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THESIS

IMPLEMENTATION OF THE TOTAL QUALITY
LEADERSHIP PROCESS IN U.S. MARINE CORPS
FIELD CONTRACTING OFFICES

by

Jeffrey D. Lee

June, 1993

Thesis Advisor:

Susan Page Hocevar

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Implementation of the Total Quality
Leadership Process in U.S. Marine Corps
Field Contracting Offices

by

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Submitted in partial fulfillment
of the requirements for the degree of

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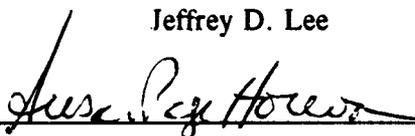
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ABSTRACT

The implementation of the Total Quality Leadership process (TQL) is a continuous process; this thesis identifies the status of implementation within the ten U.S. Marine Corps Field Contracting Offices.

The thesis also includes a brief case study involving a field contracting office. The case study examines field contracting personnel views regarding the implementation of the TQL process and how TQL impacts on their performance as organizational boundary spanners in the customer/supplier relationship.

The research revealed a wide variation regarding the implementation of the TQL process and TQL training in the field contracting offices. In a majority of the field contracting offices, actual implementation has not yet reached the lowest levels. The research revealed that field contracting personnel view implementation of the TQL process as having a positive effect on improving the conduct of the contracting process.

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I. INTRODUCTION

This chapter is organized into four sections. The sections consist of purpose, scope, objective, and organization of the thesis.

A. PURPOSE

The purpose of this thesis is to investigate the implementation status of the Total Quality Leadership (TQL) process in U.S. Marine Corps Field Contracting Offices as designated in the current edition of the Marine Corps Purchasing Procedures Manual. [Ref. 1:p. 2-5] The results of this research can be used in assessing the current implementation status of the TQL process in the contracting community portion of the Marine Corps' acquisition workforce. Additionally, this thesis will look at the implementation of the TQL process in the functional area of field contracting through a case study.

B. SCOPE

The consensus is that the quality of the acquisition workforce and the quality of the goods and services procured for the Department of Defense (DoD) can be improved [Ref. 2:p. iii]. Legislative acts such as the Defense Acquisition Workforce Improvement Act (DAWIA) are aimed

specifically at improving the quality of the acquisition workforce. Other legislative acts have also been designed to require improvements in quality from the private sector (e.g., the Truth in Negotiations Act [TINA], Competition in Contracting Act [CICA], etc.). This thesis will be restricted to an area not currently covered under legislative acts. This area is the management initiative called Total Quality Leadership (TQL), or what is also called Total Quality Management (TQM).¹ [Ref. 3:pp. 21-23]

The scope will be limited specifically to the implementation of the TQL process in the following ten U.S. Marine Corps field contracting offices: Marine Corps Logistics Base (MCLB), Albany, Georgia; MCLB, Barstow, California; Marine Corps Recruit Depot (MCRD)/Western Recruiting Region (WRR), San Diego, California; MCRD/Eastern Recruiting Region (ERR), Parris Island, South Carolina; Marine Corps Base (MCB), Camp Lejeune, North Carolina; Marine Air-Ground Combat Center (MCAGCC), Twentynine Palms, California; MCB, Camp Pendleton, California; Marine Corps Support Activity (MCSA), Overland Park, Kansas; Marine Corps Combat Development Center (MCCDC), Quantico, Virginia; and MCB, Camp Smedley D. Butler, Okinawa, Japan. [Ref. 1:p. 2-5]

¹Total Quality Leadership (TQL) and Total Quality Management (TQM) may be used interchangeably throughout this thesis.

C. OBJECTIVE

The objective of this thesis is primarily to address the status of the implementation of the TQL process in the ten U.S. Marine Corps Field Contracting Offices. Additionally, this thesis will determine what time frames, if any, are expected/anticipated for the full implementation of the TQL process in the ten field contracting offices.

Through an individual case study involving one specific field contracting office, this thesis will also examine how the TQL process has affected the boundary spanning roles of professional contracting personnel and customer/supplier reciprocal relationships. Internal customers and external suppliers of the case study organization will be examined to see how the implementation of the TQL process has affected their positions in the customer/supplier reciprocal relationship.

D. ORGANIZATION OF THE THESIS

The thesis is organized into six chapters followed by the appendices, list of references, and the initial distribution list. Chapter I is the introduction to the thesis. Chapter II provides a background and familiarization with the implementation of the TQL process followed by a restatement of the research questions. Chapter III will discuss the methodology of the study, cover the background on the ten U.S. Marine Field Contracting Offices, discuss data collection

procedures, limitations and assumptions. Chapter IV will provide an aggregate overview of the implementation status of the TQL process in the ten U.S. Marine Corps Field Contracting Offices. Chapter V will address the case study organization. Chapter VI will contain conclusions and recommendations for further study.

II. BACKGROUND

This chapter is organized into three sections. The first section will cover literature reviewed and sources of information. The second section will provide a brief summary of the total quality philosophy and will cover the implementation of the TQL process in the DoD, the Department of the Navy (DON), and the U.S. Marine Corps as well as discuss the boundary spanning roles of professional contracting personnel and customer/supplier reciprocal relationships. The last section will address the research questions.

It is assumed that the reader is already familiar with TQL/TQM, its concepts, and the DoD TQM process. If the reader is unfamiliar with TQL and TQM, the references provide recommended sources of information regarding this subject.

Information regarding the DoD TQM process is contained in DoD Directive 5000.1, Total Quality Management. [Ref. 4] Further information is contained in the, "DoD TQM Guide, A Two Volume Guide for Defense Organizations". Volume I addresses, "Key Features of the DoD Implementation" [Ref. 5] and Volume II, "A Guide to Implementation." [Ref. 6]

A. LITERATURE REVIEWED AND SOURCES OF INFORMATION

The literature review and information search portion of this research involved numerous sources. The primary source was the Naval Postgraduate School's (NPS) main and thesis libraries. Personal literature and publications held by the author were also used. Additional sources of information were the Defense Technical Information Center (DTIC) database at the NPS library and the Defense Logistics Studies Information Exchange (DLSIE). Information was also provided by the office of the Deputy Chief of Staff for Installations and Logistics, Contracts Division (DC/S I&L), Field Contracting Support Branch and the office of the Deputy Chief of Staff for Manpower and Reserve Affairs, TQL Coordinator, Code MP-30, Headquarters, U.S. Marine Corps. The Navy Personnel Research and Development Center, San Diego, California, provided information, a TQL Climate Survey (TQLCS) instrument, and technical analysis support for the TQLCS.

Professional contracting personnel from the ten field contracting offices and their parent organization's TQL coordinator were also consulted. Additional materials and research guidance were provided to the researcher by the thesis advisor, Dr. Susan Page Hocevar and the associate advisor, Linda E. Wargo.

The literature review and information search served to familiarize the author with the TQM and DON TQL philosophy as well as provide insight into the implementation of the TQL

process. It became clearly evident to the researcher during this phase of the research that a vast amount of information is available to the general public regarding the topic of TQM and TQL. The list of references can provide the reader with sources of information that includes, but is not limited to, books, reports, and public documents.

B. TQL - BACKGROUND

This section will cover the basic background of the quality movement philosophy. Following this will be a brief background on TQM in the DoD, TQL in the DON, and TQL in the U.S. Marine Corps.

1. Quality Philosophy

The quality movement philosophy is based on decades of efforts by such noted American quality scholars as Dr. W. Edwards Deming [Ref. 7] and Dr. Joseph M. Juran [Ref. 8]. Both scholars advocate managing for quality and usage of statistical process control (SPC). Furthermore, they advocate focusing on inspirational vice autocratic leadership, participatory management, working in teams instead of work by individual effort, and the needs of the customer vice just on profits. They emphasize focusing on processes to improve quality, managing from a systems perspective, strategic planning, and making no compromises regarding quality vice considering what degree of quality is affordable. The latter

is a key message; quality does not come at the cost of productivity.

It should be noted that the terms TQM and TQL are not labels that were coined by Dr. Deming. In fact,

The man most often identified as the father of total quality management, Dr. W. Edwards Deming, takes offense at the assumed parentage. "The term is counter-productive," says Dr. Deming, the man who first taught the Japanese statistical quality control. "My work is about a transformation in management and about the profound knowledge needed for the transformation. Total quality stops people from thinking." "Neither 'total quality' nor 'total quality management' describes what this approach to management is all about," says Dr. Edward Baker, director of Ford's corporate quality office. "Its about improving the total behavior of organizations, about developing the capability of a system to do what its members actual want it to do - anywhere in life." "Total quality is not a closed-ended methodology; its an open-ended methodology," says Shoji Shiba, of Japan's Tsukuba University. "TQ continues to develop according to the needs of society." [Ref. 9]

a. Dr. W. Edwards Deming

Dr. Deming specifically addresses the role of quality in government. He views government as a provider of services and states:

In most governmental services, there is no market to capture. For capture of the market, a governmental agency should deliver economically the service prescribed by law or regulation. The aim should be distinction in service. Continual improvement in government service would earn appreciation of the American public and would hold jobs in the service, and help industry to create more jobs. [Ref. 7:p. 6]

Distinction in service is a key objective and can be interpreted as providing service of uncompromising quality to the customer, the citizens of the United States.

Dr. Deming bases his philosophy on Profound Knowledge and expresses it through his 14 points, avoidance of the deadly diseases of management, obstacles to quality, and Deming's theories that can be applied to any business or government. Dr. Deming considers practices such as awarding business to the lowest bidder (Point 4) and robbing people of their right to pride of workmanship (Point 12) as having a negative impact on quality. [Ref. 7]

Deming's feelings are expressed by his statement, "he that has a rule to give his business to the lowest bidder deserves to get rooked." His philosophy considers total costs. This coincides with the current DoD acquisition policy toward seeking "best value" and the concept of life-cycle-costing (LCC). The practice of driving down prices via competition and award based upon the lowest price, without regard to quality and service, "can drive good vendors and good service out of business." [Ref. 7]

As to pride of workmanship, Deming feels that merit rating rewards people who do well in the current system but discourages attempts to improve the system. Excessive mobility of management in the government due to political turnover is a key obstacle toward implementing Deming's quality philosophy in government. [Ref. 7]

Deming's philosophy proposes a new job for purchasing managers. He feels managers should first shift their focus from lowest initial cost to one of lowest total

cost and then seek long-term relationships between the purchaser and supplier. Short-term relations discourage innovation and the development of economy in production. Long-term relations based upon trust and loyalty coupled with single sourcing, when practical, is a key principle. More recently, Deming has said that we should, "end the practice of awarding business based on price tag alone" and has recommended the use of fewer suppliers. [Ref. 7]

Deming also recommends against using the current system of vendor selection. He feels that unqualified examiners are used to rate vendors via such documents as Military Specification (Mil-Q-9858A). Deming feels that suppliers should be selected by competition but not on price tag. Use of qualifications that have meaning such as supplier evidence of active total quality involvement in their management, research and development (R&D) expenditures, and records for development of quality products should be part of the criteria for supplier qualification. [Ref. 7]

Customer/Supplier relations are also important. An "arms-around" vice an "arms length" relationship where the customer is in control is the key. Empowerment of buyers is an integral part of restoring pride in workmanship and allows for more effective customer/supplier relations. Furthermore, both top management and purchasing agents must learn to manage for quality and commit to the quality movement philosophy. [Ref. 7]

b. Dr. Joseph M. Juran

Dr. Juran provides a similar view regarding the quality movement philosophy. He feels that upper management became detached from the process of managing for quality and must now return to a philosophy of managing for quality. [Ref. 8]

Both Deming and Juran point to lessons learned from Japan in that upper management must take charge of leading the quality revolution in the U.S. Juran, like Deming, believes that training in managing for quality must occur at ALL levels and in all functions. Like Deming, Juran has basic guidelines that support his theories of quality. He stresses managing for quality and provides four key points for use in adopting this approach: Upper management in charge; training for all functions, at all levels; quality improvement at a continuing, revolutionary pace; and workforce participation through quality control (QC) circles.

Juran provides a basic reason for the need for quality. He views good quality as a shield for society against interruptions and disaster or as "life behind quality dikes". Juran stresses a need for the clarity of definitions for quality and its subsidiary terms. Like Deming, he sees *product* as the output of any process. He also stresses a focus on the customer and defines customers as either internal or external. [Ref. 8]

The "Juran Trilogy;" quality planning, quality control, and quality improvement, is the managerial process by which he proposes to manage for quality. He takes these three universal processes and provides guidelines for implementation of each step. Emphasis is placed on training and motivational activities needed to support managing for quality. He points out that investment in quality improvement provides an earlier and more measurable return than investment in either quality planning or quality control. [Ref. 8]

Like Deming, he sees that major deficiencies are intradepartmental (within) in nature but major waste is interdepartmental (between). He sees a need to provide a means for managers to deal with both intra and inter departmental deficiencies before managing for quality can begin. [Ref. 8]

Juran does address the customer-supplier relationship and like Deming, he sees current relationships as too adversarial. He proposes closer relations and adopting a teamwork concept. His recommendations for total quality improvement parallel Deming's. e.g., few suppliers; single source, long term relations of three or more years, quality based on fitness for use vice tight specifications, continuous process improvement capability emphasis for qualification, etc. [Ref. 8]

c. Dr. Kaoru Ishikawa

Japan is often lauded as the world's leader in the quality movement. To understand how the Japanese view the quality movement, one can refer to such Japanese quality experts as Dr. Ishikawa. [Ref. 10] He shows that total quality is not just a Japanese management style but a belief that has been permanently rooted in their culture. Both Deming and Juran use Japan as an example of the success of the quality movement but one must read a text on quality that is written from the Japanese perspective to fully understand why the quality movement has been so successful in Japan.

Ishikawa addresses the differences between Japan and the western societies such as the United States. Sometimes he is highly critical of western society. Japanese have fundamental differences in their views regarding professionalism, labor unions, class consciousness and elitism, pay systems, turnover, etc. Ishikawa attributes the Japanese viewpoints on these issues as a reason for the success of the quality movement in Japan. His basic philosophy, total quality control (TQC), closely parallels that of Deming and Juran. [Ref. 10]

Regarding the purchasing function, Ishikawa recommends that suppliers work closely with purchasers as does Deming and Juran. He feels that quality control is a supplier responsibility and that such concepts as integrated factories means that management either cannot or does not trust

suppliers. Like the preceding authors mentioned, he feels that long term relations with single suppliers provides the best in total quality management of vendee-vendor relations. He provides "ten point quality control principles for vendee-vendor relations." [Ref. 10]

Ishikawa and Deming strongly advocate the use of second sourcing. Ishikawa feels that selecting two subcontractors or suppliers protects against natural and man-made calamities. He does feel that the customer has a role in nurturing specialized companies and that subcontractors should be allowed to sell products to other customers. He defines purchaser relations with suppliers as preliminary dealings, official dealings, suspension of trading, and nurturing of subcontractors; a purchaser responsibility. He does stress the need for establishing well-defined, clear, long-term policies for subcontractor and purchaser relationships. [Ref. 10]

One interesting point is that Japanese business subcontracts approximately 70% of its work. This means that the producer is in the design and assembly business much like the major U.S. defense contractors who often subcontract out a large portion of their work. Ishikawa feels that subcontractors provide business with a "wealth of experience waiting to be tapped". This philosophy fits in well with current DOD policy to encourage contractors to participate in the mentorship of subcontractors. [Ref. 10]

2. TQM in the Department of Defense

The use of TQM began in DoD in the early 1980's in a few DoD logistic-type field activities. In 1987 its use began to rapidly expand with the advent of support from senior management. TQM is now one of the Department of Defense's primary initiatives. Their particular interest is in seeing it applied to improve the acquisition system. [Ref. 11:p. vii]

The DoD position on TQM was formally addressed by the Secretary of Defense on 30 March 1988 in a memorandum whose subject was the "DoD Posture on Quality." This memorandum stated that TQM was, "the vehicle for attaining continuous quality improvement in our operations," and that TQM is to be considered, "as a major strategy to meet the President's productivity objectives under Executive Order 12522." [Ref. 12:p. 1] Since 1988, the emphasis on TQM has shifted from the DoD level to the level of the individual Departments and Services within DoD.

3. TQL in the Department of the Navy

TQL started out in the DON as TQM in 1984 in such places as aviation depots (1984-Naval Aviation Depot, North Island, California and Jacksonville, Florida), shipyards, and weapons stations. The Naval Aviation Depot, Cherry Point, North Carolina, one of the "DoD logistics-type field activities" was a leader in implementing TQM. In 1986, Colonel Jerald B. Gartman, USMC, assumed command of the Naval Aviation Depot at Cherry Point, North Carolina. His vision was to use Deming's management methods to improve operations,

productivity, and reduce costs at the depot. Assisted by personnel from Navy Personnel Research and Development Center, the depot implemented TQM and began a paradigm shift in management philosophy that made it a DON quality star. In 1989 the depot won the DoD "productivity excellence award." Their accomplishments were noteworthy and resulted in \$39.3 million in savings for 1988. [Ref. 13:p. 146]

At about the same time, April 1989, a proposed strategy for educating the DoD acquisition workforce in TQM was released in a report by the Navy Personnel Research and Development Center (NPRDC). It acknowledges that the DoD policy is to give the responsibility for developing implementation plans to the individual Services. The report provides a strategy with broad guidelines specifically for the planning and coordinating of TQM implementation in the DoD acquisition workforce. [Ref. 10]

Soon after the release of the NPRDC report [Ref. 10], TQM became a major management initiative for the DON. The DON Report to the Congress for fiscal years 1990-1991 listed TQM as one of the DON's four key management initiatives. TQM was addressed in the context of improving the area of acquisition management. [Ref. 3:pp. 21-23]

The DON again addressed TQM as a key management initiative during fiscal year 1991 [Ref. 14:p. 23]. The subsequent DON report to the Congress for fiscal years 1992-1993 shifted from TQM as a management initiative aimed at

improving the area of acquisition management to that of TQL as a Service-wide management initiative aimed at improving overall operations of the DON [Ref. 15:p. 24].

The Department of the Navy is charting its future along a new path of management innovation and systems integration. We are strategically planning for a more productive organizational structure using the guidelines of Total Quality Leadership (TQL). [Ref. 16:p. 19]

On February 10, 1992, the DON strategic plan for TQL was published. This document contains the DON vision, guiding principles, and strategic goals. To signify total commitment from the highest levels of senior leadership, it was signed by the Secretary of the Navy, the Chief of Naval Operations, and the Commandant of the Marine Corps. [Ref. 17] To emphasize the total commitment to TQL, the Secretary of the Navy delegated oversight authority for TQL implementation, training, and education to the Under Secretary of the Navy, TQL Office [Ref. 18]. The DON's emphasis on education and training closely parallels Deming's point number six from his 14 obligations of top management in which he states, "Institute training on the job" and point number 13 in which he states, "Institute a rigorous program of education and self-improvement." [Ref. 7]

4. TQL in the U.S. Marine Corps

TQL started out in a number of Marine Corps "logistics-type field activities" such as the Naval Aviation Depot at Cherry Point, North Carolina [Ref. 12] and the MCLB

at Albany, Georgia [Ref. 19] in the latter part of the 1980s. As TQM became a major management initiative in the DON, Marine Corps senior leaders, both military and civilian, began to receive introductory TQL training at DON Senior Leaders' Seminars (SLS).

Official policy regarding TQL and the Marine Corps was first addressed by the DON Strategic Plan for TQL [Ref. 16]. Then on 2 December 1992, the Commandant of the Marine Corps (CMC) released CMC White Letter No. 19-92. The intent of the CMC was to, "strongly encourage the entire senior leadership of the Marine Corps to attend a SLS," on TQL. [Ref. 20:p. 1]

As of this point, the DON Strategic Plan for TQL [Ref. 17] provides official guidance regarding TQL implementation and policy for the Marine Corps. Headquarters, U.S. Marine Corps (HQMC) is, however, currently in the process of developing a formal TQL implementation plan for the Marine Corps. The researcher was permitted to review the draft copy which, when completed and officially released, will provide amplifying guidance (e.g., designation of certain HQMC principal staff members as the Marine Corps Executive Steering Committee (ESC), provide guidance for education and implementation, etc.). Expected time frame for release is sometime prior to the end of fiscal year 1993. Marine Corps organizations currently develop their own TQL education and implementation plans that are tailored to meet their specific individual needs. This approach is expected to continue with

the office of the TQL Coordinator, Code MP-30, HQMC, assisting organizations in coordinating their TQL education and implementation efforts as well as providing guidance regarding current TQL policies for the Marine Corps. [Ref. 21]

5. Contracting Personnel as Organizational Boundary Spanners in the Customer/Supplier Relationship

This thesis examines the implementation status of the TQL process in Marine field contracting offices. In order to do this the researcher first examined the role that is performed by the field contracting office and its members within the parent organization. It is the researcher's assertion that the field contracting office and its members perform the role of a boundary spanner between the internal customers, external customers, and the external suppliers of the parent organization.

The organizational structure of the Services is vertical and formal. Formal coordination and control is accomplished by adherence to the chain of command, regulations, etc. "Organizations do not transact or negotiate with other organizations." Formal coordination and control of transactions with other organizations is achieved, laterally, by spanning organizational boundaries. Organizations rely on individuals who occupy, "special roles located in unique units," within the organization to perform boundary spanning

between organizations in order to maintain relations.

[Ref. 22:p. 316]

Boundaries are a defining characteristic of organizations, and boundary roles are the link between the environment and the organization. [Ref. 23:p. 218]

Boundary roles normally fall into two classes of functions: (1) External representation and (2) Information processing/filtering. Any given boundary role in an organization can serve in either or both functions. [Ref. 23:p. 218]

Boundary roles have many pluses and minuses. When a boundary spanner is performing the information processing role, they provide "organizational defense" against information overload by filtering information, a plus. A minus is that the boundary spanner can be overburdened when large amounts of information passes through them from multiple sources and immediate action is required. This can affect their effectiveness in filtering information. [Ref. 23]

Boundary spanners have access to information that others do not. They act as both a filter and as a facilitator. The boundary spanner is given authority to act autonomously on some information and they are encouraged to be innovative. On the upside, this gives them a degree of power within their organization that is often greater than their respective position in the organization. Boundary spanners are also regarded as "experts" and can influence decisions. When they do a "good job," they are rewarded by the

organization and feel a sense of accomplishment. The downside is they are sometimes "punished" for not passing enough information. This can inhibit their decision making "next time" and discourage innovation. Also, abuses of power can occur that can seriously impact the organization. [Ref. 23]

When performing the external representation function, boundary spanners gain power over relevant elements of the environment (internal customers and external suppliers). They are regarded as a representative of the organization. Because of this, the boundary spanner can be pressured to take actions and make decisions by both the internal customer and the external supplier. The boundary spanner is also often viewed as a mediator between two organizations. They draw groups from within their organization and outside their organization closer together. In this situation, the boundary spanner gains a feeling of social legitimacy. Also, like in the information processing function, abuses of power can occur.

Individual members of the DoD, in the Services, do not, in the normal conduct of operations, move outside their organizational chain of command unless they are in a position of being a boundary spanner. The concept of organizational boundaries and boundary spanning roles can be easily seen in the Government contracting process. In this context, DoD professional contracting personnel are the suppliers of contracting services. They perform the boundary spanning role

of external representation between the internal customer and the external supplier.

Contracting personnel perform the boundary spanning roles of both external representation and information processing/filtering. The contracting office has an internal customer, such as a Direct Support Stock Control (DSSC) office, that sends requirements for goods and/or services to the contracting office in the form of a purchase request. The contracting office takes these requirements and translates them into a legally binding contract for goods and/or services in accordance with external customer requirements. In this context, professional contracting personnel perform the boundary spanning role of information processing/filtering between the internal and external customers and eventually between the internal customer, external customer, and the external supplier (e.g., The contracting office solicits invitations for bids or requests for proposals from external suppliers who will compete for the award of a contract to meet the needs of an internal customer and the requirements of the external customer. This contract is awarded to an external supplier who is a commercial business.) During the preaward phase and during the post award administration phase the professional contracting personnel perform the external representation function as well as the information processing function.

Organizational boundaries exist such that the internal customer may not deal directly with external supplier. Since only warranted contracting officers may represent the Government as an agent of the Government, contracting personnel must span the organizational boundaries between the internal customer, external customers, and the external supplier. (See Appendix A: Map of Principal Players)

As part of the contracting process, the contracting office must meet the quality requirements of the internal customer. Sometimes they have more than one internal customer, with the same basic requirements, who will be using the same contract. They must also meet the quality requirements of external customers such as legal review, Federal Acquisition Regulation (FAR), DoD FAR Supplement (DFARS), etc. Lastly, to a certain degree, they must meet the quality requirements of the external supplier.

In the formal contracting process, a reciprocal relationship must exist between the contracting office, internal customers, external suppliers, and external customers. All sides need an understanding of the quality requirements of each other. Thus, depending on the direction of the flow of information, sometimes suppliers are viewed as customers and customers are viewed as suppliers. The emphasis of the contracting office is on meeting the quality requirements of all groups with a legitimate claim to be a customer of either services or information. Special emphasis

is placed on meeting the quality requirements of the internal customer. The quality of the performance of the contracting process relies heavily upon the contracting specialist's ability to span organizational boundaries; communicating these quality requirements to all players in the contracting process.

The effectiveness of the contracting office, as a unique unit in its organization, depends upon the abilities of individual members (i.e., warranted contracting officers) to communicate the customers' requirements to the commercial supplier. Internal customer requirements normally follow local organizational standard operating procedures (e.g., description, unit of issue, quantity required, estimated cost, recommended sources, etc.). External customer requirements are principally regulatory in nature and are contained in such documents as the FAR. The measurement of the quality of work done by the contracting office is determined by internal customer satisfaction with what the commercial supplier provides. The meeting of external customer requirements is verified by such instruments as procurement management reviews (PMR) that are periodically conducted by external customer organizations such as ad hoc HQMC PMR teams.

One of the DON strategic goals addresses the acquisition process.

Specifically, the DON will: foster contractor/Government working relationships, emphasizing teamwork built on

trust, sound business practices, and the highest standards of ethical behavior. [Ref. 17:p. 5]

To accomplish this, contracting personnel must be effective boundary spanners between the internal customer and the external supplier. One of the specific programs in the DON TQL education and training program focuses on team skills and concepts [Ref. 18:p. 20]. This emphasis on team skills and concepts ties in nicely with improving the effectiveness of contracting personnel in the performance of boundary spanner functions.

C. RESEARCH QUESTIONS

This section will restate the primary and subsidiary research questions that were briefly covered in the OBJECTIVE section of the preceding chapter.

1. Primary Research Question

What is the current implementation status of the Total Quality Leadership process in U.S. Marine Corps Field Contracting Offices?

2. Subsidiary Research Questions

(1) To what extent has the TQL process been implemented in U.S. Marine Corps Field Contracting Offices? i.e., what has been achieved to date?

(2) What time frames are expected/anticipated for the implementation of the TQL process in U.S. Marine Corps Field

Contracting Offices? Can a time frame be determined at this point?

(3) How has the TQL process affected customer/supplier relations and how can the TQL process be used to continuously improve these relationships in U.S. Marine Corps Field Contracting Offices? In particular, explore how TQL impacts on the contracting specialist's boundary spanning role in building customer/supplier relationships. This issue is the focus of the case study.

(4) What do internal customers see as the important features of the customer/supplier relationship? What do external suppliers see?

III. METHODOLOGY

This chapter is organized into three sections. The first section will provide a description of the U.S. Marine Corps field contracting community, and the second section will cover data collection and procedures, and the last section will cover limitations and assumptions.

A. SITES DESCRIBED

This section provides an overview of the Marine Corps contracting organization and a description of the ten field contracting offices.

1. Overview of the Marine Corps Contracting Organization

Marine Corps supply policy requires that the acquisition of supplies, services, and equipment be obtained primarily from Government sources of supply (e.g., Marine Corps supply system, DoD supply system, Federal supply system, etc.). When these mandatory sources cannot/do not provide the goods and/or services needed to meet Marine Corps requirements, the Marine Corps turns to a method commonly referred to as open-market purchasing and formal contracting procedures (as defined by such regulations as the FAR and DFARS) in order to meet the "actual needs of the organization and the minimum needs of the Government."

Open-market purchasing is the method whereby an agency of the Government acquires ownership or control of supplies or receives the benefit of services from commercial sources in exchange, generally, for the payment of appropriated funds. All Marine Corps activities shall ensure that prescribed Government sources of supply shall be used to the maximum extent practicable prior to acquiring supplies or services through an open-market purchasing method. [Ref. 1:p. 6-5]

As part of day-to-day operations, a large number of personnel deal with the Government supply system. When the Marine Corps turns to commercial sources it enters the business world. In the commercial business world, the transactions are normally conducted between two organizational entities, a buyer and a seller. The transaction normally takes the form of a legally binding contract between the two parties. In this situation, the Government becomes a buyer and only certain individuals, with authority codified in law, may represent the Government. These individuals are contracting officers and purchasing officers. The definition of a contracting officer and a purchasing officer are as follows:

Contracting Officer. A person appointed, by name, in writing, by the DC/S I&L, with authority to enter into and administer contracts on behalf of the United States of America and to make determinations and findings with respect thereto. A contracting officer is also a purchasing officer.

Purchasing Officer. A person appointed, by name, in writing, by the commander, with authority to conduct limited open-market purchasing of supplies and/or services as may be required. [Ref. 1:p. 1-4]

Thus, the contracting officer (or purchasing officer) becomes the boundary spanner between the Marine Corps and the commercial business world. Furthermore, these boundary roles are normally found in unique organizational units such as the field contracting office for a major supporting establishment activity like a Marine Corps Base.

Currently, the Marine Corps acquires goods and/or services from commercial sources through three organizations. These three organizations and their responsibilities are as follows: (1) the Marine Corps System Command (MARCORSYSCOM), formally known as the Marine Corps Research, Development, and Acquisition Command (MCRDAC). The MARCORSYSCOM,

...is the unit within the Marine Corps responsible for planning and managing research, development and acquisition programs through production and fielding for employment by forces in Marine Air-Ground Task Force (MAGTF) expeditionary operations. The CG MCRDAC acts as the field representative of the CMC in research, development and acquisition matters. MCRDAC is a contracting activity within the meaning of the FAR 2.101 and CG MCRDAC is designated head of the contracting activity (HCA). DC/S I&L maintains responsibility for certain procurement related areas, Marine Corps wide, including MCRDAC. [Ref. 1:Chap. 2]

(2) the HQMC, Contracts Division.

The Director, Contracts Division (LB), advises the DC/S I&L in all contracting matters, procures equipment and services for items centrally managed at HQMC, and for other requirements. The Field Contracting Support Branch (LBO) exercises functional management control over contracting at activities of the Marine Corps Field Contracting System for the Director, Contracts Division, with the exception of MCRDAC. As indicated in chapter 2 of this Manual, the DC/S I&L has further delegated purchase and contracting authority to individuals appointed by name as contracting officers. Designated contracting officers are authorized to enter into

contracts on behalf of the United States and to make certain determinations and findings as required by law and regulation. [Ref. 1:Chap. 2]

(3) the U.S. Marine Corps Field Contracting System. Contracting offices are established at certain specified Marine Corps installations (See p. 2 of this thesis for a listing of those contracting offices being addressed in this thesis).

Purchasing and contracting at these activities shall be conducted only by the regularly established contracting office, unless otherwise directed by CMC (LB). Purchasing and contracting shall be conducted subject to the applicable provisions of the FAR, DFAR, NAPS, Marine Corps orders, and any other applicable directives which may be issued by competent authority. The authority provided herein applies to firm-fixed price contracts with the exception of MCLB, Albany, which is unrestricted as to the type of contract within the guidelines of paragraph 2304. All of the remaining activities listed herein may enter into contracts other than firm-fixed price if prior authority is obtained from the CMC (LBO). [Ref. 1:Ch. 2]

The first two of these three organizations derive their purchasing and contracting authority from the DON through HQMC. Field Contracting activities derive their purchasing and contracting authority from the Contracts Division at HQMC. As previously stated, this thesis will focus on the Field Contracting System and specifically on the field contracting offices.

The Marine Corps Field Contracting System consists of ten field contracting offices (See p. 2 of this thesis), approximately 17 limited purchasing activities, and approximately 300 minor activities. [Ref. 1:pp. 2-5 through 2-8] Marine Corps wide, the staffing for HQMC (LB) and the

field contracting offices consists of approximately ten Marine Corps officers, 118 enlisted Marines, and 302 civilians for a total staff of approximately 430 individuals (Military Occupational Specialty/MOS 9656 for Marine officers, MOS 3044 for enlisted Marines, and GS-1102/1105/1106/etc. for civilians) [Ref. 24]. During fiscal year 1992, HQMC (LB) and the Field Contracting System was responsible for conducting approximately 142,415 contracting actions with a dollar value of approximately \$397,968,415 [Ref. 25].

2. Description of the Ten Marine Corps Field Contracting Offices

To give the reader an understanding of what each field contracting office does and who they are, this section provides a brief description of the ten field contracting offices. While each field contracting office performs the same basic function, procuring goods and/or services from commercial sources, it can be seen that each one is unique and organized to best serve the needs of its parent organization. The descriptions have been taken from recent HQMC Procurement Management Reviews (PMR) and survey responses that were provided to the researcher. In accordance with current regulations, PMRs are conducted every three years for all field contracting offices and limited purchasing activities.

Also, the following information is important to the reader because the descriptions, from PMRs, interviews, and

surveys, show how they, the field contracting offices, see themselves. These are the ten field contracting offices that will be addressed in the following chapter.

a. MCLB, Albany, Georgia

MCLB, Albany, Georgia consists of approximately 2,600 civilian employees and approximately 1,000 military.

[Ref. 26]

The Marine Corps Logistics Base, Albany provides acquisition and logistics services which are not duplicated anywhere within the service. Organic contracting capability is found within MCLB in the Contracts Directorate, which is itself a unique organization and charged with a large and complex mission.

Its mission is to procure supplies and services for the Marine Corps Supply System, Maritime Prepositioning Ships (MPS) Program, the Logistics Base, and other Federal Government activities as requested from commercial and intergovernmental sources. Responsibilities include the planning, execution and administration of contractual actions to effect purchase and to secure timely and adequate delivery of required supplies and services.

The Contracts Directorate is located directly under the Executive Director for Logistics Operations, who reports through the Chief of Staff to the Commander, Marine Corps Logistics Bases. The Contracts Directorate is located at a level equal to its organizational counterparts and to its principal customers. The Contracts Directorate is headed by a GM-15 Principal Director. The Directorate is organized into five branches; Compliance and Business Management, Prepositioning support and Contracting, Information Resources/Special Projects Support Contracting, Integrated Logistics Support Contracting, and Installations Support Contracting. [Ref. 27]

b. MCLB, Barstow, California

MCLB, Barstow, California consists of approximately 2,000 civilian employees and approximately 500 military.

[Ref. 28]

The mission of the Contracting and Purchasing Branch (C&P) of the Marine Corps Logistics Base, Barstow, California is to provide contracting support after all other appropriate channels of supply have been thoroughly exhausted.

The C&P Branch is allocated a GS-1102-13 Contracting Officer, a Marine Corps Major, Deputy Contracting officer; and three GS-1102-11 Procurement Analysts. The Director, deputy director, and two GS-11 personnel are warranted contracting officers. The total staffing consists of 26 civilians and seven Marines. The purchasing section is divided into four buying units which purchase commodities using a team concept for purchases. The small business position is dual hatted as a contracting officer. [Ref. 29]

c. MCRD/WRR, San Diego, California

The mission of the MCRD/WRR, San Diego is to exercise operational control of enlisted recruiting operations within its assigned districts and to provide training to new recruits, male only, upon their initial entry into the Marine Corps. Additionally, they provide schools for the training of enlisted personnel for duty aboard ships, marksmanship training, training for reserve Marines, and other training as directed.

The mission of the Contracting and Purchasing Branch is to solicit offers, award and administer all purchases of supplies and services from commercial and certain government sources involving appropriated funds in support of command requirements except major repairs and minor construction. The services of the Contracting and Purchasing Branch are made available to other commands located near San Diego, e.g., Recruiting Districts and Stations within the Western Recruiting Region, Landing Force Training Command Pacific, and Marine Barracks.

The Contracting and Purchasing Branch is a Branch within the Services and Supply Division. The Branch consists of a Contracting Officer, a Deputy, who is also the only Contract Specialist, a Procurement Section, and an

Admin/Control Section. The Contracting Officer (Marine officer) and the Deputy (civilian) are appointed Contracting Officers. The Procurement Chief, a Marine (staff noncommissioned officer), is an appointed Purchasing Officer. It is anticipated that the purchasing supervisor (civilian), will also be appointed a Purchasing Officer when encumbered. [Ref. 30]

d. MCRD/ERR, Parris Island, South Carolina

The mission of the MCRD/ERR, Parris Island is to exercise operational control of enlisted recruiting operations within its assigned districts and to provide training to new recruits, both male and female, upon their initial entry into the Marine Corps. Additionally, they provide marksmanship training, training for reserve Marines, and other training as directed. The Contracting and Purchasing Division is located in the depot Supply and Services Department.

The Contracting and Purchasing Division provides and administers all purchasing in the commercial market involving appropriated funds, except commissary, construction and utilities; determines methods of procurement and performs all buying; provides procurement assistance to other Marine Corps commands upon request. [Ref. 31]

The Contracting and Purchasing Division is headed by a Contracting Officer (Marine officer), and has a Deputy Contracting Officer (civilian) as well as a Procurement Chief (Staff noncommissioned officer). Current staffing level is 12 personnel.

e. MCB, Camp Lejeune, North Carolina

MCB, Camp Lejeune is the East Coast Base for the ground units of the FMF. It provides support to numerous

tenant commands such as the Second Marine Division, provides schools for the training of officer and enlisted personnel, and conducts other training as directed.

Per BO 4200.10 the mission statement for the Camp Lejeune Contracting Division is as follows: To provide timely procurement support on a competitive basis for Marine Corps Base and its supported units after all other appropriate channels of supply have been thoroughly exhausted.

The Contracting Division at Camp Lejeune is currently authorized forty billets and has thirty-four on-hand. [Ref. 32]

The Contracts Division reports directly to the Assistant Chief of Staff for Logistics. Recent data provided to the researcher indicate that the Contracts Division currently has 37 civilian employees and 19 Marines. The Contracts Division is headed by a Contracting Officer (Marine officer) and has a Deputy Contracting Officer (civilian) as well as a Procurement Chief (Staff noncommissioned officer). [Ref. 33]

f. MCAGCC, Twentynine Palms, California

The MCAGCC, Twentynine Palms, California consists of approximately 11,000 military and approximately 540 civilian employees.

The mission of the Purchasing and Contracting Branch (P&C) of Marine Corps Air Ground Combat Center (MCAGCC), Twentynine Palms, California, is to provide acquisition support to the Combat Center for supplies and nonpersonal services determined to be unavailable from the Marine Corps Supply System. This support is extended to all units, host and tenant. In addition, acquisition support is provided for all combined arms exercises conducted aboard MCAGCC. The Purchasing and Contracting Branch is

composed of a Local Purchase Unit, a Formal Contracts Unit, and an Administrative Operations Unit. [Ref. 34]

The P&C Branch is headed by a Contracting Officer (Marine officer) and has a Deputy Contracting Officer (civilian) as well as a Procurement Chief (Staff noncommissioned officer).

g. MCB, Camp Pendleton, California

MCB, Camp Pendleton is the West Coast Base for the ground units of the FMF. It provides support to numerous tenant commands such as the First Marine Division, provides schools for the training of officer and enlisted personnel, and conducts other training as directed. The mission of the Contracts Division is to provide contracting support to its customers, "after all other supply channels have been exhausted, or there is no other mechanism available to satisfy a mission requirement." [Ref. 35]

In addition to Marine Corps Base Camp Pendleton, major customers of the Contracts Division include: First Marine Division, First Force Service Support Group, Marine Corps Tactical Systems Support Activity, Marine Corps Air Station, Camp Pendleton, and Defense Reutilization and Marketing Office.

The Contracts Division is staffed by 33 military and civilian members. These include: a Marine Corps Major contracting officer; a GM 1102-13 contracting officer deputy; and two GS-1102-12 supervisory contract specialists. The division has an authorized T/O billet for an MOS 3044 MSgt Procurement Chief. The division has four warranted contracting officers; the contracting officer, his deputy, and both GS-12 supervisors. The Division is divided into eight sections: Two formal contracting teams, Two small purchasing branches, Blanket purchase agreements, Imprest fund, Distribution, and Auto operations. [Ref. 35]

The Contracts Division reports directly to the Assistant Chief of Staff for Logistics. Recent data provided to the researcher indicate that the Contracts Division currently has 33 civilian employees and nine Marines. [Ref. 36]

h. MCSA, Overland Park, Kansas

The Contracting Office is under the operational control of the Director, Marine Corps Support Activity, and organizational control of the Director, Resources Management Center and reports to Headquarters Marine Corps for functional and technical matters concerning contract issues. The Contracting Office is tasked to provide contracting and small purchase support to the Marine Corps Support Activity and other Department of Defense activities located within the Kansas City metropolitan area and provides contract support to Marine Corps Recruiting Districts and the 4th Marine Division/Wing when requested.

The Contracting Office is currently staffed by 16 military and civilian personnel. These include: a Marine Corps Chief Warrant Officer, Head of the Contracting Office; a GM-1102-13 Deputy; an MOS 3044 Master Sergeant, Procurement Chief; and a GS-1102-12, Supervisory Contract Specialist.

The responsibilities of the Contracting Office are divided among three branches; Contracting, Purchasing, and Contract Administrative Support. One of the primary roles of the Contracting Office is to determine the appropriate type of contract to be awarded based on the requirement, award the contract and perform post award contract administration. The Contracting Office is also responsible for advising technical representatives on anticipated procurement requirements, and advise the requiring activities on the development of statements of work. [Ref. 37]

Recent data provided to the researcher indicate that the Contracting Office currently has seven civilian employees and three Marines. [Ref. 38]

i. MCCDC, Quantico, Virginia

The mission of the Marine Corps Combat Development Command (MCCDC) is to develop, assess, and promulgate concepts, plans and doctrine; identifies and assesses changes to doctrine, training, Marine Air Ground Task Force (MAGTF) structure, and materiel; develop, in coordination with the other military services (including unified, specified, and allied commands), doctrines, tactics, and techniques; serves as the proponent for all war fighting mission areas; develop and implement policy and programs for the training and education of all regular and reserve Marine Corps personnel and units; exercise cognizance over all manual and automated war gaming; provide simulation, modeling and assessment support for the Combat Development Command, operating forces, reserve establishment, supporting establishment, and Headquarters Marine Corps (HQMC). [Ref. 39]

The Purchasing and Contracting Branch provides contracting support to MCCDC organizations, tenant activities, and external Marine Corps activities as required. Recent data provided to the researcher indicate that the Purchasing and Contracting Branch currently has 27 civilian employees and five Marines. The branch is headed by a civilian contracting officer who has a civilian deputy. [Ref. 40]

j. MCB, Camp Smedley D. Butler, Okinawa, Japan

The Contracting and Purchasing (C&P) Branch provides contractual support for Marine Corps Base (MCB), Camp Smedley D. Butler to its supported units and other DoD components as required after all other appropriate channels of supply have been thoroughly exhausted.

Major units supported besides MCB Butler include: 3rd Marine Division, 1st Marine Aircraft Wing, 3rd Force Service Support Group, Naval Hospital, Naval Construction Battalion, Department of Defense Dependent Schools, and the Defense Reutilization and Marketing Office. [Ref. 41]

The Contracts Division reports directly to the Assistant Chief of Staff for Logistics. Recent data provided

to the researcher indicate that the Contracts and Purchasing Branch currently has 65 civilian employees and 14 Marines. The C&P Branch is headed by a Contracting Officer (Marine officer) and has a Deputy Contracting Officer (civilian) as well as a Procurement Chief (Staff noncommissioned officer). [Ref. 42]

This concludes the description of the ten field contracting offices that will be addressed in the next chapter. It can be seen that while the field contracting offices all perform similar functions and have similar missions, each one is a distinctly individual organization. This individuality is expressed in terms of size, internal organization, and location within the parent organization's structure (e.g., size and internal organization can depend on the number and types of internal customers serviced).

B. DATA COLLECTION AND PROCEDURES

This section will address data collection methods used, surveys and interviews.

1. Surveys

Data were gathered using three types of surveys. The first was a survey of field contracting offices' parent organization TQL Coordinators with the purpose of obtaining data regarding implementation of the TQL process within the parent organization. The TQL Coordinator Survey, Appendix B, was developed by the researcher with portions taken from the

Total Quality Leadership Climate Survey (TQLCS) categories dealing with TQL implementation and support [Ref. 24]. Prior to mailing the survey the researcher contacted the eight known TQL coordinators to obtain basic information regarding TQL implementation in the parent organization. This allowed basic information regarding implementation to be available even if the TQL coordinator later declined to participate in the survey. Surveys were sent to the eight parent organization TQL coordinators provided as points of contact by HQMC (Code MP-30). Two parent organizations have yet to establish a TQL coordinator.

A second similar survey was sent to field contracting office Contracting Officers, Deputy Contracting Officers, and Procurement Chiefs. (See Appendix C) Prior to mailing the survey the researcher contacted a number of the preceding individuals in order to obtain basic information regarding TQL implementation within the contracting office should the office later decline to participate in the survey. Surveys were sent to the 30 individuals provided as points of contact by HQMC (Code LBO) with the purpose of obtaining data regarding implementation of the TQL process within the individual field contracting offices.

The third survey was the TQLCS developed by the Naval Personnel Research and Development Center (NPRDC) [Ref. 24] and was administered to the 33 members of the case study field contracting office. The NPRDC TQLCS was administered in total

to the case study field contracting office. The purpose was to provide the researcher with data on the overall opinions of a field contracting office regarding TQL. A copy of the portions of the NPRDC TQLCS used by the researcher is contained in Appendix E. The TQLCS consists of 158 questions and a guide book for organizations using the TQLCS. The purpose of the NPRDC TQLCS is as follows:

The TQL Climate Survey (TQLCS) is a diagnostic tool designed to support your organization's transformation toward Total Quality Leadership. The survey measures employee and management perceptions and attitudes about the organization.

All organizations undergoing the TQL transformation can benefit from using the TQLCS. Measurement of employee perceptions and attitudes can help the transformation by providing management with an indication of the organization's readiness for change, if they are starting TQL, or, show organizational changes resulting from TQL efforts.

Prerequisites for using the TQLCS The following prerequisites are necessary for properly administering and interpreting the TQLCS: The CO has attended the Senior Leaders Seminar. The TQL Coordinator (TQLC) has attended Fundamentals of TQL, and Implementing TQL courses. Management is willing to maintain confidentiality of respondent identity. Each organizational member selected to respond to the TQLCS is provided at least one hour of work time to take the survey. The CO provides time and resources to plan, administer, and interpret the results. Management is willing to take action on the basis of the survey's results. ESC will develop an interpretation plan. [Ref. 24:p. 1]

The researcher contacted a number of field contracting officers in order to obtain a case study volunteer. The field contracting office that volunteered to participate met all of the preceding requirements.

Results from the first two surveys are to be used in answering the research questions regarding the implementation status of the TQL process and the time frames expected/anticipated for full implementation of the TQL process in the field contracting offices. Results from all three surveys will be used to answer, in part, the additional research questions which deal with how TQL has affected reciprocal customer/supplier relations and the boundary spanning roles of field contracting personnel. All surveys and interviews conducted during this phase of research are considered confidential (i.e., between researcher and participant and not to be construed as a military security classification). Anonymity of participants was provided by the researcher in the form of the privacy act statement used on the surveys.

2. Interviews

In addition to participating in the NPRDC TQLCS, the case study field contracting organization participated in follow-up interviews. The purpose of the follow-up interviews was to provide the researcher with information necessary to address the questions of how TQL has affected customer/supplier relations and the boundary spanning roles of field contracting personnel as well as the views of internal customers and internal suppliers.

Interview participants consisted of the contracting officer (head of the field contracting office), two contracting specialists (GS-1102), six internal customers, and two external suppliers. A total of eleven interviews were conducted. The conduct of the interview consisted of providing participants, in advance, with a narrative text for the interview (Appendix D) and a Map of Principal Players (Appendix A). A cover letter stated that the participants would be contacted by the researcher within the following two weeks after receiving these materials. The researcher coordinated confirmation of receipt through contracting personnel who distributed the material to internal customers and external suppliers. Interviews were conducted over the phone and took 45 to 60 minutes.

The narrative and questions sent to interviewees were used as the basis for a semi-structured interview format. The structured questions formed the basic outline for the interview, but specific follow-on questions were adapted to the unique needs and opportunities presented during each interview.

The contracting officer provided the researcher with two current contracts that would be used for the interviews. Requirements were for contracts that had multiple customers and a dedicated contract specialist who administered the contract. The researcher and the contracting officer discussed a number of current contracts and mutually selected

the two contracts that would be used. The objective was to select contracts that involved active administration by a contracting specialist and had multiple customers.

Prior to beginning the interview process, the researcher, the contracting officer, and the cognizant contracting specialists, and all other interview participants discussed the need for protecting proprietary information regarding the two contracts that were to be discussed. The researcher provided written statements to the contracting office agreeing to protect all proprietary information, maintain full confidentiality, and assurances that all interview participants would remain anonymous. Further assurance was provided by the privacy act statement that was placed on the narrative text for interviews (See Appendix D).

C. LIMITATIONS AND ASSUMPTIONS

This thesis focused on investigating the implementation status of the TQL process in U.S. Marine Corps field contracting offices. This thesis does not attempt to prescribe a specific method for implementing TQL since current policy guidance stresses that each organization must be given the freedom to tailor its implementation of the TQL process to meet its individual needs. Furthermore, this thesis does not attempt to evaluate the implementation status of the TQL process for the parent organizations of the field contracting offices.

It is assumed that since responses to the questionnaires and interviews are voluntary and confidential, the data collected reflect honest opinions. Furthermore, it is assumed that the personnel responding to questionnaires, the TQLCS, and the interviews provided a realistic representation of "the shared perceptions" of the cultural "climate" for the Marine Corps field contracting community, its internal customers, and its external suppliers. [Ref. 43:p. 5]

The strength of questionnaire research is argued to be enhanced reliability due to the use of representative samples. A frequently cited limitation of questionnaire data is validity, due to the difficulty in knowing how respondents interpret questions. In contrast, the strength of interviews is enhanced validity because of the opportunity for clarification and expansion of issues during the interview. The frequent limitation of the interview methodology is decreased reliability in that usually the in-depth nature of the interview keeps the sample small and thus increases the possibility of bias. Because this study incorporates both methodologies, the limitations of each can be minimized.

IV. IMPLEMENTATION STATUS OF THE TQL PROCESS

This chapter will address the primary research question and the first two of the four subsidiary research questions. These questions deal with the implementation status of the TQL process and expected/anticipated time frames for implementation. The chapter consists of three sections. The first section will be an introduction, the second section addresses the results of surveys and interviews and the third is an analysis section.

A. INTRODUCTION

There is wide variation regarding the implementation of the TQL process and TQL training in the ten field contracting offices identified in the previous chapter. The following section will provide a presentation of data necessary for answering the primary research question and the first two of the four subsidiary research questions. These questions deal with the implementation status of the TQL process and the time frames expected/anticipated for full implementation of the TQL process in the field contracting offices. These data were drawn from a subjective analysis of surveys and interviews with parent organization TQL coordinators and key leadership personnel from the ten field contracting offices (See Appendices B and C for examples of surveys).

Sufficient completed surveys from contracting personnel and parent organization TQL coordinators could not be obtained to allow for a detailed statistical analysis. Surveys and interview information were, however, obtained from all ten field contracting offices and/or their parent command TQL Coordinators. Eight parent organization TQL coordinators, or their representative, (e.g., TQL trainer) were interviewed and five responded to the survey. Seven field contracting office representatives were interviewed, thirty surveys were sent to key field contracting personnel and eight responded to the survey. This chapter, therefore, will address the results of a subjective analysis of the data generated by these surveys and interviews. The following section is based upon a subjective analysis of comments from interviews and surveys.

B. RESULTS OF SURVEYS AND INTERVIEWS

1. Analogy

If one was to consider implementation of the TQL process as being similar to running a continuous race around an oval track it could be seen that different organizations would occupy different positions on the track. The reason for the oval track is to illustrate that one cannot always see what is beyond the next curve. Coming back to the starting line does not imply starting over again. It means continuing on a spiral course of continuous improvement.

In this case, the positions of the ten field contracting organizations will be described as one of three positions. The first will be one of walking up to the starting line (e.g., beginning implementation of the TQL process at the senior leadership level, SLS training, senior leader commitment to the TQL process, etc.), the second will be one of approaching the first curve (e.g., implementing the TQL process within the parent organization, TQL training for individual members of the organization, etc.), and the third will be one of rounding the first curve (e.g., making the paradigm shift to a TQL orientation and shifting to a continuous improvement cycle, continuing TQL training, etc.).

2. Placement

a. Walking Up to the Starting Line

Two field contracting offices and their parent organizations are just walking up to the starting line. These two field contracting offices indicated on returned surveys that their parent organizations had not yet begun an organized implementation of the TQL process. They indicated their parent organizations did not have a designated TQL coordinator nor were they aware of any formalized implementation plans. This does not mean that because their parent organization has not begun formalized TQL training, the field contracting offices were not allowed to pursue TQL training.

Both field contracting offices have senior leaders within their parent organization who have attended a TQL SLS and other introductory TQL training courses. The senior leaders of both parent organizations are providing TQL introductory briefs to prepare key personnel for anticipated TQL training sometime in the near future. In one field contracting office the survey participant, the contracting officer (Marine officer) had attended a three day introductory TQM/TQL workshop but no other members of the field contracting office had received any formal TQL training. In the other field contracting office, the survey participant indicated that no members of their field contracting office had received any formal TQL training.

It is noteworthy that while these field contracting offices have had minimal introduction to the TQL process, they did provide comments regarding their professional opinions of TQL and expressed their expectations. Respondents from both organizations indicated they felt that the adoption of the TQM philosophy in the DoD, for the Services, represents a paradigm shift in the Services' management philosophy and view the TQL process as having a positive effect on the field contracting system.

b. Approaching the First Curve

Six field contracting offices and their parent organizations have crossed the starting line and are, to various degrees, approaching the first curve.

(1) *Up in Front.* Three of the six field contracting offices in this category, have made considerably more progress in implementing the TQL process.

Two of the three indicated that the majority of their members had received introductory TQL training and that senior personnel (i.e., Director, Deputy, and Procurement Chief) had received additional TQL training. The parent organizations for both these field contracting offices have full time TQL coordinators. Both TQL coordinators indicated that their organizations were just beginning their implementation of the TQL process.

The third field contracting office indicated all members had attended local TQL introductory training. The survey participant also indicated they have a full time TQL Coordinator within their department. In the parent organization, the TQL coordinator has the role as an additional duty.

The parent organization for the third field contracting office indicated they were conducting comprehensive TQL training. Senior leaders are to receive formal TQL training between October 1992 and September 1993,

general leaders/management between May 1993 and October 1993, and general workforce between May 1993 and December 1993. Review and refresher training is expected to start December 1993. The parent organization just recently published its strategic plan for TQL implementation as well as a revised mission and vision statement. Copies were provided to the researcher along with a comprehensive TQL training matrix. Training courses consist of SLS, Introduction to TQL, Seven Graphic Tools, Team Building, Seven Management and Planning Tools, Basic Facilitator, Advanced Facilitator, Fundamentals of TQL, Implementing TQL, Methods for Managing Quality, Team Skills and Concepts, and Systems Approach to Process Improvement. The training matrix indicated that the parent organization intends to include external suppliers in TQL training on an "as required" basis. The training matrix contained proposed course dates and quotas but did not indicate how course quotas would be assigned. As of March 1993, the field contracting office had yet to receive its individual training quotas.

(2) *Catching Up.* The remaining three field contracting offices and their parent organizations have crossed the starting line but have not made as much TQL implementation progress as the three just described.

One field contracting office indicated that only the Director, Deputy, and Procurement Chief had received

TQL training. All three had attended a DON Introduction to TQL course and a DON Fundamentals of TQL/Deming Management Methods course. The parent organization does have a full time TQL coordinator.

One survey participant from this field contracting office indicated plans were being made to provide TQL training to all contracting personnel, "in the upcoming months" but specific dates had yet to be established. Another survey participant from the same field contracting office provided additional comments and stated that TQL, "should help eliminate communication barriers." They went on to further say that,

If it is not implemented correctly, I can foresee it relating to the old quality of life program which was a total failure. With the rate or pace at which it is going, I feel it will take at least five years to fully implement.

The second field contracting office indicated that implementation of the TQL process has only just begun at the parent organization level. Introductory TQL training is limited to personnel such as the Director and the Deputy. The parent organization TQL coordinator performs the TQL coordinator role as an additional duty aside from their primary duties.

The third field contracting office indicated they are, "not involved or allowed to attend any training due to funding restraints" and that they had yet to begin TQL training. The survey participant indicated they had received

some TQM/TQL training in previous assignments and done some self-paced studying regarding TQM. The survey participant stated s/he is,

...a firm believer of TQL. Problem is the command has a poor track record of planning. It tends to continue to rush to put out fires and not hold anyone or any organization accountable for planning.

The TQL coordinator for this field contracting office's parent organization concurred with this statement. S/he performs the TQL coordinator role as an additional duty. Another survey participant from the parent organization's senior leadership, in a department that has oversight regarding education and training, indicated that ten individuals within the parent organization had attended SLS TQL training, 30 had attended a Fundamentals of TQL course, 25 had attended a Team Skills and Concepts course, 25 had attended a Methods for Maintaining Quality, and that the parent organization was conducting an Orientation to TQL course.

It is interesting to note, in this case, that the field contracting office survey participant indicated that they were unaware of who the parent organization TQL coordinator was. Also, while the field contracting office and parent organization TQL coordinator both report no TQL training, the senior leader responsible for education and training reports several types of TQL training have been completed. This suggests that coordination between the TQL

coordinator's office and the education and training office is lacking.

c. Rounding the First Curve

Two field contracting offices and their parent organizations have crossed the starting line and are, to various degrees, rounding the first curve. One parent organization stated they actually began with TQM training during May 1989 but did not start their official implementation of the TQL process until 1991. Similar data were not available for the other parent organization but the field contracting office indicated that they began their implementation of the TQL process during March 1991 following the parent organization implementation which started during January 1991.

These two field contracting offices and their parent organization TQL coordinators indicated that they had progressed well past the introductory phase in implementing the TQL process. Both parent organizations offered comprehensive TQL training courses such as TQL Orientation, TQL Introduction, Deming Management Method, Customer Service, TQL Workshop for Managers, Strategic Planning, Teamwork Concepts, SPC, Facilitator Training, Leadership Training, Group Dynamics, and Problem Solving to all personnel.

The TQL coordinator from one of the parent organizations indicated that they had trained over 3037

personnel in a TQL Orientation course, 1811 personnel in a Customer Service course, 413 personnel in a TQL Workshop for Managers, and over 300 personnel in a Strategic Planning course. The majority of this parent organization's field contracting personnel had attended one or more of the courses. The other field contracting office indicated that over 60% of its personnel had attended one or more formal TQL training course(s).

Both of the field contracting organizations indicated they used TQL as a part of their daily management practices. However, a survey participant from one of the field contracting offices indicated that TQL is helping but there is still some resistance from senior civilian personnel who are having difficulties in embracing the parent organization's TQL initiative. This survey participant stated s/he did, "see the paradigm shift occurring, however it will take time, i.e., at least five years." S/He felt that, "sometimes decisions can be made on the basis of information other than statistical data," and that, "there has to be a happy medium between shooting from the hip and a decision based purely on numbers."

Both field contracting offices indicated their parent organizations had full time TQL Coordinators, full time TQL trainers, and TQL facilitators. The TQL coordinators are directors of the parent organizations TQL office. Both parent organization's have established strategic plans that detail

the parent organizations strategies, goals, objectives, and vision statement. Additionally, the field contracting offices have their own individual mission statements that reflect the parent organization's strategic plans.

C. ANALYSIS

The preceding section provides the data for answering the primary research question and the first two of the four subsidiary research questions which deal with the implementation status of the TQL process and expected/anticipated time frames for implementation. It can be seen that there is a significant variation in the extent of implementation of the TQL process in the ten field contracting offices. Because of this and the lack of established dates for implementation of the TQL process in the majority of the ten field contracting offices and their parent organizations, an actual time frame for full implementation cannot be determined at this point. This is understandable since HQMC policy towards implementing the TQL process in its subordinate commands, both FMF and non-FMF, empowers individual activity commanders to determine how to implement the TQL process in a manner that best suits the needs, availability of resources, etc. of their organizations. The DON has established implementation of the TQL process as a strategic goal and since the TQL process involves a never-ending process of

continuous improvement, fixed dates for completion of implementation cannot be established.

Using the metaphor proposed at the beginning of this chapter, if one was to consider implementation of the TQL process as being similar to running a continuous race around an oval track, two parent organizations and their field contracting offices are just walking up to the starting line. Six parent organizations have crossed the starting line and are, to various degrees, approaching the first curve. The other two parent organizations and their field contracting offices are rounding the first curve and are well into the process of making the paradigm shift towards full implementation of TQL.

As previously indicated, sufficient completed surveys from contracting personnel and parent organization TQL coordinators could not be obtained to allow for a detailed statistical analysis. Based upon survey responses, indicated levels of TQL training, etc., it is difficult to differentiate between organizations regarding the leadership, supplier, customer, and measurement processes areas. The data for these areas are suspect because the amount of TQL training of some respondents, or lack of, indicates they may not have thoroughly understood the questions. This may be, in part, due to a lack of unity and clarity of language both on the part of the survey and between the organizations studied.

Juran stresses the need for unity and clarity of language (e.g., clearly defining quality and subsidiary terminology throughout the organization). He further states that achieving unity requires overcoming obstacles that arise from differences in viewpoints among members of management and, "hidden obstacles arising from differences in premises, concepts, and even the meaning of key words." [Ref. 8:p. 14]

Placement on the track is based primarily on data provided regarding TQL training. A perception gained from the interviews indicates that the survey used would be best administered only to organizations that are rounding the first curve of the track. Some interviewees indicated that the survey had too many questions. Additionally, some organizations opted to not respond to the survey despite assurances they would during interviews. It is possible that organizations cannot accurately answer the leadership, supplier, customer, and measurement processes questions until all organizations have completed the initial TQL training evolution (Described below as the start up phase of implementation) and a degree of unity and clarity of language has been developed.

Field contracting offices with full time TQL coordinators at the parent organization level appear to have progressed much further in implementing the TQL process. Those parent organizations with full time TQL coordinators and an actual

TQL office demonstrated the highest level of implementation and have the most comprehensive TQL training programs.

Additionally, these parent organizations have a commanding general/officer who has a strong and sincere commitment towards implementing the TQL process. This commitment is one of the key factors towards success in implementing the TQL process and is normally expressed in the form of a mandate to senior leaders of the parent organization. These mandates have assured that necessary resources have been allocated for the implementation of the TQL process. The importance of leadership commitment and even mandates is increased by the current pressures to downsize, reduce personnel, etc.

The interviews and surveys also suggest a possible pattern regarding the implementation of TQL. Data indicate there is a five year time frame or series of events that runs from when the parent organization walks up to the starting line until both the parent organization and field contracting offices are rounding the first curve toward full implementation of TQL.

During the first two years of this five year start up phase, the senior leaders of the parent organization receive SLS TQL training. A senior leader becomes the TQL coordinator for the parent organization. This position is one of an additional duty and often is delegated to a deputy. During this time the parent organization's commanding general/officer issues a mandate that TQL is to be a major management initiative. As time progresses, the parent organization

realizes that there is a need for a full time TQL coordinator. If there is a consensus for support among senior leadership and the commanding general/officer continues to be committed towards implementing TQL, a full time TQL coordinator position is created. Once a full time TQL coordinator position has been established, the parent organization then develops a strategic plan for implementation of the TQL process.

This series of events indicates a strong link with Deming's second point, "Adopt the new philosophy." [Ref. 13:pp. 17-19] Senior leadership learns the new philosophy and starts the parent organization on the TQL track. The senior leadership then follows Deming's first point, "Create constancy of purpose for improvement of product and service." [Ref. 13:pp. 17-19] The senior leadership demonstrates their commitment to TQL. They create and publish their aims and the purpose of the organization through a TQL oriented mission statement and/or vision statement along with a master plan for implementation of the TQL process. Additionally, at this point, the senior leadership has followed Deming's fourteenth point, "Take action to accomplish the transformation." [Ref. 13:pp. 17-19]

During the next three years, the parent organization conducts initial TQL training. Some organizations find it more cost effective to create TQL trainer positions so that the full range of TQL training can be conducted in-house. Other organizations opt to use outside TQL training resources.

It is during the early part of this phase of the cycle that the contracting officer, the deputy, and the procurement chief normally begin to receive TQL training. Following this, the remaining contracting personnel receive their initial TQL training. Near the end of this phase, the parent organization begins to conduct follow-on TQL training. The follow-on training normally involves establishing training quotas. A percentage of the training quotas are allocated to the field contracting office of the parent organization.

This series of events indicates a strong link with Deming's sixth, seventh, eighth, and thirteenth points. "Institute training," for skills, "Institute leadership," "Drive out fear," and "Institute a vigorous program of education and training." [Ref. 13:pp. 17-19]

At the end of this five year series of events, the parent organization is rounding the first curve and has moved towards full implementation of the TQL process. All field contracting personnel should have received introductory TQL training and a majority will have received follow-on training. At this point, the paradigm shift to the TQL process has started. Organizational culture should now reflect a TQL orientation. Additionally, upon rounding the first curve of the track, the organization has shifted into a continuous improvement cycle.

Looking ahead, the researcher speculates that at this point the senior leaders of the parent organization begin adoption of the remaining points of Deming's 14 obligations of

management; point three, "Cease dependence on mass inspection;" four, "End the practice of awarding business on the basis of price tag alone;" five, "Improve constantly and forever the system of production and service;" nine, "Breakdown barriers between staff areas;" ten, "Eliminate slogans, exhortations, and targets for the workforce;" eleven, "Eliminate numerical quotas;" and twelve, "Remove barriers to pride of workmanship." [Ref. 13:pp. 17-19]

Point four applies specifically to the field contracting office and requires the support of both the senior leadership of the parent organization and HQMC. Currently, field contracting offices must seek business clearances from HQMC (Code LBO) in order to accomplish this since their contracting authority is limited to firm fixed-price type contracts. Firm fixed-price contracts require award based upon price. Use of other contracting methods which allow for award based upon other than price requires HQMC approval. This procedure adds to the time it takes to process a contracting action. The senior leadership must understand this and support the contracting office in order to encourage point number four.

It is clear from the various degrees of implementation that the five year time frame or start up phase does not proceed automatically. Achieving successful implementation of the TQL process does not just happen as a result of crossing the starting line. Many critical factors such as leadership, resources, training, etc. will influence the pace and degree

of success of TQL implementation. The analogy does not infer that if two similar organizations start implementation of the TQL process at the same time, they would simultaneously reach the first curve.

V. CASE STUDY; IMPLEMENTATION OF THE TQL PROCESS AND CUSTOMER/SUPPLIER RELATIONS IN A FIELD CONTRACTING OFFICE

This chapter addresses the last two of the four subsidiary research questions which are as follows:

(3) How has the TQL process affected customer/supplier relations and how can the TQL process be used to continuously improve these relationships in U.S. Marine Corps Field Contracting Offices? In particular, explore how TQL impacts on the contracting specialist's boundary spanning role in building customer/supplier relationships. This issue is the focus of the case study.

(4) What do internal customers see as the important features of the customer/supplier relationship? What do external suppliers see?

The chapter is organized into four sections. The first section covers the background regarding the case study field contracting office; the second section describes the interviews with contracting personnel, internal customers, and external suppliers; the third section discusses the results of the TQLCS; and the last section provides an analysis of the data gathered.

A. BACKGROUND

Two areas are addressed. The first is a background of the implementation status of the TQL process in the case study organization and the second is a background description of two specific contracts studied.

1. TQL Implementation in the Field Contracting Office

The parent organization of the case study field contracting office falls into the category of approaching the first curve. Members of the contracting office have received introductory TQL briefings and training. Interviews with the contracting officer and contracting personnel indicate that s/he is personally stressing a TQL process approach towards management of the contracting office and displays a high degree of commitment towards implementing the TQL process. This commitment is also shared by the contracting officer's reporting senior, an assistant chief of staff (AC/S).

2. Contracts Studied

The first contract is a firm fixed-price type contract and was advertised as a 100% small business set-aside. Small business standards for this type of service contract are determined by average annual receipts. The standard in this case is \$10 million in average annual receipts. The contract has a performance period of one base year with options to extend the contract for four more additional years.

The contract involves providing services at 14 separate site specific locations. The services provided are for functions previously performed in-house by Marines and are now performed by a contractor. The manner of performance is similar to what is commonly referred to as Government-owned, Contractor-operated (GOCO). The services provided affect, primarily, the thousands of Marines who utilize the 14 separate site specific locations on a daily basis.

The quality control plan for this contract is established by the contractor with minimum requirements established by the Government. For quality assurance, the Government monitors the contractor's performance using established quality assurance procedures. Typical procedures can include random and planned sampling, checklists, customer complaints, unscheduled inspections, and other methods as determined by the Government (e.g., statistical process control). The contractor is provided with all information regarding the Government's quality assurance methods and can provide input to the Government.

This particular contract provides opportunities for a scheduled preaward site visit, postaward meetings, and meetings during the actual performance periods. Additionally, this contract allows the contractor to participate in applicable service excellence award programs. The personnel interviewed concerning this contract were the contracting officer, the contract specialist with administration

responsibility for the contract, three customer representatives, and a contractor senior managerial representative.

The second contract is also a firm fixed-priced contract and the services are currently being provided by a small business. It has a performance period of one base year with an option to extend the contract for one more additional year.

The contract involves providing services in a Contractor-owned, Contractor-operated (COCO) facility (off base). Services provided are for functions previously performed under a GOCO contract. Performance/delivery of the contracted services is on base. The services provided affect, primarily, the thousands of Marines who utilized the previous GOCO services on a daily basis during the course of a normal work week.

The personnel interviewed from this contract consisted of the contracting officer, the contract specialist with administration responsibility for the contract, three customer representatives, and a contractor senior managerial representative.

In this contract, general standards of quality are solely dependent upon the contractor's ability to adhere to proper operating procedures and the utilization of self-imposed quality control measures. The Government provides the contractor with certain general guidelines for use by both the

contractor's quality control and the Government's quality assurance evaluation programs.

The Government requires the contractor to develop and implement an innovative, effective, and economical quality control program to assure services and work effort comply with the performance work specifications (PWS) of the contract. Government quality assurance is in accordance with FAR 52.246-4, each phase of the services rendered under this contract are subject to Government inspection during both the contractor's operations and after completion of the tasks. The Government's quality assurance surveillance program is not a substitute for quality control by the contractor. Typical procedures can include random and planned sampling, checklists, customer complaints, unscheduled inspections, and other methods as determined by the Government (e.g., statistical process control/SPC). The contractor is provided with all information regarding the Government's quality assurance methods and can provide input to the Government. This contract, like the first, provided opportunities for a scheduled preaward site visit, postaward meetings, and meetings during the actual performance periods.

B. RESULTS OF INTERVIEWS

Appendix D provides a narrative text of the questions discussed with the interviewees. Results of the interviews are provided in the following subsections.

1. Contracting Personnel

Both contracting specialists interviewed have a keen understanding and knowledge of the quality philosophy and are extremely experienced contracts specialists. One contracting specialist had previous work experience in industrial engineering and quality assurance plus a business degree. This contracting specialist had received TQM related training (e.g., SPC) during previous work assignments. The other contracting specialist had received, "some TQL training in the Naval Reserve," and is a Certified Associate Contracts Manager (CACM) from the National Contract Management Association.

a. Boundary Spanning Roles and Customer/Supplier Relationships

The contracting specialists indicated that they took the lead role in the contracting process but the ownership of the contracting process is shared between the contracting office, the internal customer, and the external supplier. They viewed their role as a manager of the procurement cycle and are responsible for ensuring that the contractor fulfills their obligations, "by getting the supplies or services required by the Government within the boundaries of the contract and the procurement regulations." Additionally, they must ensure that, "Government personnel (usually the customer) do not change the scope of the contract." Both contract specialists characterized themselves

as playing a mediator and liaison role regarding customer/supplier relationships.

Both contract specialists felt that, generally, the relationship is good between the Government and the contractor. They did, however, indicate that often the relationship between the contracting office and the internal customer is strained (this will be elaborated later in the analysis).

The contracting specialists indicated that some internal customers are better than others in regards to providing sufficiently informative and well-constructed purchase requests. An example commonly provided points to the internal customer who takes an active or participatory role in the contracting process as contrasted with the internal customer who feels that their part is done when the purchase request is turned over to the contracting office. Both contract specialists felt that part of their responsibilities are to provide guidance to the customer in order to ensure that the customer provides them with a good performance work statement (PWS)/statement of work (SOW).

Establishing and maintaining good lines of communication both internally and externally was also identified as an important responsibility. One contract specialist further defined their inter-office responsibilities as including communication with contracting office management, thus defining management as an internal customer of their

contracting activities. S/He felt that management needs to understand the workload of the contracting specialist, identify potential problems and trends, and prioritize problems and workload. The workload of an individual contract can vary depending upon the quality of information provided by internal customers. The contracting specialist maintains information related to the contracting process through various forms of process measurement. S/he then provides selected portions of this process measurement data to management. The contracting specialist indicated that management, as a customer, must identify its needs and quality requirements.

In regard to the specific contracts studied, both contracts utilized Contracting Officer's Representatives (COR) (also commonly known as the Contracting Officer's Technical Representatives (COTR)) who do not work in the field contracting office. The CORs are members of the organization that provides the funding for the services provided by the contract. Both contract specialists indicated that the COR often, "interfaces more with the contractor," than the contracting specialist. Contracting specialists, "get involved when problems arise," and when changes or contract modifications are needed/requested. The contract specialists see the CORs weekly and usually meet with the contractor representatives bi-monthly. Both felt that, overall, the contracts were running smoothly. One contract specialist

commented that, "It's great to have a contract that is working out so well. The...contractor has bent over backwards."

Both contracting specialists viewed their boundary spanning positions as challenging, "never a dull moment." They felt that versatility, diplomacy, tact, being a good communicator, and mastery level knowledge of procurement regulations were essential traits for successful performance of their jobs. As to advantages and disadvantages, one contracting specialist stated,

Advantages - The procurement regs and the contract are spelled out to a major degree and you follow the rules. I also get to see both sides of the problem.

Disadvantages - My job is often hampered more by the Government customers than it is by the contractors. Customers seem to think they can do a better job...and they hate to put things in writing.

The term "customers" is in reference primarily to the internal customer of the contracting office. Because of the disadvantages described above, "the relationship between the contracting office and the customer is often strained." The other contract specialist expressed similar views.

A key factor in the success of the contract is receiving a quality PWS/SOW from the customer. As indicated earlier, ownership of the contracting process is shared by all parties but the contracting office doesn't always get what they need from the customer. "They don't often know exactly what they want...." and "We often need to pull teeth to get info out of them." Both contracting specialists indicated

that they felt the customer needed more commitment towards meeting the quality needs of the contracting office and the supplier.

The contracting specialists felt the customer/supplier reciprocal relationship can be improved if the internal customer was more aware and sensitive to the needs of the contracting office and the supplier. "The customer needs to keep us informed," avoid making constructive changes in the contract, provide required paperwork (e.g., performance reports, customer complaints, etc.) and feedback in a timely manner, seek assistance/guidance from the contracting office, and provide the contracting office with good technical evaluations.

Both contract specialists indicated they are effective in their respective roles. Currently, their field contracting office separates the functions of preaward (cradle) from postaward contract administration and close out (grave). The contracting specialists interviewed have responsibility for postaward contract administration and close out. Previously, the contract specialists had cradle to grave responsibilities. Under the cradle to grave concept, the contract specialists indicated that they felt more effective and, "You lived with your own mistakes."

Both contract specialists felt their boundary spanning roles could be improved by having more involvement in the preaward phase. This would allow for early involvement

with the customer and provide for a TQL team concept approach towards the process. They both perceive their biggest obstacle as workload and therefore feel it is essential to optimize their involvement in the early phases of the contracting process so they can, "do it right the first time."

b. Impact of TQL

Both contracting specialists felt their abilities as boundary spanners, as well as, their customer/supplier reciprocal relations can be improved by using the continuous improvement process concept in the contracting process, especially in the planning and preparation phases. They indicated that improving quality takes time and requires commitment by all participants in the contracting process. The big obstacle is scarcity of time due to cutbacks and the draw down. This obstacle results in requiring the contracting office to perform the same mission but with significantly less resources.

Often the push is just to get the contract out, quality is suffering because of time constraints. Increased quality is needed in drafting and putting the contract together but that often means that we need to slow down and do it right the first time.

Both contracting specialists deal with customers who are beginning to use TQL concepts. They indicated the effects were positive and that customers are providing more input into the contracting process. This increase in customer involvement also means that the contracting specialist must,

"take more time to explain to the customer the how and why's of the procurement cycle," such as explaining the requirements of the other important customer, the external customer, who has established regulations governing the contracting process. Use of the TQL process increases the level of involvement.

After award, when problems arise between the Government and the contractor, a meeting is arranged between all parties and an attempt is made to resolve issues.

Both contracting specialists indicated increased involvement resulted in better lines of communication and participants had a better appreciation of the needs of all parties. This improvement in relations made the approach to problem solving less adversarial. All participants worked together in an environment of teamwork and because there was a high degree of mutual trust; problems become challenges to be solved together.

The contracting specialists viewed TQL as a way to continuously improve the contracting process. Both felt that the most pressing requirement is for training the internal customer as well as joint training for the internal customer, external supplier, and contracting specialist. One contracting specialist envisioned this training as utilizing TQL concepts with a specific focus on improving the contracting process. This approach is currently part of the parent organization's TQL implementation plan in that the TQL coordinator's training matrix includes internal customer and

external supplier training on an as required basis in the near future.

Both contracting specialists felt that TQL will provide tools for better problem solving and allow them to better meet the quality requirements of all participants.

By getting the customer involved from the beginning in the quality process, problems can be resolved before they occur. Both the customer and the contracting personnel come to an understanding of how to proceed with the contract, how to do quality assurance checks, etc.

This view is shared by both contracting specialists and they acknowledged that the contracting process will be more effective through the teamwork approach and by managing quality by focusing on continuously improving the process as it occurs.

A significant factor in building the teamwork approach is the excessive mobility of the military customer personnel. "It seems that just when you train them, they get transferred." Contracting and contractor personnel are relatively stable in their work assignments, however, one contracting specialist felt that military organizations should endeavor to maintain assignment of CORs and/or customer representatives for at least one year, preferably for two years when feasible.

Both contracting specialists realized that the Marine Corps is just beginning its implementation of the TQL process. One contracting specialist commented that,

The contracting arena, with all its many rules and regulations, with requirements to justify everything and anything, makes TQL difficult to implement. It is my opinion it will never be fully implemented unless the procurement rules change.

They felt that TQL is a "wonderful philosophy" but the big obstacles are lack of training and time due to increased workload as well as the excessive mobility of military personnel and leaders. Both contracting specialists were aware that TQM is, "big in industry," and they indicated that there is a definite need to provide TQL training for contract specialists in order to remain current with commercial business practices. They did, however, indicate that there is a need for TQL training that is geared to the contracting process in the military environment vice private industry. Furthermore, they indicated that successful implementation of the TQL process must go hand-in-hand with establishing new position descriptions and individual work performance measures.

In summary, the contracting specialists interviewed stressed a need for more involvement on the part of the internal customer so that the internal customer can be a "quality" customer. This can be accomplished, in part, by increasing the internal customer's ownership in the contracting process through a teamwork approach. They recognize the need for training as being the first step (e.g., explaining external customer and contracting office requirements to the internal customer, joint TQL training with

external suppliers, etc.). TQL team skills and concepts integrated with training specifically addressing the contracting process would provide a foundation for continuously improving the effectiveness of the contracting specialist in their boundary spanning role. Additionally, this training should improve the abilities of internal customer and the external supplier in being "quality" customers and suppliers.

Furthermore, both contracting specialists indicated a need for more involvement, within their contracting office, in the initial contract development phase since they no longer have "cradle to grave" responsibilities. They also identified explaining external customer requirements, in an informal and non-training format, to the internal customer as part of their information processing/filtering boundary spanning role.

2. Internal Customers

Six customers were interviewed. Two were CORs for the respective contracts, two were involved in customer quality assurance and two were customers who utilized the services provided by the contractors. The CORs, as previously stated, are not assigned to the contracting office but are provided by the customer. In this case, the CORs perform as an arm of the contracting specialist in the boundary spanning process and also represent the customer (e.g., routine liaison functions between the contractor and end user customer, between the

contracting specialist and internal customer management, etc.).

a. Customer/Supplier Relationships

All of the interviewees viewed their responsibilities as providing information and feedback to the contracting office and the contractor. They felt maintaining a good working relation with the contracting office and the contractor was a key factor towards meeting their needs. Additionally, they viewed providing input, such as a good PWS/SOW, during the planning and preaward phase as a customer obligation (e.g., review of the contract, provide recommendations, participate in "fine tuning" the contract prior to solicitation, etc).

They all indicated that the contracting office needs to show concern and actively seek customer involvement in the process. If necessary, the contracting office should "walk through" the contract with the customer. The customer, generally, knows what they want as an end product but they often do not know what is "in between." This "in between" is the part of the contracting process often hidden from the internal customer and involves the contracting specialist's meeting the requirements of the external customer such as Government procurement regulations and contracting requirements for definition/clarification of specifications set in the PWS/SOW. The contracting specialist must work with

the internal customer to assure that both the internal and external customer requirements can be met.

Some internal customers were more aware of the requirements placed upon the contracting office and the external supplier by the external customer as represented by Government regulations. Customers with COR and/or quality assurance training fell into this category. Other customers were only vaguely aware of the extent of the external customer requirements.

All customers interviewed indicated they understood their obligation to meet the quality needs of the contracting office and the external supplier. One customer stated that they would like to have more "ownership" in the process and that mission performance requires a two way approach. They did not, however, feel the same degree of obligation towards the external customer (e.g., Government procurement regulations, DFARS, etc.).

Like the contracting specialists, all customer groups, CORs, QAEs (quality assurance examiners/evaluators) and general customers, felt that involvement and communication are key factors in improving customer supplier reciprocal relations. As one non-COR/QAE customer said, "Don't work in a vacuum." They indicated that they looked to the contracting office for guidance and coordination. Increased use of progress performance meetings, informational meetings, discussions early on in the planning stage, and "solving

problems jointly" were examples of actions that could be used to continuously improve relations. More usage of postaward conferences where the contracting office walks through the contract with the customer(s) and the external supplier would also help. Another non-COR/QAE customer also indicated that training for the customer would help (e.g., TQL training integrated with training that explains the contracting process to the internal customer).

It was also mentioned by one non-COR/QAE that general management needed to, "look at a person's ability to get along with people." Furthermore, "customer representatives and contracting personnel must have good interpersonal relationship skills." All of the customers indicated a preference for face-to-face communications even though it was more time intensive. They felt it is more effective than, "just filling out a customer complaint form," because they can better clarify their needs.

b. Impact of TQL

A majority of the customers indicated that taking a continuous improvement process (CIP) approach towards improving relations would enhance the achievement of all parties' quality requirements. One customer, a COR, stated that the,

...key to success is CIP. CIP is how it should work. Don't inspect to find things wrong. Look for problem areas, tell the contractor and the contracting officer, give recommendations for improvement, address problems

with the contractor. Give the contractor a heads up. Provide feedback on a friendly basis. The contractor appreciates it. Avoid adversarial relations.

Another customer, non-COR/QAE, stated that all parties, "needed to demonstrate leadership and professionalism in conduct. Never compromise yourself." This customer was referring to the need to conduct business in a friendly and non-adversarial manner (e.g., losing one's temper is considered by Marines to be unprofessional and demonstrates poor leadership).

Those customers that had received TQL training liked what they saw in the TQL concept and one, a QAE, stated that,

We're already doing process measurement and systems thinking to improve operations and relations. I like the customer orientation attitude, a can do attitude towards customer requirements.

Another customer, non-COR/QAE, who has received some TQL training, indicated the same.

For those who were using a TQL approach, they saw a definite improvement in relationships. One customer, a COR, indicated that because of bad experiences with previous contracts, they had decided to take a TQL approach even though that was not what they called it at the time. This approach included working closer with the contracting office and the contractor, seeking a better understanding of the contracting process through systems thinking, and capitalizing on lessons learned from past experiences.

General comments by customers indicated a desire for more TQL training and more concurrent or joint training. They felt they needed access to specialized training that related to the contracting process because, "lots of courses are offered but few apply to us and our needs. COR training is important." Non-COR interviewees indicated a similar view regarding training.

All customers indicated that the biggest obstacle is a lack of communication. "Any increase in communication will automatically improve quality." They also indicated a need for more customer involvement from the ultimate end user (e.g., input from the Marine who actually receives the contractor's services).

In addressing internal customer interaction with the contractor's personnel during the performance of work, one customer, a QAE, stated that, "we need to tell them what we want, like with performance specifications, but not how to do it." Also, "Commanding Officers must be well-briefed and know their boundaries/limits," in regards to controlling the activities of the contractor. When asked who should do this, the customer responded, "the COR is the best one but sometimes the Contracting Officer has to be the one." This was in reference to briefing senior military leaders who formerly had Marines performing functions now performed by contractors.

In summary, internal customers, like contracting personnel, see a need for more involvement. This can be

accomplished, in part, by increasing the internal customer's ownership in the contracting process through a teamwork approach. The internal customers indicated that by increasing their involvement in the contracting function, they could better meet the needs of the contracting office and the external customer. Internal customers also indicate a preference for face-to-face contact with contractors over indirect contact via customer complaint forms.

Like the contracting specialists, the internal customers recognize the need for training as being the first step. TQL team skills and concepts integrated with training specifically addressing the contracting process would provide a foundation for continuously improving the contracting process.

3. External Suppliers

Views of the external supplier are represented through interviews conducted by the researcher with the chief executive officer (CEO) for each of the two Government contractors. One contractor was an experienced Government contractor from the services industry. The other Government contractor was new to Federal Government contracting. Because of this difference in experience, the comments of the Government contractors are presented separately. Both contractors stated they were small businesses.

a. Experienced Government Contractor

This individual has many years of experience in providing services to the Government. Additionally, this contractor has dealt with all the Services within the DoD.

(1) *Customer/Supplier Relationships.* The interviewee expressed the opinion that the Government contracting officer often takes the side of the Government automatically. S/He felt, however, it is the contracting officer's responsibility to be in the middle between the contractor and the customer (both internal and external). The contractor should address problems to the contracting officer and receive fair and equitable treatment.

S/He felt contracting officer involvement with the contractor and the customer is important (e.g., feedback from the contracting office regarding internal customer perceptions of contractor performance of work) but that one should not have meetings just to have meetings. Time is money for the contractor and excessive requirements for meetings that serve no real purpose results in suboptimization of the customer/supplier relationship. In this respect, the contractor indicated that sometimes issues (e.g., changes in scheduling that are within the scope of the contract) are best addressed between the contractor's project manager or site supervisors and customer representatives. In some cases, the CEO and the contracting officer should address issues with the

principal customer representative(s) (e.g., suggested changes that require contract modifications).

The contractor felt it is his/her responsibility to bring to the attention of the contracting officer those issues that involve significant problems with the internal customer (e.g., improper treatment of contractor personnel by Government personnel) but s/he made a caveat that this must be done in a very diplomatic manner.

S/He indicated that Government contracting officers (not referring to the case study contracting officer) sometimes take too much of a punitive attitude towards service contractors (e.g., they punish poor performance but do not reward good performance). The contractor indicated that it is a responsibility of the contracting officer to reward good quality performance and to make fair and equitable determinations when performance falls below acceptable levels. This can be done through actions such as reduction of Government inspections. S/He indicated the Government should not ask more of the contractor regarding quality than the Government had when it performed the function in-house. Quality has its costs and the Government often wants a degree of quality that is akin to perfection.

As to the internal customer, the contractor indicated they wanted direct feedback. Customer complaint forms, when utilized, need to go directly to the contractor not through a loop (e.g., customer to QAE, to COR, to

administrative contracting specialist, to contracting officer, and then to the contractor). When a customer complaint passes through too many hands before being handed to the contractor, the contractor loses the ability to provide a timely response.

This particular contractor stressed involvement by their on-site managerial personnel and indicated they had a very good relationship with the customer representatives and the case study contracting office. This view was also reflected during interviews with the internal customers and contracting personnel. All parties indicated a high degree of trust and confidence in each other's openness. Additionally, the CEO periodically visited sites such as the case study organization and always stopped by to call on customers and the contracting office to ensure a good relationship is maintained.

The contractor felt the internal customer has obligations to support their quality requirements too (e.g., establishing reasonable PWS/SOWs, timely feedback, clarifying needs, etc.). The contractor indicated that early supplier involvement would help a great deal and could be accomplished by bringing potential suppliers in on the planning process prior to doing the performance work statement/statement of work (PWS/SOW). This would allow him/her to meet with internal customers, hear the customers views regarding services needed, provide input regarding the development of

PWS/SOWs, and provide the customer, as well as the contracting office, access to the views, experiences, expertise, etc. of potential external suppliers. Increased use of draft solicitations would be a good start.

The contractor was aware of external customer requirements such as the body of law (FAR, DFARS, Department of Labor, etc.). They stated a Government contractor, "survives by staying inside of external customer requirements." This, however, means the contractor must expend resources on, "good counsel who specialize in Federal Government contracting law."

(2) *Impact of TQM.* The contractor felt customer quality assurance examiners/evaluators (QAE) were key players in the customer/supplier relationship. QAEs need an understanding of TQM and need to realize that when applying TQM concepts, the Government should pay for those things that are of value to the ultimate customer and ensure that the customer is getting what they are paying for in accordance with the contract. Suggestions for improvement, while well-intended, can result in a requirement for a contract modification and possible constructive changes thereby raising the total cost of the contract. QAEs vary in attitudes and there is a good deal of inconsistency in evaluators. S/He felt the Government should consider having its QAEs inspect

and apply the same rules to Marine-operated facilities that perform the same function, not just to the contractor.

One interesting comment made by the contractor involved the internal customer's recent application of TQM SPC techniques. Customer QAE personnel had monitored what they felt was the best operating contractor facility. They had established what the contractor felt was valid measurement criteria and established an "achievable" but not necessarily a "desirable" level of variance. The customer then wanted the criteria used as a benchmark and applied to other facilities operated by the contractor. The contractor reviewed the quality requirements but indicated that in order to stay within the proposed variance levels, the contract would require a modification since the variation levels required a significant change in the PWS/SOW established in the contract. This proposal was dropped by the customer due to the funding increases that would be required to meet the proposed new standards of quality and performance. The effort had good intentions but here was a case where the Government was asking for a higher level of performance from the contractor than was expected from facilities operated by Marines and had been established by the PWS/SOW.

The contractor viewed service contracting and total quality as meaning that they, the service contractor, were responsible for meeting the needs of, "the customer coming in." In this regard, the contractor is referring to

the customer who receives the direct benefit of their services, the end user customer. Quality performance is judged by when, "the customer gets a good product and they are happy."

The contractor felt that the customer/supplier reciprocal relationship can best be improved by continuously improving communication. This can be done by having contracting officer involvement when needed and through face-to-face meetings with customers. The customer can clarify what they want. The contractor can clarify what they do.

S/He indicated that service contracting involves people and there is a need to avoid a zero defects mentality. Furthermore, "the PWS/SOW needs to avoid a zero defect approach to quality." In this regards, the contractor indicated that a continuous improvement approach towards quality is much more appropriate.

The contractor was very knowledgeable regarding TQM and indicated that his/her organization used the concepts in their business. S/He did indicate, however, that there is a big difference between total quality in the service contracting industry, the technical/hard services and in the manufacturing sector. As stated previously, service contracting involves a people-intensive process centered around human interactions vice a person/machine process. The contractor indicated that causes of variance differ when a

process is centered around a people-oriented process/function involving intensive human interactions.

In summary, the views of this external supplier are quite similar to those expressed by the contracting personnel and the internal customer. The contractor, however, focused on such issues as timely responses to complaints, direct contact with internal customers, early supplier involvement, and support from the contracting office as areas for improvement. S/He views service contracting as involving a process centered around a complex system of human interactions. A close customer/supplier relationship focusing on an understanding of each party's needs is a key factor towards success. The contractor indicated that TQM is a means for improving this relationship.

b. New Government Contractor

This individual has many years of business experience but s/he indicated this is the first Government contract for his/her business.

(1) *Customer/Supplier Relationships.* This contractor indicated that his/her business had a very good relationship with the contracting office and their end user customers. This view was also reflected by the contracting office and the customers. S/He did indicate that this contracting office is very responsive and helpful. Although this is the first Government contract for this contractor,

s/he had dealt with other Government contracting offices during the bidding process and felt that, "this one is much better." Here is an example of an effective customer/supplier reciprocal relationship. The contracting specialist assigned to this contract indicated that this particular, "contractor has bent over backwards" and "It's great to have a contract that is working out so well."

Based on experience with other DoD organizations in bidding for contracts, the contractor felt that the, "Government is somewhat inflexible regarding changes that could improve the process (e.g., contractor suggested improvements that would benefit the end user but require a contract modification because total costs are increased)." The contractor indicated that the Government needed to, "cut layers, decentralize, and lessen the administrative burden," on the contractor (e.g., the contractor mentioned using computerized billing as a way to lessen some of the administrative burden). The contractor wants to, "focus on quality performance. I sometimes feel that my hands are tied."

The contractor felt that keeping close communication with the end user customer and the contracting office is the best way to improve customer/supplier reciprocal relations. "Visiting individual customers once a month really helps. Access to the customer," is the key. The contractor needs constant communication with the customer and needs to

know who is in charge at the customer's organization. The contractor felt a great deal of obligation towards the end user customer but needed feedback directly from the customer vice solely through customer complaint forms. Person to person, friendly, contact is preferred to customer complaint forms. Contractor management needs to be accessible to the customer.

The contractor felt the contracting office and sometimes the COR or Government representative is a good referee for minor issues. Service can often be improved via the dealings with the COR without having to modify the contract. The contractor felt it was the contracting office's responsibility to be the impartial judge between the customer and the contractor as well as to provide guidance and answer questions. The customer needs to provide feedback directly to the contractor. Major issues, such as modifications to the contract, should involve the contracting office.

(2) *Impact of TQM.* The contractor was familiar with TQM and felt that it was used in some ways in his/her company and in their dealings with customers. S/He had their own internal policies regarding customer service and solicited contractor employee feedback. The contractor believed in empowering employees and felt that it gave the business increased flexibility and responsiveness. Employees represent the contractor on a day-to-day basis. Employees are their own

first level supervisor and they are encouraged to suggest improvements. The contractor also stated that, "they would like to participate in Government TQL training."

During the general comment portion of the interview, the contractor indicated that dealing with the Government is usually straight forward.

The Government lays out rules and you follow it. It is good when everything is clear. The problem is when you, the contractor, have ideas for improvement but there are obstacles to implementation, especially if the changes cost money but will improve quality and processes.

The contractor indicated the Government needed to improve its invoicing/paperwork process. The current method is manual, there is a need for mechanization.

In regards to periods of performance and firm fixed-price contracts, the contractor felt that one year is not enough and the lowest bid is not the best way to go. The Government needs to emphasize more multi-year contracts. The Government should go to the best value/quality, not just the lowest price. Lowest bid and low balling by other bidders means no considerations have been given to quality. The way the system is set up, businesses bid on price, not quality. Quality is sacrificed because of the award requirement for lowest price. The contractor indicated that they preferred contracts with the one base year with four option years.

In summary, both contractors have similar views. External suppliers, like contracting personnel and internal customers, see a need for more involvement. This can

be accomplished, in part, by increasing the internal customer's ownership in the contracting process through a teamwork approach. External suppliers also indicate a preference towards face-to-face contact with internal customers over indirect contact via customer complaint forms. Additionally, when used, customer complaint forms should go directly to the contractor thus allowing a more immediate response to customer needs. Both contractors recognize the need for training as being the first step and one contractor indicated a strong desire to participate in joint TQL training. TQL team skills and concepts integrated with training specifically addressing the contracting process would provide a foundation for continuously improving the contracting process.

Additionally, both contractors indicated a preference for multi-year contracts. They indicated that multi-year contracts allow them to build effective customer/supplier relations.

Both contractors placed the Marine Corps high on their list of DoD Services that they had conducted business with and/or submitted bids to. Both indicated that the Marines are direct, no politics, no evasions, straight to the point. This makes for a good business relationship and effective customer/supplier reciprocal relationships.

C. RESULTS OF THE TQLCS

The TQLCS was administered to the case study field contracting organization during April 1993. Surveys were given to the 33 members on board and 30 surveys were returned. This number reflects participation in the TQLCS by over 90% of the personnel in the case study field contracting organization.

Additional demographics are as follows: Age; 48% are 26 through 35, 25% are 36 through 50, 27% are 51 and above. Gender; 65% female and 35% male. Highest education level; approximately 19% high school, 4% vocational training, 47% some college, 11% associate's degree, 11% bachelor's degree, 4% graduate school, and 4% graduate degree. Supervisory level; 69% non-supervisor, 14% first-line supervisor, 10% mid-level supervisor/manager, and 7% top management. Employment status; 72% civilian (e.g., GS-1102/1105/1106 and administrative support personnel) and 28% military (e.g., Marines with the MOS 9656 and 3044). Type of work; 39% professional, 25% management, 21% office/clerical, 11% other, and 4% technical (None are CORs or QAEs).

Appendix E contains an example of the TQLCS. Only those portions of the TQLCS actually used for the purpose of this research are provided. The presentation of data for the portions of the TQLCS used is contained in Appendix F.

Questions 1-76 deal with work team functioning, job characteristics, worker motivation, and general organizational

climate and are not included in Appendices E and F. Only the portions of the TQLCS that deal with TQL implementation and TQL support (portions of questions 77-153) are being used.

The majority of respondents indicated a large/very large extent response regarding knowledge and understanding of TQL (See Appendix F, p. 159, data analysis of questions 116-118). A majority of respondents indicated a large/very large commitment to TQL. Seventy-seven percent indicated that military management desires to implement TQL in the field contracting organization, 67% indicated that civilian management desires to implement TQL in the field contracting organization, and 67% of individual respondents indicated they desired to implement TQL in the field contracting organization (See Appendix F, p. 160, data analysis of questions 133-137).

A majority of respondents also indicated to a large/very large extent a positive attitude regarding the perceived benefits of implementing TQL (See Appendix F, p. 161, data analysis of questions 138-141).

In regard to the fear of implementing TQL, over 90% of respondents were either not at all or to a small extent fearful of implementing TQL (See Appendix F, p. 162 data analysis of questions 142-145). A majority of respondents also indicated a some or large/very large extent response regarding anticipated TQL success (See Appendix F, p. 164, data analysis of questions 151-153).

The majority of respondents, 87%, indicated a large/very large degree of leadership involvement in quality performance by the senior leaders of the parent organization and the field contracting office (See Appendix F, p. 152, data analysis of questions 77-79). A majority of respondents, 60%, indicated that the field contracting office has a long-term quality focus regarding TQL. However, only 47% indicated to a large/very large extent that TQL had been incorporated into the overall organizational strategy and that TQL activities were consistent with the long-term goals of the organization (See Appendix F, p. 153, data analysis of questions 80-83).

Another set of questions found somewhat lower ratings (See Appendix F, p. 161, data analysis of questions 146-150). A majority of respondents, 80%, indicated that their supervisor practiced TQL methods to some extent or greater and 72% indicated that their supervisor assisted them in performing quality improvement activities. Seventy-four percent indicated that organizational policies and procedures fit with the objectives of TQL and 59% indicated that their supervisor gives them, at least to some extent, enough time to perform quality improvement activities. However, 70% indicated that they can, to a large/very large extent, tell when they have done a good job (See Appendix F, p. 157, data analysis of question 105).

The majority of respondents demonstrated a high degree of understanding regarding the external customer orientation (See

Appendix F, p. 154, data analysis of questions 84-87). Seventy-three percent indicated that they understood the needs of the external customer and 77% indicated that their organization does focus on meeting their needs. However, only 50% indicated that management plans ahead for changes in external customer requirements and only 57% indicated that management had clearly identified its external customers.

The majority of respondents also demonstrated a high degree of understanding regarding internal customer orientation (See Appendix F, p. 152, data analysis of questions 88-91). Sixty-three percent indicated they understand the needs of the internal customer to a large/very large extent. Sixty-seven percent believed that they were meeting the needs of internal customers. However, only 47% indicated they try to plan ahead for changes in internal customer requirements and only 63% indicated they knew who their internal customers were.

This can be related to the contracting specialists comments. They indicated they felt effective in their role as an information processing boundary spanner between the internal customer and the external customer (e.g., translating internal customer needs into a contract that meets external customer requirements).

Results, however, indicated a lower rating regarding attention toward external supplier quality by management (See Appendix F, p. 156, data analysis of questions 92-95). In

this regard, the majority of respondents rated the organization as attending to these issues only to some extent.

Respondents also indicated a lower rating regarding the absence of barriers between departments (See Appendix F, p. 158, data analysis of questions 112-115). This is substantiated by the case study interview responses from contracting specialists who indicated a need for increased involvement by internal customers. In this regard, the contracting office predominantly views other departments as internal customers since a majority of the contact with other departments consists of receiving internal customer requirements in the form of a purchase request.

D. ANALYSIS

The case study interviews and the TQLCS were used to address the third and fourth subsidiary research questions which deal with looking at the boundary spanning roles of contracting personnel and customer/supplier relationships, how TQL has affected customer/supplier relations in a field contracting office, and the views of external suppliers and internal customers.

1. Boundary Spanning Roles and Customer/Supplier Relationships

Contracting specialists are legitimate boundary spanners. They are individuals who occupy, special roles located in unique units," within their parent organizations.

[Ref. 22:p. 316] They perform both information processing and external representation boundary spanning functions. They draw groups from within their parent organization and outside their parent organization closer together. [Ref. 23] Both internal customers and external suppliers view contracting specialists as information processing and external representation boundary spanners. Performing the boundary spanner role of filtering information so that management is sufficiently informed is also an important function.

In performing this boundary spanning role, contracting specialists translate external customer requirements for the internal customer and external supplier. They also translate internal customer requirements for the external supplier.

Contracting specialists feel they are effective in performing this boundary spanning role and they gain a degree of personal job satisfaction when they work with internal customers and external suppliers who are actively involved in the contracting process. [Ref. 23] The interviews with the contracting specialists indicate that having quality external suppliers contributes towards allowing them to increase their boundary spanning role effectiveness. They feel that increased internal customer involvement (e.g., more shared ownership, early collaborative planning, etc.) will also increase their effectiveness in this role.

The interviews with the case study contracting personnel, internal customers, and external suppliers

indicated a desire for increased involvement and ownership in the contracting process by all parties. Improving lines of communication is seen as the most important aspect towards improving customer/supplier relations. The data from all three groups suggest that the boundary role of the contracting specialist is expanding.

The contracting specialists indicated that often the relationship between the contracting office and the internal customer is strained. This, in part, is due to the variation of relationships between internal customer representatives and contracting specialists which is commonly found in boundary spanning activities (e.g., internal customers representatives who continually work closely with contracting specialists have established a strong customer/supplier reciprocal relationship with the contracting office).

Both contract specialists characterized themselves as playing a mediator and liaison role regarding customer/supplier relationships. This view indicates that they perform both external representation and information processing boundary spanning roles between the internal customer, external customer, and external supplier. Furthermore, they act as the negotiators and facilitators in the customer/supplier relationship.

In regards to the boundary spanning roles of information processing and external representation, contracting personnel translate internal customer needs into

contracts in accordance with external customer requirements. The contract is then provided, upon award, to the external supplier. It provides the necessary information that allows the external supplier to meet internal customer needs and external customer requirements.

Both contracting specialists and external suppliers indicated that CORs play an important part in the customer/supplier relationship. CORs perform as an arm of the contracting specialist in the boundary spanning process. They also provide the external supplier with access to the perceptions of the end user customer. In a manner of speaking, CORs are information processing boundary spanners.

2. Impact of TQL

All interviewees were aware of the TQL/TQM process and felt that even though implementation had just started, they anticipated implementation of TQL would yield positive benefits. This was also shown in the TQLCS responses of the case study field contracting organization.

The results of the interviews with the contracting specialists and the TQLCS indicates a consensus regarding the impacts of TQL on the contracting process. The data show a strong belief that TQL will improve the contracting process, improve customer/supplier relationships, and increase the effectiveness of the contracting specialist in the performance of their boundary spanning roles. Internal customers and

external suppliers also feel that TQL/TQM will contribute towards improving the contracting process and customer/supplier relationships. These data suggest that TQL will cause the boundary spanning role of the contracting specialist to be expanded as well as the roles of the internal customer and external supplier.

The contracting specialists interviewed and the TQLCS participants believed the senior leaders of their parent organization demonstrate commitment to TQL. This example follows the quality philosophy of Deming [Ref. 7] and Juran [Ref. 8] in that senior leaders and middle management must set the example. This commitment is shared by the participants and is shown in the participants' positive belief in the anticipated benefits of TQL.

One contractor interviewed demonstrates a perspective towards inspection shared by Deming's third point, "Cease dependence on mass inspection." [Ref. 13:pp.17-19] Deming feels that it is important for the Government to understand the purpose of inspection, for improvement of processes and reduction of cost [Ref. 7].

Additionally, this contractor's comments regarding recent experiences with QAEs who were beginning to use TQL SPC techniques indicates a possible barrier is the "cost" of quality, but not necessarily unequal standards (e.g., applying one standard to contractor activities and another to similar activities performed by the Government). The cost of quality

is an important issue in the contracting process and is tied to the level of performance that the internal customer is willing to pay for. This is influenced by budgetary constraints and by how well the costs of poor quality are measured as well as considered in the determination of what can be paid for quality performance.

Furthermore, both contractors interviewed prefer multi-year contracts. In this case it is primarily in regards to allowing the contractor the time necessary to build an effective customer/supplier relationship. However, as one contractor indicated, s/he would like to see competition for award based on a best value approach instead of awarding to the lowest bidder. Seeking long-term relations with fewer suppliers as well as ceasing to award contracts based solely on the lowest bid is a key part of the quality philosophy supported by Deming [Ref. 7], Juran [Ref. 8], and Ishikawa [Ref. 10].

3. Boundary Spanning Roles, Customer/Supplier Relationships, and the Impact of TQL

As the implementation of TQL progresses, participants in the contracting process, the field contracting office, internal customers, and external suppliers, should see an increase in their involvement in a collaborative analysis of the contracting process. This increased involvement will require the cultivation of closer relationships through

increased communication between the contracting office, the internal customer, and the external supplier.

The common thread that ties all three groups together is the emphasis on communication and involvement. Contracting personnel would like more internal customer involvement and see the need to increase the internal customer's share in the ownership of the contracting process. Internal customers indicated a strong desire for more ownership and involvement (e.g., collaborative planning, TQL training aimed at improving the contracting process, etc.) in the contracting process. They stressed the need for stronger lines of communication with the contracting office and the external supplier. Like the contracting personnel, internal customers recognize the need for TQL training as being a first step towards increasing their involvement. External suppliers, likewise, feel that a closer relationship with the internal customer will increase their ability to meet internal customer needs (e.g., through early supplier involvement in the planning phase, direct customer feedback, etc.). This trend towards increased involvement falls in line with Deming's ninth point, "Break down the barriers between staff areas," by optimizing the efforts of teams, groups, staff areas, etc. [Ref. 13:pp. 17-19]

The TQL process stresses a teamwork approach. In regards to the contracting process, the need for an effective boundary spanner who can link internal customers and external

customers to external suppliers is increased. The requirement for more involvement and improved communications in order to improve the customer/supplier reciprocal relationship will increase the demands placed on the contracting specialist's role as a boundary spanner.

Deming [Ref. 7], Juran [Ref. 8], and Ishikawa [Ref. 10] all recommend that purchasers work closely with suppliers. They propose closer customer/supplier relations be based on an "arms around" and teamwork approach. Furthermore, Deming feels that purchasing managers should shift their focus from lowest initial cost to one of lowest total cost and then seek long-term relationships with suppliers. Deming also believes that empowerment of buyers is an integral part of restoring pride in workmanship and allows for more effective customer/supplier relationships. This concept of empowering buyers contributes significantly towards increasing the effectiveness of contracting specialists in the performance of their boundary spanning roles.

As the paradigm shift towards the TQL philosophy progresses, there should be an increase in the number of boundary spanning roles. Additionally, DoD and the Services are currently faced with a rapidly changing environment. This rapidly changing environment indicates a need for leaner organizations.

Organizations in rapidly changing environments will have a higher proportion of boundary roles than organizations in stable environments. Organizations in lean

environments will have a higher proportion of boundary roles than organizations in a rich environment. [Ref. 23]

VI. CONCLUSIONS AND RECOMMENDATIONS

A. CONCLUSIONS

1. Primary Research Question

What is the current implementation status of the Total Quality Leadership process in U.S. Marine Corps Field Contracting Offices?

As discussed in Chapter IV, the majority of field contracting offices are only beginning to implement the TQL process. As the parent organization progresses with its overall implementation program, the contracting office members receive TQL training. As training of contracting personnel occurs, the contracting office, along with the parent organization, moves towards implementation of the TQL process.

If one was to consider implementation of the TQL process as being similar to running a continuous race around an oval track (Using the metaphor described in Chapter IV), the ten field contracting offices would occupy various positions on the track. In this case, the positions of the ten field contracting organizations fall into one of three categories. The first will be one of walking up to the starting line (i.e., beginning implementation of the TQL process at the senior leadership level, SLS training, senior leader commitment to the TQL process, etc.), the second will

be one of approaching the first curve (i.e., implementing the TQL process within the parent organization, TQL training for individual members of the organization, etc.), and the third will be one of rounding the first curve (i.e., making the paradigm shift to a TQL orientation and shifting to a continuous improvement cycle, continuing TQL training, etc.).

2. Subsidiary Research Questions

(1) To what extent has the TQL process been implemented in U.S. Marine Corps Field Contracting Offices? i.e., what has been achieved to date?

As discussed in Chapter IV, a wide variation exists. Implementation of TQL within the majority of the field contracting offices is in the early start up phase. Currently, the majority of the field contracting office personnel who have received TQL training are the contracting officer, the deputy, and the procurement chief.

The variation is illustrated by the placement of the field contracting office and its parent organization on the continuous oval track. Two parent organizations and their field contracting offices are just walking up to the starting line. Six parent organizations have crossed the starting line and are, to various degrees, approaching the first curve. The other two parent organizations and their field contracting offices are rounding the first curve and are well into the

process of making the paradigm shift towards full implementation of TQL.

(2) What time frames are expected/anticipated for the implementation of the TQL process in U.S. Marine Corps Field Contracting Offices? Can a time frame be determined at this point?

As discussed in Chapter IV, a time frame for implementation could not be established, however, it appears that TQL implementation follows a five year start up phase. The five year start up phase is related to the implementation of the TQL process within the parent organization of the field contracting office. This start up phase, however, is dependent upon many factors such as senior leader commitment towards implementing the TQL process, allocation of resources, establishment of a full time TQL coordinator position, TQL trainers, facilitators, etc. TQL implementation within the field contracting office usually begins during the third year of the start up phase. It is during this time that the contracting officer, the deputy, and the procurement chief begin to receive formal TQL training. TQL training for the remaining members of the field contracting then follows and is conducted throughout the last three years of the five year start up phase. After this point, implementation of TQL and TQL training becomes part of a continuous improvement process.

(3) How has the TQL process affected customer/supplier relations and how can the TQL process be

used to continuously improve these relationships in U.S. Marine Corps Field Contracting Offices? In particular, explore how TQL impacts on the contracting specialist's boundary spanning role in building customer/supplier relationships. This is the focus of the case study.

As discussed in Chapter V, the case study field contracting organization is just beginning implementation of the TQL process. Contracting personnel interviewed indicated that TQL is having a positive effect on the contracting process by increasing the involvement/ownership of the participants in the contracting process and expanding their boundary spanning role. Closer lines of communication and a TQL teamwork approach would allow the contracting specialist to be more effective in their boundary spanner role. A need for emphasis on joint TQL training aimed at improving the quality of the contracting process is indicated. The joint training should involve contracting personnel, internal customers, and external suppliers.

Contracting specialists are legitimate boundary spanners. They perform both information processing and external representation functions. They feel responsible for ensuring that the contractor fulfills their contractual obligations to the internal and external customer. Contracting specialists provide guidance to the internal customer in order to ensure that the customer provides a good PWS/SOW and understands the contracting process. Some

internal customers, those with CORs and QAEs, are more aware of the requirements of the contracting office.

The unique role and position of the contracting specialist allows them to see both sides of the customer/supplier relationship. Their effectiveness as boundary spanners is improved when the internal customer keeps them informed. Their effectiveness can be further enhanced by having more involvement in the planning and preaward phase of the contracting process.

(4) What do internal customers see as the important features of the customer/supplier relationship? What do external suppliers see?

Both internal customers and external suppliers indicated a similar desire for increased involvement/ownership in the contracting process. They viewed the contracting office as the boundary spanner who provided guidance, answers questions, and leads the team through the contracting process. Both groups stressed a need for closer lines of communication and a teamwork approach towards accomplishing a successful execution of the contracting process. Increased involvement, communication, feedback, and joint TQL training is needed in order to have quality internal customers and external suppliers.

External suppliers would like to see the contracting officer reward good quality (e.g., less frequent inspections, lessen the administrative burden, etc.). They can improve

quality by receiving direct feedback from the customer and by being more accessible to the customer. External suppliers feel the contracting officer should be the impartial judge in the customer/supplier relationship. They have quality capabilities, procurement procedures must be able to evaluate these features and not just allow but encourage Government procurement from quality based contractors.

B. SUMMARY

The implementation of the TQL process in the Marine Corps and its field contracting offices shows that, "a long slow effort is vital." In the business world, organizations that have successfully adopted the quality philosophy take a long term approach that spans decades. Appendix G reflects this long term perspective which is essential in order to make the paradigm shift to a continuous improvement process. Experiences of western businesses indicates that management must have a long term commitment and "count the customer in."

[Ref. 44]

One problem is inexperience. Even the most quality-conscious western firms have had little more than a decade's experience with total-quality management. The crux of western firms' quality crisis is their apparent inability to aim their efforts at the right target - the customer. Total-quality management focuses on processes rather than results and products. Taking that to heart, many western firms have concentrated all their efforts on improving their quality processes, and lost sight of the customer on the way. [Ref. 44]

Some western firms feel that, "Total-quality is much easier to implement during a period of corporate prosperity."

[Ref. 44] Many western firms, such as Xerox, however, disagree. Xerox,

...believes that because Xerox faced possible extinction at the time that it launched its quality initiative, managers and workers were more inclined to accept radical changes. ...Xerox did not expect rapid, dramatic results. The firm...did not intend to fold its tents after two or three years. After almost a decade of keeping its tents up, Xerox is one of the rare western winners in the quality game. Like Honda and Nippondenso, it sees quality simply as a way of doing business, one that is focused wholly on the customer. [Ref. 44]

Implementation of the TQL process in U.S. Marine field contracting offices is a means to a number of ends. Two of these ends are improving the contracting process so that customers needs are met and meeting the challenges of a rapidly changing environment.

C. RECOMMENDATIONS FOR FURTHER STUDY

Further functional area studies regarding implementation of the TQL process in individual U.S. Marine Corps Field Contracting Offices and other DoD contracting organizations can provide information and lessons learned. During the course of the case study interviews, field contracting personnel expressed a desire for information regarding implementation of the TQL process in other contracting organizations. They were interested in finding out what had been tried, what worked, what did not.

In the case of field contracting offices, there is a need for further research with an emphasis on which factors allow organizations to move ahead most effectively in implementation of the TQL process (e.g., TQL coordinator utilization and placement, top leader commitment, joint training, etc.). Case-based research is well-suited towards the gathering of information regarding lessons learned (e.g., potential value of increased direct contact between end-user customers and external suppliers/contractors, joint training, etc.).

As the paradigm shift towards the TQL philosophy progresses, there should be an increase in the number of boundary spanning roles. Additionally, DoD and the Services are currently faced with a rapidly changing environment. This rapidly changing environment indicates a need for leaner organizations. Organizations faced with a rapidly changing environment and requirements for leaner organizations tend to have a higher proportion of boundary roles than organizations in a stable and rich environment.

Because of this, it is important to continue to expand our understanding of how to lead organizations at the boundaries. Further research on the characteristics of effective contracting specialists can help us further this understanding and the implications of TQL to the enhanced effectiveness of boundary relationships.

APPENDIX A

MAP OF PRINCIPAL PLAYERS*

I. CUSTOMERS

A. Internal [Addressed in thesis]

1. Customers within the contracting office's parent organization.

a. Direct Support Stock Control (DSSC). The intermediate level of the Marine Corps Supply System. (e.g., Subsistence Branch, Shop Stores, Bulk Issue, etc.)

b. Facilities Maintenance Department.

c. Base units, battalions, departments, etc.

2. Customers outside the contracting office's parent organization.

a. Fleet Marine Force (FMF) tenant units.

b. Non-FMF tenant units and other internal customers as stated in organizational mission statements. e.g., Marine Corps Mountain Warfare Training Center (MCMWTC), Bridgeport, California, is a remote location that receives contracting support from the contracting office at Marine Corps Base (MCB), Camp Pendleton, California.

B. External (The contracting office provides data, information, regulatory compliance, etc.)

1. Body of Law. Executive/Federal branch-Executive orders, Office of Management and Budget (OMB), Office of Federal Procurement Policy (OFPP), Federal Acquisition Regulation (FAR), etc. Legislative branch-Portions of FAR, Competition in Contracting Act (CICA), Truth in Negotiations Act (TINA), etc. Judicial branch-Court decisions, etc. (Primarily these are regulatory customers external to the Department of Defense [DoD])

2. DoD agencies external to the contracting office's parent organization and are not internal customers. e.g., Department of the Navy [DON], Headquarters, U.S. Marine Corps [HQMC], etc. (Primarily these are regulatory customers internal to DoD)

3. Defense Finance and Accounting Service (DFAS). The paying activity.

4. Legal review.

II. SUPPLIERS

A. Internal

1. Marine Corps Supply System. [Not addressed in thesis]

2. DoD Supply System. e.g., Defense Logistics Agency (DLA) and other DOD sources. [Not addressed in thesis]

3. Federal Supply System e.g., General Services Administration (GSA), National Industries for the Blind (NIB),

National Industries for the Severely Handicapped (NISH), etc.
[Not addressed in thesis]

Internal suppliers 1, 2, and 3 are mandatory sources of supply that must be utilized prior to going to external suppliers.

4. Contracting office. The contracting office is the boundary spanner between internal customers, external customers, and external suppliers. **[Addressed in thesis]**

B. External [Addressed in thesis]

1. Commercial sources of goods and/or services unavailable through mandatory internal suppliers. e.g., suppliers, vendors, contractors. etc.

*Principal players are also known as stakeholders. A stakeholder is any individual, group, etc. that is affected by or that can affect the future outcome of a process. e.g., customers, suppliers, governments, critics, etc.

Source: Developed by researcher

APPENDIX B

TQL COORDINATOR SURVEY

DEPARTMENT OF THE NAVY
Naval Postgraduate School
Monterey, CA 93943-5000

4200
815/jdl
25 Feb 1993

MEMORANDUM

From: Captain Jeffrey D. Lee, USMC, Acquisition & Contract
Management Program, SMC #1530, Naval Postgraduate
School, Monterey, CA 93943-5000

To: (TQL Coordinator), (Organization)

Subj: TOTAL QUALITY LEADERSHIP (TQL) IMPLEMENTATION PROCESS

Encl: (1) TQL Implementation and Training Information Survey

1. The office of the Deputy Chief of Staff for Manpower and Reserve Affairs (Code MP-30/TQL Coordinator) has listed your office as the coordinating point of contact regarding questions pertaining to TQL implementation and training for your organization.

2. Research is being conducted on the current status of TQL implementation in Marine Corps Field Contracting Offices. As part of this research, TQL Coordinators are being informally contacted via mail, E-mail, facsimile, and telephone interviews in order to ascertain the status of TQL implementation and TQL training courses.

3. It is requested that you complete enclosure (1) and return it by 10Mar93 via a facsimile and/or via mail. Your assistance in providing the requested information will be greatly appreciated and will greatly aid in completion of this research project.

4. Should you have any questions, the following point of contact along with return mailing address and fax phone number is provided:

Captain Jeffrey D. Lee USMC
SMC #1530, Naval Postgraduate School
Monterey, CA 93943-5000
DSN 878-2536 (Student messages)
Facsimile Number DSN 878-2138 or 408-656-2138

Jeffrey D. Lee

TQL IMPLEMENTATION AND TRAINING INFORMATION SURVEY

[Enclosure (1)]

Privacy Act Statement

Public Law 93-579, the Privacy Act of 1974 requires that you be informed of the purposes and uses of the survey. Authority to collect this information is granted in Title 5 of the United States Code. Providing this information is voluntary. The information will be used for research and statistical purposes only. In no case will the information be used for making decisions affecting specific individuals.

GENERAL INFORMATION and ORGANIZATIONAL CHARACTERISTICS

Organization's Name: _____

Mailing Address: _____

TQL Coordinator's Name: _____

Title: _____

Department's Name: _____

Phone Number: _____

Fax Number: _____

The following definitions are to be used when responding to the questions:

Organization: The organization for which you work (e.g., MCB, MCLB, etc.).

Department/Directorate: A section of the organization that fulfills a major function (e.g., G-1, Comptroller, Contracting, Maintenance, etc.).

External customer: An individual or group outside the producing organization who receives or uses the output of a process (product or service).

External supplier: An individual or group outside your organization (vendor) that provides materials, products, information or services to an individual or group within your organization.

Internal supplier: An individual or group within your organization (department/division/office) that provides input to another individual or group within your organization.

Internal customer: An individual or group inside the producing organization who receives or uses the output of a process (product or service).

Leadership/Management: Any/all levels of leadership and supervision in the organization.

Senior leaders: The highest-ranking official of the organization and those reporting directly to that official.

TQL: Total Quality Leadership. The application of quantitative methods and people, to assess and improve materials and services supplied to the organization; all significant processes in the organization; and meeting the needs of the end user, now and in the future... [TQL is synonymous with the term TQM/Total Quality Management]

1. What is the frequency of CG/CO/OIC rotation?
 Every 1 2 3 4 years (Circle one) Other _____
2. How many civilian employees are currently assigned to your organization: _____
3. How many military employees are currently assigned to your organization: _____
4. What is your command's total current budget (in millions)?

5. When did your organization start its TQL effort?
Month _____ Year _____
6. TQL Education & Training Efforts

Senior leadership/management (Top level; CG, CO, AC/S, Directors, etc.)

When started or when expected to start: Month _____ Year _____
When completed or expected completion: Month _____ Year _____

General leadership/management (Department/branch heads, supervisors, OIC, etc.)

When started or when expected to start: Month _____ Year _____
When completed or expected completion: Month _____ Year _____

General Work Force (Across the board at all levels in the organization)

When started or when expected to start: Month _____ Year _____
When completed or expected completion: Month _____ Year _____

Review and Refresher Training (Across the board at all levels)

When started or when expected to start: Month _____ Year _____

7. Does your organization measure quality improvements or cost savings as a result of its TQL efforts? Yes No

8. If "yes" to above, did your organization achieve measurable quality improvements or cost savings as a result of its TQL efforts in FY92?

Yes No

9. Is your organization undergoing any major changes in mission?

Yes No

10. Is your organization experiencing reductions in force?

Yes No

11. Is your organization finding it necessary to make major changes in the way business is conducted? Yes No

12. Briefly describe your organization's primary mission:

TQL IMPLEMENTATION

This next section contains items concerned with the implementation of TQL in your organization. **CIRCLE the most appropriate answer.**

To What Extent....	Not At All	Some Extent	Very Large Extent	Don't Know		
13. Are the senior leaders of your organization committed to providing top quality products or services?	1	2	3	4	5	0
14. Do your senior leaders regularly review the quality of the organization's work?	1	2	3	4	5	0
15. Do the senior leaders in your organization set examples of quality performance?	1	2	3	4	5	0
16. Does your organization have a long-term quality focus?	1	2	3	4	5	0
17. Is quality improvement seen as just another organizational program?	1	2	3	4	5	0
18. Is TQL incorporated into the overall organizational strategy?	1	2	3	4	5	0
19. Are TQL activities consistent with the long term goals of your organization?	1	2	3	4	5	0

To What Extent....	Not At All	Some Extent	Very Large Extent	Don't Know		
20. Does your organization understand the needs of its external customers?	1	2	3	4	5	0
21. Does your organization focus on meeting the needs of external customers?	1	2	3	4	5	0
22. Does management try to plan ahead for changes in external customer requirements?	1	2	3	4	5	0
23. Has management clearly identified its external customers?	1	2	3	4	5	0
24. Does your organization understand the needs of its internal customers?	1	2	3	4	5	0
25. Do you believe your organization is meeting the needs of its internal customers?	1	2	3	4	5	0
26. Does your organization plan ahead for changes in internal customer requirements?	1	2	3	4	5	0
27. Does your organization know who its internal customers are?	1	2	3	4	5	0
28. Do leaders actively monitor the quality of external suppliers' products or services?	1	2	3	4	5	0
29. Have your leaders defined the quality requirements that external suppliers must meet?	1	2	3	4	5	0
30. Do leaders communicate the organization's quality requirements to external suppliers?	1	2	3	4	5	0
31. Have quality requirements been defined for your internal suppliers?	1	2	3	4	5	0
32. Is the quality of internal suppliers' products or services monitored?	1	2	3	4	5	0
33. Have quality requirements been communicated to your internal suppliers?	1	2	3	4	5	0
34. Do you believe your quality requirements are being met by internal suppliers?	1	2	3	4	5	0

To What Extent....	Not At All	Some Extent	Very Large Extent	Don't Know		
30. Do leaders communicate the organization's quality requirements to external suppliers?	1	2	3	4	5	0
31. Have quality requirements been defined for your internal suppliers?	1	2	3	4	5	0
32. Is the quality of internal suppliers' products or services monitored?	1	2	3	4	5	0
33. Have quality requirements been communicated to your internal suppliers?	1	2	3	4	5	0
34. Do you believe your quality requirements are being met by internal suppliers?	1	2	3	4	5	0
35. Does your organization use any of the seven basic graphical tools to help improve processes (run chart, histogram, pareto chart, flow diagram, cause and effect diagram, scatter diagram, control chart)?	1	2	3	4	5	0
36. Does your organization collect process data?	1	2	3	4	5	0
37. Has your organization developed process measures?	1	2	3	4	5	0

APPENDIX C

CONTRACTING PERSONNEL SURVEY

DEPARTMENT OF THE NAVY
Naval Postgraduate School
Monterey, CA 93943-5000

4200
815/jdl
01 Mar 1993

MEMORANDUM

From: Captain Jeffrey D. Lee, USMC, Acquisition & Contract Management Program, SMC #1530, Naval Postgraduate School, Monterey, CA 93943-5000
To: (Contracting Officer/Deputy/Procurement Chief), (Organization)
Subj: TOTAL QUALITY LEADERSHIP (TQL) IMPLEMENTATION AND TRAINING IN MARINE CORPS FIELD CONTRACTING OFFICES

Encl: (1) TQL Implementation and Training Information Survey

1. The Field Contracting Support Branch (LBO) has provided your office as a point of contact regarding questions pertaining to TQL implementation and training for your office.

2. Research is being conducted on the current status of TQL implementation and training in Marine Corps Field Contracting Offices. As part of this research field contracting office Directors, Deputy Directors, Procurement Chiefs, and Organizational TQL Coordinators are being informally contacted via mail, E-mail, facsimile, and telephone interviews in order ascertain the status of TQL implementation and TQL training.

3. It is requested that you complete enclosure (1) and return it by 17Mar93 via mail and/or facsimile. Your assistance in providing the requested information will be greatly appreciated and will aid in completion of this research project.

4. Should you have any questions, the following point of contact along with return mailing address and facsimile phone number is provided:

Captain Jeffrey D. Lee USMC
SMC #1530, Naval Postgraduate School
Monterey, CA 93943-5000
DSN 878-2536 (Student messages)
Facsimile Number DSN 878-2138 or 408-656-2138

Jeffrey D. Lee

TQL IMPLEMENTATION AND TRAINING INFORMATION SURVEY

[Enclosure (1)]

Privacy Act Statement

Public Law 93-579, the Privacy Act of 1974 requires that you be informed of the purposes and uses of the survey. Authority to collect this information is granted in Title 5 of the United States Code. Providing this information is voluntary. The information will be used for research and statistical purposes only. In no case will the information be used for making decisions affecting specific individuals.

The following definitions are to be used when responding to the questions:

Organization: The organization for which you work.

Department/Directorate: A section of the organization that fulfills a major function (e.g., contracting office, maintenance).

External customer: An individual or group outside the producing organization who receives or uses the output of a process (product or service).

External supplier: An individual or group outside your organization (vendor) that provides materials, products, information or services to an individual or group within your organization.

Internal supplier: An individual or group within your organization (department/division/office) that provides input to another individual or group within your organization.

Internal customer: An individual or group inside the producing organization who receives or uses the output of a process (product or service).

Management: Any/all levels of supervision in the organization.

Senior leaders: The highest-ranking official of the organization and those reporting directly to that official.

TQL: Total Quality Leadership. The application of quantitative methods and people, to assess and improve materials and services supplied to the organization; all significant processes in the organization; and meeting the needs of the end user, now and in the future... [TQL is synonymous with the term TQM/Total Quality Management]

GENERAL INFORMATION

Contracting Officer's Name: _____

Phone Number: DSN _____

Commercial _____

Fax Number: DSN _____

Mailing Address: _____

Note: Deputy Contracting Officer's/Procurement Chief's used as is appropriate.

TQL Coordinator's: Name: _____
Title: _____
Department's Name: _____
Phone Number: _____
Fax Number: _____

ORGANIZATIONAL CHARACTERISTICS

1. What is the full name of your organization?

2. What is the abbreviated name of your organization?

3. Briefly describe your organization's primary mission:

4. What is the name of the Major Command to which you report?

5. What is the frequency of your rotation?
 Every 1 2 3 4 years (Circle one)
 Other _____
6. How many civilian employees are currently assigned to your organization: _____
7. How many civilian employees are currently assigned to your contracting office: _____
8. How many military employees are currently assigned to your organization: _____
9. How many military employees are currently assigned to your contracting office: _____
10. What is your command's total current budget (in millions)?

11. When did your organization start its TQL effort?
Month _____ Year _____
12. When did your contracting office start its TQL effort?
Month _____ Year _____
13. Does your organization measure quality improvements or cost savings as a result of its TQL efforts? Yes No

14. Does your contracting office measure quality improvements or cost savings as a result of its TQL efforts? Yes No
15. If "yes" to above, did your contracting office achieve measurable quality improvements or cost savings as a result of its TQL efforts in FY92? Yes No
16. Is your organization undergoing any major changes in mission?
 Yes No
17. Is your contracting office undergoing any major changes in mission?
 Yes No
18. Is your organization experiencing reductions in force?
 Yes No
19. Is your organization finding it necessary to make major changes in the way business is conducted? Yes No
20. Is your contracting office finding it necessary to make major changes in the way business is conducted? Yes No

This last section of the questionnaire asks questions that are needed to help with the statistical analysis of data. This information will allow for comparison with other DOD employee groups. Please circle the number of the correct response. No attempt will be made to identify your individual responses in this or any other part of the survey.

TQL IMPLEMENTATION

This next section contains items concerned with the implementation of TQL in your organization. *CIRCLE the most appropriate answer.*

To What Extent....	Not At All	Some Extent	Very Large Extent	Don't Know		
21. Are the senior leaders of this organization committed to providing top quality products or services?	1	2	3	4	5	0
22. Do the senior leaders regularly review the quality of the organization's work?	1	2	3	4	5	0
23. Do the senior leaders in this organization set examples of quality performance?	1	2	3	4	5	0
24. Does this organization have a long-term quality focus?	1	2	3	4	5	0
25. Is quality improvement seen as just another organizational program?	1	2	3	4	5	0

To What Extent....	Not At All	Some Extent	Very Large Extent	Don't Know		
26. Is TQL incorporated into the overall organizational strategy?	1	2	3	4	5	0
27. Are TQL activities consistent with the long term goals of the organization?	1	2	3	4	5	0
28. Do you understand the needs of this organization's external customers?	1	2	3	4	5	0
29. Does the organization focus on meeting the needs of external customers?	1	2	3	4	5	0
30. Does management try to plan ahead for changes in external customer requirements?	1	2	3	4	5	0
31. Has management clearly identified its external customers?	1	2	3	4	5	0
32. Do you understand the needs of your internal customers?	1	2	3	4	5	0
33. Do you believe you are meeting the needs of your internal customers?	1	2	3	4	5	0
34. Do you plan ahead for changes in internal customer requirements?	1	2	3	4	5	0
35. Do you know who your internal customers are?	1	2	3	4	5	0
36. Does management actively monitor the quality of external suppliers' products or services?	1	2	3	4	5	0
37. Has management defined the quality requirements that external suppliers must meet?	1	2	3	4	5	0
38. Does management communicate the organization's quality requirements to external suppliers?	1	2	3	4	5	0
39. Is the quality of internal suppliers' products or services monitored?	1	2	3	4	5	0
40. Have quality requirements been defined for your internal suppliers?	1	2	3	4	5	0
41. Have quality requirements been communicated to your internal suppliers?	1	2	3	4	5	0

To What Extent....	Not At All	Some Extent	Very Large Extent	Don't Know		
42. Do you believe your quality requirements are being met by internal suppliers?	1	2	3	4	5	0
43. Do you use any of the seven basic graphical tools to help improve processes (run chart, histogram, pareto chart, flow diagram, cause and effect diagram, scatter diagram, control chart)?	1	2	3	4	5	0
44. Do you collect process data?	1	2	3	4	5	0
45. Have you developed process measures?	1	2	3	4	5	0

46. Please list the TQL courses available to you, the members of your contracting office and the number, civilian and military, who have attended the course:

TQL COURSE NAME (include in-house, off-base, contracted training, etc.)	
Courses I have attended	Month/Year
Courses attended by members in my contracting office:	# Attended

****Please mail a copy of your most current mission statement, vision statement, and TQL master plan if available from turnover files****

Thank you for your time and cooperation.

Please return this survey via mail and/or facsimile to the following address: (A return envelop is enclosed for your convenience)

Captain Jeffrey D. Lee USMC
SMC #1530, Naval Postgraduate School
Monterey, CA 93943-5000
DSN 878-2536 (*Student messages*)
Facsimile Number DSN 878-2138 or 408-656-2138

Optional:

Your opinions of the TQL process. e.g., Is it helping? Will it aid in improving customer service and the supplier/customer relationship? What problems or barriers do you see? Do you see this as a paradigm shift in the DODs basic management philosophy that will take five to ten years to fully implement? Your candid and honest opinions will be greatly appreciated. Thank you.

Source: Developed by researcher with portions taken from the DON, NPRDC, Guide to Using the TQL Climate Survey (TQLCS), Appendix F.

APPENDIX D

NARRATIVE TEXT FOR INTERVIEWS

CONTRACTING PERSONNEL

Privacy Act Statement

Public Law 93-579, the Privacy Act of 1974 requires that you be informed of the purposes and uses of the survey. Authority to collect this information is granted in Title 5 of the United States Code. Providing this information is voluntary. The information will be used for research and statistical purposes only. In no case will the information be used for making decisions affecting specific individuals.

I would like to discuss customer/supplier reciprocal relations. In this context, you are the supplier of contracting services and you have an internal customer, like Direct Support Stock Control (DSSC), who sends you purchase requests. You take these requirements and translate them into a contract for goods and/or services. This contract is then awarded to an external supplier who is a commercial business.

Organizational boundaries exist such that the internal customer may not deal directly with external supplier. Since only warranted contracting officers may represent the Government as an agent of the Government, you must span these organizational boundaries between the internal customer, your external customers, and the external supplier. (See attached Map of Principal Players)

As part of this process you must meet the quality requirements of the internal customer. Sometimes you have more than one internal customer, with the same basic requirements, who will be using the same contract. You must also meet the quality requirements of external customers such as legal review, FAR, DFAR, etc. Lastly, to a certain degree, you must meet the quality requirements of the external supplier.

A reciprocal relationship must exist between the contracting office, internal customers, external suppliers, and external customers. All sides need an understanding of the quality requirements of each other. This means that sometimes suppliers are viewed as customers and customers are viewed as suppliers. The emphasis is on the quality requirements of the internal customer. The quality of the performance of the contracting process relies heavily upon the contracting specialist's ability to span organizational boundaries through

their ability to communicate these quality requirements to all players in the contracting process.

QUESTIONS

1. How do you view the contracting specialist as a boundary spanner between the customer and the supplier? What do you see as your responsibilities? How do you characterize these relationships?
2. What are the challenges of your boundary spanner role? The advantages, the disadvantages?
3. Do you feel that you are effective in your role as a boundary spanner? Can you give examples of when you felt effective? Ineffective?
4. How can your role as a boundary spanner be improved? Can you provide some examples?
5. Do you feel that in the Department of Defense (DOD) there are certain internal customer obligations to support the quality needs of the contracting organization? The external customers? The external supplier? What are your views?
6. How do you think the customer/supplier reciprocal relationship can be improved? Can you give some examples?
7. Do you believe that by continuously improving your abilities as a boundary spanner and the customer/supplier reciprocal relationship, the quality in contracting services will be improved? The meeting of customer and external supplier quality requirements? What are your views?
8. Have you had any total quality leadership (TQL) training?
9. How has TQL affected your role as a boundary spanner? The customer/supplier reciprocal relationship? Can you give some specific examples? When it has worked, when it didn't?
10. In what ways do you believe TQL can be used to continuously improve your role as a boundary spanner and the customer/supplier reciprocal relationship?
11. Do you see TQL as a way to resolve problems in the process of meeting customer quality requirements? Your quality requirements? The external supplier quality requirements? What are your views?
12. Any additional comments? [Source: Developed by author]

INTERNAL CUSTOMERS

Privacy Act Statement

Public Law 93-579, the Privacy Act of 1974 requires that you be informed of the purposes and uses of the survey. Authority to collect this information is granted in Title 5 of the United States Code. Providing this information is voluntary. The information will be used for research and statistical purposes only. In no case will the information be used for making decisions affecting specific individuals.

I would like to discuss customer/supplier reciprocal relations. When you determine that you have a requirement that cannot be met by mandatory internal suppliers, like the Marine Corps Supply System, you send requirements in the form of a purchase request to the contracting office. You are requesting that an external supplier be found to meet your requirements. The contracting office takes your requirements and translates them into a contract for goods and/or services.

This contract is then awarded to an external supplier. Quality requirements are established by you, the internal customer of the contracting office. In this context, you are the internal customer of the contracting office. They are your internal supplier of contracting services. They provide for your requirements by contracting with an external supplier who is a commercial business.

Organizational boundaries exist such that you, the internal customer, may not deal directly with external supplier. Since only warranted contracting officers may represent the Government as an agent of the Government, they must span these organizational boundaries between yourself (the internal customer), external customers, and the external supplier. (See attached Map of Principal Players)

As part of this process the contracting office, the external customer, and the external supplier must meet your quality requirements. Sometimes there are other internal customers, with the same basic requirements, who will be using the same contract. The contracting office must also meet the quality requirements of external customers such as legal review, Federal Acquisition Regulations (FAR), Defense FAR Supplement (DFARS), etc. Lastly, to a certain degree, you must meet the quality needs of the contracting office, the external customer, and the external supplier.

A reciprocal relationship must exist between internal customers like yourself, the contracting office, external customers, and external suppliers. All sides need an understanding of the quality requirements of each other. This means that sometimes suppliers are viewed as customers and customers are viewed as suppliers. The emphasis is on your quality requirements. The quality of the performance of the

contracting process relies heavily upon the contracting specialist's ability to span these organizational boundaries through their ability to communicate quality requirements to all players in the contracting process.

QUESTIONS

1. How do you view the contracting specialist as a boundary spanner between the customer and the supplier? What do you see as your responsibilities? How do you characterize these relationships?

2. Are you aware of the external customer requirements placed on the contracting office? The external supplier? Can you provide examples of the requirements that you are aware of?

3. Do you feel that in the Department of Defense (DOD) there are certain internal customer obligations to support the quality needs of the contracting organization? The external customers? The external supplier? What are your views?

4. How do you think the customer/supplier reciprocal relationship can be improved? Can you give some examples?

5. Do you believe that by continuously improving your relationship with the contracting office and the customer/supplier reciprocal relationship, the meeting of your quality requirements will be improved? The quality in contracting services? External supplier quality requirements? What are your views?

6. Have you had any total quality leadership (TQL) training?

7. How has TQL affected your relationship with the contracting office? The customer/supplier reciprocal relationship? Can you give some specific examples? When it has worked, when it didn't?

8. In what ways do you believe TQL can be used to continuously improve your role in the customer/supplier reciprocal relationship? Your relationship with the contracting office?

9. Do you see TQL as a way to resolve problems in the process of meeting your quality requirements? The contracting office and external supplier quality requirements? What are your views?

10. Any additional comments? [Source: Developed by author]

EXTERNAL SUPPLIERS

Privacy Act Statement

Public Law 93-579, the Privacy Act of 1974 requires that you be informed of the purposes and uses of the survey. Authority to collect this information is granted in Title 5 of the United States Code. Providing this information is voluntary. The information will be used for research and statistical purposes only. In no case will the information be used for making decisions affecting specific individuals.

I would like to discuss customer/supplier reciprocal relations. In this context, you are the external supplier of goods and/or services to the contracting office and the requirements generator. They are your customers. The contracting office is the internal supplier of contracting services and you are the external supplier who is a commercial business. When the requirements generator, who is an internal customer of the contracting office, determines that it has requirements that cannot be met by internal suppliers, like the Marine Corps Supply System, they send a purchase request to the contracting office requesting that an external supplier be found to meet their requirements. The contracting office takes their requirements and translates them into a contract for goods and/or services. This contract is then awarded to an external supplier such as your business. Quality requirements are established by the requirements generator, the contracting office, and external customers.

Organizational boundaries exist such that you, the external supplier, may not deal directly with the requirements generator. Since only warranted contracting officers may represent the Government as an agent of the Government, they must span these organizational boundaries between yourself, the requirements generator, and external customers. (See attached Map of Principal Players)

As part of this process your business and the contracting office must meet the requirements generator's quality requirements. Sometimes there may be more than one customer using the same contract. The contracting office must also meet the quality requirements of external customers such as legal review, Federal Acquisition Regulations (FAR), Defense FAR Supplement (DFARS), etc. You must also meet the quality requirements of the contracting office.

A reciprocal relationship must exist between internal customers, external suppliers, the contracting office, and external customers. All sides need an understanding of the quality requirements of each other. This means that sometimes suppliers are viewed as customers and customers are viewed as suppliers. The emphasis is on the quality needs of the internal customer who generates requirements for your goods

and/or services. The quality of the performance of the contracting process relies heavily upon the contracting specialist's ability to span organizational boundaries through their ability to communicate quality requirements to all players in the contracting process.

QUESTIONS

1. How do you view the contracting specialist as a boundary spanner between the customer and the supplier? What do you see as your responsibilities? How do you characterize these relationships?
2. Are you aware of the external customer requirements placed on the contracting office? The customer? Can you provide examples of the requirements that you are aware of?
3. Do you feel that in the Department of Defense (DOD) there are certain internal customer and contracting office obligations to support the quality requirements of an external supplier such as your business? What are your views?
4. How do you think the customer/supplier reciprocal relationship can be improved? Relationships with the contracting office? Can you give some examples?
5. Do you believe that by continuously improving your relationship with the contracting office and the customer/supplier reciprocal relationship, your business' ability to provide quality goods and/or services will be improved? What are your views?
6. Have you had any total quality management (TQM) training? (Department of Defense refers to TQM as total quality leadership [TQL])
7. How has TQM affected your relationship with the contracting office? The customer/supplier reciprocal relationship? Can you give some specific examples? When it has worked, when it didn't?
8. In what ways do you believe TQM can be used to continuously improve your role in the customer/supplier reciprocal relationship? Your relationship with the contracting office?
9. Do you see TQM as a way to resolve problems in the process of meeting customer and contracting office quality requirements? Your quality requirements? What are your views?

10. Any additional comments? [Source: Developed by
Researcher]

APPENDIX E

Department of the Navy



**Total
Quality
Leadership
Climate
Survey**

1992

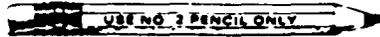
**Navy Personnel Research and Development Center
San Diego, California**

RCS 5300-11

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This survey is designed to obtain your thoughts about your job and organization. Your honest opinions are important and sincerely welcome. Please read each question carefully before responding. Most can be answered by simply filling in the bubble that most nearly represents your opinion.

MARKING DIRECTIONS:



- Make heavy black marks that fill the circle.
- If you change any answer, erase completely.
- Make no stray markings of any kind.

Correct Mark ●

Incorrect Marks @ @ @ @

EXAMPLE QUESTION:

To What Extent...

Not					Very	
At	Small	Some	Large	Large	Don't	
All	Extent	Extent	Extent	Extent	Know	

1. Do you like working with your fellow employees? ○ ○ ● ○ ○ ○

Use the "Don't Know" category when you do not know the answer to a question or when you think the question is not applicable to you.

Your individual answers to questions will not be given to anyone in your organization. Please do not sign your name to this survey. The information you provide will be combined with the information of other employees to evaluate general attitudes and opinions of employees in your organization. The survey includes several questions describing yourself. The answers to these questions will be used for research purposes and will not be used to identify you or reveal your individual responses.

Your assistance in this effort is appreciated.

Privacy Act Statement

Public Law 93-579, the Privacy Act of 1974 requires that you be informed of the purposes and uses to be made of the survey. Authority to collect this information is granted in Title 5 of the United States Code. Providing this information is voluntary. The information will be used for statistical purposes only. In no case will the information be used for making decisions affecting specific individuals.

Navy Personnel Research and Development Center
San Diego, California

The following definitions are to be used when responding to the questions.

- Department..... A section of the organization that fulfills a major function, such as the maintenance department or the engineering department. (The survey administrator will provide a list of the departments for you).
- Executive Steering Committee.....The highest level quality improvement team in an organization
- External customer.....An individual or group outside the producing organization who receives or uses the output of a process (product or service).
- External supplier.....An individual or group outside your organization (vendor) that provides materials, products, information, or services to an individual or group within your organization.
- Internal customer.....An individual or group inside the producing organization who receives or uses the output of a process (product or service).
- Internal supplier.....An individual or group within your organization who provides input to another individual or group within your organization.
- Management.....Any/all levels of supervision in the organization.
- Organization.....The organization for which you work. (The survey administrator will provide a definition of organization for you).
- Process Action Team.....A team that is chartered by a Quality Management Board (QMB) or a functional line manager to assist in achieving process stability for a particular measurement being used by the QMB.
- Quality Management Board..... A team composed of all the managers who are jointly responsible for a process, system, product, or service.
- Senior leaders.....The highest-ranking official of the organization and those reporting directly to that official.
- Supervisor.....The person to whom you directly report (the person who formally evaluates your performance).
- TQL.....Total Quality Leadership. The application of quantitative methods and people to assess and improve: materials and services supplied to the organization; all significant processes in the organization; and meeting the needs of the end user, now and in the future.
- Work team.....The people who work with you most frequently (on a day-to-day basis).
-

To what extent...	Not At All	Small Extent	Some Extent	Large Extent	Very Large Extent	Don't Know
66. Does management follow up on suggestions for improvement?	<input type="radio"/>					
67. Does management reward employees who make improvements in the way the work is done?	<input type="radio"/>					
68. Does management encourage creative solutions to work problems?	<input type="radio"/>					
69. Does management take action quickly enough when new opportunities could help the organization?	<input type="radio"/>					
70. Is this organization a leader when compared with similar organizations?	<input type="radio"/>					
71. Does this organization adapt well to changes in funding levels?	<input type="radio"/>					
72. Are management decisions innovative?	<input type="radio"/>					
73. Does management treat you with respect?	<input type="radio"/>					
74. Does management follow through on its commitments?	<input type="radio"/>					
75. Do employees trust management?	<input type="radio"/>					
76. Do you trust your supervisor?	<input type="radio"/>					

This section contains items concerned with the implementation of TQL in your organization.

To what extent...	Not At All	Small Extent	Some Extent	Large Extent	Very Large Extent	Don't Know
77. Are the senior leaders of this organization committed to providing top quality products or services?	<input type="radio"/>					
78. Do our senior leaders regularly review the quality of the organization's work?	<input type="radio"/>					
79. Do our senior leaders in this organization set examples of quality performance?	<input type="radio"/>					
80. Does this organization have a long-term quality focus?	<input type="radio"/>					
81. Do you see quality improvement as just another organizational program?	<input type="radio"/>					

To what extent...	Not At All	Small Extent	Some Extent	Large Extent	Very Large Extent	Don't Know
82. Is TQL incorporated into the overall organizational strategy?	<input type="radio"/>					
83. Are TQL activities consistent with the long-term goals of the organization?	<input type="radio"/>					
84. Do you understand the needs of this organization's external customers?	<input type="radio"/>					
85. Does the organization focus on meeting the needs of external customers?	<input type="radio"/>					
86. Does management try to plan ahead for changes in external customer requirements?	<input type="radio"/>					
87. Has management clearly identified its external customers to you?	<input type="radio"/>					
88. Do you understand the needs of your internal customers?	<input type="radio"/>					
89. Do you believe you are meeting the needs of your internal customers?	<input type="radio"/>					
90. Do you plan ahead for changes in internal customer requirements?	<input type="radio"/>					
91. Do you know who your internal customers are?	<input type="radio"/>					
92. Does management actively monitor the quality of external suppliers' products or services?	<input type="radio"/>					
93. Has management defined the quality requirements that external suppliers must meet?	<input type="radio"/>					
94. Does management communicate the organization's quality requirements to external suppliers?	<input type="radio"/>					
95. Is management working toward using fewer external suppliers?	<input type="radio"/>					
96. Is the quality of your internal suppliers' products or services monitored?	<input type="radio"/>					
97. Have quality requirements been defined for your internal suppliers?	<input type="radio"/>					
98. Have quality requirements been communicated to your internal suppliers?	<input type="radio"/>					



To what extent..	Not At All	Small Extent	Some Extent	Large Extent	Very Large Extent	Don't Know
99. Do you believe your quality requirements are being met by internal suppliers?	<input type="radio"/>					
100. Do you use any of the seven basic graphical tools to help improve processes (run chart, histogram, Pareto chart, flow diagram, cause & effect diagram, scatter diagram, control chart)?	<input type="radio"/>					
101. Do you collect data on your work process?	<input type="radio"/>					
102. Have you developed process measures?	<input type="radio"/>					
103. Does your work team apply process improvement methods to critical processes?	<input type="radio"/>					
104. Are there barriers in this organization that prevent you from taking pride in your work?	<input type="radio"/>					
105. Can you tell when you have done a good job?	<input type="radio"/>					
106. Are you forced to use equipment or materials that will produce poor-quality results?	<input type="radio"/>					
107. Does our performance appraisal system create barriers to pride in workmanship?	<input type="radio"/>					
108. Do work teams in your department understand one another's goals and objectives?	<input type="radio"/>					
109. Do work teams in your department work together to achieve one another's goals and objectives?	<input type="radio"/>					
110. Do work teams in your department understand one another's problems and difficulties?	<input type="radio"/>					
111. Do work teams in your department get along with one another?	<input type="radio"/>					
112. Do people in your department understand the goals and objectives of other departments?	<input type="radio"/>					
113. Do people in your department work with people in other departments to achieve one another's goals and objectives?	<input type="radio"/>					
114. Do people in your department understand the problems and the difficulties of people in other departments?	<input type="radio"/>					
115. Are there good relations between different departments?	<input type="radio"/>					
116. Do you understand basic TQL concepts?	<input type="radio"/>					

To what extent...	Not At All	Small Extent	Some Extent	Large Extent	Very Large Extent	Don't Know
117. Do you understand TQL well enough to use it in your job?	<input type="radio"/>					
118. Do you understand TQL well enough to improve your work processes?	<input type="radio"/>					

The following questions ask about your experience in specific TQL roles. Please indicate if you have served in the following TQL related roles during the last year in this organization.

	Yes	No	Don't Know
119. Have you served as a member of a Process Action Team?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
120. Have you served as a member of a Quality Management Board?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
121. Have you served as a member of the Executive Steering Committee?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
122. Have you served as a TQL team advisor/facilitator?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The following questions ask about your exposure to TQL training courses developed by the Department of the Navy.

	Haven't Attended	Not Helpful	Slightly Helpful	Moderately Helpful	Very Helpful	Extremely Helpful
123. TQL Orientation Briefing by senior leaders, mid-managers, or supervisors	<input type="radio"/>					
124. Introduction to TQL (1-Day)	<input type="radio"/>					
125. Fundamentals of TQL (4-Day)	<input type="radio"/>					
126. Implementing TQL	<input type="radio"/>					
127. Systems Approach to Process Improvement	<input type="radio"/>					
128. Team Skills and Concepts for TQL	<input type="radio"/>					



	Haven't Attended	Not Helpful	Slightly Helpful	Moderately Helpful	Very Helpful	Extremely Helpful
129. Methods for Managing Quality	<input type="radio"/>					
130. Strategic Planning for Quality	<input type="radio"/>					
131. Senior Leaders Seminar	<input type="radio"/>					
	None	Less than 1 day	1-2 days	3-5 days	6-10 days	More than 2 weeks
132. How much TQL training have you received in classes not listed above?	<input type="radio"/>					

These items are concerned with factors that may affect implementing and using the TQL approach.

To what extent...	Not At All	Small Extent	Some Extent	Large Extent	Very Large Extent	Don't Know
133. Does military management in this organization want to implement TQL?	<input type="radio"/>					
134. Does civilian management in this organization want to implement TQL?	<input type="radio"/>					
135. Does your supervisor want to implement TQL?	<input type="radio"/>					
136. Do your co-workers want to implement TQL?	<input type="radio"/>					
137. Do you want to implement TQL?	<input type="radio"/>					
138. Can TQL increase productivity?	<input type="radio"/>					
139. Can TQL improve quality?	<input type="radio"/>					
140. Can TQL improve technical capabilities?	<input type="radio"/>					
141. Can TQL improve the organization's reputation?	<input type="radio"/>					

To what extent...	Not At All	Small Extent	Some Extent	Large Extent	Very Large Extent	Don't Know
142. Do you fear the changes that may result from TQL implementation?	<input type="radio"/>					
143. Do you fear criticism from others in the organization if you use TQL methods?	<input type="radio"/>					
144. Do you fear that applying TQL principles will lead you to make incorrect decisions?	<input type="radio"/>					
145. Do you fear that you may anger others if you use TQL methods?	<input type="radio"/>					
146. Does your supervisor practice TQL methods?	<input type="radio"/>					
147. Does your supervisor assist you in performing quality improvement activities?	<input type="radio"/>					
148. Are your efforts toward implementing TQL considered during performance appraisal?	<input type="radio"/>					
149. Do the organization's policies and procedures fit with the objectives of TQL?	<input type="radio"/>					
150. Does your supervisor give you enough time to perform quality improvement activities?	<input type="radio"/>					
151. Do you think TQL will work in this organization?	<input type="radio"/>					
152. Does this organization need to improve quality?	<input type="radio"/>					
153. Is the TQL philosophy consistent with beliefs held by people in this organization?	<input type="radio"/>					

APPENDIX F

**Total Quality Leadership Climate Survey
Feedback Package**

Post Graduate School

Administration date: April, 1993

Number of Respondents = 30

Prepared by
Navy Personnel Research and Development Center
San Diego, CA

Category: TQL Implementation
Sub-category: Leadership Involvement In Quality Performance

Subcategory/Item	Mean	SD	N	Percent Answering			
				Don't Know/NA 0	Not At All/Small Extent 1 or 2	Some Extent 3	Large/Very Large 4 or 5
Leadership Involvement In Quality Performance	3.76	0.91	30				
77. Are the senior leaders of this organization committed to providing top quality products or services?	4.13	0.94	30	0	7	7	87
78. Do our senior leaders regularly review the quality of the organization's work?	3.63	1.00	30	0	10	33	57
79. Do our senior leaders in this organization set examples of quality performance?	3.52	1.02	29	3	13	33	50

Category: TQL Implementation
 Sub-category: TQL Planning

Subcategory/Item	Mean	SD	N	Percent Answering			
				Don't Know/NA 0	Not At All/Small Extent 1 or 2	Some Extent 3	Large/Very Large Extent 4 or 5
TQL Planning	3.39	0.91	30				
80. Does this organization have a long-term quality focus?	3.78	1.05	27	10	10	20	60
81. Is quality improvement seen as just another organizational program? (RC)	2.66	1.17	29	3	33	47	17
82. Is TQL incorporated into the overall organizational strategy?	3.33	1.27	30	0	30	23	47
83. Are TQL activities consistent with the long-term goals of the organization?	3.24	1.15	29	3	23	27	47

Category: TQL Implementation
Sub-category: External Customer Orientation

Subcategory/Item	Mean	SD	N	Percent Answering			
				Don't Know/NA 0	Not At All/Small Extent 1 or 2	Some Extent 3	Large/Very Large Extent 4 or 5
External Customer Orientation	3.89	0.84	30				
84. Do you understand the needs of this organization's external customers?	4.07	1.05	30	0	7	20	73
85. Does the organization focus on meeting the needs of external customers?	4.10	0.84	30	0	3	20	77
86. Does management try to plan ahead for changes in external customer requirements?	3.68	0.99	25	17	7	27	50
87. Has management clearly identified its external customers to you?	3.72	1.25	29	3	20	20	57

Category: TQL Implementation
Sub-category: Internal Customer Orientation

Subcategory/Item	Mean	SD	N	Percent Answering			
				Don't Know/NA 0	Not At All/Small Extent 1 or 2	Some Extent 3	Large/Very Large Extent 4 or 5
Internal Customer Orientation	3.85	0.85	29				
88. Do you understand the needs of your internal customers?	3.97	0.98	29	3	7	27	63
89. Do you believe you are meeting the needs of your internal customers?	3.86	0.88	29	3	7	23	67
90. Do you plan ahead for changes in internal customer requirements?	3.62	0.90	26	13	3	37	47
91. Do you know who your internal customers are?	3.93	0.88	29	3	3	30	63

Category: TQL Implementation
Sub-category: External Supplier Quality

Subcategory/Item	Mean	SD	N	Percent Answering			
				Don't Know/NA 0	Not At All/Small Extent 1 or 2	Some Extent 3	Large/Very Large Extent 4 or 5
External Supplier Quality	3.02	0.91	27				
92. Does management actively monitor the quality of external suppliers' products or services?	2.88	1.19	24	<input type="checkbox"/> 20	<input type="checkbox"/> 27	<input type="checkbox"/> 30	<input type="checkbox"/> 23
93. Has management defined the quality requirements that external suppliers must meet?	3.19	1.10	26	<input type="checkbox"/> 13	<input type="checkbox"/> 27	<input type="checkbox"/> 23	<input type="checkbox"/> 37
94. Does management communicate the organization's quality requirements to external suppliers?	3.08	0.97	24	<input type="checkbox"/> 20	<input type="checkbox"/> 23	<input type="checkbox"/> 27	<input type="checkbox"/> 30
95. Is management working toward using fewer external suppliers?	2.68	1.21	22	<input type="checkbox"/> 27	<input type="checkbox"/> 37	<input type="checkbox"/> 13	<input type="checkbox"/> 23

Category: TQL Implementation
Sub-category: Barriers To Pride In Workmanship*

Item/Subcategory				Percent Answering			
Description	Mean	SD	N	Don't	Not At	Large/	
				Know/ NA 0	All/ Small Extent 1 or 2	Some Extent 3	Very Large Extent 4 or 5
Barriers To Pride In Workmanship*	3.58	0.92	30				
104. Are there barriers in this organization that prevent you from taking pride in your work?	2.59	1.35	29	3	50	20	27
105. Can you tell when you have done a good job? (RC)	3.93	1.14	30	0	13	17	70
106. Are you forced to use equipment or materials that will produce poor-quality results?	2.17	1.18	30	0	57	37	7
107. Does our performance appraisal system create barriers to pride in workmanship?	2.96	1.32	28	7	37	27	30

Category: TQL Implementation
Sub-category: Absence Of Barriers Between Departments

Subcategory/Item	Mean	SD	N	Percent Answering			
				Don't Know/NA 0	Not At All/Small Extent 1 or 2	Some Extent 3	Large/Very Large Extent 4 or 5
Absence of Barriers Between Departments	2.87	0.98	29				
112. Do people in your department understand the goals and objectives of other departments?	3.04	1.23	28	7	27	37	30
113. Do people in your department work with people in other departments to achieve one another's goals and objectives?	2.83	1.04	29	3	30	53	13
114. Do people in your department understand the problems and difficulties of people in other departments?	2.76	0.99	29	3	37	40	20
115. Are there good relations between different departments?	2.87	1.01	30	0	33	40	27

Category: TQL Implementation
Sub-category: Knowledge Of TQL

Item/Subcategory				Percent Answering			
Description	Mean	SD	N	Don't	Not At	Some	Large/
				Know/ NA 0	All/ Small Extent 1 or 2	Extent 3	Very Large Extent 4 or 5
<u>Knowledge of TQL</u>	3.71	1.05	30				
116. Do you understand basic TQL concepts?	3.83	1.09	30	0	13	27	60
117. Do you understand TQL well enough to use it in your job?	3.67	1.03	30	0	13	33	53
118. Do you understand TQL well enough to improve your work processes?	3.63	1.10	30	0	13	33	53

Category: TQL Support
 Sub-category: Commitment To TQL

Subcategory/Item	Mean	SD	N	Percent Answering			
				Don't Know/ NA 0	Not At All/ Small Extent 1 or 2	Some Extent 3	Large/ Very Large Extent 4 or 5
Commitment To TQL	3.95	0.86	30				
133. Does military management in this organization want to implement TQL?	4.32	0.77	28	7	0	17	77
134. Does civilian management in this organization want to implement TQL?	4.11	0.80	27	10	0	23	67
135. Does your supervisor want to implement TQL?	4.14	1.04	28	7	3	23	67
136. Do your co-workers want to implement TQL?	3.50	0.98	24	20	10	27	43
137. Do you want to implement TQL?	3.90	1.18	30	0	10	23	67

Category: TQL Support
Sub-category: Perceived Benefits Of Implementing TQL

Subcategory/Item	Mean	SD	N	Percent Answering			
				Don't Know/NA 0	Not At All/Small Extent 1 or 2	Some Extent 3	Large/Very Large Extent 4 or 5
<u>Perceived Benefits Of Implementing TQL</u>	3.96	1.00	28				
138. Can TQL increase productivity?	3.89	1.10	28	7	7	30	57
139. Can TQL improve quality?	4.04	1.04	28	7	3	27	63
140. Can TQL improve technical capabilities?	3.96	1.02	25	17	3	23	57
141. Can TQL improve the organization's reputation?	4.04	1.00	28	7	3	23	67

Category: TQL Support
 Sub-category: Fear Of Implementing TQL*

Subcategory/Item	Mean	SD	N	Percent Answering			
				Don't Know/NA 0	Not At All/Small Extent 1 or 2	Some Extent 3	Large/Very Large Extent 4 or 5
Fear Of Implementing TQL*	4.75	0.42	29				
142. Do you fear the changes that may result from TQL implementation?	1.28	0.59	29	3	90	7	0
143. Do you fear criticism from others in the organization if you use TQL methods?	1.21	0.49	29	3	93	3	0
144. Do you fear that applying TQL principles will lead you to make incorrect decisions?	1.21	0.49	29	3	93	3	0
145. Do you fear that you may anger others if you use TQL methods?	1.31	0.54	29	3	93	3	0

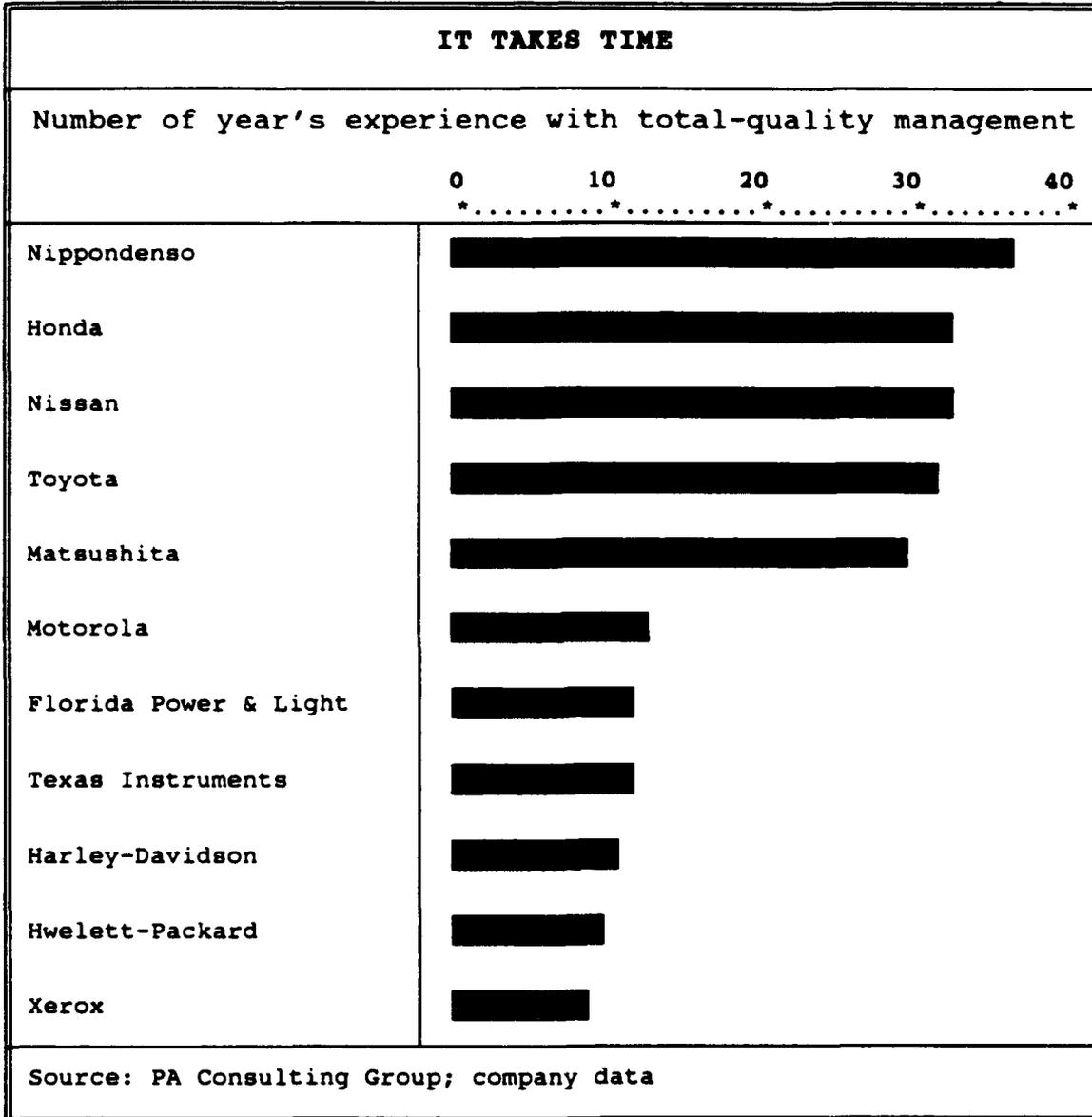
Category: TQL Support
Sub-category: Leadership Support For TQL

Subcategory/Item	Mean	SD	N	Percent Answering			
				Don't Know/NA 0	Not At All/Small Extent 1 or 2	Some Extent 3	Large/Very Large Extent 4 or 5
Leadership Support For TQL	3.03	1.08	30				
146. Does your supervisor practice TQL methods?	3.27	1.28	30	0	20	43	37
147. Does your supervisor assist you in performing quality improvement activities?	3.03	1.30	29	0	28	41	31
148. Are your efforts toward implementing TQL considered during performance appraisal?	2.68	1.46	22	27	27	27	20
149. Do the organization's policies and procedures fit with the objectives of TQL?	3.10	1.21	30	0	27	37	37
150. Does your supervisor give you enough time to perform quality improvement activities?	2.89	1.22	27	7	34	31	28

Category: TQL Support
Sub-category: Anticipated TQL Success

Subcategory/Item	Mean	SD	N	Percent Answering			
				Don't Know/NA 0	Not At All/Small Extent 1 or 2	Some Extent 3	Large/Very Large Extent 4 or 5
Anticipated TQL Success	3.51	0.79	30				
151. Do you think TQL will work in this organization?	3.61	1.20	28	7	10	40	43
152. Does this organization need to improve quality?	3.59	1.09	29	3	10	43	43
153. Is the TQL philosophy consistent with beliefs held by people in this organization?	3.30	1.03	27	10	10	40	40

APPENDIX G



[Ref. 44]

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