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A RECOMMENDED ORGANIZATIONAL DESIGN
FOR THE
FLEET AND INDUSTRIAL SUPPLY CENTER, SAN DIEGO
PURCHASING DEPARTMENT

by

Thomas E. Jablonski

December, 1993

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Downsizing is and will continue to be a fact of life in the U. S. Military for the foreseeable future. Many military organizations are reorganizing to reduce expenses and increase efficiency in an effort to survive budget cuts. The Fleet and Industrial Supply Center (FISC), San Diego, CA., is an organization that desires to reorganize to maintain its position as a leader and innovator in the military purchasing community.

This thesis analyzes the structure, key management processes, information flows, and employee perceptions of the efficiency of the organizational structure at FISC Site North Island and FISC Site Naval Station, in addition to the procurement management functions at the FISC Headquarters. As a result of this analysis, a new organizational design and the beginnings of a transition plan are recommended to improve the efficiency of FISC's purchasing management.

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PURCHASING DEPARTMENT

by

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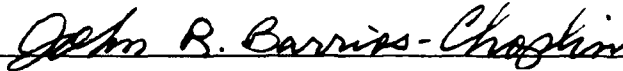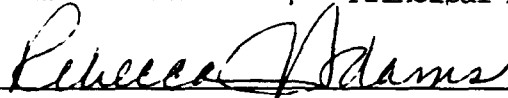December 1993

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ABSTRACT

Downsizing is and will continue to be a fact of life in the U. S. Military for the foreseeable future. Many military organizations are reorganizing to reduce expenses and increase efficiency in an effort to survive budget cuts. The Fleet and Industrial Supply Center (FISC), San Diego, CA., is an organization that desires to reorganize to maintain its position as a leader and innovator in the military purchasing community.

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I. INTRODUCTION

A. GENERAL BACKGROUND

In February 1991, the Secretary of Defense stated "The Cold War is over." (Cheney, 1991) He then proceeded to outline a plan to reduce the military forces by 25 percent over the next five years. This movement to a smaller, restructured military was made possible by the changing world situation. However, it appears to be the country's concern over the rising budget deficits and a stagnant economy that are the drivers of the strategy of reduction and improved efficiency.

To maintain a military force that is capable of defending U.S. interests at this time of drawdown, efficiency will be the rule in the operation of military organizations. A long recognized key to the efficiency of an organization is its organizational design. Galbraith describes organizational design as follows.

> Historically, organizational design usually meant organizational structure. Today it means an alignment of structure, management processes, information systems, reward systems, people, and other features of the organization with the business strategy. (Galbraith, 1987)

This thesis analyzes the structural alignment, management processes, the information flow, and the perceptions of organizational structure of two Site locations of the Fleet

and Industrial Supply Center, (FISC), San Diego's, Purchasing Department. It identifies areas where changes might improve efficiency in the purchasing department.

There is a growing belief that effective organization will be the basis for gaining competitive advantage in the future (Galbraith, 1993). Much of this belief may be based on the extraordinary success of Japanese industry. The Japanese are widely recognized for their unique managerial style and organizational designs that differ greatly from those used by American companies.

The U.S. Government is criticized extensively for the inefficiencies of its agencies. In fact, Vice President Gore is heading an initiative to "reinvent government," in particular Government purchasing. Throughout the 1980's Government agencies pursued improvement by launching initiatives in productivity, total quality, and customer service (Galbraith, 1993). Despite making some progress, people generally believe that the progress made to date is not enough. Many believe that Government waste is extensive and more savings can be made through elimination or realignment of Government agencies. Improvements of this type are generally believed to be a critical necessity to reduce the Federal budget deficit.

The fact is that budget dollars are tight and may become tighter in the future. Government agencies and departments within those agencies will be vying for fewer dollars in what

will be a decreasing budget. Commands that are not organized to show economical and shrewd use of public funds face elimination. Those that survive may be swallowed up by organizations that have shown more efficient use of public funds. Therefore, the importance of an efficient organizational design may be critical to the survival of government organizations in the future.

Organizations can be viewed either in terms of their structure (anatomy) or their processes (physiology) (Melcher, 1976). This thesis studies the anatomy of FISC's Purchasing Department. The main focus is on possible changes in the structure of the purchasing department which might improve the efficiency of the organization. However, it is difficult in an examination of this type to separate management processes completely in an examination of the structure. Therefore, references to recommended changes in processes are included as well as changes to the structure.

The strategy for downsizing of the military is expected to continue into 1997. This target is tentative at best and no conclusive time for completion of the drawdown has been set. Downsizing promises to be an event which managers will continue to face for the foreseeable future. This phenomenon has already greatly affected the planning operations of many military agencies. In today's atmosphere of downsizing and

Base Realignment and Closure commissions, it is essential for an organization's survival to arrange itself in the most efficient structure possible.

The business community believes that organization design will be the basis for gaining competitive, therefore fiscal, advantage in the future (Galbraith, 1993). Several factors in the environment increasingly drive the choice of organization forms. Perhaps the most important factor presently and in the future for Government agencies is the competition for public dollars and the desire to remain in existence. Key strategic initiatives of cost, speed, and quality are driving factors necessary to be able to compete. Other factors are technology, customer satisfaction, productivity, information technology, the changing nature of organizational control, and the rate and nature of societal change (Galbraith, 1993). These factors are important for Government agencies also if they wish to remain competitive for budget dollars.

"The most efficient organizations are those that adopt the newest strategic issue early, perfect it, institutionalize it, and move on to the next." (Galbraith, 1993). One of the key strategic issues is the search for the most efficient organizational design. This thesis focuses that search on the most efficient organizational structure for FISC, San Diego's Purchasing Department.

B. OBJECTIVES

In 1931, James Mooney, the Vice President of General Motors said: "The real secret of the greatness of the Romans was their genius for organization" (Kotter, Schlesinger, 1979). The FISC Purchasing Department organization currently consists of three independent purchasing SITE commands operated in unison with an oversight activity called Procurement Management (Code P). This thesis examines the structure of FISC's Purchasing Department for barriers to cooperation and redundancies in operation in order to recommend a streamlined, efficient operation. The researcher conducted interviews with FISC purchasing personnel to identify inefficiencies and redundancies in operations due to organizational barriers inherent in their design or operation. The current organizational structure was examined with a critical eye toward any parts of the organization that may be reorganized in a more efficient organizational design, such as a lateral organization.

As to lateral organizations, there is a growing number of managers that believe lateral design will be required for future competitiveness (Galbraith, 1993). Time-based configuration may be the driving factor leading organizations towards lateral organization. A time-based configuration is one that reduces the response time for presentation of the product or service to the customer. "A key to time-based effectiveness is lateral organization." (Galbraith, 1973).

Reducing procurement administrative lead time, turnaround time and eliminating unnecessary administrative oversight are inherently organizational issues. Elimination of cross-functional barriers to cooperation is necessary for the performance of an efficient organization. Elimination of barriers calls for delegation of functions to project teams and, some suggest, the long-run decline of the functions themselves (Galbraith, 1993).

FISC's purchasing department desires to survive into the future as the dominate purchasing agency in the San Diego-Los Angeles corridor. Management recognizes that it is necessary to reorganize using the most efficient organizational structure possible.

C. RESEARCH QUESTIONS

The primary research question is: What is the most efficient organizational structure for the Purchasing Department of the Fleet and Industrial Supply Center, San Diego, CA.? An efficient organization, as described by the FISC Purchasing Department management, is an organization that is maximizing productivity by being free of redundancies in positions and procedures; with coordinating mechanisms that achieve its objectives of providing information and guidance in a timely manner, and; with an organizational structure where reporting relationships are known and provide adequate flow of information and guidance up and down the chain of

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command. The efficient organization described above will achieve its efficiencies with the minimum amount of personnel and administrative costs and the maximum amount of customer service (Mckee, 1993).

Subsidiary research questions are:

● Does the formal structure mirror the informal structure? If not, what changes are suggested?

● Are there redundancies in functions or processes? If so, what changes are suggested?

● Are the reporting relationships efficient? If not, what changes are suggested?

● Are the coordinating mechanisms efficient? If not, what changes are suggested?

D. SCOPE, LIMITATIONS AND ASSUMPTIONS

Scope. The focus of this research is on the organizational structure of the FISC purchasing department and the business relationships of the purchasing agents with their supervisors. Additionally, the structural effectiveness of the coordinating activity, Procurement Management, is examined. Recommendations for change in areas of the organizational structure that may be causing inefficiencies are made.

Limitations. This was the first time this researcher has planned and conducted a research interview of this type. It is hoped that the researcher's relative inexperience at planning and conducting interviews does not affect the validity of the conclusions of this study. The researcher's

position, as an active duty Naval officer, may have had an influence on the interviewees' responses. Other factors limiting the research were the amount of time the researcher had to interview each person and the experience of the interviewer. In spite of the number of persons to be interviewed and the limited amount of time available at the job sites it was possible to collect needed data by spending approximately one half hour per interviewee. Examination of a larger population was impractical because of time and travel dollar constraints.

While all the interviewees were pleasant and responsive to the researcher, there may have been some feeling of coercion to take part in the study, as the request to participate was addressed to them through Code P personnel. The facts obtained during the interviews may be effected by each interviewee's perceptions of the organization. No effort was made to verify interviewees' statements through other means. The conclusions reached during this study are based on a relatively small sample population (approximately 20%) of the two sites examined. The conclusions presented are solely from the author's limited evaluation of the organizational structure and may require further research into current procurement processes and regulations.

Assumptions. The primary assumption under which this thesis is written is that the current FISC management has the desire and ability to make changes to the structure. Laws and

regulations that may restrict the manager's ability to change were not examined. Additionally, the process by which procurement is currently conducted was assumed to remain constant in the immediate future. The researcher has tried to identify areas where improvements can be made but he was limited by the amount of information that could be gathered during the time available.

E. LITERATURE REVIEW AND METHODOLOGY

No previous research on an efficient organizational structure for a military purchasing department was available as a reference for this study. However, organizational design is a major topic of study and literature. The books and methods of Jay R. Galbraith, a noted author and academician in this field, were used considerably to prepare for this study.

The research method used to gather data for this study was the use of face-to-face interviews with twenty-seven procurement personnel attached to two FISC site purchasing departments. Additionally, the Director of Procurement Management and the procurement analyst located at Code P were interviewed extensively. A 21-question interview protocol (Appendix A) was carefully prepared in advance and administered on site so the researcher could discuss more fully the interviewees' responses. Appendix B is a sample of a completed interview form with researcher notes.

F. ORGANIZATION OF THE STUDY

This thesis is divided into five chapters, beginning with this introduction. Chapter II provides a background of the current downsizing issues and the development of the FISC Purchasing Department. Chapter III discusses the methodology used to gather data for this study. Chapter IV is a presentation of the data gathered during the interviews and an analysis of those data. Answers to the subsidiary research questions are addressed in this chapter. Chapter V summarizes the results and provides a response to the primary research question, makes recommendations for change and suggests areas for further study in the implementation section of the chapter.

II. LITERATURE REVIEW AND BACKGROUND

A. LITERATURE REVIEW

The study of organizational design, as we know it today, has been prevalent since the turn of the century. Some early theorists who formulated the first principles of organizational management included authors such as Henri Fayol (1949), Lyndall Urwick (1937), and Luther Gulick (1937), (Bolman, 1991). The principles that they set down are still in existence in American management today. "It is not easy for today's managers to discard the so-called principles those early authors laid down: the span of control should be between six and nine subordinates; one boss for each man; authority must equal responsibility; the line does, the staff advises; and so on" (Garbarro, 1992). Many managers, when confronted with organizational design issues, fall back on these early principles because of their simplicity and 'nstitutionalized use (Lorsch, 1992).

Since the middle of this century the study of Organizational Design has evolved into the study of more complex organizations. Modern approaches to understanding and managing organizations have been fostered by such authors as Jay R. Galbraith (1966-1993), Jay W. Lorsch (1975-1992), Henry Mintzberg (1979-1993), and the rediscovered efforts of Max

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Weber (1947) among others. These latter theorists have advanced organizational principles as a more complex study of infinitely varied human, technological, and market conditions for which organizations must be designed (Lorsch, 1992).

Jay W. Lorsch writes that managers are concerned with three related goals when they make design decisions:

1. To create an organization design that provides a permanent setting in which managers can influence individuals to do their particular jobs.

2. To achieve a pattern of collaborative effort among individual employees, which is necessary for successful operations.

3. To create an organization that is cost effective-one that achieves the first two goals with a minimum of duplication of effort, payroll costs and so on (Lorsch, 1992).

This is hardly a conclusive definition of what organizational design hopes to accomplish. Recent scholars of organization design would take exception to the first statement that the design of organizations should be thought of as permanent (Gabarro, 1991). Many believe that constantly transforming organizations are the requirement for future success. Definitions of the functions and purpose of organizational design appear to be nearly as varied as the number of researchers in this field.

As diverse as the patterns of thought are, it is generally true that different organizations display distinctly different

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patterns of human architecture (Gabarro, 1991). At the same time all organizations share a number of characteristics. What is shared among organizations is that they all have goals, boundaries, levels of authority, communication systems, coordinating mechanisms, and distinctive procedures (Galbraith, 1993). This is true whether the organization is a bank, a church or the U.S. Navy. How to structure itself is one of the fundamental issues facing any organization. Structure is more than boxes and lines arranged hierarchically on an official organization chart. It is an outline of the desired pattern of activities, expectations, and exchanges among executives, managers, employees, and customers. The form of the structure heightens or constrains what an organization is able to accomplish (Galbraith, 1993).

B. GENERAL BACKGROUND ISSUES

Since former Secretary of Defense Cheney announced the end of the Cold War, there has been a stream of congresspersons rushing to Capitol Hill with ideas to cut defense spending. If all the cuts suggested were implemented the results would be devastating to the stability of the military. Lately, the Gulf War and the relief efforts in Somalia have calmed the wave of legislation reapportioning the perceived "Peace Dividend". However, the gradual downsizing of the military is a fact of life that civilian and military executives alike have accepted.

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The Navy began the process of downsizing and reorganizing the force structure several years ago. It is anticipated by many that the Navy will eventually manage about 300 ships, half of what was envisioned just three years ago. Personnel levels will likely be reduced by 25 to 35 percent. The number and size of Naval bases are gradually being reduced. These extensive reductions are driven by shrinking congressional authorizations and allocations.

Beyond the decommissioning of ships, elimination and restructuring of bases suggested by the Base Realignment and Closure Commissions, there is significant pressure on military commands to make smaller, less visible efforts to reorganize to save taxpayer dollars. Nearly all Navy commands are looking at ways to reorganize to save dollars through improved efficiency.

C. THEORETICAL CONTRIBUTION

The possible outcome of this research effort will hopefully be a streamlined, efficiently operating purchasing organization at FISC San Diego. This study recommends improved lines of communication and coordination between work groups and oversight personnel, and among the work groups. The desire is to eliminate barriers that impede the efficient operation of the purchasing activity.

This thesis presents a discussion of the different types of organizational designs available and their possible uses.

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It also discusses the reasons for reorganizing and presents questions to consider should a manager choose to redesign his organization. The specific research done in preparation for this thesis was with two FISC site purchasing departments and specific recommendations and conclusions are addressed to their needs.

D. SPECIFIC BACKGROUND ISSUES

The Naval Supply Center, San Diego, CA. was established in 1922 and has seen many changes to its mission and functions in the last 70 plus years. The latest concept change in this ever evolving activity is its reorganization as a Fleet and Industrial Supply Center. The Fleet and Industrial Supply Center, San Diego, CA. (FISC-SD) is the prototype for the FISC concept. Evolution from the Naval Supply Center to FISC, San Diego has brought many changes, from the command's primary mission to the reorganization of the command itself. As a result of the Defense Management Review Decision (DMRD) 902, receipt, issue, and warehousing responsibility for wholesale and residual intermediate/retail stock were moved to Defense Logistics Agency (DLA), San Diego. Thirty-five percent of the FISC's business moved to DLA with the warehousing consolidation. The loss of warehousing responsibilities combined with the expansion of current business areas and newly developed business has compelled a major restructuring at FISC-SD. (Banghart, 1993)

Force downsizing, DMRDs, the establishment of the Defense Business Operating Fund (DBOF), and the advent of Base Realignment and Closure Commissions have increased the need for efficient, lean organizations. FISC, San Diego believes that two years of change and reorganization has left them in a stronger position to survive the downsizing decisions of the future. (Banghart, 1993)

FISC believes that their success is a combination of many factors of which one major element is Total Quality Management (TQM): the commitment to team building with customers and among employees and continuous process improvement (Banghart, 1993). Process improvement and cost reduction are major keystones to the use of TQM. Among the processes being studied for possible cost savings is the reorganization of the command and its many departments. Included among the departments being looked at for possible redesign is the Purchasing Department and its coordinating division, Procurement Management (Code P).

Recently, in the San Diego basin alone, there were 26 independent small Navy procurement agencies at commands other than FISC-SD. Today the number is 20 and falling. FISC-SD has taken the lead in accepting the transfer of the workload from customer commands in purchasing and other areas of their expertise (Vitalis, 1993). Additionally, initiatives are

being considered for consolidation of small and large purchase responsibilities in the San Diego area under the FISC organization.

The Purchasing Department is a diverse organization with various locations throughout the San Diego area and the southwest coast of California. Procurement Management, an oversight department, was developed to ensure compliance with procurement regulations and standardization of procurement procedures. Procurement Management "links the FISC Sites," enabling FISC, San Diego to continue to follow established regulations. Code P's main goal is to focus on improving the FISC's ability to support customers by providing an integrated system for procurement policy, oversight, innovative streamlined procurement procedures and dedicated customer service (Vitalis, 1993).

The Purchasing Department began its move toward regional consolidation by co-locating three of five purchasing sites into the Naval Station, FISC Site. The primary customers of the Naval Station, FISC Site are the Commander, Naval Surface Forces, Pacific, fleet units and numerous San Diego shore activities. All procurement for FISC headquarter's departments and support staff is also done from this Site. To improve efficiency, modification, filing and distribution functions have been centrally located at this site (Vitalis, 1993). Besides the Naval Station site, there exists a FISC North Island site, handling the Naval Air Station's and

surrounding activities' needs. FISC Headquarters is also responsible for the FISC Long Beach site. To round out the five proposed sites, plans call for establishment of site units at Miramar Naval Air Station and at the Naval Submarine Base at Point Loma (Vitalis, 1993).

"The goal of each FISC site is to provide one stop shopping convenience" (Vitalis, 1993). Specialized services such as shipboard habitability purchases and large procurements are all available in a single location.

Preliminary examination of the various FISC site purchasing activities reveals that there is no standard purchasing organization structure. The two FISC site purchasing departments (Naval Station and North Island) examined in detail by this researcher are organized on the basis of a hierarchical structure with specialized functional/product work groups. Additionally, Code P personnel at the headquarters location were interviewed for their perspective on coordinating such diverse activities.

E. ORGANIZATIONAL DESIGN

Whether it was by design, tradition, response to pressures of the time, or a combination of all of these factors, FISC is organized in the typical government bureaucratic hierarchy. Hierarchy is considered the "natural" form of organizational structure for a military organization (Lawler, 1992). This form of organization is not to be taken lightly or dismissed

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easily. It has worked well in its current form for decades. Any attempt to dismantle or change this system could meet with heavy resistance.

As noted earlier, a number of factors in the current Government environment are driving the need to examine Government choice of organizational structure. Perhaps the most important factor is the public pressure on Congress to balance its budget. The public perception is that the cost of Government is out of control. The current administration was elected on a platform that included promises to reduce and reorganize Government in order to control costs.

Survival is another driver of an individual agency's need to examine their choice of organizational form. Speed in responding to customers' demands, and speed in correcting organizational problems are important factors in presenting an organization's appearance as an efficient, responsive organization. In the world of Government bureaucracy, efficiency is a key to an organization's surviving the military downsizing.

Technology has been a major factor in reorganization of the commercial world and has become increasingly important in the business of governments. Another of President Clinton's campaign promises was to improve Government efficiency by bringing the White House into the computer age. Technology is more than just computer hardware and software, the real power is in the information that is available because of this

technology. Networks have made it possible for a customer to prepare a purchase request on a computer in the morning; send the requirement electronically to the purchasing agent; and view the completed document and the current status on his computer in the afternoon. E-mail has made it possible to communicate directly with purchasing agents, changing the face of customer service forever. The ultimate organizational structure of the FISC Purchasing Department will depend heavily on the amount and type of technology in place and projected to be in place in the near future.

Perhaps the main function of an organizational structure is to allow management a means of controlling its personnel and work process. Bureaucratic control is increasingly being replaced by customer control, peer control, and automated formal controls. These new forms of control call for a reduction of control-oriented managerial units, as well as a reduction in the need for layers of management. Customer and employee involvement, self-managing work teams, combined with automated control turns an organization away from formal bureaucratic control (Lawler, 1992).

Which of the new forms of organization a manager would develop is largely dependent upon the nature of his business strategy. Government organizations that desire to control costs will use the most cost effective type of organization. If the desire is to enhance customer service another type of organization would be appropriate. Organizations wanting to

make maximum use of information technology will use even another form of organization. Any organization trying to be all things to all people may have to develop a hybrid form of organization to suit their needs.

Once an organization has been formed it can not be thought of as a permanent structure. Dynamic organizations are constantly changing to meet the challenges of the changing environment. Organizations that respond to changes quickly are learning organizations. Learning occurs when the organization can alter its performance patterns to anticipate or respond to change by adding, deleting, or changing its patterns of activity as required to meet the challenges of the future. An organization looking for a "best" form will have to consider a form of organization that is not rigid, but one that is patterned in such a way that it can change as required by the environment (Galbraith, 1993).

The form of an organization is one of the most difficult decisions a manager may have to make. There are a number of factors one must consider before choosing a form. The manager must consider his organization's size, customers, function, product, the degree of centralization, and the careers and reward systems of the employees among others. Perhaps the relationship between strategy and structure is the most important aspect of the decision. Strategy may be defined as

the goals of the organization. Where is this business headed and how are we going to get there may be the key questions (Gabarro, 1992).

There are many organizational designs from which to choose. "The study and design of organizations has been based on standard building blocks, or units." (Galbraith, 1993). Individuals are the base unit usually formed into work groups. Work groups are clustered together in functions. Several functions are gathered together to form departments/divisions. Departments formed together to make the whole organization (Galbraith, 1993). FISC San Diego is formed in much this same way and goes several steps beyond in that it is one activity that makes up the Supply Systems Command which is a part of the Navy.

Today, the classic building blocks conception is becoming questionable. Initiatives such as total quality management, just in time warehousing, and electronic data interchange are leading to some fundamental changes in the functional organization. New models of a business unit have emerged and are continuing to be developed at a rapid pace. Some of the organizational models of the future are the Functional unit, Lateral unit, Network organizations, and Front-end/Back-end organizations. Some of these forms may have been around for awhile and are just now being recognized as functional forms of organization (Galbraith, 1993).

The **Lateral Organization** can be described as a horizontal organization where processes cross hierarchical lines. It is generally believed that in the future, the organization will be flatter, more lateral, and less hierarchical (Galbraith, 1993). Lateral organizations consist of cross-functional teams dedicated to products or customers. In a lateral organization personnel will be increasingly multi-functional and managers more generalists.

As organizations become more efficient in the use of computers and data bases, knowledge can be accessed by generalists across functional lines. This ability to access needed information and expertise throughout the organization will cause a decline in the need for specialists. The work process time will decrease as authority to make decisions is pushed down the functional ladder (Galbraith, 1993).

The **Front-End/Back-End Model** represents an organizational structure whose front is organized around customer and whose back end is organized around product. The key to success of this form of organization is the quality of the lateral integrating processes (Galbraith, 1993).

The **Functional Unit** is an old idea. Because of pressures to reduce cost in recent years this form of organization has seem a resurgence in use. It is especially popular in organizations where salaries are a major cost component. The reason is that this functional form allows work to be performed with the fewest number of people because it pools

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specialists and time shares them. However, the defects of this type of organization consist of such shortcomings as: career stagnation, decisions are made far from the action, customer service suffers and so on (Galbraith, 1993).

These are just three of the numerous models of organizations that exist. These three were mentioned as they are most applicable to the type of organization FISC Purchasing is or may consider becoming due to the nature of their business, customers serviced and regulations that they must follow.

Today among organizational design academicians there is much argument as to the ideal type of organization. Many believe that the "lateral organizations are the wave of the future" (Bolman, 1991). Their ability to quickly recognize problems and make decisions at low levels gives them a distinct advantage in the business world. Hierarchial organizations, which are historically slow to react, will not be able to compete on this level (Bolman, 1991).

However, Elliott Jaques (1972) leads a group of organizational theorists that would say don't be too quick to pronounce the hierarchical organization dead. Jaques concedes that there have been errors in the running of this type of organization. He argues that these problems can be fixed and that the hierarchical structure is necessary for control of large organizations (Gabarro, 1992).

Managers choosing to reorganize will have to weigh the pros and cons of both arguments. As with most arguments with differing points of view neither side will have a perfect solution to the manager's dilemma. While the use of a hierarchical organization may be right for the Navy as a whole, there is some leeway in the lower/smaller functions to experiment with other forms of organization. If FISC management wants to experiment in new organizational designs due to pressures to cut cost and reduce in size while increasing productivity and efficiency, the time may be right to reorganize.

III. METHODOLOGY

A. RESEARCH METHODOLOGY

This study compares the "perceptions of organizational structure" with the formal organizational charts of the two FISC Sites and relates the discrepancies to the existence of an informal organizational structure. Further, an attempt is made to discover "perceived inefficiencies" in reporting relationships, coordinating mechanisms, and redundancies that exist in the formal or informal organizational structure. This is accomplished through the use of interview questions designed to elicit the participants' perceptions of barriers to efficient performance of his/her duties because of inefficiencies in the functional areas examined.

The interview questions were designed to draw information from the participants concerning their responsibilities on the job and their place in the organization structure. Problems in the management of the unit, problems with coordinating activities, their working relationships with other members of the organization and suggestions for improvement are also examined.

The field research necessary for this thesis was performed by conducting personal interviews at the interviewee's work station. Data collected from the interviewees was obtained

during an approximately 30 minute interview. The actual amount of time varied from 15 minutes to 45 minutes depending on the participant's enthusiasm and the interviewer's schedule of interviews. An interview form was prepared to record the answers given (see Appendix A). The interviewer paraphrased the interviewees' answers on the interview form (see Appendix B).

The researcher felt that to obtain a solid understanding of the informal work-related associations in the activities examined, it was necessary to interview as many supervisory personnel attached to the two FISC Sites as possible. Non-supervisory personnel were also requested to participate. Approximately 40% of the personnel assigned to each of the two activities were requested to participate in this study.

At the FISC Site Naval Station the researcher requested interviews with 24 of the 38 personnel attached to that activity. Of the 24 personnel requested to participate in this interview nine were chosen because they held the top nine supervisor positions at the activity. The researcher choose to interview all supervisory personnel because of the limited number of supervisors and the desire to examine their positions and duties closely for redundancies.

Another nine persons were chosen to be interviewed because they represented one entire purchasing work group. The researcher chose this work group randomly. The researcher's theory behind examining one entire work group is that it will

then be possible to compare the other random selectees' answers against this base to ensure that anomalies can be identified. The remaining six personnel selected to be interviewed were picked randomly from all the members in their work group. Random selection was accomplished by assigning each possible selectee a number and drawing numbers written on a piece of equalized sized paper from a bag (Weiss, 1991).

Of the 24 requested interviews, 14 agreed to participate. Five supervisory personnel and nine non-supervisory personnel in total from FISC Site Naval Station participated in the interviews. Included in the interviews was one entire work group. The ten persons declining to participate in the study did not differ in any significant way from the group participating.

At FISC Site North Island 21 of 39 persons assigned were requested to participate in the interviews. As at the Naval Station Site all supervisors were requested to participate. There are five supervisors at various levels assigned to this activity. The remaining 16 persons to be interviewed were chosen by the random numbers process described above.

Of the 21 persons requested to participate at FISC Site North Island 13 agreed to participate. Four supervisory personnel and nine non-supervisory personnel were interviewed. Again the eight persons declining to be interviewed did not differ in any significant way from those participating.

The interview as designed is structured for a free-response type of interview. Free-response means that the form was designed to elicit information about specific topics, but the questions have been phrased to allow the interviewee to respond in his/her own terms. Answers were paraphrased by the researcher and recorded on the interview sheet for future analysis.

Before entering into the interview proper, the researcher gave the interviewee a brief explanation of the purpose and nature of the study in which he/she was asked to participate. A reassurance of anonymity was given at this time (page 1 of Appendix A). The interviewer presented the interview form (Appendix A) to the interviewee and explained how questions would be asked and answers recorded. After the introductions and explanations about the study the interviewee was given an opportunity to ask any questions before the interview proper. Questions addressed at this time generally concerned a reassurance of privacy and concerns as to whom in the FISC command would read the final thesis report.

The interviewer placed the interview form on the interviewee's desk and asked the questions in the order written on the interview form. The interviewer recorded the answers in full view of the interviewee as he/she responded to the interviewer's questions.

As the interview progressed the interviewer could clarify terms or responses not immediately clear in the interviewee's

answer. The interviewee could ask for clarification of any questions that he did not fully understand. The interviewer was also able to ask for amplifying information when the interviewee's response warranted further examination.

As some answers to questions drew the participant into areas of personal concern that were not a part of the research, the researcher gently steered the interviewee back to the topic.

In deciding how to record the interviewees' answer the researcher used key words or phrases such as useless, time consuming, extra work, wasted time, no reason for, etc., to identify the response that would most likely address the issues being researched. These key works/phrases were selected by the researcher as ones most likely to address the issue from the researcher's experience with the test interviewees.

B. INTERVIEW PROTOCOL

The interview form was developed by this researcher using the ideas and methods developed by Ralph M. Stogdill (Stogdill, 1955) and Ellis L. Scott (Scott, 1956). The questions as presented here were the questions as developed by the researcher. These original questions were modified slightly because of comments and suggestions made by three interviewees during the pretests. The modifications made are addressed in section D, labeled PRETESTS, of this chapter.

The questionnaire as presented in Appendix A presents the questions as actually asked during the interview.

Information for the Record. The interview begins with several general questions designed to identify the interviewee and his/her position in the formal organization. These questions and their purpose are listed below.

The Questions.

1. Name -- For identification and placement in the formal organizational chart (deleted during pretest phase).

2. Phone & Fax number -- so that the interviewee can be contacted for further explanation of his/her answers after the interview is complete, if necessary (deleted during pretest phase).

3. Brief job description -- so that the researcher, while looking for redundancies, can identify the participant's actual functions despite the implied functions as identified by his or her title and formal job description.

4. How long in present position? -- this was asked as a safety valve to identify personnel without sufficient experience or knowledge of the organizational structure. It turned out none of the personnel interviewed had less than the six months at their present position thought necessary to be thoroughly familiar with their organizational position.

Reporting Relationships. The next two questions (labeled questions 1 & 2) were provided to interviewees at least three working days before the interview. It was thought that these

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questions would take some thought on the interviewees' part and may be better answered with a little forethought. At the time of the interview the interviewee was asked to further consider the names he provided to questions one and two and rank them in order of the person with whom he spent the most time to the least time regardless of which question they were used to answer.

Questions one and two were designed to learn if the daily working relationships match the formal organizational chart. If not, what working relationships have developed that identify the informal organizational structure.

All the responses to the first two questions were compared to the formal organizational chart by drawing lines showing the interaction between persons. Only the first two names mentioned were charted for each interviewee and overlaid on one merged formal organizational chart. Only two names are used because use of the interviewee's entire response would cause the combined chart to be undecipherable to most readers. The theory is that differences between the formal chart and the overlay will identify the informal organization.

The Questions.

1.   Think back over the past several weeks, and consider all the persons who are working under you. Please list the persons with whom you spent the most time on a business basis. With which one have you spent the next most

time and so on? What is the general kind of business you conduct with each of the persons you have named above?

2. Now, let's consider everybody in the entire organization, regardless of their position or title, who are not working under your supervision. Considering all of these people who are not your subordinates, please list the persons with whom you spent the most time on a business basis. With which one have you spent the next most time and so on? What is the general kind of business you conduct with each of the persons you have named above?

At the time of the interview the interviewee was asked to rank the names given as answers to the questions above from the person with whom most time was spent to the least time spent.

Supervisory Constraints. Question three is designed to measure the perceived efficiency of the command structure from the point of view of the supervisors. The question asks the participants about constraints on their ability to adequately supervise their subordinates. If the person does not believe the structure allows him to adequately supervise his subordinates, he is given an opportunity to identify the deficiencies and offer suggestions for improvement. Since all supervisors were interviewed the responses to this question were tallied as either positive or negative and presented as

a percentage of the total. The researcher subjectively evaluated the suggestions given to negative responses and included them in the final chapter.

The Question.

3. Does the command structure allow you to efficiently supervise your subordinates? If not, what changes would you suggest.

Functional Redundancies. The next four questions are designed to identify the amount of responsibility given to personnel in the preparation of their own work. One precept of efficient management is that the worker should be given responsibility for his work and held accountable for it (Walton, 1986). When work is forwarded from worker to supervisor to lead supervisor to the signing authority, the responsibility for the work flows with it. These questions hopefully will identify areas of redundancy in the organizational structure and identify inefficiencies in accountability/responsibility that can be investigated.

Questions four and five are answered on a scale ranging from always to never. Each response was given a value of one point. The number of points for each response (e.g. always, often, etc.) were tallied and displayed on a chart. This chart shows the percentage of the total, each response received. Responses of supervisory and non-supervisory personnel were reported separately for comparison purposes.

Question six is designed for people to identify by name and order the persons that are responsible for reviewing and signing their work. Additionally, the reason the person reviews the work, informational or approval, is also shown. The answers to this question were charted and the results compared to the organizational chart. Signature personnel that lay outside the interviewee's organizational chain of command were examined for possible connection with an informal organization cr redundancy of action.

Question seven is designed to measure the participant's general perception of the chain of approval structure. Responses to this question were tallied as positive or negative and presented as a percentage of the total of the responses. The results are presented as either an endorsement of the current process or an area requiring further research for possible elimination of redundancies and/or simplification. The researcher subjectively evaluated the suggestions given to negative responses and included them in the final chapter, if warranted.

The Questions.

4. When completing a purchase order do you sign the paper?

5. When completing correspondence do you sign the paper?

6. If other persons are required to sign your completed work, please list them from your signature to final

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signature. Indicate if the signature is for approval or if the person signing sees the document for information only.

7. Do you think this process could be improved? If yes, how?

Reporting Inefficiencies. The next four questions, eight through eleven, are designed to answer the research question pertaining to the efficiency of the reporting relationships. Question eight is used to find to what extent the interviewee feels that he or she is working for one boss. The answers are recorded on a scale ranging from always to never. The interviewees' responses were tallied on a one point for one answer scale and presented as a percentage of the total number of responses received.

Question nine asks the interviewee to name the person with whom he/she seeks out when requiring professional work related help. The answers to this question were compared with the organizational chart. Responses were charted as either (A) agrees with the organizational chart or (D) disagrees with the organizational chart. A tally was made of (A)s and (D)s and reported as indicators of an efficient or inefficient organizational structure. (D) responses were also compared to the organizational chart for possible inclusion in the informal organizational chart.

Questions ten and eleven are designed to elicit a response as to the interviewee's perception as to the barriers to free access to his chain of command. Responses to this question

were tallied as either positive or negative and presented as a percentage of the total of the responses. The results are presented as either an endorsement of the current structure or an area requiring further research for possible simplification or improvement. The researcher evaluated the suggestions given to negative responses and included them in the final chapter, if warranted. Questions eight through eleven are presented as follows.

The Questions.

8. To what extent do you work directly for your boss versus others?

9. When seeking answers to questions concerning the performance of your professional duties from whom do you usually seek assistance?

10. Does the current structure of your chain of command allow you enough access to your supervisor? If not, explain.

11. Does the command structure allow you access to persons above your supervisor if required? If not, explain.

Coordinating Mechanisms (Information Flow). The remaining ten questions were designed to extract information as to the efficiency of the commands coordinating mechanisms, in particular, Procurement Management. Questions twelve and thirteen are designed to find if the participants are aware of the methods of routine communication of information through their command and their perception as to the amount of needed

information they are receiving. The researcher used the Officer in Charge's response to being asked for the official routing procedures as basis for judging other responses. Negative responses to question twelve or responses different from the base are reported as a percentage of the total. Answers to question thirteen are recorded on a scale ranging from always to never. The responses were tallied on a one point for one answer scale and presented as a percentage of the total number of responses received. The researcher subjectively evaluated the suggestions given to negative responses and included them in the final chapter, if warranted.

The Questions.

12. How is information/instruction from FISC Headquarters, Code P, and central commands (NAVSUP, DOD, SECNAV, etc.) routed to you?

13. To what extent do you receive needed information on important changes? What suggestions can you offer for improving this process?

Coordinating Mechanisms (Training). Questions 14 and 16 are designed to measure the perceived and actual extent of training conducted. Question 14 asks the interviewee the perceived extent of training he receives on topics important to him. The scale is measured from always to never. Question 16 asks the interviewee to list the five latest formal training sessions he/she actually attended. Positive

responses (the interviewee names one or more training courses) to this question were considered evidence that training was received and negative responses (the interviewee can't remember a course) as evidence that training is not done. These answers are reported in the analysis as a percentage of the number of responses in each category. Suggestions for improvement of training are included in the final chapters. The questions as presented are as follows.

The Questions.

14. To what extent is training conducted on important changes in procedures regarding your work? What suggestions can you offer for improving this process?

16. List the five most recent training courses, lasting more than a day, and the year you attended.

Coordinating Mechanisms (Relationships). Questions 15 and 17 measure the extent of contact personnel have with their coordinating activity. Responses are presented as a percentage of people who believe they have good relations with Code P and can name the Code P representative vs the people who think they do and can't vs those who don't and can't.

The Questions.

15. To what extent do you have the contact you need with personnel from Procurement Management (Code P)? What suggestions can you offer for improving this process?

17. Do you know or have written down the name and phone number of a Code P liaison?   Yes   No   (circle one)

Coordinating Mechanisms (Efficiency). Questions 18 and 19 elicited negative or positive responses to the perceived efficiency and usefulness of the coordinating efforts of Code P. The positive and negative responses were tallied and presented as a percentage of the total responses. The researcher subjectively evaluated the suggestions given to negative responses and included them in the following chapters, if warranted. The questions were presented as written below.

The Questions.

18. Does this liaison provide efficient coordination? If no, explain.

19. Do you attend meetings with personnel from Code P? If yes, do you feel they are worth your time? What suggestions can you offer for improving these meetings?

Command Efficiency. Questions 20 and 21 were designed as a wrap up giving the interviewee an opportunity to express his/her general feeling about the effectiveness of their activity. Question 20 requires a negative or positive response which were tallied and presented as a percentage of the total responses. The researcher subjectively evaluated all suggestions given and included them in the following chapters, if warranted. Questions 20 and 21 were presented as written below.

The Questions.

20. Do you feel your division is efficient in its ability to quickly process information up and down the chain of command? Explain and offer suggestions.

21. In general, what other things do you feel can be done to increase the efficiency of the structure of your working environment?

C. THE ORGANIZATION CHART

Each person interviewed was given a blank organizational chart two or three days before the interview (see Figure 1). On this chart, each person was requested to write his/her own name in the appropriate box and to write the names of his/her immediate superiors, his/her peers and his/her immediate subordinates in boxes as appropriate.

This chart is regarded as a representation of the interviewee's perception of his/her place in the organization. His/her perception may or may not have corresponded with the structure of the unit as represented by the formal organization chart. Each instance in which his/her perception of the organization structure failed to correspond with the structure as represented by the formal chart was regarded as a perceptual error. Perceptual errors can occur in several ways such as omissions, omitting superiors or subordinates, unit errors, naming persons outside their chain of command, and echelon errors, which is incorrectly identifying persons

Please fill in this organizational chart. You are to show
your own position and the position of those working close
to you by filling in the names in the boxes. **Add boxes if
you need them.**

Superiors

Peers   Peers

You

START HERE
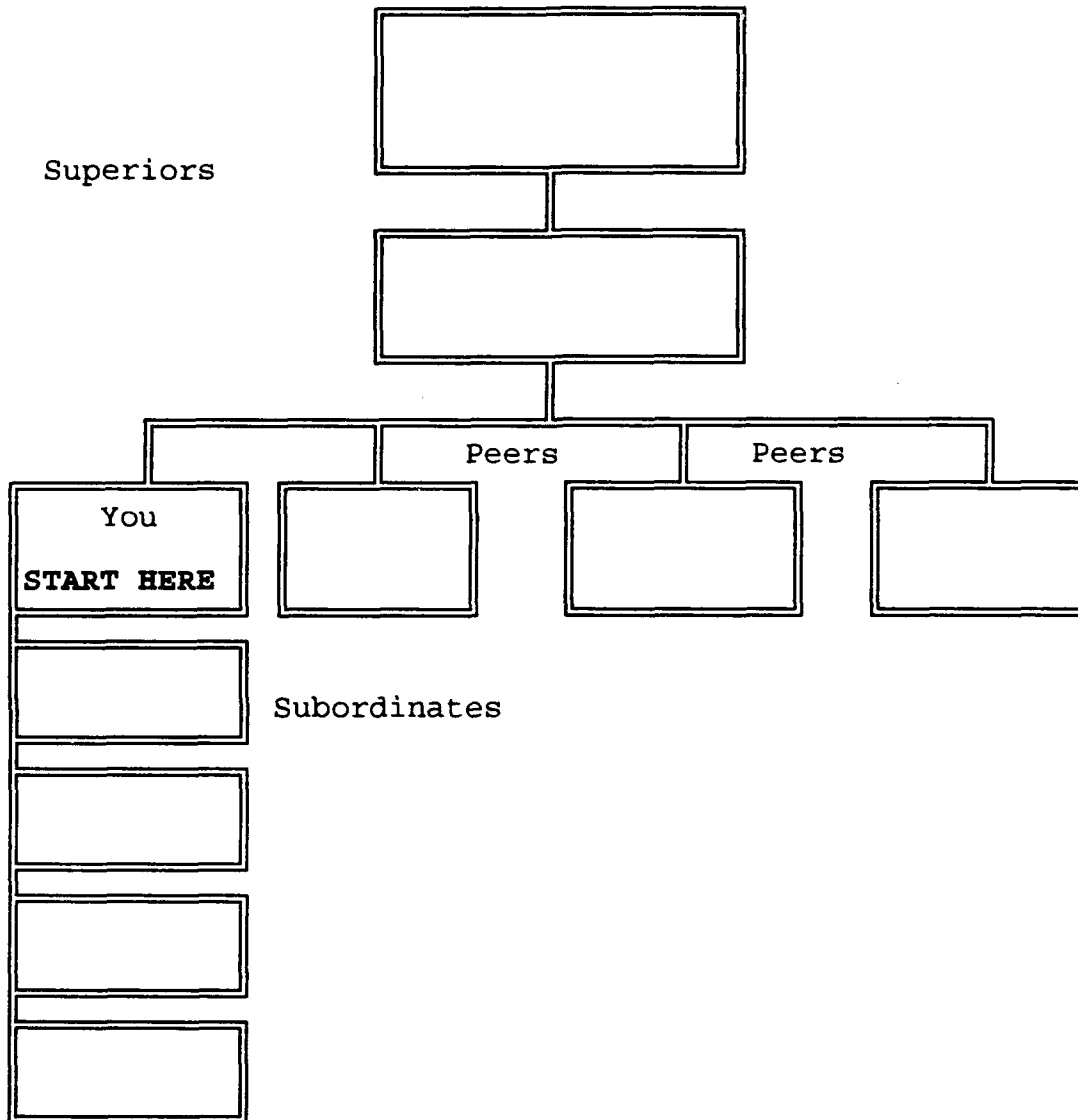
Subordinates

Figure 1

as superiors or subordinates. It was suspected that omission

errors would be the most common discrepancy identified during

this exercise. The existence of perception errors alone is

not conclusive evidence of an informal organization. However,

this information combined with questions one and two along with the other information gained during the interviews should be a good source for identification of the informal organization if it exists.

D. PRETESTS

Three tests were conducted to determine the validity and understandability of the interview questions. The first test was done by interviewing a former contracting officer using the interview form. This person was asked to relate to the researcher his understanding of the questions as asked. He was not asked to actually answer the questions. The purpose of this test was to determine if his understanding of the questions were the same as the researcher's intended meanings. The second test interview was conducted with a working contracting professional, similar to those for whom the interview was developed. She was asked to relate her understanding of the question and offer a brief reply to the question. The purpose of this test was to determine if a working purchasing agent understood the questions and if the answers would provide the information the researcher desired. The final test was done by sending a copy of the interview form to the procurement analyst at Code P for review of the questions for relevancy to purchasing organization where it was intended to be administered.

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Changes to the interview questions made as a result of the first pretest were to add the phrase "besides processing information" to question 21. This change was made to more clearly differentiate the question from the information requested in question 20.

The space for the interviewee to fill in his/her name was eliminated from the questionnaire after discussion with the test interviewees as it was felt that the actual interviewees would hesitate to give honest answers if they felt there was a possibility of retribution. As a means of identification the interviewer coded the individuals to be interviewed and wrote the code on the interview sheet after the interview was complete in order that the source of information could be identified during the analysis.

On question six the phrase "the majority of" was added to the question. This was done to clarify the question, because it was pointed out that there will be numerous papers that will have different signature authorities. Other minor changes were made to make the question clearer.

Question eight was completely rewritten as the test individuals thought that the answer would always present the perceived "correct" answer. The researcher rewrote the question to be more direct and hopefully obtain an honest answer.

In question 16 the phrase, "in-house type of training" was added and references to the length of training conducted were

removed. This was done to differentiate the formal training from the informal training usually planned and conducted in-house.

As a result of the second pretest with an individual at FISC San Diego the following changes were made to questions three, four, five, nine and thirteen. In order to remove some of the subjectivity from question three, examples were added at the end of the sentence.

In question four and five the word "paper" was changed to "order and correspondence" to be more specific and avoid confusion. The interviewee thought that questions nine and thirteen were confusing because they did not differentiate between "technical" and "general" issues. The questions were rephrased to add the word technical in order that the interviewee could make a distinction as to the issues on which the interviewer was focusing.

IV. DATA PRESENTATION AND ANALYSIS

A. INTRODUCTION

This chapter is a presentation and analysis of the data collected from personal interviews with FISC Code P personnel and purchasing personnel at FISC Sites North Island and Naval Station. In this chapter the researcher analyzes the data presented as they pertain to the subsidiary research questions. This analysis leads to the answers to the subsidiary research questions.

B. FISC, SAN DIEGO ORGANIZATION

The organizational structure of the Fleet Industrial and Supply Center, San Diego has evolved over decades of constant change in policy, mission, public and private pressures and changing management philosophies. What has emerged is the current hierarchial structure presented as Figure 2. As is common in a hierarchial structure, FISC, San Diego' fifteen divisions are organized by function and report through layers of management to a central planning and policy authority at the top of the pyramid (Galbraith, 1993). In the FISC, San Diego organization there exists a unique division, designated Code P, which adds a layer of control to the procurement function.

As stated in the procurement policy memorandum (PROMEMO) dated 18 March 1993, Code P's primary function is to review,
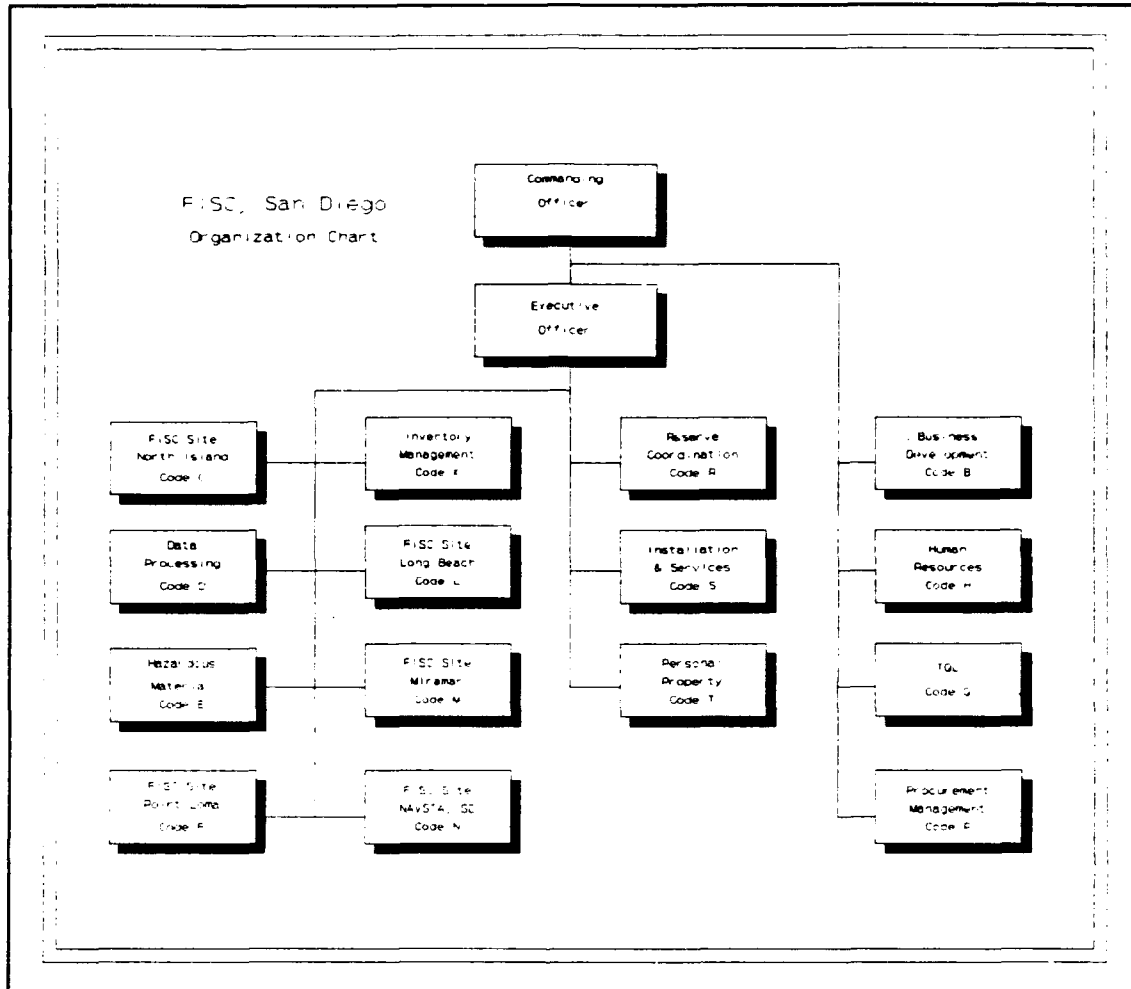
Figure 2

carry out, monitor and continuously improve procurement
policies and procedures. Code P reports directly to the
Commanding Officer, FISC, San Diego, as Figure 2 illustrates.
The FISC Sites, which perform the actual procurement
operations, are a decentralized group that report to the
Commanding Officer through the Executive Officer. The
reasoning behind this unique reporting relationship is the
desire to centralize the planning and policy aspects of the

procurement process, while purchasing divisions are decentralized to provide better customer service (McKee, 1993).

FISC, San Diego is much more complicated and intricate than shown in this simple organizational chart. However, further study of the organization at this level is not part of this study and is only examined regarding reporting relationships of Code P and the Site Divisions.

C. THE CODE P ORGANIZATION

Code P is organized as shown in Figure 3. The director, a military position, is responsible for providing an interface between the FISC Commanding Officer and the procurement divisions. Code P's Director is also responsible for developing a strategic plan for the procurement organization. The Deputy Director is responsible for carrying out and overseeing the strategic plans with help from the functional assistants (PROMEMO, 18MAR93).

Besides the functions cited earlier, Code P provides functional procurement support to the FISC sites, rendering information and guidance as necessary. In addition, Code P acts as the link between the FISC sites to ensure unity (McKee, 1993).

The division of responsibilities of functions such as personnel issues, policy and procedures, work-flow and production are shown in Table 1.

FISC San Diego, California

Code P

Director

Admin Support

Deputy Director

| Technical Analyst | Procurement Analyst | SB/SDB Advocate | APADE Manager | Budget Analyst |

Source: FISC, San Diego 3/93
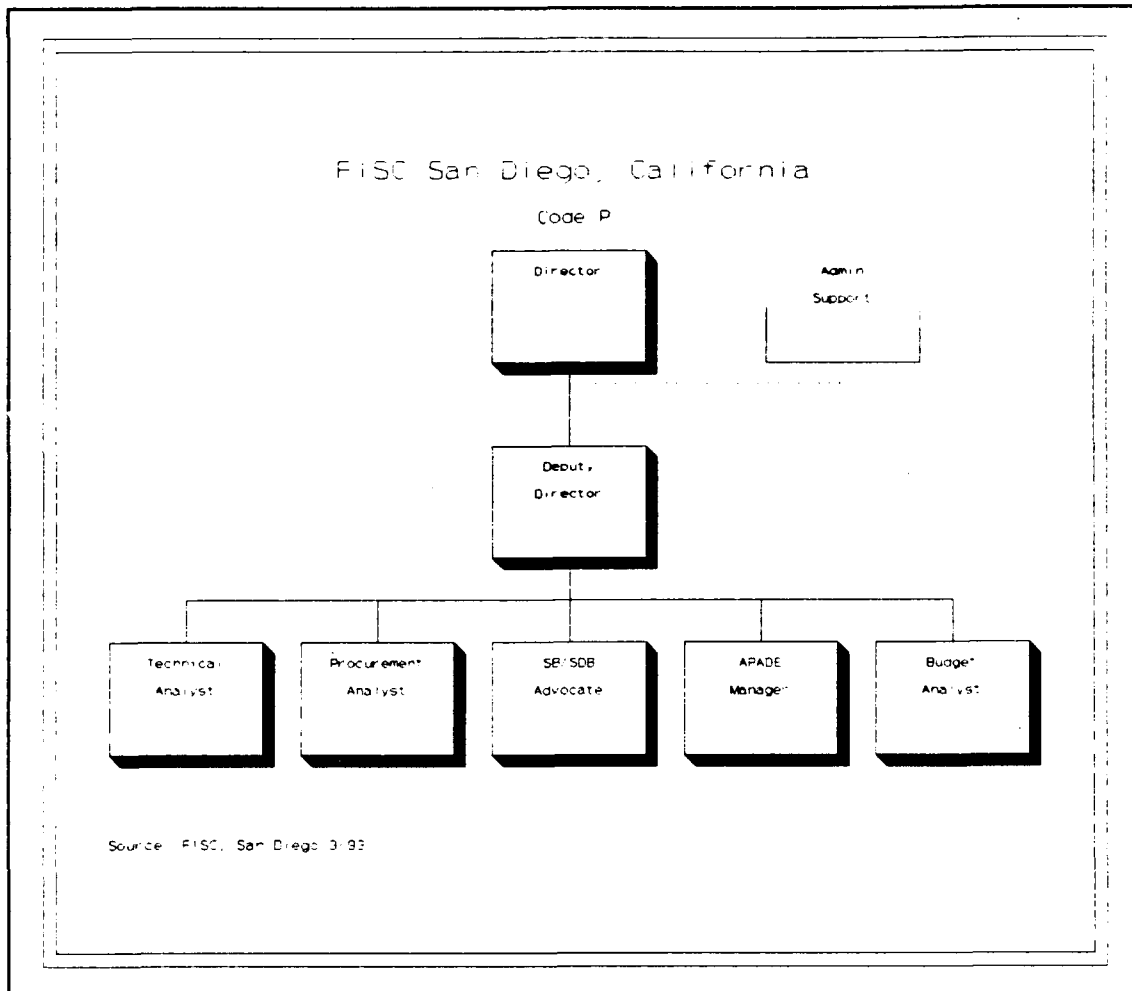
Figure 3

D. FISC SITE NORTH ISLAND ORGANIZATION

The Structure.   The FISC Site North Island organization
(see Figure 4) is a hierarchial organization with the Deputy
Director, a civil service position, reporting to the Site
Director, a Navy Supply Corps Captain.   This organization has
developed from the recent consolidation of the former supply
department at Naval Air Station, North Island and the supply
department at the neighboring Naval Amphibious Base.   FISC,

North Island's Purchasing Division is one of four major divisions at this site. North Island's organizational chart is presented in Figure 5.

Reporting Requirements. The reporting relationships of purchasing division personnel are divided along lines of business of a general administrative nature and business concerning procurement. Matters of a general administrative nature (personnel movements, reports, etc.) move through the FISC Site hierarchy, while matters concerning procurement and procurement policy move through the FISC Code P hierarchy. Reporting relationships concerning procurement, procurement policy and administrative matters are both examined during this study.

Table 1

FUNCTION	FISC SITE RESPONSIBILITIES	PROCUREMENT MANAGEMENT
PERSONNEL	OPERATIONAL SUPERVISION, PERSONNEL ACTIONS, PERFORMANCE APPRAISALS, FILES, LEAVE AUTH. AND RECORDS, WORK SCHED. ASSIGN., TIMEKEEPING	FUNCTIONAL ADVISORY SUPPORT, INDOCTRINATION, INTEGRITY STATEMENTS, WARRANTS, STATEMENTS OF AFFILIATION, ALLOCATE RESOURCES
POLICY AND PROCEDURES	ASSURE COMPLIANCE WITH EXISTING REGULATIONS	SET MONITOR & CONTINUOUSLY IMPROVE PROCUREMENT POLICIES AND PROCEDURES, RESEARCH AND DEVELOP DAR COUNCIL CASES, RESEARCH AND RESPOND TO CONGRESSIONAL INQUIRIES
WORKFLOW	PRIMARY RESPONSIBILITY AWARD OF CONTRACTS CONTRACT ADMINISTRATION SET PRIORITIES	ANALYSIS OF AND RECOMMENDATIONS FOR PROCESS IMPROVEMENTS, ASSISTANCE AND GUIDANCE. CONTRACTING OFFICER DECISIONS. RELEASE UNAUTHORIZED COMMITMENTS
PRODUCTION	PRIMARY INDIVIDUAL SITE RESPONSIBILITY	GENERATE REPORTS FOR INDIVIDUAL SITES
TRAINING	COORDINATION, SCHEDULING OF FISC GENERAL AND BASIC SKILLS TRAINING, ENSURE THE COMPLETION AND MAINTAIN RECORDS OF MANDATORY PROCUREMENT TRAINING	SPECIALIZED IN-DEPTH PROCUREMENT TRAINING, MAINTAIN CENTRAL FILES
TECHNICAL	DOCUMENT SCREENING, TECHNICAL RESEARCH	SPECIFIC WAIVERS, CONTRACTOR COMPLIANCE

Source FISC, San Diego 3/93

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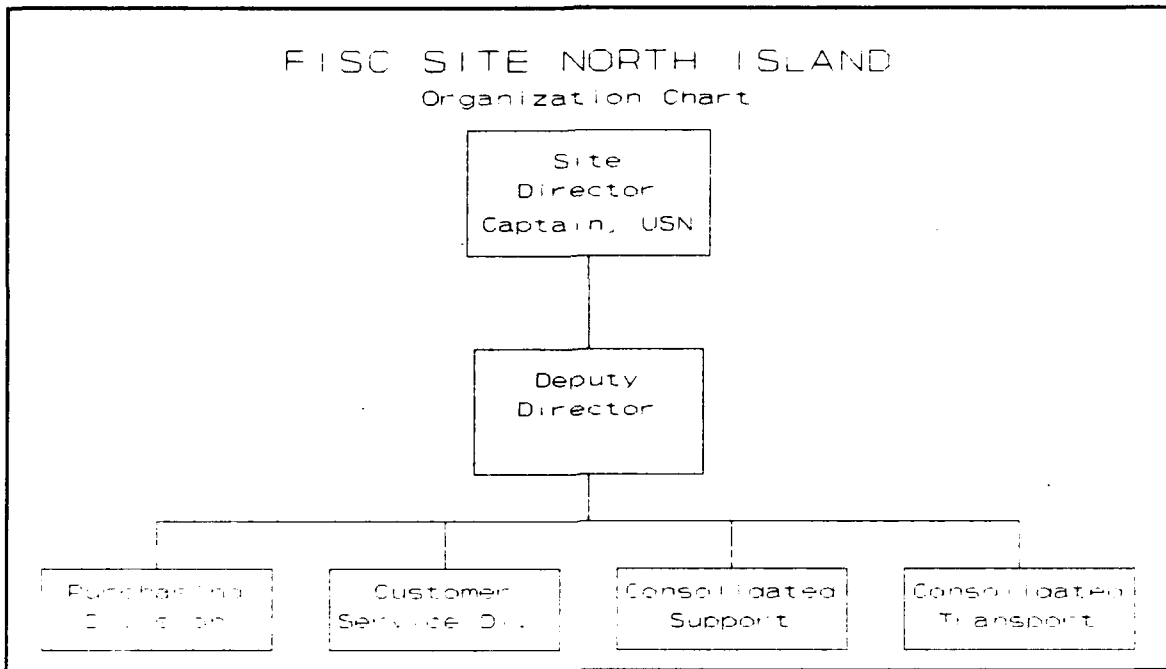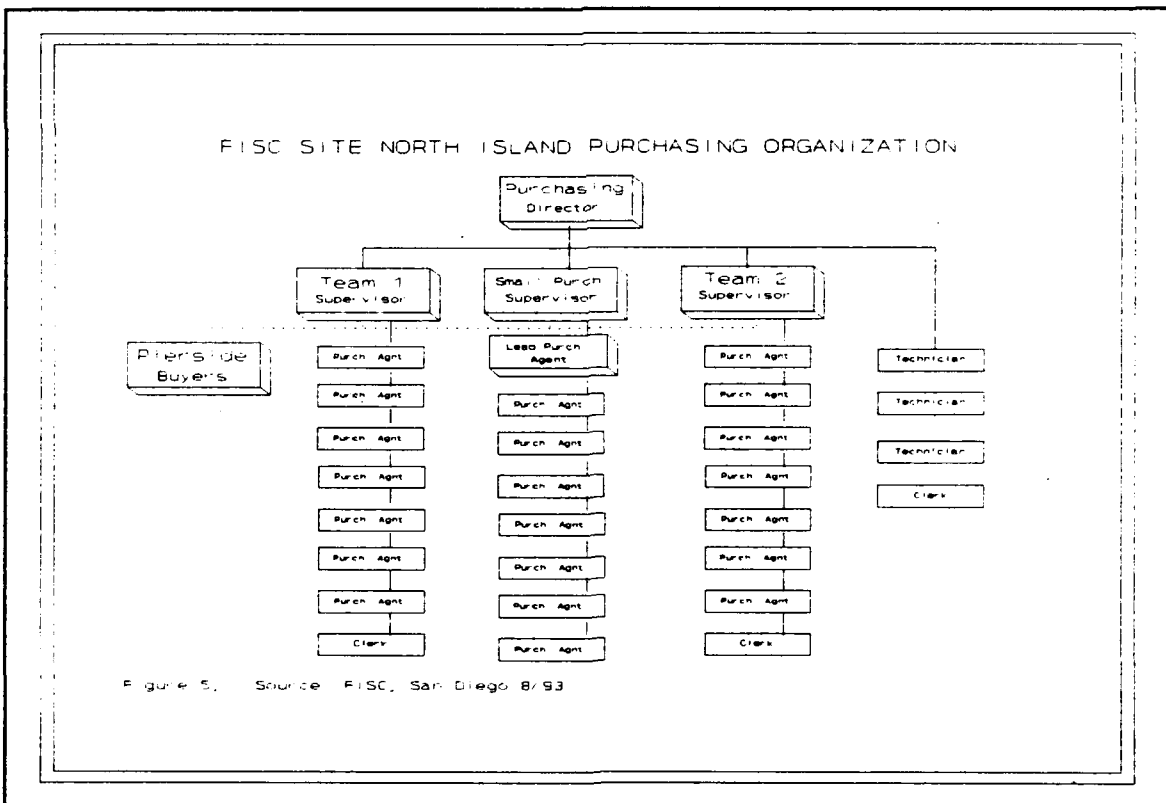
Figure 4

Figure 5

The Site Purchasing Director is an administrative head with no procurement authority and generally has little or no procurement background. For administrative matters, including customer inquires, the Purchasing Director reports to the Deputy Director or the Site Director depending on whom has addressed the issue for action. Matters concerning procurement policy are usually addressed directly to Code P unless the FISC Site hierarchy has become involved. The Deputy Director for the FISC Site reports to the FISC Site Director. Neither the FISC Site Director nor Deputy Director is required to have previous purchasing experience.

Individual purchasing supervisors report to the purchasing director as their administrative supervisor. For questions concerning policy they report directly to Code P. As such, responsibility for procurement lies solely within the authority of the supervisors and buyers who prepare purchase orders.

E.   FISC SITE NAVAL STATION ORGANIZATION

The Structure. As with FISC Site North Island, FISC Site Naval Station is a hierarchial organization with a Director and Deputy in charge (see Figure 6). FISC Site Naval Station has developed from the dismemberment of what used to be the Naval Station Supply Center. The FISC Site Naval Station's purchasing division's organization is presented in Figure 7.
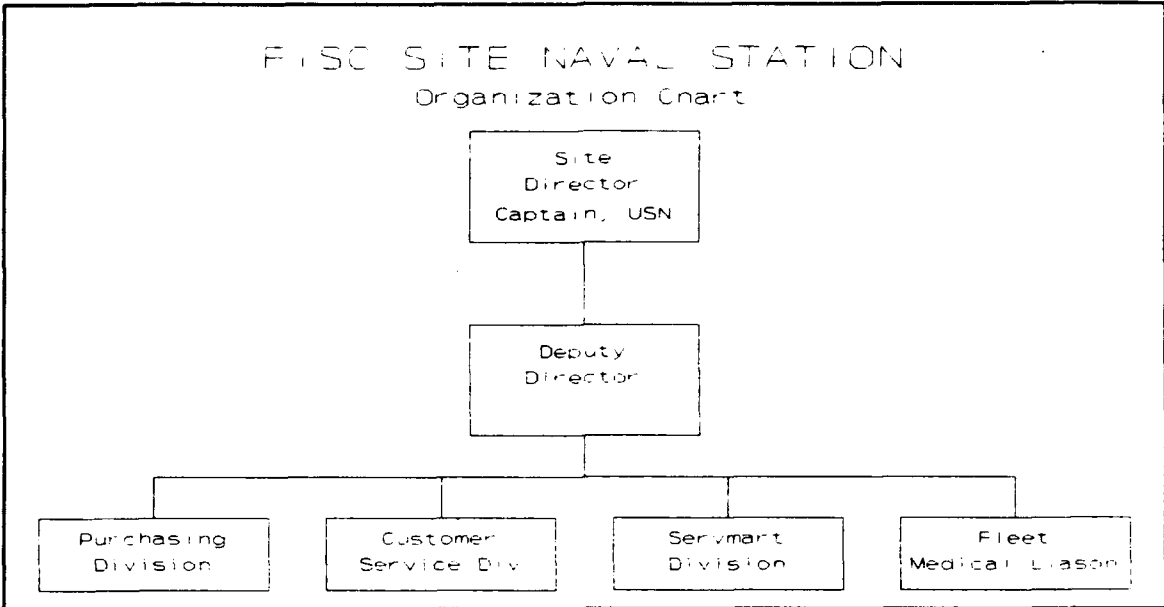
Figure 6
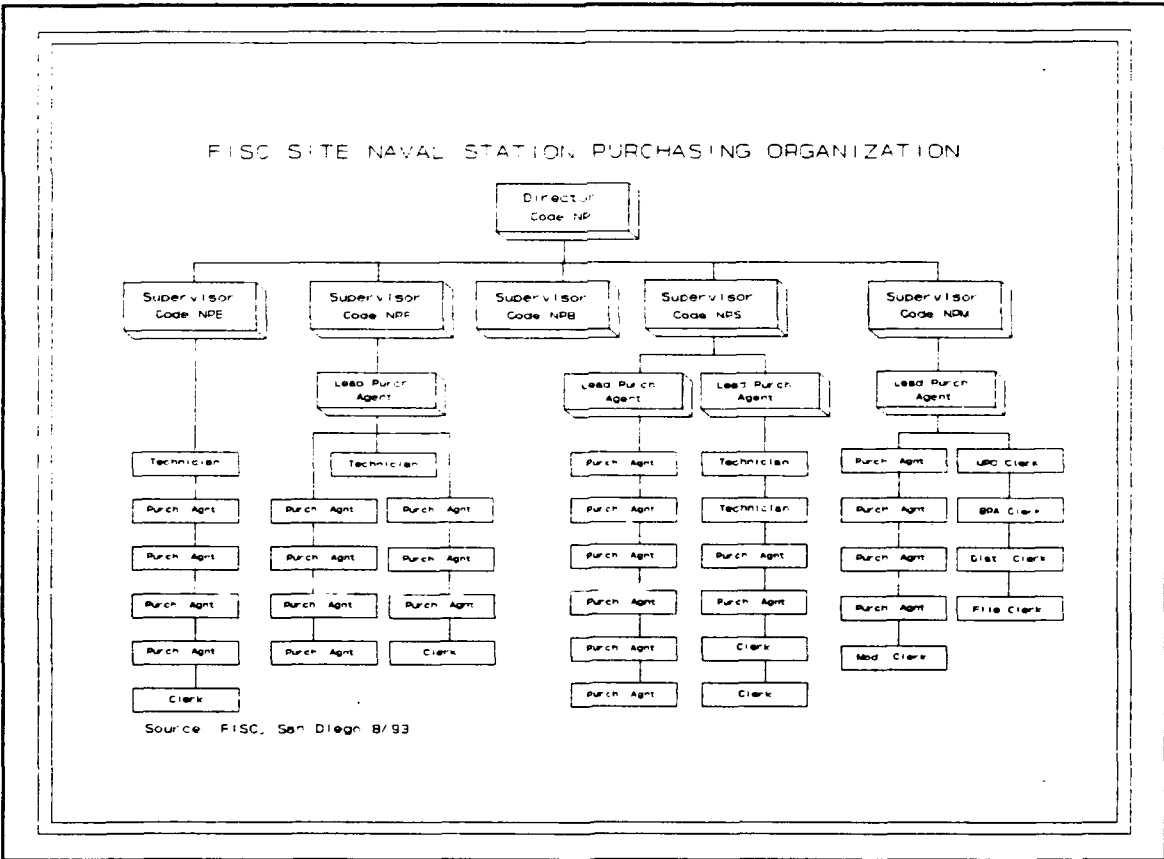
Figure 7

Reporting Requirements. As with North Island the reporting relationships of purchasing division personnel are divided depending on the subject matter being discussed. Matters of a general administrative nature (personnel movements, reports, etc.) move through one chain of command, while matters concerning procurement and procurement policy move through another.

The Naval Station FISC Site Purchasing Director is the administrative head of the purchasing division reporting to the FISC Site Deputy Director. The Site Deputy Director reports to the Director of the FISC Site. Purchasing supervisors report to the Purchasing Director for administrative matters only. Responsibility for procurement lies solely within the authority of the supervisors, lead buyers and the buyers who prepare the purchase orders.

F. SUBSIDIARY RESEARCH QUESTIONS

The subsidiary research questions are addressed in turn in the following sections. Data from the completed interviews are analyzed to formulate an answer to the research questions. The subsidiary research questions as discussed in the introduction, Chapter I, are: 1. Does the formal structure mirror the informal structure? If not, what changes are suggested? 2. Are there redundancies in functions or processes? If so, what changes are suggested? 3. Are the reporting relationships

efficient? If not, what changes are suggested? 4. Are the coordination mechanisms efficient? If not, what changes are suggested?

G.   ANALYSIS OF THE FORMAL ORGANIZATIONAL STRUCTURE

The first subsidiary question, "Does the formal structure mirror the informal structure?", deals with the analysis of an informal structure, if one exists. Two methods were used to examine this question. The first method was direct questioning (questions one and two); the second method was the organizational chart exercise, as discussed below.

The Interview Questions. Questions one and two of the interview questionnaire were designed to examine the interviewee's reporting relationships. In particular, whether the daily working relationships of purchasing personnel match the formal organizational chart. If upon examination they did not match, the relationships that did emerge would help identify the existence and nature of an informal organizational structure. If the informal organization is detrimental to the organization, this information could be used to redesign the structure.

Question one was: "Think back over the past several weeks, consider all the persons w   are working under you. Please list the persons with whom you spent the most time on a business basis. With which one have you spent the next most

time and so on? What is the general kind of business you conduct with each of the persons you have named above?"

Question two differs from question one in that it asks the interviewee to consider those persons outside their supervisory responsibility or chain of command. The question was: "Now, let's consider everybody in the entire organization, regardless of their position or title, who are not working under your supervision. Considering all of these people who are not your subordinates, please list the persons with whom you spent the most time on a business basis. With which one have you spent the next most time and so on? What is the general kind of business you conduct with each of the persons you have named above?" This question's purpose was to identify personnel outside the organization for possible inclusion in an informal organizational structure.

Questions one and two were provided to the interviewee two or three days before the interview, because it would likely take more time to complete these questions than was allowed for the interview.

Having previously listed the names of people with whom the interviewee spends the most time, in response to questions one and two, he/she was then asked (during the interview) to rank them together from most time spent to the least time. The responses to the question above were compared to the formal organizational chart by drawing lines showing the interaction between persons mentioned (Scott, 1956). The first two names

mentioned are charted for each interviewee and overlaid on the organizational charts (see Figures 8 and 9). Only two names are being used because use of the interviewee's entire response would cause the combined charts to be undecipherable to most readers.

The objective of this section of the interview was to obtain a list of persons with whom the interviewee spends the most time working. It was expected that most supervisors would spend more time with their immediate assistants and subordinates than with other persons. It was also expected that most non-supervisory personnel would spend most of their time with their supervisors or peers in their work group.

If these expectations prove to be correct it is surmised that the formal structure as presented on the organizational chart is a correct representation oᶜ the command structure. If however, the supervisors are spending the most time with persons other than their subordinates or the subordinates are spending the most time with persons outside their work group; these relationships could be part of an informal organization in operation. The theory regarding this method of research is that differences between the formal chart and the overlay will identify the informal organization (Scott, 1956).

Tables 2 and 3 present the information gathered from North Island and Naval Station, respectively, in response to questions one and two. Persons mentioned in the interviewee's chain of command (COC) are charted as (SB) for subordinate, (P)

for peer, (S) for supervisor, (OP) for peers outside one's COC, (OS) for supervisors outside one's COC, and (OO) for others outside one's COC. Supervisors are identified as S1, S2, etc. and non-supervisory personnel (buyers) as B1, B2, etc.

The Organization Chart. As with questions one and two, each person interviewed was given a blank organizational chart two or three days before the interview. The interviewees were requested to write their own name in the appropriate box as suggested on the chart and to write the names of their immediate superiors, their peers and subordinates in boxes as appropriate. This chart is regarded as a representation of the interviewee's perception of his or her place in the organization. Their perception may or may not have corresponded with the structure of the unit as represented by the formal organization chart (Scott, 1956).

This exercise is an attempt to compare the interviewee's "perceptions of organization" with the formal organization chart. The chart (see Figure 1, Chapter 3) when filled out may be regarded as a representation of the interviewee's perception of the structure of his/her organization. An attempt was made to relate the discrepancies discovered to the existence of an informal organization. Existence of perceptual errors alone is not conclusive evidence of an informal organization. However, this information, combined with questions one and two along with the other information gained during the interviews, was

used as a source for identification of an informal organization. Twenty-one of twenty-seven interviewees participated in this exercise.

Each instance in which the interviewee's perception of the organization structure failed to correspond with the structure as represented by the formal chart was regarded as a perceptual error. Perceptual errors can occur in several ways such as omissions, omitting superiors or subordinates, unit errors, naming persons outside their chain of command, and echelon errors, which is incorrectly identifying persons as superiors or subordinates (Scott, 1956).

Tables 4 and 5 were prepared to show each individual's perception of his/her own hierarchical relationships to other members of the organization. These perceived relationships were compared to the formal organizational chart and discrepancies and omissions were identified. The following symbols were used to show the perceived hierarchical relationships and discrepancies.

- H - Persons respondent correctly shows as superior to himself or herself (Higher).

- P - Persons respondent correctly shows as being on the same organizational level as himself or herself (Peers).

- L - Persons respondent correctly reports as subordinates (Lower).

- * - Persons respondent incorrectly identifies as subordinates.

- O - Persons omitted by respondent.

- X - Persons respondent incorrectly identifies as peers.

The names of the interviewees are not used in the tables for reasons of anonymity. Each interviewee was asked to identify two or more supervisors senior to their position. These are identified on the tables as S1 and S2. Next they were asked to identify three or more peers. These are shown on the tables as P1, P2, and P3. Lastly they were to identify four or more subordinates shown as L1, L2, etc.

North Island responses. There are five supervisory positions at FISC Site North Island purchasing, however, only four supervisory personnel participated in this study. The four supervisors' responses and four of the nine non-supervisory personnel responses were useful for this part of the study. Five non-supervisors did not prepare responses to questions one and two in advance as requested. Due to the time limitation of the scheduled interviews, they were not able to respond to these issues during the interview.

Table 2 confirms that, at FISC Site North Island, supervisors generally spend the majority of their time advising and supervising their subordinates. However, three of four non-supervisory personnel indicated that they routinely use persons other than their supervisor as sources for professional advice. All but one interviewee indicated that at least some of their time is spent getting or giving work related assistance to/from persons outside their chain of command.

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Twelve of thirteen persons interviewed at North Island volunteered during the interview that when seeking assistance or answers to questions their first source of information was with peers, whatever the chain of command. Comments such as "We supervisors will discuss the problem among ourselves first," and "I usually check with another buyer" were common.

North Island Organization Chart Responses. Nine of thirteen persons from FISC Site North Island participated in the organizational chart exercise. Their responses are shown in Table 4. Of the nine North Island participants in this exercise, six persons correctly identified their immediate superiors, peers and subordinates. Three persons' responses contained discrepancies when compared to the formal organization chart. The most common discrepancy was incorrect identification of peers and subordinates and twice the correct supervisor was omitted.

Naval Station responses. At FISC Site Naval Station the data gathered from questions one and two were similar to that from North Island (see Table 3). Interviewees indicated that the bulk of their business related contacts were with supervisors and peers in their chain of command. However, they reported having numerous business meetings weekly with peers and supervisors outside their chain of command. The instances of contacts with other personnel shown in Table 3 were with contractors and customers.

Naval Station Organization Chart Responses. Twelve persons from FISC Site Naval Station participated in the organizational chart exercise. Their responses are shown in Table 5. Seven of twelve interviewees at Naval Station could correctly identify immediate superiors, peers and subordinates. Five persons were not able to correctly identify their entire chain of command. However, the only discrepancy noted was omission of one or more persons in the chain of command. The organizational chart exercise establishes that, other than a few omissions, Naval Station buyers have an excellent understanding of their chain of command.
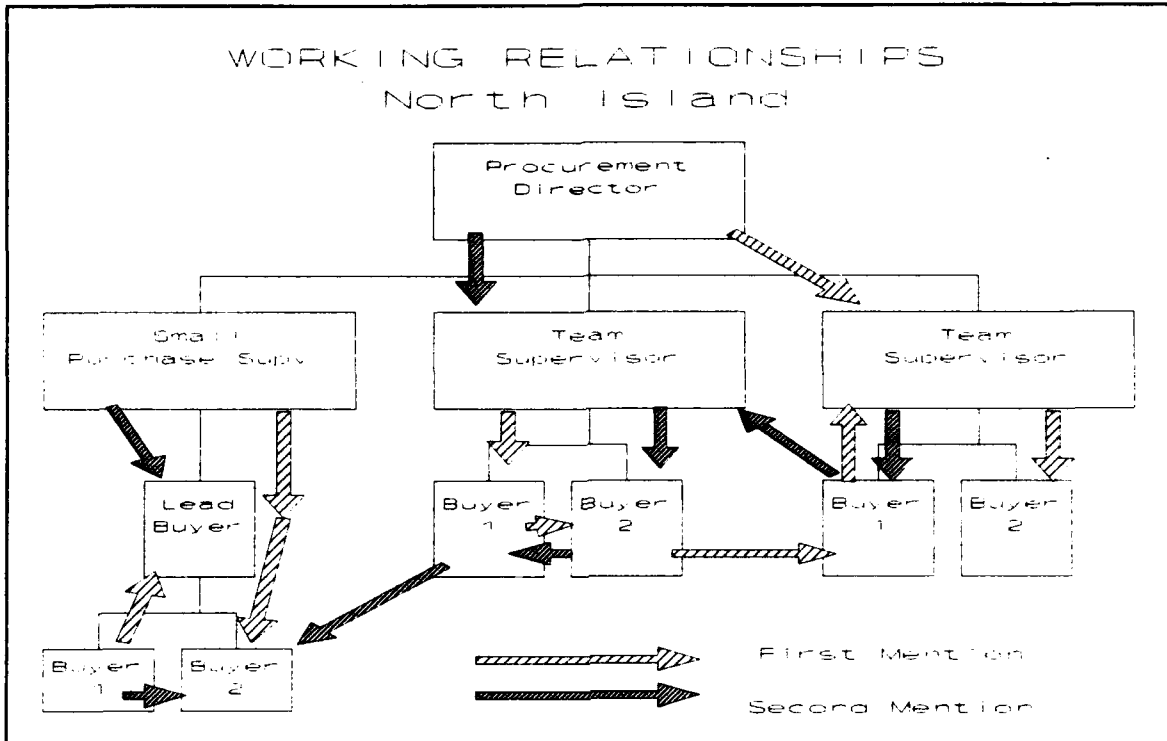
Figure 8
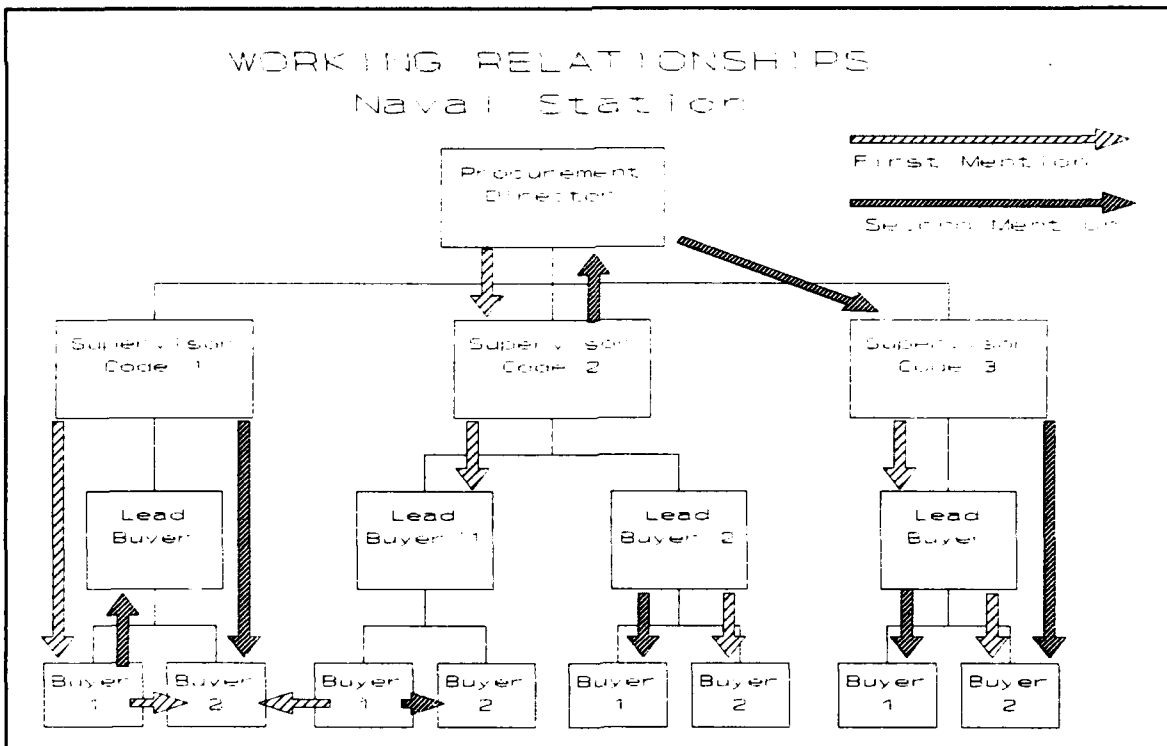
Figure 9

Table 2   **NORTH ISLAND INTERVIEWEES**

Response	S1	S2	S3	S4	B1	B2	B3	B4
1	SB	SB	SB	SB	S	P	S	OP
2	SB	SB	SB	SB	P	OP	OS	P
3	SB	SB	SB	SB	P	S	OS	P
4	OP	SB	SB	SB	P	P	P	OS
5	OP	OP	SB	SB	P	OS	P	S
6		OP	OP	S			OS	
7			OP	S				
8			S					

Code: SB=Subordinate; P=Peer; S=Supervisor; OP=Peers outside one's COC; OS=Supervisors outside one's COC; OO=Others outside one's COC; S1, S2, etc.=Supervisors; B1, B2, etc.=Buyers

Table 3   **NAVAL STATION INTERVIEWEES**

Response	S1	S2	S3	S4	S5	S6	B1	B2
1	SB	S	SB	SB	SB	SB	P	P
2	SB	SB	SB	SB	SB	SB	S	OP
3	OS	SB	S	SB	OO	SB	OO	S
4	OP	OP		SB	OP	S	OO	OS
5	SB	OO		S		SB	S	OO
6	SB	OO				OO	OP	
7	S					SB		
8	OO					SB		

Code: SB=Subordinate; P=Peer; S=Supervisor; OP=Peers outside one's COC; OS=Supervisors outside one's COC; OO=Others outside one's COC; S1, S2, etc.=Supervisors; B1, B2, etc.=Buyers

Table 4 **NORTH ISLAND INTERVIEWEES**

	Respondents perceived relationship to:								
	S1	S2	P1	P2	P3	L1	L2	L3	L4
R1	H	H	P	P	P	L	L	L	L
R2	H	H	P	P	X	L	L	L	L
R3	H	H	P	P		L	L	L	L
R4	H	H	P	P		L	L	L	L
R5	H	O	X	P	P	X	X	X	X
R6	H	H	P	P	P				
R7	H	H	P	P	P				
R8	H	H	P	P	P				
R9	H	O	X	X	X	*			

Code: S1=Supervisor 1; P1=Peer 1; L1=Subordinate 1; R1=Response 1, etc., H=Superior; P=Peer; L=Subordinate; O=Omission; X=Incorrect peer; *=Incorrect subordinate.

Table 5 **NAVAL STATION INTERVIEWEES**

	Respondents perceived relationship to:								
	S1	S2	P1	P2	P3	L1	L2	L3	L4
R1	H	O	P	P	O	L	L	L	L
R2	H	H	O	O	O	L	L	L	L
R3	H	O	P	P	P	L	L	L	L
R4	H	H	P	P		L	L	L	L
R5	H	O	O	O	O	L	L	L	L
R6	H	H	P	P	P	L	L	L	L
R7	H	H	P	P	P	L	L	L	L
R8	H	H	P	P	P				
R9	H	H	P	P	P				
R10	H	O	P	P	P				
R11	H	H	P	P	P				
R12	H	H	P	P	P				

Code: S1=Supervisor 1; P1=Peer 1; L1=Subordinate 1; R1=Response 1, etc., H=Superior; P=Peer; L=Subordinate; O=Omission; X=Incorrect peer; *=Incorrect subordinate

The Analysis. The data presented above suggest that the organization as perceived by its members differs from the organization as formally defined. A comparison of the formal

organizational charts with the answers to questions one and two confirms the existence of informal organizational structures at both North Island and Naval Station. This information is not surprising as the fact that informal organizations exist within formal organizations has been known and studied for sometime (Scott, 1956). What the organizational chart exercise demonstrated was that other than a few minor discrepancies of omission and one totally confused individual at North Island most interviewees have an excellent comprehension of their chain of command. This exercise proves that the interviewees have a strong understanding of the command's formal organization.

Answer to Subsidiary Research Question One. The answer to the subsidiary research question, **"Does the formal structure mirror the informal structure? If not, what changes are suggested?"** is that informal structures exist at both North Island and Naval Station FISC Sites. However, the information provided during the interviews suggest that the informal organizations that exist at Naval Station and North Island improve the efficiency of those organizations by expanding the purchasing agent's source of information and professional assistance. This was shown by buyers seeking information and assistance at the lowest levels available. Additionally, work related problems are solved within peer groups and are seldom elevated to higher levels. Working within peer groups is an accepted and desirable practice and is the first step toward

the formation of self-directed work groups (Galbraith, 1993).
No changes are suggested at this time. The informal
organizational structure is beneficial to the organizational
structure recommended in the final chapter.

H. ANALYSIS OF PURCHASING'S FUNCTIONS AND PROCESSES

Subsidiary question two asks: "Are there redundancies in
functions or processes? If so, what changes are suggested?"
In particular, the second subsidiary question deals with
redundancies in the submission of purchase orders for approval,
as this is where the functions and responsibilities of the
buyer and supervisor converge and redundancy might occur.

The Interview Questions. Questions four through seven were
designed to identify the amount of responsibility given to
personnel in the preparation of their work. Answers to these
questions will identify areas of redundancy in the
organizational structure in addition to inefficiencies in the
organization pertaining to accountability.

Question four was: "When completing a purchase order do you
sign the order as the contracting officer?" Question five was:
"When completing correspondence do you sign the
correspondence?" Questions four and five are answered on a
subjective scale (referred to in the remainder of this chapter
as the six interval scale) with possible answers in declining
order being always, often, occasionally, seldom, never or not
applicable (Miller, 1970). The purpose of these questions was

to find to what extent the interviewee's work was examined by other individuals. The questions referred to purchase orders and correspondence. This was thought to be the bulk of the purchasing agent's (and his/her supervisor's) work.

Question six was: "If other persons are required to sign your completed work, please list them from your signature to final signature. Indicate if the signature is for approval or if the person signing sees the document for information only." The answers to this question were compared to the formal organizational chart for possible redundancies. Question six is meant to identify, by name, the persons responsible for reviewing and signing the purchasing agent's work. Additionally, the reason the person reviews the work, informational or approval, was asked as a means of determining if nonessential reviews could be identified as redundancies.

Question seven was "Do you think this process could be improved? If yes, how?" Responses to this question were evaluated as positive or negative. Question seven was a companion to question six as it was designed to measure the participant's general perception of the chain of approval structure.

North Island Responses. In response to question four, except for the Purchasing Director and one non-supervisory clerk, all supervisory personnel answered "always" and all non-supervisory personnel answered "never." The Purchasing Director and the clerk answered "not applicable" to question

four as they neither prepare nor sign purchase orders. The researcher found that at North Island supervisors are responsible for signing all purchase orders that are not covered under a Blanket Purchase Agreement or Imprest Fund.

All tne responses to question five were "always," with the exception of one supervisor and one non-supervisor who answered "not applicable," as correspondence by buyers and supervisors is considered informal. Responses to questions four and five are reported in Table 6 separately for supervisory and non-supervisory personnel for comparison purposes.

Table 6   **NORTH ISLAND RESPONSES TO QUESTIONS 4 & 5**

Question 4	always	often	occasion-ally	seldom	never	NA
Supervisors	3					1
Non-supervisors				2	6	1
Question 5						
Supervisors	3					1
Non-supervisors	8					1

Responses to question six, by the eight non-supervisory and three supervisory personnel involved in procurement, show that there are no persons outside the formal organizational chain of command involved in the process, as supervisory personnel are the only persons authorized to sign and release purchase orders.

Of the thirteen responses to question seven, twelve were positive (the process could be improved) and one negative (no improvement needed). From discussions with the interviewees the researcher learned that seven of nine non-supervisory personnel felt signature authority for purchase orders should be given to the buyers. Four supervisors interviewed also felt that signature authority should be given to the buyers. The two other non-supervisory personnel had no suggestions.

Naval Station Responses. In response to question four, about signature authority, eight purchasing agents and four supervisors interviewed answered "always." During discussions, the researcher learned that at Naval Station all but two of the interviewees have warrants to sign purchase orders they prepare. One buyer in training has not yet received a warrant and the Purchasing Director does not prepare purchase orders. Two purchasing agents indicated that occasionally they were asked to prepare purchase orders that were above their authority to sign. These orders were then submitted to their supervisors for signature.

As with North Island, all responses to question five were "always" as correspondence prepared by buyers and supervisors are considered informal. Naval Station responses to questions four and five are shown in Table 7. Supervisory and non-supervisory personnel responses are shown separately for comparison purposes.

Due to the fact that each buyer signs his or her own
purchase orders and correspondence, question six (regarding
other persons' signatures) was redundant and no answers were
required or given.

There were seven positive responses (the process could be
improved) to question seven. The other seven interviewees felt
the question did not apply or had no opinion. Of those that
did reply the general feeling was that purchasing agents should
be given greater warrants to increase their purchase authority
thereby increasing their productivity.

Table 7   **NAVAL STATION RESPONSES TO QUESTIONS 4 & 5**

Question 4	always	often	occasion-ally	seldom	never	NA
Supervisors	4					1
Non-supervisors	8				1	
Question 5						
Supervisors	5					
Non-supervisors	9					

The Analysis. In question four the interviewees were asked
about whom had signature authority for completed purchase
orders. The information gathered at North Island revealed that
supervisors are responsible for signing most of the purchase
orders prepared by their subordinates. From comments made by
those supervisors, it was learned that 50% of their time was

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spent reviewing and releasing the buyers' work. In the question asking for suggestions to improve the process, all but one of the buyers responsible for preparing purchase orders said that they would like to have authority (a warrant) to release their own procurement documents. Supervisors agree that the buyers are proficient purchasing agents and should be granted signature authority.

The next question asked about whom had signature authority for correspondence prepared by the interviewees. The answers revealed that neither buyers nor supervisors prepared correspondence that was considered formal (command to command) requiring signature authority above that of the person preparing the document. As everyone seemed satisfied with these procedures no changes are suggested.

In response to question six the eight buyers interviewed at North Island listed only their supervisors as persons signing their purchase orders. No Naval Station answers were recorded for the reason given previously.

In regard to question seven, eleven North Island and seven Naval Station interviewees answered that they felt improvements in the signature authority process could be made. Information gathered at FISC Site Naval Station reveals that the process of purchase order approval is different from that practiced at North Island in that all but one buyer in training has a warrant to sign the purchase orders they prepare. In the suggestions for improvement section of the question, some

purchasing agents (buyers) suggested they would like to see the authority of their warrants increased. The purchasing agents felt they were ready for increased responsibilities. Also noted at Naval Station the supervisors helped relieve their subordinates workload by preparing purchase orders of their own. The researcher believes this is possible because the supervisors at Naval Station have more time as they uon't review their subordinates completed work.

It has been shown at FISC Site Naval Station that the requirement for supervisors to review and sign the purchasing agent's work is an unnecessary and time consuming requirement. In the researcher's opinion, warrants and responsibility for release of purchase orders should be authorized to qualified personnel at the lowest levels.

Answer to Subsidiary Research Question Two. In response to the subsidiary question: **"Are there redundancies in functions or processes? If so, what changes are suggested?"** the most obvious redundancy is the process of having North Island buyers submitting purchase orders to their supervisors for signature. It is suggested that FISC Site North Island review their procedures concerning purchase order approval and issuing warrants.

I. ANALYSIS OF REPORTING RELATIONSHIPS

Subsidiary question number three asks about the reporting relationships of the interviewees at FISC Site North Island and

FISC Site Naval Station. Subsidiary question three is: "Are the reporting relationships efficient? If not, what changes are suggested?" Questions eight through eleven of the interview questionnaire were designed to examine how the interviewees felt about the efficiency of the command structure by studying the interaction between the interviewees and their supervisors.

The Interview Questions. Question eight is used to evaluate to what extent the interviewees feel they are working for more than one boss. The question asked was: "To what extent do you feel that you are working for more than one boss?" Answers were recorded on the six interval scale. The purpose of this question is to learn to what extent the interviewees felt that the organizational structure allowed dual supervision. Employees often become frustrated and confused when they perceive that they are working for more than one supervisor. An organization that is structured to allow dual or fuzzy lines of authority is an inefficient organization (Gabarro, 1992).

Question nine asks the interviewee to name the person whom he or she seeks out when requiring professional work-related help. The question was: "When seeking answers to questions concerning the performance of your professional duties from whom do you usually seek assistance for technical issues?" Answers to this question were compared with the organizational chart to determine where the interviewees commonly sought assistance. The objective of this question was to obtain the

name or title of the person or persons with whom the interviewee seeks assistance in the professional performance of his or her duties. The researcher believes that most personnel would normally seek assistance from their immediate supervisors or as in the case of FISC, Code P personnel. This assumption was made because within military organizations it is commonly the supervisor's responsibility to help and advise subordinates in the performance of their professional duties. As was shown in Table 1, Code P shares this responsibility as a source of professional assistance for purchasing personnel. If responses revealed that the interviewees sought assistance from their supervisors or Code P personnel most of the time, this was taken as an indicator that the current structure was efficient as a source of professional assistance.

Questions ten and eleven were designed to elicit a response as to the interviewee's perception as to the existence of barriers prohibiting free access to their chain of command. Question ten as asked was: "Does the current structure of your chain of command allow you enough access to your supervisor? If not, explain." Question eleven was: "Does the command structure allow you access to persons above your supervisor if required? If not, explain." The interviewees could respond with either a yes or no answer. The purpose of these questions was to determine the structure's efficiency in allowing contact with personnel up the chain of command, as required.

North Island Responses. Responses to question eight from the North Island interviewees regarding their perception as to working for more than one boss are presented in Table 8. Supervisors and non-supervisors are displayed separately for comparison purposes. The number and percentage of responses in each category are as follows: five persons (38%) indicated that they "always" felt like they worked for more than one boss. Two responses (15%) were "often" and three responses (23%) were "occasionally." Two persons (15%) answered that they never felt like they worked for more than one boss and one person (8%) answered "NA" as he felt he didn't have a boss.

Table 8   **NORTH ISLAND RESPONSES TO QUESTION 8**

Question 8	always	often	occasion- ally	seldom	never	NA
Supervisors	3		1			
Non- supervisors	2	2	2		2	1

The data show that a number of persons at North Island feel they work, at least occasionally, for more than one boss. From the discussions, the interviewees indicated that they often sought assistance and received guidance from supervisors other than their own, when their supervisors were not available. Additionally, the personnel at North Island had a solid

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understanding of Code P's presence in their chain of command and felt that they received conflicting guidance from their operational and administrative chain of commands.

Question nine asks the interviewee to name his or her usual source of technical assistance. Twelve persons indicated that they usually sought assistance from their supervisors or peers first. One technician said, there were no sources for assistance in his line of work, so he was self-reliant. Four supervisory personnel and one non-supervisory person indicated that their second source of information was either Code P or the Navy Regional Contracting Center, PMR Team. Their choice of which of these second sources to use depended upon where they thought they might get the best answer. From the discussion with the interviewees the researcher found that two people were not satisfied with the technical expertise of their supervisors. Additionally, two people expressed a desire for a senior contracting officer to act as the resident expert.

Questions ten and eleven asked about the interviewee's perception of access to persons senior in the chain of command. Of the thirteen responses to these questions, all interviewees answered yes to both questions. The interviewees' discussions with the researcher on these questions showed that there is an "open door" policy to supervisors and persons in the chain of command above their supervisors.

Naval Station Responses. Responses to question eight from the Naval Station interviewees regarding their perceptions as

to working for more than one boss are presented in Table 9. As with North Island, supervisors' and non-supervisors' responses are displayed separately for comparison purposes. There were fourteen responses at Naval Station of which two persons (14%) indicated that they "always" felt like they worked for more than one boss. Two persons (14%) responded "often" and another two (14%) "occasionally." Three persons (21%) answered "seldom" and the remaining five persons (35%) felt that they never worked for more than one boss.

Table 9   **NAVAL STATION RESPONSES TO QUESTION 8**

Question 8	always	often	occasion-ally	seldom	never	NA
Supervisors				2	3	
Non-supervisors	2	2	2	3		

Through discussions with the interviewees at Naval Station, it was determined that Naval Station purchasing agents feel less pressured by dual supervision because they have warrants to sign their own purchase orders and are less likely to seek assistance from a supervisor. Additionally, Naval Station personnel did not perceive Code P as a source of dual supervisor as they were not as aware of Code P's charter to provide policy guidance as were the interviewees at North Island.

Of the fourteen responses to question nine, twelve persons answered that they usually sought the assistance of their supervisors or peers first. One supervisor said that she sought outside help (PMR team, Legal) first and another supervisor stated that he never requires help. Two of the interviewees responded that they would seek secondary assistance outside their command. Their second source of information was either Code P or the Navy Regional Contracting Center, PMR Team. Only one person at Naval Station expressed a desire for a resident senior contracting officer.

As at North Island, responses to questions ten and eleven concerning access to the chain of command, all interviewees answered yes to both questions suggesting that there is sufficient access to their supervisors in the chain of command.

The Analysis. When asked about the extent that they felt they were working for more than one boss, 83 percent of the interviewees at North Island answered with an "occasionally" or above. At Naval Station only 42 percent answered "occasionally" or above. There is a definite perception, among the interviewees at North Island, that they are subject to dual supervision. In the researcher's opinion, these employees' perceptions stem from the inability of purchasing agents to sign their own work. Additionally, personnel are not as aware of Code P's responsibilities or authority as it pertains to them. This is a source of uneasiness, caused in part by the current organizational structure.

The conclusion drawn from responses to question nine is that the current structure is efficient in providing technical assistance to its personnel. However, due to the number of responses concerning use of the PMR team it appears that there is a minor reliance on local outside sources for information that is not easily obtained within the command. Also, the requests for a senior contracting officer to act as the resident expert demonstrates that apprehension about the expertise of some supervisors exists. From the discussion about an informal organization structure, the researcher believes that any short-comings in the supervisor's abilities are made up through use of the informal organizational structure identified earlier.

Responses to questions ten and eleven suggest that there is sufficient access to persons senior in the chain of command at both activities.

Answer to Subsidiary Research Question Three. In response to the subsidiary question: **"Are the reporting relationships efficient? If not, what changes are suggested?"**, the data show that there are definite problems with the perception of dual supervision and to a lesser extent a problem with the availability of supervisory assistance. Some suggestions for improvements made by the interviewees were: "Grant warrants to all qualified buyers and disperse Code P personnel to the Sites to act as the resident experts."

J. COORDINATING MECHANISM EFFICIENCIES

The final subsidiary question dealt with the perceived efficiency of the command's coordination mechanisms, in particular, Code P. Subsidiary question four is: "Are the coordination mechanisms efficient? If not, what changes are suggested?" There were eight questions asked during the interviews that dealt with various aspects of the FISC's coordinating mechanisms. The coordinating aspects examined are: information flow, training, relationships, and efficiency.

The Interview Questions. Questions twelve through nineteen were designed to extract information as to the efficiency of the command's coordinating mechanisms. At FISC San Diego the main coordinating mechanism is Procurement Management, Code P. The questions and answers are categorized and discussed according to the aspects of coordination identified above.

Coordinating Mechanisms (Information Flow). Questions twelve and thirteen determine if the participants are aware of the cc and's method for routing information. Additionally, the questions solicit the interviewees' perception as to the amount of important information they are receiving. Question twelve asked: "How is information from FISC Headquarters, Code P, and central commands (e.g. NAVSUP, DOD, SECNAV, etc.) routed to you?" The Purchasing Director's response was used as the base to judge the other interviewees' responses. Answers different from the Director's were believed to be a reflection of an unawareness of the information flow process. In the

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researcher's opinion, a lack of awareness of the information flow process is an indicator of inefficient coordinating mechanisms. Persons not knowledgeable of the information flow process are restricted in their ability to seek out required information.

Responses different from the base were considered negative responses to question twelve. Answers the same or similar to the base response were considered positive responses. Responses were judged similar if the interviewee could describe the base process using different terminology.

Question thirteen was: "To what extent do you receive needed information on important changes in the professional/technical aspects of your work? What suggestions can you offer for improving this process?" Answers to question thirteen are recorded on the six interval scale described in question four. This question was used to determine the perceived access or lack of access to needed information. Additionally, suggestions for improving the process were solicited. Table 10 presents the total number of responses in each category. North Island and Naval Station responses are presented in the same table for comparison purposes.

North Island Responses. Twelve persons besides the Purchasing Director responded to question twelve at FISC Site North Island. All twelve responses were judged to be the same or similar to the base response provided by the Purchasing Director.

Of the thirteen responses to question thirteen, two persons (15%) answered that they "always" felt they received needed information. Five persons (38%) responded "often" and three (23%) responded "occasionally." Three persons (23%) answered that they seldom received needed information.

Naval Station Responses. As at North Island the thirteen responses to question twelve were compared to the Naval Station's Purchasing Director. Again all thirteen responses were judged the same or similar to the base response.

Fourteen responses were recorded to question thirteen at Naval Station. Four persons (29%) answered that they "always" felt they received needed information. Seven persons (50%) responded "often" and three responded (21%) "occasionally."

Table 10   **RESPONSES TO QUESTION 13**

Question 13	always	often	occasion-ally	seldom	never	NA
North Island	2	5	3	3		
Naval Station	4	7	3			

The Analysis. The first aspect of the coordinating mechanism to be examined was the information flow process. The researcher believes that personnel aware of the latest changes or impending changes in their work process and environment will be more efficient and productive. The first two questions of

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this section attempt to discover the efficiency of FISC's information routing process. When the interviewees were asked if they knew how information from FISC Headquarters, Code P, and central commands is routed to them, all of the interviewees from both sites displayed a thorough knowledge of routing procedures. The conclusion drawn from this information and from responses given during the interview is that personnel are interested in receiving as much information as quickly as possible.

When asked to what extent they felt that they received all the information needed on important changes in the professional and technical aspects of their work the responses were conflicting. At FISC Site North Island only 15% of those interviewed answered that they "always" felt they received needed information. Thirty-eight responded "often," 23% responded "occasionally," and 23% felt they seldom received needed information.

The results at FISC Site Naval Station were more positive in that 29% of the interviewees felt they "always" received needed information, 50% responded "often" and 21% answered "occasionally." When asked to elaborate on their responses, the interviewees were more satisfied with the efficiency of the routing system than the percentages suggest. The confusion lay in the interviewees' inability to separate the routing of general information from the independent routing system for professional information.

In conclusion, all of the interviewees are knowledgeable of the FISC's information routing system and most persons interviewed were satisfied with the professional information they receive. In the researcher's opinion, this is clearly an endorsement of the efficiency of the current information flow process. Three persons suggested the use of a Local Area Network (LAN) for increasing the command's ability to pass professional and general information more quickly and efficiently.

Coordinating Mechanisms (Training). Questions fourteen and sixteen are designed to measure the perceived and actual extent of training conducted. Question fourteen asks the interviewee for his or her perception as to the extent of training they receive on important topics. Question fourteen was: "To what extent is training conducted on important changes in procedures regarding your work. What suggestions can you offer for improving this process?" The six interval scale was used to record answers to this question. The intent of this question is to measure the efficiency of Code P's coordinating activities pertaining to training.

Question sixteen asks the interviewees to name the latest formal in-house training sessions he/she could remember. The question asked was "List the five most recent in-house training sessions completed and the year you attended." Responses to this question required the interviewee to remember the topics taught. These responses were used to validate the answers

given to question fourteen by testing the interviewee's ability to recall the training received.

North Island responses. The following are the results of answers to question fourteen from North Island. Of the thirteen responses to this question one person (8%) answered "often." Two persons (15%) answered "occasionally" and ten persons (77%) felt that they "seldom" received training on important changes regarding their work (see table 11).

The following responses to question sixteen were recorded. Three persons (23%) were unable to name even one training course they received in the last year. Two persons (15%) could name one training session, two persons (15%) named two training sessions, and three persons (23%) could name three training sessions. Two persons (15%) could name four training sessions they attended and only one person (8%) could name five training sessions.

The researcher contacted the Code P procurement analyst to learn that three training sessions had been conducted by Code P in the past year. From responses provided by the interviewees, it was learned that in-house training, other than the three conducted by Code P, was given by and at the supervisor's discretion.

Naval Station Responses. Of the fourteen persons responding to question fourteen at Naval Station, one person (7%) answered "always." Six persons (42%) answered "often." Three persons (21%) felt that they "occasionally" received

training on important changes regarding their work. Three persons (21%) answered "seldom" and one person (7%) answered "never." Table 11 combines the responses from North Island and Naval Station for comparison purposes.

The fourteen interviewees at Naval Station answered question sixteen in the following manner. One person (7%) could name only one training course received in the last year. Three persons (21%) could name two training sessions, two persons (14%) named four sessions, and three persons (21%) could name five training sessions. Five persons (35%) could not name any training sessions they attended in the last year. As at North Island, Code P conducted three training sessions in the past year. Again, other in-house training was conducted by the individual supervisors.

Tables 11 and 12 present the responses to questions fourteen and sixteen, respectively, from both North Island and Naval Station for comparison purposes.

Table 11   **RESPONSES TO QUESTION 14**

Question 14	always	often	occasion-ally	seldom	never	NA
North Island		1	2	10		
Naval Station	1	6	3	3	1	

RESPONSES TO QUESTION 16

Table 12   NUMBER OF TRAINING SESSIONS NAMED

Question 16	five	four	three	two	one	none
North Island	1	2	3	2	2	3
Naval Station	3	2		3	1	5

The Analysis. Questions fourteen and sixteen examined the coordinating mechanisms as they pertain to training. When asked to what extent training was conducted on important changes in procedures regarding their work only one person at North Island answered "often." Two of the interviewees felt they "occasionally" received needed training and 76% felt that the/ "seldom" received training on important changes. The responses at FISC Site Naval Station were somewhat different. Of the fourteen persons responding to this question again only one person answered "always." However, six persons answered "often," three "occasionally," another three persons answered "seldom" and one person felt that he never received training on important issues concerning his work.

Only 8% of the interviewees at North Island and 27% of the interviewees at Naval Station felt that they always or often received training on important changes about their work. Seventy-six percent at North Island and 28% at Naval Station felt that they seldom or never received training on important changes.

Question sixteen was designed to validate the data received above. Interviewees were asked to list the course title, length and year of the five most recent in-house training sessions they attended. Of the thirteen interviewees at North Island, three were unable to name even one training course they received in the last year. Only three persons could name four or more training sessions. Of the fourteen interviewees at Naval Station, five persons could not name any training sessions they attended in the last year. While the majority of people at Naval Station felt they were receiving an adequate amount of training only 35% could name more than two training sessions they received. This appears to be a contradiction between perceptions and reality. Either the interviewees at Naval Station did not want training or the training they received was not memorable.

Eighty percent of those interviewed, who could remember having attended training, could name at least two of the three training courses conducted by Code P personnel. Personnel that had attended training given by Code P commented that the training was useful but that the instructors required better preparation. While discussing the training issues with the interviewees the researcher learned that training is not considered a high priority at either command. Personnel on leave, sick, or otherwise occupied will miss important training and there is no make-up program. Training other than that conducted by Code P was conducted by and at the discretion of

the individual supervisors and was somewhat sporadic. The data presented above lead the researcher to the conclusion that neither North Island nor Naval Station site personnel are receiving (or remembering) an adequate amount of training.

Coordinating Mechanisms (Relationships). Questions fifteen and seventeen were designed to measure the interviewees' perceptions of the amount of contact they require with the Coordinating Activity, Code P. Question fifteen asked: "To what extent do you have the contact you need with personnel from Procurement Management (Code P). What suggestions can you offer for improving this process?" Question fifteen was answered on the six interval scale.

Question seventeen was "Do you know or have written down the name and phone number of a Code P liaison?" The responses were recorded as either a yes or no. The intent of these two questions was to learn about the closeness of the relationships the interviewees were able to develop with Code P personnel.

Question seventeen didn't directly ask the interviewee to name the person with whom they communicated. However, when the question was asked all interviewees freely displayed their telephone logs and discussed their contacts with Code P personnel. The premise of questions fifteen and seventeen was that closely developed relationships would be the bases for a more efficient coordinating mechanism.

North Island Responses. There were thirteen responses to question fifteen from North Island. One person (8%) felt that

he "always" was able to contact Code P personnel when needed. Two persons (15%) answered "often" to this question. The remaining eight interviewees (62%) answered "occasionally." Two persons (15%) answered "not applicable" as they had no contact with Code P personnel. Responses to question fifteen are presented in Table 13.

The eleven interviewees who had answers other than not applicable to the last question, answered yes to question seventeen. As mentioned earlier, they freely discussed the nature of their business with Code P personnel and displayed the name(s) and number(s) of those contacts from their personal telephone logs.

Naval Station Responses. Of the fourteen responses to question fifteen at Naval Station, two persons (14%) felt that they "always" were able to contact Code P personnel when needed and four persons (28%) answered "often." Two persons (14%) answered "occasionally" and six persons (42%) answered "seldom."

In response to question seventeen, twelve interviewees answered yes and two persons answered no to this question. As at North Island, the twelve interviewees answering yes displayed the names and phone numbers of their Code P contacts and freely discussed with the researcher the nature of their business with Code P personnel. The two persons that answered no stated that they seldom or never had business concerning

Code P personnel. North Island and Naval Station responses are displayed together in Table 13 for comparison purposes.

Table 13 **RESPONSES TO QUESTION 15**

Question 15	always	often	occasion-ally	seldom	never	NA
North Island	1	2	8			2
Naval Station	2	4	2	6		

The Analysis. The third area of coordinating mechanisms examined was relationships. The intent of the two questions asked was to learn of the closeness and perceived usefulness of the contacts developed with Code P personnel. When the North Island interviewees were asked to what extent they had the contact they needed with personnel from Procurement Management (Code P), two persons had no opinion as they indicated they had no contact with Code P personnel. Of the remaining eleven persons interviewed one person responded "always," two answered "often," and eight answered "occasionally." The answers at Naval Station were slightly different in that two persons answered "always," four answered "often," two answered "occasionally" and six persons said they seldom contacted Code P personnel.

The next question asked do you know or have written down the name and phone number of a Code P liaison. Although the question didn't directly ask the interviewee to name the person

with whom they communicated, all the interviewees answered yes and freely displayed their telephone logs to the researcher.

The conclusion drawn from these data and discussions with the interviewees is that most of the interviewees at North Island and Naval Station have only a casual business relationship with Code P personnel. Those persons with Code P contacts recognize the importance of using Code P as a source of assistance, as evidenced by their having the contacts' names and numbers readily available.

Of the comments concerning improving the process the most requested improvement was to increase the availability of Code P personnel. It was noted that there is difficulty with reaching Code P personnel due to leave periods, meetings, etc. The researcher would suggest that a means to improve access (e.g., LANs) be explored.

Coordinating Mechanisms (Efficiency). Questions eighteen and nineteen were designed to elicit a yes or no response to the perceived efficiency and usefulness of the coordinating efforts of Code P. Question eighteen was: "Does this liaison provide efficient coordination? If no, explain." Answers to this question were evaluated as either positive or negative. The purpose of this question was to elicit comments concerning the perceived efficiency of Code P's coordinating efforts.

Question nineteen was designed to solicit from the interviewees, who attend meetings conducted by Code P personnel, the perceived worth of those meetings. Question

nineteen as asked was: "Do you attend meetings with personnel from Code P? If yes, do you feel they are worth your time? What suggestions can you offer for improving these meetings?" The answers to this question were also evaluated as either positive or negative. The purpose of this question was to determine who attended coordinating meetings with Code P and the usefulness of those meetings. In addition, suggestions for improving the value of future meetings were solicited.

North Island Responses. Eleven interviewees at North Island provided responses to question eighteen. The other two had previously said they have not used Code P liaisons. Ten of the eleven persons answering this question agreed that their contacts with Code P provided efficient coordination. The eleventh person did not feel that the contact he had was productive.

In response to question nineteen only four persons of the thirteen persons interviewed have attended meetings, other than training, with Code P personnel. Three of those persons responded that they felt the meetings were useful. Only one person thought the meeting he attended had no value to him.

Naval Station Responses. Of the fourteen responses to question eighteen at Naval Station, ten interviewees said that they felt their liaisons with Code P provided efficient coordination. Three persons were not satisfied with Code P's

response time and one person had no opinion. The usual comment concerning dissatisfaction with Code P was with the difficulty in reaching the person required.

Seven persons at Naval Station had attended meetings, other than training, sponsored by Code P. Five persons answered yes to question nineteen indicating that in their opinions the meetings were useful. Two respondents felt that the meeting(s) they had attended were not useful.

The Analysis. The fourth area of coordinating mechanisms examined was the perceived efficiency of the Code P division. North Island personnel when asked "Does this liaison provide efficient coordination?" overwhelmingly supported their contacts at Code P. Ten persons answered yes and only one person answered no, to the question, suggesting that the interviewees feel their contacts with Code P provided efficient coordination.

At Naval Station ten of fourteen interviewees expressed satisfaction with their liaisons from Code P. Three persons were less than satisfied with Code P's response time. The usual comment expressing dissatisfaction with Code P concerned difficulty in reaching the person they needed because of meetings, vacations, etc.

A total of eleven of the interviewees (from North Island and Naval Station) had attended meetings coordinated by Code P. Of those eleven, eight felt that the meetings were useful, while three did not. The data collected on Code P's efficiency

suggest that personnel who have dealings with Code P generally give them a favorable rating. The conclusion drawn from the data above lead the researcher to believe that Code P is perceived as an efficient organization.

Answer to Subsidiary Research Question Four. In answer to the final subsidiary question: **"Are the coordination mechanisms efficient? If not, what changes are suggested?"** there were four areas of coordination looked at and the total evidence is mixed. The data on information flow and the perceptions of Code P's efficiency show that the perceptions of the efficiency of those activities are favorable. However, there are definite problems with the training aspect in that it is somewhat sporadic, sometimes perceived as ineffective and not universally applied to all personnel. While the interviewees felt that the information and assistance they received from Code P were useful, Code P's mission is not well known and their availability to their clients is perceived as insufficient. Suggestions, made by the interviewees, were to improve information flow by use of a local area network and enhance training by better preparation of the instructors. Code P's coordinating efforts could be improved by use of E-mail and training of site personnel on assistance they can offer.

K. MISCELLANEOUS

Questions twenty and twenty-one were designed as a wrap-up. They did not answer any particular research question but were considered useful in soliciting suggestions for improvement of the organizational structure. These two questions also provided the interviewees with the opportunity to express their general feelings about the effectiveness of their structure and offer comments that may identify problem areas not specifically covered in previous questions.

The suggestions offered by the interviewees apply to issues addressed at both North Island and Naval Station and as such are not separated below by location.

Command Efficiency North Island. Question twenty was: "Do you feel your division is efficient in its ability to quickly process information up and down the chain of command? Explain and offer suggestions." The responses to this question reinforced the data received from questions twelve and thirteen that the information flow process is satisfactory. However, the following suggestions were offered for improving the process. The number following each suggestion is the number of persons offering this suggestion.

- Prepare training summaries for persons who missed the training sessions. People who attended training can use them as references. (1)

- Use computerized communications to feed important and general information in small bites. (3)

- Conduct make-up training sessions on important information for persons who were not able to attend the initial training session.(2)

- Require all supervisors to have a weekly training period where the latest information is distributed.(1)

- Provide a means, use of a box or hot line number, to contact Code P personnel for follow-up questions, concerning training that was conducted, that may arise later.(1)

Question twenty-one was: "In general, what other things besides processing information do you feel can be done to increase the efficiency of the structure of your working environment?" This question was designed to solicit ideas and suggestions for structural improvement. The following suggestions were offered.

- Involve the employees more in the decision making process and improve the employee incentive structure.(1)

- Improve the quality of the computer hardware and software (the computer and printers are routinely down and the APADE software is not user friendly).(8)

- Work on improving employee morale through social functions and group recognition programs.(1)

- Improve the quality of our leadership (more training for some, fire others).(1)

- Use imprest fund for more purchases and streamline the required contract clauses.(1)

- Improve our ability to interact with customers via computers.(1)

- Make greater use of government sponsored training (Cost/Price analysis, Contract Administration, etc).(1)

- Reduce the amount and complexity of contract documentation and regulations.(1)

- Make available an experienced, senior contracting officer for assistance to junior personnel.(2)

- Separate technical division from the purchasing division.(1)

- Offer regular in-house training sessions with knowledgeable instructors.(5)

- Require strict compliance with work load standards.(1)

Question Three. Question three was designed to measure the perceived efficiency of the command structure from the point of view of the supervisors. Question three as presented was "Does the command structure allow you to efficiently supervise your subordinates? If not, what changes would you suggest." During the analysis stage of this thesis it was found that the answers to this question did not provide information that addressed any particular research question. However, the data obtained from this question are of interest to the thesis sponsors and will be provided to them along with the answers to question nineteen (a).

L. SUMMARY

A total of twenty-seven supervisory and non-supervisory personnel from the purchasing divisions at FISC Sites, North Island and Naval Station were interviewed. The data collected during these interviews have been presented as tables, charts, figures and percentages. An analysis of the data was offered after each section and a conclusion drawn for each subsidiary research question. In the following chapter the data gathered and conclusions drawn to the subsidiary research questions are used to answer the primary research question.

V. CONCLUSIONS, RECOMMENDATIONS, AND SUMMARY

In this chapter the researcher responds to the primary research question, "What is the most efficient organizational structure for the Purchasing Department of the Fleet and Industrial Supply Center, San Diego, CA.?" based on the data, analysis, and responses to the subsidiary research questions presented in the previous chapter.

A. CONCLUSIONS

In Chapter I, FISC's Director of Procurement Management's description of an efficient organization was "an organization that is maximizing productivity by being free of redundancies in positions and procedures; with coordinating mechanisms that achieve its objectives of providing information and guidance in a timely manner, and; with an organizational structure where reporting relationships are known and provide adequate flow of information and guidance up and down the chain of command. The efficient organization described above will achieve its efficiencies with the minimum amount of personnel and administrative costs and the maximum amount of customer service." While this definition presents a clear vision of the ideal FISC purchasing organization, implementing it provides challenges to the established order. To achieve these goals

management may need to be innovative in its approach toward the organization's structure.

As stated in Chapter II, the structuring of an organization is one of the most difficult decisions a manager may have to make. The manager must consider his organization's size, customers, function, product, degree of centralization, employees, and interests of other stakeholders. There are many organizational designs from which a manager may choose (e.g., lateral organizations, functional units, front-end/back-end models, matrix organizations) or he may choose to develop his own hybrid organizational design (Gabarro, 1992). In answer to the primary research question, this thesis recommends an organizational structure and present a rationale for its implementation.

Fulfillment of its goals will require management to embrace new forms such as lateral organization and self-directed work groups. Reorganizing for efficiency will take teamwork, team building, team incentives and shared information, in short, it takes organization (Galbraith, 1993). Management's challenge will be to effect the necessary changes in the organizational design and processes, through the involvement and the support of personnel from all levels of the organization.

Several inconsistencies exist within the FISC Purchasing Department as currently organized. The organization of the FISC sites look similar on an organization chart but in many ways they are dissimilar in practice. Policies for granting

purchase authority (warrants) differ by site. There is no standard policy or practice in respect to training. Manning of the site activities is not necessarily determined by volume of work load. The responsibility of supervisors (number of subordinates, volume of work, etc.) appears to have no explicit policy basis.

The FISC structure is itself one cause of insecurity within the purchasing organization. The dual reporting relationship (e.g. reporting to the purchasing director for administrative matters and to Code P for policy) is confusing to some supervisors and allows for the perception of redundant oversight. Additionally, there exists among the buyers a degree of apprehension of Code P personnel because of uncertainty about Code P's current or future position within the command structure.

B. RECOMMENDATIONS

The primary research question is: **What is the most efficient organizational structure for the Purchasing Department of the Fleet and Industrial Supply Center, San Diego, CA.?** Based on the information gathered during interviews, the literature review, and the answers to the subsidiary research questions, the researcher recommends reorganization based on self-directed work groups. A description of the organization envisioned follows.

The policy/planning hierarchy at FISC headquarters would consist of the commanding officer, executive officer, and purchasing department head. Under the purchasing department head would be a deputy responsible for implementation of plans and policy. This senior hierarchial structure, with the exception of the addition of the executive officer, remains the same as the current organization. The addition of the executive officer has the effect of transforming procurement management from a staff to a line function. In the recommended organization the purchasing department head, currently the procurement management director, is responsible for procurement operations and management to the commanding officer of the FISC via the executive officer. Additionally, the purchasing department head is responsible to customers and the directors of the FISC sites for the performance of the purchasing work groups.

Additional changes to the organization are made at the functional supervisor/analyst level of the Code P organization. This study proposes the addition of one or more (as many or few as necessary) purchasing supervisor(s) to the functional manager's level of Code P. The purchasing supervisor(s) will be responsible for the management, guidance, and administrative requirements of site purchasing activities. The purchasing supervisors will be experienced contracting professionals reporting to the procurement management deputy director. Major responsibilities of the purchasing supervisor(s) would include

personnel assignments to site work groups and oversight of the work groups at the remote locations. The assignment responsibility includes determining personnel per work group requirements and work groups per site requirements. Control functions include approving warrants and personnel promotions upon qualification, accumulating data for reports, and functioning as the contracting expert and disputes arbiter. Combined with recent improvements in Electronic Data Interchange (EDI), Management Information Systems (MIS), and numerous procurement related programs for data collection and information networks, these changes would improve the current process by centralizing reporting requirements, data collection and other non-value adding requirements (Proceedings, 1993). This should increase the productivity and efficiency of site purchasing personnel by reducing the number of non-purchasing related requirements placed upon them. Other benefits derived from this reorganization would be centralization of technical expertise at Code P and simplification of the chain of command/authority. While this study envisions the purchasing manager(s) located a FISC headquarters it is recognized that in practice they may need to be located at the site locations.

The savings and streamlining realized from this change would come from the elimination of twelve supervisor positions from the two sites. Positions made redundant include the purchasing directors, supervisors, and lead buyers located at the sites. As described below, the work groups would report

directly to the purchasing supervisors, located at Code P, eliminating four layers of management (i.e., lead buyer, purchasing director, FISC site deputy director, and the FISC site director).

Site work groups would consist of self-directed procurement and technical personnel organized by customer. Customers would be assigned to a team, who have all the expertise within the work group to deal with the full range of the customer's requirements. Work groups would select a leader responsible for interfacing between customers, procurement management and the group. Organizing in this manner would develop personal customer/buyer relationships, offering a sense of familiarity to the customer and ownership to the buyer. Additional improvements gained from these actions include overhead savings by the reduction of oversight (twelve supervisors), improved employee morale and productivity (less oversight, more responsibility/authority, and a clear promotion path), and a more responsive, responsible, and knowledgeable work force (work groups are self-directed and self-reliant). Figures 10 and 11 present **abbreviated** organizational charts for the purchasing organization as it currently exists and as proposed for comparison purposes. Figure 10 shows only Code P's reporting requirements (the complete FISC organization is shown in Figure 2) as a staff function reporting directly to the commanding officer. Site activities are not shown on Figure 10 as reporting to Code P as there currently exists no clear line

of authority. Figure 11 is a representation of the proposed purchasing organization. Code P is reporting to the executive officer as it will migrate from a staff position to a line position with the other functional departments shown in Figure 2. The site purchasing activities are presented on this chart as oversight and management responsibilities were moved to Code P with the advent of the purchasing supervisor(s).

Numerous details concerning personnel incentives, pay scales, reporting relationships, leadership, interface with customers commands, etc., would have to be worked out, as well as what current duties and reporting requirements would be transferred to Code P, or eliminated. Additionally, the purchasing process should be examined for methods of simplification.

Flattening the organization in this manner would centralize the supervisory functions (at Code P), eliminate the dual reporting relationship, reduce by twelve the supervisory personnel requirements (as one supervisor could possibly oversee one or more sites), and pr vide greater responsibility and accountability to purchasing personnel.

CURRENT PURCHASING ORGANIZATION*

FISC, SAN DIEGO
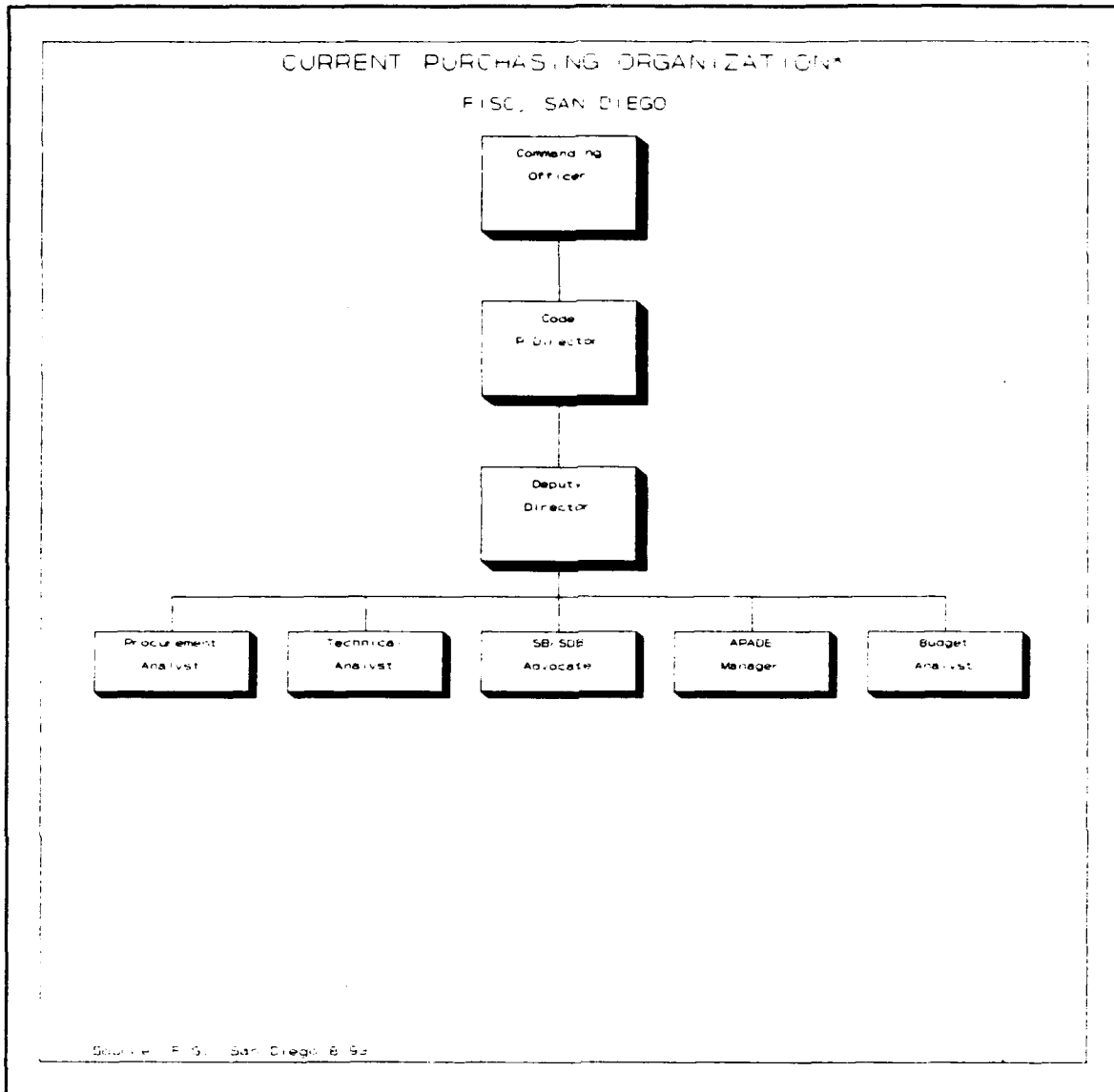
Figure 10

*NOTE: This chart is a composite of Figures 2 and 3 for the purchasing organizational structure only. Other functional areas are not included as they are not a part of this study. As shown in Figure 2, Code P is a staff function reporting directly to the Commanding Officer, FISC, San Diego. Site purchasing activities are not included as Code P currently has no oversight authority for buying functions (policy only).
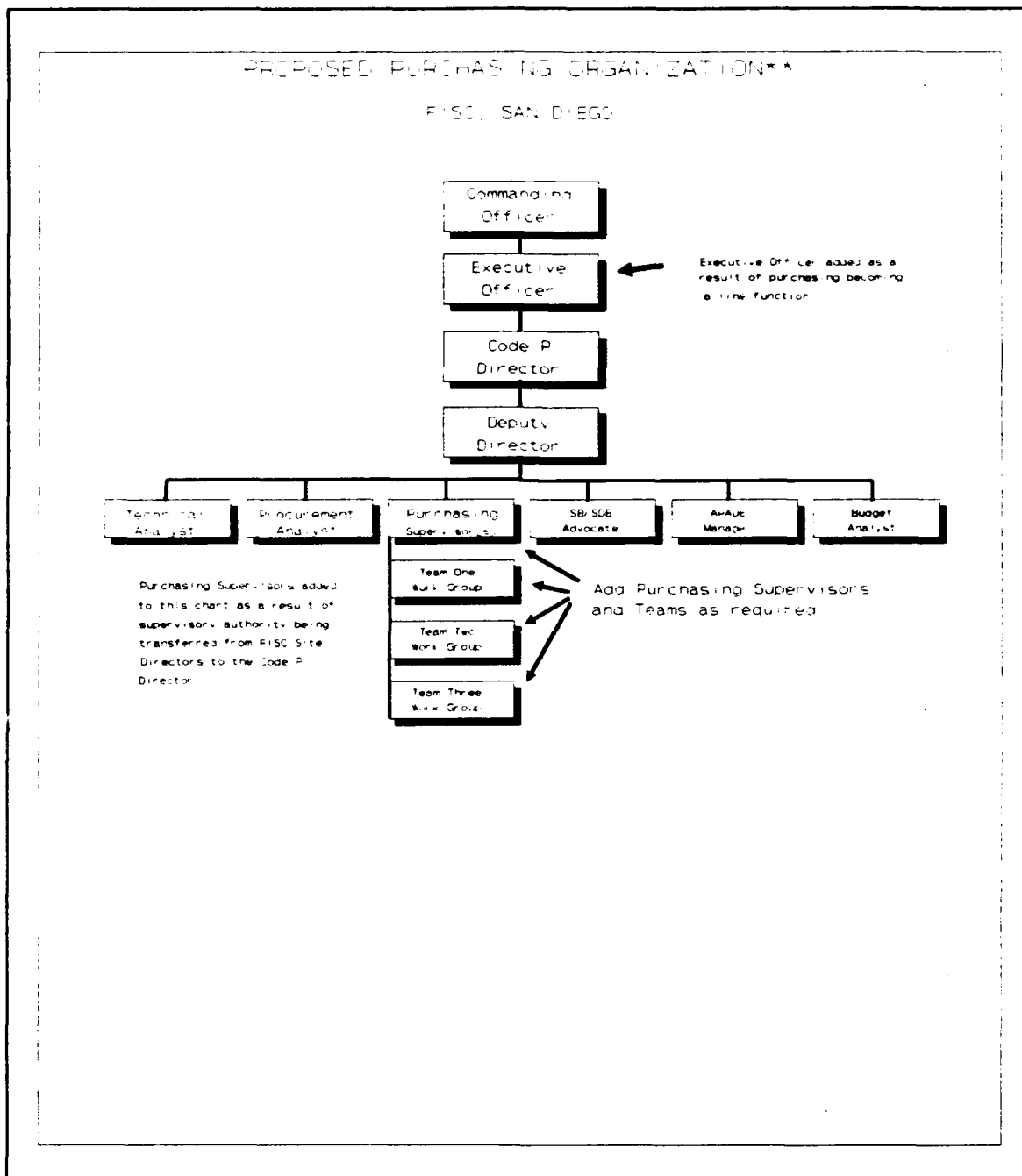
Figure 11

**NOTE: This chart was developed assuming that Procurement Management (Code P) shifts from a staff function to a line function reporting to the Commanding Officer via the Executive Officer. Additionally, site purchasing personnel are added to this chart as supervisory responsibilities will shift from FISC site directors to Code P.

C. IMPLEMENTATION SUGGESTIONS

Before beginning any reorganization or restructuring the following recommendations are made.

1. Recommend FISC management form a strategic planning committee/board to develop and implement a strategic planning system. In "Strategic Planning for Public and Nonprofit Organizations," 1988, John M. Bryson lays out an excellent program for developing and executing a strategic planning process. Bryson defines strategic planning: "as a set of concepts, procedures, and tools designed to assist leaders and managers develop effective strategies to cope with changed and changing circumstances. Additionally, strategic planning may be defined as a disciplined effort to produce fundamental decisions and actions that shape and guide what an organization is, what it does, and why it does it." Further, Bryson describes an eight-step process: "for promoting strategic thinking and acting in governments...."(Bryson, 1988).

- Initiating and agreeing on a strategic planning process.

- Identifying organizational mandates.

- Clarifying organizational mission and values.

- Assessing the external environment: opportunities and threats.

- Assessing the internal environment: strengths and weaknesses.

- Identifying the strategic issues facing an organization.

- Formulating strategies to manage the issues.

- Establishing an effective organizational vision for the future, the "Vision of Success."

The following areas of concern are suggested for further research by a strategic planning committee, if FISC's management desires to flatten the organization.

- How should personnel be selected, trained, and promoted? The ability to perform these functions correctly will greatly enhance the success of self-directed work groups.

- What incentives are available to motivate personnel in a flat organization? The effects of these issues will determine the continued success of an organization.

2. Recommend FISC management determine the main focus of their organization (cost reduction, service to customers, etc.) prior to deciding on the formal organizational design. Organizations that are designed to control cost, provide for the best customer service, or enhance functional expertise may require very different organizational designs. Many organizations desire to be the most cost effective and service oriented at the same time but generally there will be some compromise to cost, service or both.

3. Recommend management involve employees in all phases of the strategic planning process. Dr. W. Edward Deming recommends as point eight of his management method, (Total Quality Management), that management "Drive out fear" (Walton, 1986). Currently, FISC purchasing is in a state of flux due to consolidations and restructuring. The researcher sensed a degree of tension possibly due in part to the lack of employee

involvement in the change process. As employees are often an organization's most valued asset, it is important to alleviate tension and fear by continually informing the employees of management's plans, policies, and programs.

D. SUMMARY

The objective of this thesis was to examine the structure of FISC San Diego's Purchasing Department and to recommend changes to achieve the most efficient structure. Field interviews were conducted with FISC site personnel to identify those areas to be considered for change. The data collected have been presented and analyzed in Chapter IV of this thesis. Additionally, answers to the subsidiary research questions were addressed in that analysis. In this chapter the researcher responded to the primary research question based on the data, analysis, and responses to the subsidiary research questions presented in the previous chapter.

The proposed changes developed here are summarized briefly as:

1. Restructure the organization to include Procurement Management in the line organization.

2. Reorganize the site purchasing personnel into customer based self-directed work groups.

3. Move all supervisory and reporting requirements to Code P as a functional branch of that organization.

Suggested steps for implementation of a reorganization effort

include:

   1.   Recommend establishment of a strategic planning
   committee to develop strategies to cope with the changing
   circumstances.

   2.   Recommend management determine the primary focus of the
   organization in order to facilitate reorganization.

   3.   Recommend employee cooperation and acceptance by use of
   employee input in the reorganization process.

Many of these suggestions may appear to be fairly radical

changes from the organization as it exists today and in fact

they are!   This study shows that radical change may be

necessary, and is being attempted in many organizations, to

achieve the efficiencies in cost control, customer satisfaction

and productivity that FISC, San Diego desires.   It is believed

that the recommended changes would help create a purchasing

organization that would establish FISC, San Diego as a model of

purchasing efficiency.

APPENDIX A

INTRODUCTION/INSTRUCTIONS

My name is Tom Jablonski and I am a student in Contracting at the Naval Postgraduate School. You are about to participate in an interview that will help me analyze the efficiency of the Organizational Structure of the FISC Purchasing Department.

Anything you say during this interview will be anonymous and held in the strictest confidence. I will be the only person to see the completed interview forms. The interview forms will be destroyed upon completion of my thesis in December. My thesis report will be my opinion of the efficiency of the organizational structure and will offer suggestions (including yours) for improvement (names and position titles will not be used in the report).

If you would take a few minutes to fill in the organization chart and answer the questions provided before our interview (return them to me during the interview) it will greatly reduce the amount of time to do the interview. Your participation in this study is completely voluntary and greatly appreciated.

INTERVIEW FORM

Position/Title_____

Brief job description:

_____

_____

How long in present position?_____

1. Think back over the past several weeks, consider all the persons who are working under you. Please list the persons with whom you spent the most time on a business basis. With which ones have you spent the next most time and so on? What is the general kind of business you conduct with each of the persons you have named above?

    Name and position/title of   Kind of business
    assistants/subordinates   conducted

1_____   _____

2_____   _____

3_____   _____

4_____   _____

5_____   _____

2. Now, let's consider everybody in the entire organization, regardless of their position or title, who are not working under your supervision. Considering all of these people who are not your subordinates, please list the persons with whom you spent the most time on a business basis. With which one have you spent the next most time and so on? What is the general kind of business you conduct with each of the persons you have named above?

    Name and position/title of   Kind of business
    the person   conducted

1_____   _____

2_____   _____

3_____   _____

4_____   _____

5_____   _____

3. Does the command structure allow you to efficiently supervise your subordinates (do you have enough authority, access, time, etc)? If not, what changes would you suggest.

_____

_____

_____

4. When completing a purchase order do you sign the order as the contracting officer?

    always   often   cccasionally   seldom   never   NA

Comments: _____

5. When completing correspondence do you sign the correspondence?

    always   often   occasionally   seldom   never   NA

Comments:_____

6. If other persons are required to sign the majority of your completed work, please list them from your signature to final signature. Indicate if the signature is for approval or if the person seeing the document is for information only.

    Title/Position   Reason

1._____   _____

2._____   _____

3._____   _____

4._____   _____

5._____   _____

7. Do you think this process could be improved? If yes, how?

_____

_____

_____

_____

8. To what extent do you feel that you are working for more than one boss?

    always   often   occasionally   seldom   never   NA

9. When seeking answers to questions concerning the performance of your professional duties from whom do you usually seek assistance for technical issues?

_____

_____

_____

10. Does the current structure of your chain of command allow you enough access to your supervisor? If not, explain.

_____

_____

_____

11. Does the command structure allow you access to persons above your supervisor if required? If not, explain.

_____

_____

_____

12. How is information from FISC Headquarters, Code P, and central commands (i.e. NAVSUP, DOD, SECNAV, etc) routed to you?

_____

_____

_____

13. To what extent do you receive needed information on important changes in the professional/technical aspects of your work?

        always   often   occasionally   seldom   never   NA

What suggestions can you offer for improving this process?

_____

_____

_____

14. To what extent is training conducted on important changes in procedures regarding your work.

        always   often   occasionally   seldom   never   NA

What suggestions can you offer for improving this process?

_____

_____

_____

15. To what extent do you have the contact you need with personnel from Procurement Management (code P).

    always   often   occasionally   seldom   never   NA

What suggestions can you offer for improving this process?

_____
_____
_____
_____

16. List the five most recent in-house training sessions completed and the year you attended.

Course Title	length	Year
1._____	____	____
2._____	____	____
3._____	____	____
4._____	____	____
5._____	____	____

17. Do you know or have written down the name and phone number of a Code P liaison?   Yes   No (circle one)

18. Does this liaison provide efficient coordination?
    Yes No
  If no, explain.

_____
_____
_____
_____

19. Do you attend meetings with personnel from Code P?

    Yes   No (circle one)

If yes, do you feel they are worth your time? _____

What suggestions can you offer for improving these meetings?

_____
_____
_____
_____

19a. Do you feel attending meetings with Code P would be useful to your work? (circle one)

    Yes   No

20. Do you feel your division is efficient in its ability to quickly process information up and down the chain of command?

Explain & offer suggestions

_____
_____
_____

21. In general, what other things besides processing information do you feel can be done to increase the efficiency of the structure of your working environment?

_____
_____
_____
_____
_____
_____
_____
_____

Please fill in this organizational chart. You are to show your own position and the position of those working close to you by filling in the names in the boxes. **Add boxes if you need them.**

Superiors

Peers   Peers

You

START HERE

Subordinates

NAVAL STATION SUPV # 1
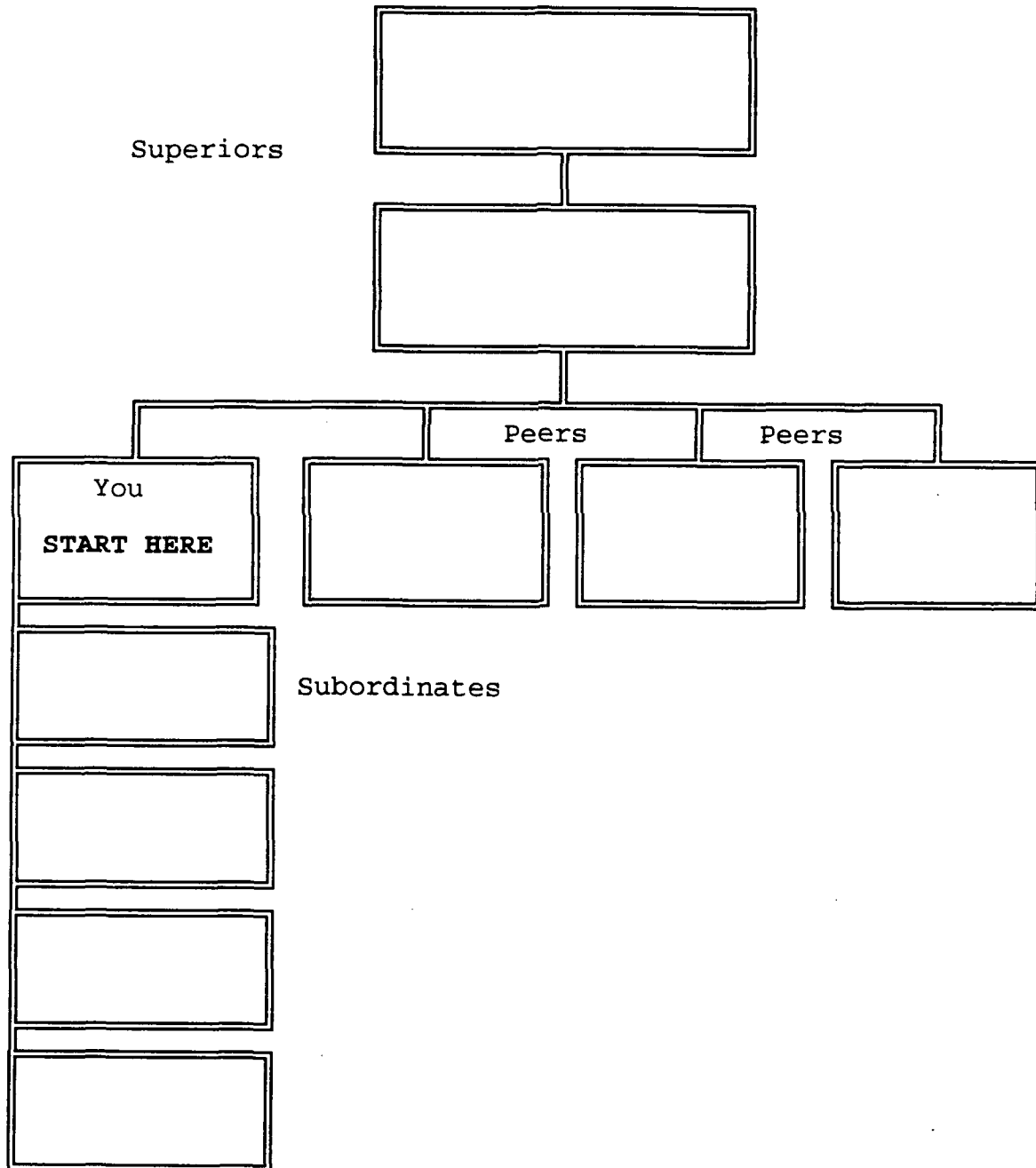
INTERVIEW FORM

Position/Title _SUPERVISORY PURCHASING AGENT_   *SUPV*

Brief job description:
SUPERVISOR OF 9 PURCHASING AGENTS
INCLUDING 1 LEAD BUYER
_____
_____

How long in present position? _6 MONTHS_   *SATISFACT[*

1. Think back over the past several weeks, consider all the
persons who are working under you. Please list the persons with
whom you spent the most time on a business basis. With which ones
have you spent the next most time and so on? What is the general
kind of business you conduct with each of the persons you have
named above?

TIME SPENT

	Name and position/title of assistants/subordinates	Kind of business conducted
1st 1	_JOHN HUDSON BUYER_	_TECHNICAL ASPECT OF JOB_ SUBO[
2ND 2	_MARY WORTH BUYER_	_ '' '' '' ''_ SUBORDINA[
3RD 3	_JIM JONES BUYER_	_ '' '' '' ''_ SUBORDIN[
5TH 4	_SARA FERGUSON LEAD BUYER_	_ '' '' '' ''_ SUBORDIN[
5	_____	_____

2. Now, let's consider everybody in the entire organization,
regardless of their position or title, who are not working under
your supervision. Considering all of these people who are not
your subordinates, please list the persons with whom you spent
the most time on a business basis. With which one have you spent
the next most time and so on? What is the general kind of
business you conduct with each of the persons you have named
above?

	Name and position/title of the person	Kind of business conducted
6TH 1	_RICK WRIGHT CUSTOMER_	_REQUIREMENTS_ *CUSTOMER*
4TH 2	_MIA FARROW ANALYST (CODE P)_	_APADE INPUTS_ *CODE P*
3	_____	_____
4	_____	_____
5	_____	_____

3. Does the command structure allow you to efficiently supervise your subordinates (do you have enough authority, access, time, etc)? If not, what changes would you suggest.

I HAVE ENOUGH AUTHORITY BUT THERE IS NEVER ENOUGH TIME BECAUSE OF THEIR AND MY WORK LOAD (MEETING, etc.)

4. When completing a purchase order do you sign the order as the contracting officer?

(always)   often   occasionally   seldom   never   NA   *ALWAYS-1*

Comments: *HAS OWN WARRANT TO $25,000*

5. When completing correspondence do you sign the correspondence?

(always)   often   occasionally   seldom   never   NA   *ALWAY-1*

Comments: *ALL MY CORRESPONDENCE IS INFORMAL*

6. If other persons are required to sign the majority of your completed work, please list them from your signature to final signature. Indicate if the signature is for approval or if the person seeing the document is for information only.

Title/Position	Reason
1. *NOT APPLICABLE -I SIGN MY*	
2. *OWN STUFF*	
3.	
4.	
5.	

NOT APPLICABL

7. Do you think this process could be improved? If yes, how? *USE AS A SUGGESTION* ✓

YES - EACH BUY SHOULD BE ABLE TO EARN A WARRANT FOR THEIR PURCHASE REQUIREMENTS. WITH MORE PROFESSIONAL TRAINING THERE WOULD BE MORE QUALIFIED

8. To what extent do you feel that you are working for more than one boss?

DUAL SUPERVISN

always   (often)   occasionally   seldom   never   NA

I TAKE DIRECTION FROM CODE P AND THE PURCHASING DIRECTOR.

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9. When seeking answers to questions concerning the performance of your professional duties from whom do you usually seek assistance for technical issues?

^{SUPV IST} [margin note: SUPV IST / CODE P 2N]

I USUALLY SEEK HELP FROM MY SUPERVISOR FIRST THEN CODE P PEOPLE DEPENDING ON THE SUBJECT

10. Does the current structure of your chain of command allow you enough access to your supervisor? If not, explain.

[margin note: YES - 1]

YES - I SEE HER WHEN I NEED TOO BUT SHE IS USUALLY VERY BUSY.

11. Does the command structure allow you access to persons above your supervisor if required? If not, explain.

[margin note: YES - 1]

YES - WE HAVE AN OPEN DOOR POLICY

12. How is information from FISC Headquarters, Code P, and central commands (i.e. NAVSUP, DOD, SECNAV, etc) routed to you?

[margin note: GUARDMA / MATCHES / BASE / RESPONSE]

WE RECEIVE OUR INFO THROUGH THE GUARD MAIL AND I DISTRIBUTE IT TO MY PEOPLE

13. To what extent do you receive needed information on important changes in the professional/technical aspects of your work?

(always)   often   occasionally   seldom   never   NA

What suggestions can you offer for improving this process?   [margin note: USE AS A SUGGESTIO]

WE COULD GET INFO FASTER IF THEY PUT IT IN SMALL BITE ON E-MAIL OR PS-MAIL.

14. To what extent is training conducted on important changes in procedures regarding your work.

always   (often)   occasionally   seldom   never   NA   [margin note: OFTEN - 1]

What suggestions can you offer for improving this process?
I CONDUCT TRAINING WHEN I CAN - ABOUT ONCE A MONTH CODE P CONDUCTS TRAINING ON IMPORTANT ISSUES THEY COULD DO MORE TRAINING.

[margin note: MORE CODE P / TRAINING / USE AS SUGGESTIO]

15. To what extent do you have the contact you need with
personnel from Procurement Management (code P).

ALWAYS - 1

(always)   often   occasionally   seldom   never   NA

What suggestions can you offer for improving this process?

USE AS A
✓ SUGGEST

THEY ARE OFTEN BUSY - THERE SHOULD BE SOME WAY
TO LEAVE A MESSAGE AND GET A CALL BACK.

16. List the five most recent in-house training sessions
completed and the year you attended.

Course Title	length	Year
1. HAZMAT	2 HRs	93
2. TQM	1 HR	93
3.		
4.		
5.		

REMEMBERS ONLY TWO CODE P SESSION

NO IN-HOUSE

17. Do you know or have written down the name and phone number
of a Code P liaison?   (Yes) No (circle one)

YES - 1

DISPLAYED NAMES IN PERSONAL DIRECTORY

SHOWED PHONE BOOK.

18. Does this liaison provide efficient coordination? Yes (No)

NO - 1

If no, explain.

I DON'T THINK THEY KEEP US WELL ENOUGH
INFORMED

← USE AS COMMENT

19. Do you attend meetings with personnel from Code P?

(Yes)   No (circle one)

YES - 1

If yes, do you feel they are worth your time? __YES__

What suggestions can you offer for improving these meetings?

NONE - THE MEETING I HAD WERE INFORMATIVE.
THEY COULD CONDUCT MORE TRAINING

NOTE TRAINING USE COMMENT

19a. Do you feel attending meetings with Code P would be useful
to your work? (circle one)

(Yes)   No

MORE TRAINING AS STATED ABOVE.

20. Do you feel your division is efficient in its ability to quickly process information up and down the chain of command?

Explain & offer suggestions   YES - WE HAVE WEEKLY *NOTE WEEK MEETING MEETINGS WHERE I PASS ALONG INFO TO MY SUBORDINATES

21. In general, what other things besides processing information do you feel can be done to increase the efficiency of the structure of your working environment?

IMPROVE COMPUTER HARDWARE — PRINTER IS ALWAYS *USE TWO COMMEN DOWN.
GET NEW MORE USER PROGRAM - APADE IS OUTDATED.

SUMMARY

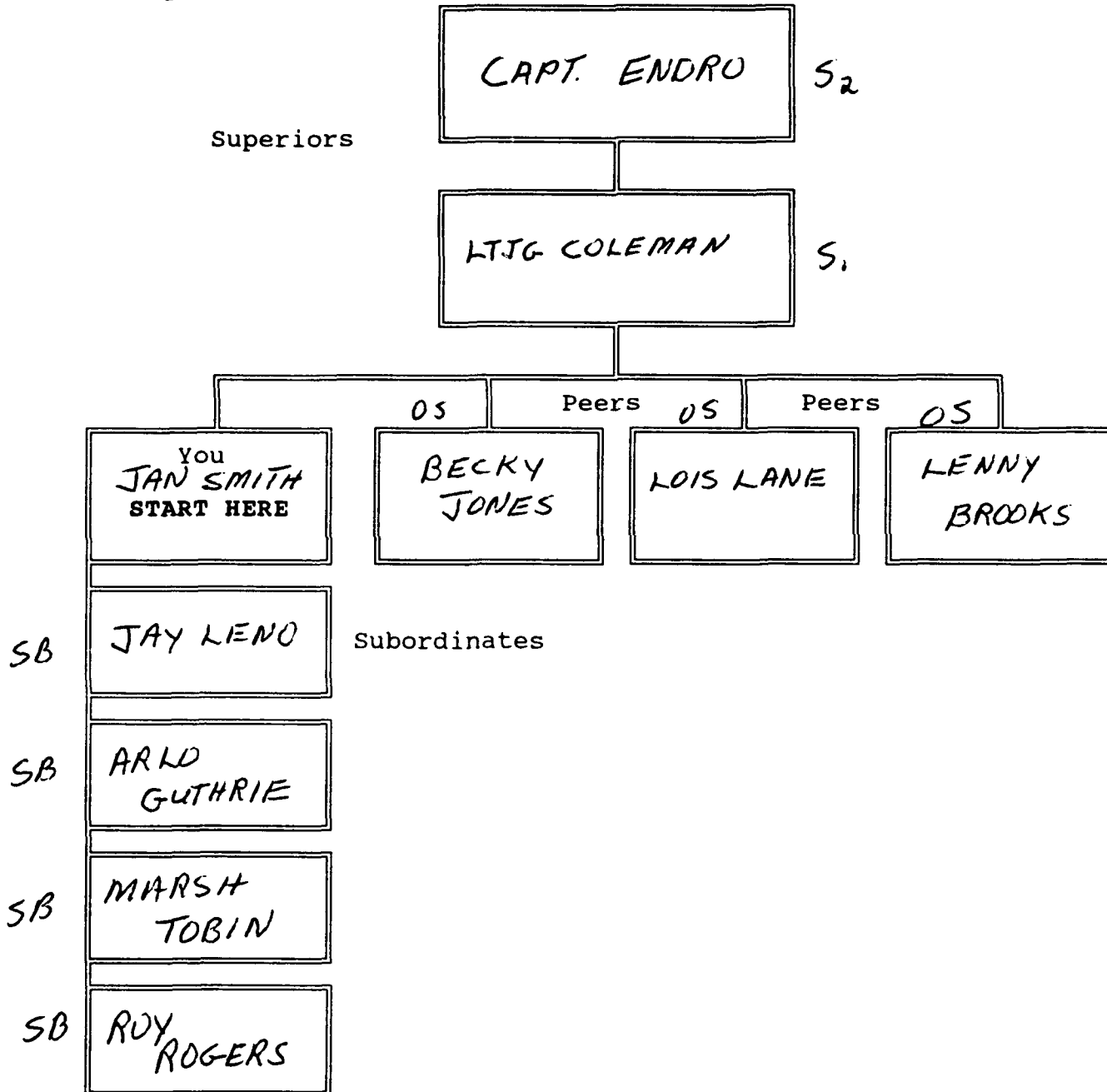Q-1 —   TIME SPENT
+2   1ST   SB
          2ND   SB
          3RD   SB
          4TH   OO
          5TH   SB
          6TH   SB

3. yes
4 always
5. always
6. NA
7. yes
8. often
9. SUPU — 1st
   CODE — 2ND
10. YES

11. YES
12. MATCH
13. ALWAYS
14. often
15. often
16 2 code P
17. yes
18. NO
19. YES
20 YES

Please fill in this organizational chart. You are to show your own position and the position of those working close to you by filling in the names in the boxes. **Add boxes if you need them.**

SAMPLE

Superiors

CAPT. ENDRO S_2

LTJG COLEMAN S_1

OS   Peers   OS   Peers   OS

You
JAN SMITH
START HERE

BECKY JONES

LOIS LANE

LENNY BROOKS

SB   JAY LENO   Subordinates

SB   ARLO GUTHRIE

SB   MARSH TOBIN

SB   ROY ROGERS

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