledge is what managers need to pinpoint quality problems and discover successful solutions. The Japanese call this method the " Deming Cycle." It has helped companies worldwide produce quality products and services.

#### Volume X: How Managers and Workers Can Change (25 minutes)

Deming explains why best efforts, automation, and copying the practices of the Japanese or some other company will not improve quality and productivity. He discusses the need for transforming the way Americans do business. Managers and workers at a small company describe how they began to change.

#### Volume XI: Cooperation -- The Key to Quality (25 minutes)

Managers and workers discuss their struggle against old habits, their mistakes, and the reasons that statistics are only the beginning of the process. Deming talks about the qualities of a good manager, ways to increase profits, and methods for determining whether continual improvement is being practiced.

#### Volume XII: The Dangers of Buying on Price Tag Alone (25 minutes)

Deming discusses the concept of total cost, considers the reasons that long-term customer-supplier relationships pay off, and explains the method to use in selecting a single supplier. A manager of a \$50 million company tells how using these methods has improved his business.

#### Volume XIII: America in the Global Market (25 minutes)

America has been the leader of the world's economy for decades. Now we find our status assailed by Japan, other Pacific Rim nations, and the European Economic Community. New developments in Eastern Europe will most assuredly bring new opportunities--and new challenges. How did our position at the top change from birthright to battle ground? What can we do to adapt to and thrive in the face of these new economic realities?

Volume XIII addresses these vital issues through the presentation of a history of U.S. industrial growth and economic competition. You'll find out why the traditional management techniques that made America the world's industrial giant now threaten to topple us to second-rate status. You'll also see how American business can use Deming's philosophy as the Japanese did to transform our economy and lead organizations large and small to a successful future.

#### Volume XIV: Understanding Profound Knowledge (25 minutes)

Producing quality at a reasonable cost is everyone's goal. But how do we achieve it? Most managers today have bits and pieces of information about how to produce quality. But as Deming explains in Volume 14, you need "profound knowledge" (an understanding of the entire system) to achieve quality at a cost that will convince customers to buy your products or services. This volume is a detailed explanation of "profound knowledge."

It also examines why established concepts like "zero defects" and "just-in-time" may be good practices--but alone cannot lead to improved quality and increased productivity. You'll discover the 17 principles of "profound knowledge" managers must understand before they can produce quality at a lower cost.

#### Volume XV: Competition, Cooperation, and the Individual (25 minutes)

What's wrong with competition? Dr. Deming points out that competition often crushes motivation, cooperation, and collaboration. And all of these factors are crucial to producing quality.

Volume XV presents Deming's eye-opening attack on the competitive forces--grades, ratings, merit systems--that keep American companies from high profitability. Deming explains that individuals, companies, and countries can cooperate in research and development, while they compete to produce the best quality at the lowest price and to increase the size of the market. Everyone benefits from this win-win situation! Volume XV is the clearest explanation of how you can get everyone--workers, managers and suppliers--motivated to cooperate and achieve renewed mutual profitability.

#### Volume XVI: The Quality Leader (25 minutes)

Quality is leadership-driven and understanding leadership is vital to understanding and applying the Deming method. In Volume XVI, Deming describes the attributes of a successful leader and defines leadership's role in achieving improved quality and increased productivity.

#### Volume XVII: People Systems: The Toughest Challenge (25 minutes)

Deming describes how managers at the General Motors Engine Division applied the Deming philosophy to create a compensation system that replaced old methods of performance appraisal and ranking. He explains that performance does not necessarily come from the individual but from the system in which he or she works. He also talks about the work environment and how it determines quality output.

#### Volume XVIII: Competition Doesn't Work: Cooperation Does (25 minutes)

Deming is joined by psychologists Alfie Kohn and Michael Maccoby to investigate competition, motivation, and cooperation in the workplace, and the destructive nature of ranking.

#### Volume XIX: Profound Knowledge for Leadership (25 minutes)

Deming and Michael Maccoby describe the qualities of a successful leader and how a leader must transform the organization into a cooperative environment where everyone gives forth their best effort. Transforming an organization requires managers to unlearn old practices of motivation and participation.

#### Volume XX: Leadership for the Transformation (25 minutes)

Top managers at General Motors Engine Division discuss the role of a leader as teacher and coach. Deming and Michael Maccoby explore the challenges of transformation by moving to the front line, talking to supervisors, managers and employees about the difficulties and benefits of their new roles.

#### MISCELLANEOUS VIDEOTAPES

## SPC Press (Producer). (1984). A Japanese Control Chart (16 minutes). ASO price \$81.00; Stock #0120-LF-020-4100.

In this videotape, Dr. Donald J. Wheeler, statistician and industrial instructor, shows the way one Japanese company used the average and range chart for continuous improvement. This simple case history is a comprehensive example of what statistical process control is all about.

# Bianchard Training and Development, Inc. (1992). *Building High Performance Teams* with Ken Bianchard (customized edition for DON). ASO price \$143.00; Stock #0120-LF-020-4200.

Blanchard demonstrates the four stages of building an effective managerial team. He discusses the skills essential for high performing teams and how successful teams communicate and make decisions. This video is suggested for all management and professional-level employees.

### Ford Motor Company (Producer). (1983). *Continuous Improvement -- Batavia* (15 minutes). ASO price \$3.80; Stock #0120-LF-020-4300.

Ford states that this video illustrates a turnaround at Batavia as a result of their incorporating statistical methods of quality management. The Batavia plant reduced the measurable differences between each piece manufactured, resulting in a greatly improved quality product.

# Chart House Learning Constition. (1989). *Discovering the Future: The Business of Paradigms* (second edition. (34 minutes). ASO price \$267.00; Stock #0120-LF-020-8900.

Joel Barker updates his pioneering concepts on uncovering hidden barriers to innovation and encouraging new ideas. He states that strategies that have been successful in the past may actually block success in the future. There are several examples that support his theory in this video. This video is suggested for all management and professional-level employees.

## NBC (Producer). (1980). NBC White Paper: If Japan Can. . . Why Can't We? (80 minutes). ASO price \$147; Stock #0120-LF-020-4600.

The award-winning NBC White Paper: If Japan Can. . . Why Can't We? scrutinizes America's faltering productivity by contrasting it to Japan's, where the productivity rate and standard of living have steadily increased. The video covers areas such as American-Japanese competition, work groups, productivity, quality, and job satisfaction.

#### **Bianchard Training and Development, Inc.** (1992). *Managing the Journey with Ken Bianchard* (customized edition for DON) (26 minutes). ASO price \$134.00; Stock #0120-LF-020-4700.

Blanchard discusses the four levels of change and helps viewers understand the impact of the four levels. He also demonstrates the four leadership styles for managing change. This video is suggested for all support and management staff.

## Video Arts (Producer). (1976). *Meetings, Bloody Meetings* (30 minutes). ASO price \$143.00; Stock #0120-LF-020-4800.

This video is designed for everyone who attends meetings. It makes viewers vividly aware of the damage that can be done by approaching a meeting with the wrong attitude. It then shows the straightforward disciplines and techniques that can make meetings shorter, more productive, and more satisfying. This video is suggested for all levels of staff within an organization.

## Video Publishing House, Inc. (Producer). (1988). The Leadership Alliance by Tom Peters (65 minutes). To order, contact Joyce Leon, 800-323-4222, ext. 381. \$895.00.

Tom Peters discusses management strategies with successful leaders: Pat Carrigan, first woman to manage a General Motors assembly plant; Dennis Littky, principal who turned around problem high schools; Ralph Stayer, head of Johnsonville Foods; and Vaughn Beals, chairman of Harley-Davidson. It explains the techniques used and how they generated enthusiasm throughout their organizations. This video is suggested for all support and management staff.

## CRM (Producer). (1984). The Abliene Paradox (28 minutes). ASO price \$86.00; Stock #0120-LF-020-5000.

Dr. Jerry B. Harvey, Professor of Management Science at George Washington University, shows how collective decision-making can lead to "mismanaged agreement" and how it applies to organizations as well as individuals. Training designs help participants identify mismanaged agreements, understand their causes and develop strategies for dealing with "The Abilene Paradox."

## Petty (Producer). (1991). The Deming of America (57 minutes) ASO price \$160; Stock #0120-LF-020-9100.

This video gives viewers a thorough understanding of the Deming concepts. It focuses not only on Deming the man, but on Deming's ideas as well as on executives who explain why and how they use Deming's principles and methods.

# Bill Martin Productions, Inc. (Producer). (1989). *The Tribus Tapes: Deployment Flow Charting* (87 minutes total). ASO price \$149.00 for the 2-volume set; Stock #0120-LF-020-5200.

The videotapes come with a workbook. Tribus teaches viewers how to analyze processes that flow across the organization and ignore departmental boundaries.

#### Volume 1 (48 minutes)

Tribus defines flow charting and illustrates its power in both manufacturing and service industries. Practical hints are given on how to examine a flow chart and how to go about improving a process through the insights provided by flow charts.

#### Volume 2 (39 minutes)

Tribus explains how to use deployment flow charts as an aid in the development of new processes. He explores what to do when employees are hesitant to provide ideas about improvement of processes and provides techniques for working with groups of people with diverse educational backgrounds.

#### Workbook

The workbook, which covers both volumes of the videotapes, provides a permanent record of each and every figure and graph shown on the videotapes, often with added details not practical to show on a video screen. Several additional flow charts are included in the workbook to expand on the ideas shown on the videotapes.

## Salinger (Producer). (1945). Who's On First (8 minutes). ASO price \$59.00; Stock #0120-LF-020-5300.

This video, starring Abbott and Costello, illustrates the importance of communication in a way everyone can appreciate. It cleverly demonstrates some of the problems inherent in communication and sets up a positive climate for discussion and learning. It is good for sessions on communication skills, conflict resolution, feedback, and teamwork. This classic, the only comedy routine in the Baseball Hall of Fame, is suitable for all audiences from entry level to the top.

### American Management Association (Producer). (1987). Why Quality? (23 minutes). ASO price \$109.00; Stock #0120-LF-020-5400.

Why Quality? is based on John Guaspari's best-selling book Theory Why. This video delivers the message that every employee in an organization has a key role in delivering quality. It shows the central importance of seeing quality from the only point of view that really counts -- the customers'. Ideal for employees in all organizations interested in quality products and services.

### Britannica Films (Producer). (1984). *Management's Five Deadly Diseases* (16 minutes). To order, call (800) 292-4375. Order No. 3909-032. \$395.00.

Deming discusses five concepts apparent in American-style business management that are inhibiting growth and full productivity: (1) lack of constancy of purpose, (2) emphasis on short-term profits, (3) annual rating of performance, (4) mobility of management, and (5) the use of visible figures only.

### ORDERING REFERENCE MATERIALS

#### **HOW TO ORDER**

The Aviation Supply Office (ASO), located at 700 Robbins Avenue, Philadelphia, PA, has been designated the inventory control point and distribution center for all materials supporting the Department of the Navy Total Quality Leadership courses. They have three telephone lines dedicated to serving customers interested in these materials: (215) 697-2261/5655/2159, DSN 442-2261/5655/2159.

The majority of the reference materials reviewed in this source guide are on the shelves at ASO and ready for requisitioning. *The Deming Library* videos can only be ordered in a set of 20 volumes; all other videos may be purchased separately or in the command kit, which contains all videos, the broken squares exercise, a storyboard, and the two posters. The red bead experiment, used in Dr. Deming's 4-Day Seminar, is available by ordering a bead box, which is compact and portable, or a large acrylic bead bowl, which is more visible to students in larger classes.

Instructor guides will be distributed to command-level instructors upon completion of training at the two master trainer sites. The command instructors may then order student guides. If they order the command kit, they will have all the videos and training aids needed to teach the courses. In addition, all video titles will be made available for temporary loan at the two General Production Libraries at Naval Education and Training Support Center Atlantic, Norfolk, VA, and at Naval Education and Training Support Center Pacific, San Diego, CA, in fourth quarter FY-92.

In addition to the books and videotapes identified to support the courses, the following can be ordered from ASO for your command general libraries: Books: *No Contest, The Case Against Competition* by A. Kohn; *Out of the Crisis* by Deming; *ZAPP! The Lightning of Empowerment* by Byham & Cox; Videotapes: *Deming of America* by Petty.

The NAVSUP P-2002 Publication, a microfiche of an unabridged Navy Index of Publications and Forms, lists the TQL materials available and has been issued to assist in the ordering process. Orders must be placed through command supply departments in the MILSTRIP format via AUTODIN (Automatic Digital Network) with "NFZ" in record positions 4-6 (RIC field). The employees in the ASO Cognizance (COG I) Support Branch of the Forms Division will help in this process. They can be reached at (215) 697-2261/5655/2159, DSN 442-2261/5655/2159.

For your convenience, ASO stock numbers for recommended readings and videotapes are provided on the next page.

#### STOCK NUMBER AND PRICING SHEET FOR TQL MATERIALS

BOOKS	STOCK #	PRICE
Analyzing Business Process Data	0120-LF-020-5700	\$21.00
Deming Management At Work	0120-LF-020-8200	11.00
Deming's Road to Continual Improvement	0120-LF-020-9400	25.00
Leaders: Strategies for Taking Charge	0120-LF-020-5900	14.00
Management for Quality Improvement-The 7	0120-LF-020-7000	46.00
New QC Tools		
No Contest	0120-LF-020-8400	6.00
Out of the Crisis	0120-LF-020-8600	43.00
Please Understand Me	0120-LF-020-7100	9.50
Process Quality Management & Improvement Guidelines	0120-LF-020-7200	21.00
Safer Than a Known Way	0120-LF-020-7300	15.00
Sixteen Types	0120-LF-020-9700	3.00
Statistical Methods for Quality Improvement	0120-LF-020-7400	27.00
The Deming Management Method	0120-LF-020-6000	12.00
The Deming Route to Quality & Productivity	0120-LF-020-8700	17.00
The Goal	0120-LF-020-8300	12.00
The Keirsy Temperament Sorter	0120-LF-020-8100	.35
The Memory Jogger	0120-LF-020-6200	3.60
The Memory Jogger Plus	0120-LF-020-6100	25.00
The Team Handbook	0120-LF-020-6300	22.00
The Transformational Leader	0120-LF-020-6400	9.90
Tools and Methods for Improvement of Quality	0120-LF-020-9300	42.00
ZAPP! The Lightning of Empowerment	0120-LF-020-8800	10.50
VIDEOTAPES	STOCK #	PRICE
	STOCK # 0120-LF-020-4400	<b>PRICE</b> 1177.00
The Deming Library (Vol I-XX)		
The Deming Library (Vol I-XX) A Japanese Control Chart	0120-LF-020-4400	1177.00
The Deming Library (Vol I-XX) A Japanese Control Chart Building High Performance Teams	0120-LF-020-4400 0120-LF-020-4100	1177.00 81.00
The Deming Library (Vol I-XX) A Japanese Control Chart Building High Performance Teams Continuous ImprovementBatavia	0120-LF-020-4400 0120-LF-020-4100 0120-LF-020-4200	1177.00 81.00 143.00
The Deming Library (Vol I-XX) A Japanese Control Chart Building High Performance Teams Continuous ImprovementBatavia Discovering the Future (Paradigms)	0120-LF-020-4400 0120-LF-020-4100 0120-LF-020-4200 0120-LF-020-4300	1177.00 81.00 143.00 3.80
The Deming Library (Vol I-XX) A Japanese Control Chart Building High Performance Teams Continuous ImprovementBatavia Discovering the Future (Paradigms) If Japan CanWhy Can't We (NBC White Paper)	0120-LF-020-4400 0120-LF-020-4100 0120-LF-020-4200 0120-LF-020-4300 0120-LF-020-8900	1177.00 81.00 143.00 3.80 267.00
The Deming Library (Vol I-XX) A Japanese Control Chart Building High Performance Teams Continuous ImprovementBatavia Discovering the Future (Paradigms) If Japan CanWhy Can't We (NBC White Paper) Managing the Journey	0120-LF-020-4400 0120-LF-020-4100 0120-LF-020-4200 0120-LF-020-4300 0120-LF-020-8900 0120-LF-020-4600	1177.00 81.00 143.00 3.80 267.00 147.00
The Deming Library (Vol I-XX) A Japanese Control Chart Building High Performance Teams Continuous ImprovementBatavia Discovering the Future (Paradigms) If Japan CanWhy Can't We (NBC White Paper) Managing the Journey Meetings, Bloody Meetings	0120-LF-020-4400 0120-LF-020-4100 0120-LF-020-4200 0120-LF-020-4300 0120-LF-020-8900 0120-LF-020-4600 0120-LF-020-4700	1177.00 81.00 143.00 3.80 267.00 147.00 134.00
The Deming Library (Vol I-XX) A Japanese Control Chart Building High Performance Teams Continuous ImprovementBatavia Discovering the Future (Paradigms) If Japan CanWhy Can't We (NBC White Paper) Managing the Journey Meetings, Bloody Meetings The Abilene Paradox	0120-LF-020-4400 0120-LF-020-4100 0120-LF-020-4200 0120-LF-020-4300 0120-LF-020-8900 0120-LF-020-4600 0120-LF-020-4700 0120-LF-020-4800	1177.00 81.00 143.00 3.80 267.00 147.00 134.00 143.00
The Deming Library (Vol I-XX) A Japanese Control Chart Building High Performance Teams Continuous ImprovementBatavia Discovering the Future (Paradigms) If Japan CanWhy Can't We (NBC White Paper) Managing the Journey Meetings, Bloody Meetings The Abilene Paradox The Tribus Tapes: Deployment Flow Charting	0120-LF-020-4400 0120-LF-020-4100 0120-LF-020-4200 0120-LF-020-4300 0120-LF-020-8900 0120-LF-020-4600 0120-LF-020-4700 0120-LF-020-4800 0120-LF-020-5000	1177.00 81.00 143.00 3.80 267.00 147.00 134.00 143.00 86.00
The Deming Library (Vol I-XX) A Japanese Control Chart Building High Performance Teams Continuous ImprovementBatavia Discovering the Future (Paradigms) If Japan CanWhy Can't We (NBC White Paper) Managing the Journey Meetings, Bloody Meetings The Abilene Paradox The Tribus Tapes: Deployment Flow Charting Who's On First	0120-LF-020-4400 0120-LF-020-4100 0120-LF-020-4200 0120-LF-020-4300 0120-LF-020-8900 0120-LF-020-4600 0120-LF-020-4700 0120-LF-020-4800 0120-LF-020-5000 0120-LF-020-5200	1177.00 81.00 143.00 3.80 267.00 147.00 134.00 143.00 86.00 149.00
The Deming Library (Vol I-XX) A Japanese Control Chart Building High Performance Teams Continuous ImprovementBatavia Discovering the Future (Paradigms) If Japan CanWhy Can't We (NBC White Paper) Managing the Journey Meetings, Bloody Meetings The Abilene Paradox The Tribus Tapes: Deployment Flow Charting Who's On First Why Quality?	0120-LF-020-4400 0120-LF-020-4100 0120-LF-020-4200 0120-LF-020-4300 0120-LF-020-8900 0120-LF-020-4600 0120-LF-020-4800 0120-LF-020-4800 0120-LF-020-5000 0120-LF-020-5200 0120-LF-020-5300	1177.00 81.00 143.00 3.80 267.00 147.00 134.00 143.00 86.00 149.00 53.00
The Deming Library (Vol I-XX) A Japanese Control Chart Building High Performance Teams Continuous ImprovementBatavia Discovering the Future (Paradigms) If Japan CanWhy Can't We (NBC White Paper) Managing the Journey Meetings, Bloody Meetings The Abilene Paradox The Tribus Tapes: Deployment Flow Charting Who's On First Why Quality? Command Kit (consists of above videos,	0120-LF-020-4400 0120-LF-020-4100 0120-LF-020-4200 0120-LF-020-4300 0120-LF-020-8900 0120-LF-020-4600 0120-LF-020-4700 0120-LF-020-4800 0120-LF-020-5200 0120-LF-020-5300 0120-LF-020-5400	1177.00 81.00 143.00 3.80 267.00 147.00 134.00 143.00 86.00 149.00 53.00 109.00
The Deming Library (Vol I-XX) A Japanese Control Chart Building High Performance Teams Continuous ImprovementBatavia Discovering the Future (Paradigms) If Japan CanWhy Can't We (NBC White Paper) Managing the Journey Meetings, Bloody Meetings The Abilene Paradox The Tribus Tapes: Deployment Flow Charting Who's On First Why Quality?	0120-LF-020-4400 0120-LF-020-4100 0120-LF-020-4200 0120-LF-020-4300 0120-LF-020-8900 0120-LF-020-4600 0120-LF-020-4700 0120-LF-020-4800 0120-LF-020-5200 0120-LF-020-5300 0120-LF-020-5400	1177.00 81.00 143.00 3.80 267.00 147.00 134.00 143.00 86.00 149.00 53.00 109.00
The Deming Library (Vol I-XX) A Japanese Control Chart Building High Performance Teams Continuous ImprovementBatavia Discovering the Future (Paradigms) If Japan CanWhy Can't We (NBC White Paper) Managing the Journey Meetings, Bloody Meetings The Abilene Paradox The Tribus Tapes: Deployment Flow Charting Who's On First Why Quality? Command Kit (consists of above videos, broken squares, storyboard, and 2 posters)	0120-LF-020-4400 0120-LF-020-4100 0120-LF-020-4200 0120-LF-020-4300 0120-LF-020-8900 0120-LF-020-4600 0120-LF-020-4600 0120-LF-020-4800 0120-LF-020-5000 0120-LF-020-5200 0120-LF-020-5400 0120-LF-020-9600	1177.00 81.00 143.00 3.80 267.00 147.00 134.00 143.00 86.00 149.00 53.00 109.00 2628.00
The Deming Library (Vol I-XX) A Japanese Control Chart Building High Performance Teams Continuous ImprovementBatavia Discovering the Future (Paradigms) If Japan CanWhy Can't We (NBC White Paper) Managing the Journey Meetings, Bloody Meetings The Abilene Paradox The Tribus Tapes: Deployment Flow Charting Who's On First Why Quality? Command Kit (consists of above videos, broken squares, storyboard, and 2 posters) The Deming of America	0120-LF-020-4400 0120-LF-020-4100 0120-LF-020-4200 0120-LF-020-4300 0120-LF-020-8900 0120-LF-020-4600 0120-LF-020-4700 0120-LF-020-4800 0120-LF-020-5000 0120-LF-020-5200 0120-LF-020-5400 0120-LF-020-9600	$\begin{array}{c} 1177.00\\ 81.00\\ 143.00\\ 3.80\\ 267.00\\ 147.00\\ 134.00\\ 143.00\\ 86.00\\ 149.00\\ 53.00\\ 109.00\\ 2628.00\\ 160.00\\ \end{array}$
The Deming Library (Vol I-XX) A Japanese Control Chart Building High Performance Teams Continuous ImprovementBatavia Discovering the Future (Paradigms) If Japan CanWhy Can't We (NBC White Paper) Managing the Journey Meetings, Bloody Meetings The Abilene Paradox The Tribus Tapes: Deployment Flow Charting Who's On First Why Quality? Command Kit (consists of above videos, broken squares, storyboard, and 2 posters) The Deming of America <b>MISCELLANEOUS</b> Bead Bowl Experiment	0120-LF-020-4400 0120-LF-020-4100 0120-LF-020-4200 0120-LF-020-4300 0120-LF-020-8900 0120-LF-020-4600 0120-LF-020-4600 0120-LF-020-4800 0120-LF-020-5200 0120-LF-020-5300 0120-LF-020-5400 0120-LF-020-9600 0120-LF-020-9100 STOCK #	1177.00 81.00 143.00 3.80 267.00 147.00 134.00 143.00 86.00 149.00 53.00 109.00 2628.00 160.00 <b>PRICE</b>
The Deming Library (Vol I-XX) A Japanese Control Chart Building High Performance Teams Continuous ImprovementBatavia Discovering the Future (Paradigms) If Japan CanWhy Can't We (NBC White Paper) Managing the Journey Meetings, Bloody Meetings The Abilene Paradox The Tribus Tapes: Deployment Flow Charting Who's On First Why Quality? Command Kit (consists of above videos, broken squares, storyboard, and 2 posters) The Deming of America <b>MISCELLANEOUS</b> Bead Bowl Experiment Bead Box Experiment	0120-LF-020-4400 0120-LF-020-4100 0120-LF-020-4200 0120-LF-020-4300 0120-LF-020-8900 0120-LF-020-8900 0120-LF-020-4600 0120-LF-020-4700 0120-LF-020-4800 0120-LF-020-5200 0120-LF-020-5200 0120-LF-020-9600 0120-LF-020-9100 STOCK # 0120-LF-020-9200	1177.00 81.00 143.00 3.80 267.00 147.00 134.00 143.00 86.00 149.00 53.00 109.00 2628.00 160.00 <b>PRICE</b> 193.00
The Deming Library (Vol I-XX) A Japanese Control Chart Building High Performance Teams Continuous ImprovementBatavia Discovering the Future (Paradigms) If Japan CanWhy Can't We (NBC White Paper) Managing the Journey Meetings, Bloody Meetings The Abilene Paradox The Tribus Tapes: Deployment Flow Charting Who's On First Why Quality? Command Kit (consists of above videos, broken squares, storyboard, and 2 posters) The Deming of America <b>MISCELLANEOUS</b> Bead Bowl Experiment Bead Box Experiment Broken Squares Exercise	0120-LF-020-4400 0120-LF-020-4100 0120-LF-020-4200 0120-LF-020-4300 0120-LF-020-8900 0120-LF-020-8900 0120-LF-020-4600 0120-LF-020-4700 0120-LF-020-4800 0120-LF-020-5200 0120-LF-020-5200 0120-LF-020-9600 0120-LF-020-9100 <b>STOCK #</b> 0120-LF-020-9200 0120-LF-020-9200 0120-LF-020-6800	1177.00 81.00 143.00 3.80 267.00 147.00 134.00 143.00 86.00 149.00 53.00 109.00 2628.00 160.00 <b>PRICE</b> 193.00 95.00
The Deming Library (Vol I-XX) A Japanese Control Chart Building High Performance Teams Continuous ImprovementBatavia Discovering the Future (Paradigms) If Japan CanWhy Can't We (NBC White Paper) Managing the Journey Meetings, Bloody Meetings The Abilene Paradox The Tribus Tapes: Deployment Flow Charting Who's On First Why Quality? Command Kit (consists of above videos, broken squares, storyboard, and 2 posters) The Deming of America <b>MISCELLANEOUS</b> Bead Bowl Experiment Bead Box Experiment	0120-LF-020-4400 0120-LF-020-4100 0120-LF-020-4200 0120-LF-020-4300 0120-LF-020-8900 0120-LF-020-8900 0120-LF-020-4800 0120-LF-020-4800 0120-LF-020-5200 0120-LF-020-5200 0120-LF-020-5400 0120-LF-020-9600 0120-LF-020-9100 STOCK # 0120-LF-020-9200 0120-LF-020-6800 0120-LF-020-6800	1177.00 81.00 143.00 3.80 267.00 147.00 134.00 143.00 86.00 149.00 53.00 109.00 2628.00 160.00 <b>PRICE</b> 193.00 95.00 14.50

Storyboard

Department of the Navy Total Quality Leadership Source Guide • Joyce Ward

### TQL POINTS OF CONTACT

The DON points of contact are people within major DON organizations who are involved in TQL training and implementation. The Office of Personnel Management (OPM) and the Federal Quality Institute (FQI) can also refer you to other Federal agencies involved in TQL. Both OPM and FQI offer a variety of services.

#### BUREAU OF MEDICINE AND SURGERY

TQL Coordinator: LCDR Dave Krieger (Code MED-00Q), (202) 653-1958; DSN 294-1958/1200; fax (202) 653-1280; Washington, DC 20372.

#### **BUREAU OF NAVAL PERSONNEL**

TQL Coordinator: Jerry Buck (Code PERS OOT), (703) 614-5581; DSN 222-5581; fax (703) 695-9611; Navy Annex G815, Washington, DC 20370-5000.

#### CHIEF OF NAVAL EDUCATION & TRAINING (CNET)

Special Assistants for TQL: CAPT Barbara J. Stankowski (Code OOQ), (904) 452-4798; DSN 922-4798; Dr. J. D. Smith (Code OOQA), (904) 452-4994; DSN 922-4994; Bldg 628, Naval Air Station, Pensacola, FL 32508-5100.

#### HEADQUARTERS, UNITED STATES MARINE CORPS

TQL Coordinator: Jerry D. Stark (Code MPC-70), (703) 614-0852; DSN 224-0852; fax (703) 614-8506; Navy Annex 4029, Washington, DC 20380-0001.

#### MILITARY SEALIFT COMMAND

TQL Coordinator: Tom Kelley (Code NQA), (202) 433-0007; DSN 288-0007; fax (202) 433-6638; Washington, DC 20378-5100.

#### NAVAL AIR SYSTEMS COMMAND

TQL Coordinator: Janice Stark, (703) 692-3853; DSN 222-3853; fax (703) 746-3651; Washington, DC 20361-0004.

#### NAVAL FACILITIES ENGINEERING COMMAND

TQL Facilitator: Jack Johnson (Code 09F), (703) 325-9036; DSN 221-9036; fax (703) 325-8121; Alexandria, VA 22332-2300.

#### NAVAL SEA SYSTEMS COMMAND

TQL Coordinator: Donna K. Tierney (Code SEA 09Q), (703) 602-6515; DSN 332-3500; fax (703) 602-8526; 2531 National Center, Building 3, Washington, DC 20362-5160.

#### NAVAL SUPPLY SYSTEMS COMMAND

TQL Coordinator: Dr. Irene Pendleton, (Code 00Q),(703) 607-0613; DSN 327-0613; fax (703) 607-0114; 1931 Jefferson Davis Highway, Arlington, VA 22202.

#### OFFICE OF THE CHIEF OF NAVAL OPERATIONS

TQL Coordinator: Joe Bizup, (703) 693-7016; DSN 223-7016; fax (703) 697-2506; Washington, DC 20350-2000.

Department of the Navy Total Quality Leadership Source Guide • Joyce Ward

#### SPACE AND NAVAL WARFARE SYSTEMS COMMAND

TQL Coordinator: Paul Stoskus (Code 08Q), (703) 602-3635; DSN 332-3635; fax (703) 602-1659; 2451 Crystal Drive, Arlington, VA 22202.

#### CINCPACFLT TQL TEAMS:

Code 01Q, Building 301, NTC San Diego, CA 92147-5030

#### SURFACE TQL TEAM

(619) 524-6272 DSN 524-6272 fax (619) 524-6276

#### AIR TQL TEAM

(619) 524-6273 DSN 524-6273 fax (619) 524-6276

#### CINCLANTFLT TQL TEAMS:

Commander in Chief, U.S. Atlantic Fleet Code N02Q Norfolk, VA 23511-5210

#### SURFACE TQL TEAM

(804) 445-8586 DSN 565-8586 fax (804) 565-8579

#### AIR TQL TEAM

(804) 445-8585 DSN 565-8585 fax (804) 565-8579

#### SUBMARINE TQL TEAM

(804) 445-8587 DSN 565-8587 fax (804) 565-8579

#### FEDERAL QUALITY INSTITUTE

Director: Don Mizaur, (202) 376-3747; fax (202) 376-3765. Information Network Office: Jeff Manthos, (202) 376-3753; 401 F Street, NW Room 333, Washington, DC 20044-0099. Mailing address: P.O. Box 99, Washington, DC 20044-0099.

#### OFFICE OF CIVILIAN PERSONNEL MANAGEMENT

Director: Roberta K. Peters Total Quality Principal: Jerome M. Smith, (703) 696-4546; DSN 226-4546; Office of Civilian Personnel Management, 800 North Quincy Street, Arlington, VA 22203-1998.