THE IMPLEMENTATION AND EXECUTION OF AN INTERNAL CONTROL PROGRAM IN A NAVAL SHIPYARD

by

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This thesis reviews the evolution of an internal control program from the Federal Manager's Financial Integrity Act through implementation by local line managers. Using interviews and a case study analysis of one shipyard's internal control program, a current picture of how the program is working provides evidence that the use of internal controls can make a difference when promoted throughout the entire chain of command. This thesis also reviews the elements of internal control and its history in the government and in the Navy.
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ABSTRACT

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# TABLE OF CONTENTS

I. INTRODUCTION
   A. BACKGROUND
   B. PURPOSE AND OBJECTIVES OF THE RESEARCH
   C. SCOPE, ASSUMPTIONS AND LIMITATIONS
   D. STUDY DESIGN AND METHODOLOGY
   E. THESIS ORGANIZATION

II. INTERNAL CONTROLS OVERVIEW
    A. INTRODUCTION
    B. IMPORTANT DEFINITIONS
    C. THE OBJECTIVES OF INTERNAL CONTROLS
    D. ELEMENTS OR STANDARDS OF INTERNAL CONTROL
    E. THE ROLE OF RISK IN DETERMINING INTERNAL CONTROLS
    F. COMPLIANCE TESTING

III. THE HISTORY OF INTERNAL CONTROL IN THE FEDERAL GOVERNMENT
    A. INTRODUCTION
    B. THE BUDGET AND ACCOUNTING ACT OF 1921
    C. THE BUDGET AND ACCOUNTING PROCEDURES ACT OF 1950
    D. THE FOREIGN CORRUPT PRACTICES ACT OF 1977
    E. THE INSPECTOR GENERAL ACT OF 1978
    F. OFFICE OF MANAGEMENT AND BUDGET CIRCULAR A-123
    G. THE FEDERAL MANAGER'S FINANCIAL INTEGRITY ACT OF 1982

iv
IV. HISTORY OF INTERNAL CONTROLS WITHIN THE NAVY
   A. INTRODUCTION
   B. INTERNAL CONTROL PROGRAM GUIDANCE AND RESPONSIBILITIES
   C. VULNERABILITY ASSESSMENTS
   D. MANAGEMENT CONTROL REVIEWS
   E. THE INTERNAL CONTROL PROGRAM PROCESS
   F. INTERNAL CONTROL PROGRAM EVALUATION

V. AN INTERNAL CONTROL PROGRAM WITHIN ONE NAVAL SHIPYARD
   A. AN INTRODUCTION TO A SHIPYARD'S INTERNAL CONTROL PROGRAM
   B. AN EVOLUTION OF ONE SHIPYARD'S INTERNAL CONTROL PROGRAM
   C. THE SHIPYARD'S INTERNAL CONTROL PROGRAM ORGANIZATION
   D. HOW THE SHIPYARD USES THE INTERNAL CONTROL PROCESS

VI. AN EVALUATION OF THE SHIPYARD'S INTERNAL CONTROL PROGRAM
    A. OVERVIEW
    B. FOUR PERSPECTIVES ON HOW THE SHIPYARD EXECUTES THE INTERNAL CONTROL PROGRAM
    C. HOW THE SHIPYARD MET THE REQUIREMENTS OF THE NAVY'S INTERNAL CONTROL PROGRAM
    D. SIX EXAMPLES OF HOW THE INTERNAL CONTROL PROGRAM WAS USED TO MAKE A DIFFERENCE IN SHIPYARD OPERATIONS

VII. CONCLUSIONS AND RECOMMENDATIONS
    A. SUMMARY
    B. CONCLUSIONS
    C. RECOMMENDATIONS
I. INTRODUCTION

A. BACKGROUND

In private industry, the goal of the organization is often to maximize profit. The Federal Government does not have this simple a measure by which to gauge success or failure. However, the goal to maximize profit is based on two underlying principles that do relate to the operations performed by the Federal Government. Those two principles are efficiency and effectiveness. Efficiency is attained by minimizing waste in the generation of output, and effectiveness is attained by that output achieving the Federal Government's goals. To produce its output and achieve its goals, the Government must use resources. These resources are not unlimited and they are acquired through taxation of the people. When these resources are wasted or when the goals are not achieved, the people exhibit very strong concerns. They measure the success or failure of the Federal Government by their knowledge or perceptions of how goals are being accomplished and how resources are being used. Congress, sensitive to the needs and concerns of the governed, passed the Federal Manager's Financial Integrity Act of 1982 (FMFIA) [Ref. 1]. The Act was designed to increase the use of internal controls throughout the Federal Government [Ref. 2]. A period of six years has elapsed
since that Act's passage and the Department of the Navy has implemented a program to meet the requirements of that Act [Ref. 3].

B. PURPOSE AND OBJECTIVES OF THE RESEARCH

The primary purpose of this study was to examine the implementation and execution of the Navy's Internal Control Program at the local activity level. The first step in trying to achieve that goal was to select an activity that provided a wide diversity of functions with a high susceptibility to fraud, waste and abuse. A second step was to look for an activity that supported both operational forces and shore based facilities. The third and final step for selecting an activity was to find one that had a permanently assigned Naval Audit Service auditor. A requirement for an on-site auditor was felt to be necessary for obtaining an external evaluation of the local activity's performance regarding the use of internal controls. The only type of activity to meet all of the preceding requirements was a Naval Shipyard. Naval Shipyards are the only Navy shore activities that have permanently assigned on-site auditors. As an industrial activity of major importance, the shipyard has numerous functions which are representative of both Federal and private business activities. Some typical common functions are the sales cycle, the collections cycle, the manufacturing cycle, the purchasing cycle and automated data processing cycle.
Because these cycles are commonplace this study may provide a sense of how a typical internal control program evolved and is currently being used to protect resources. One of the shipyard's primary mechanisms used to monitor the use of its resources is the Navy's Industrial Fund. The Industrial Fund is a revolving fund that is reimbursed through the purchase of services by its customers. Annual expenditures for the eight active shipyards during Fiscal Year 1987 was approximately $3.7 billion and expenditures for Fiscal Year 1988 are projected to be $3.4 billion [Ref. 4].

The specific objectives of this thesis are to:

1. Identify the basic requirements of internal controls,
2. Trace the history of internal control in the Federal Government and the Department of Defense,
3. Identify the key individuals responsible for local implementation,
4. Identify the types of internal controls being used,
5. Evaluate the use of internal controls used to correct problems,
6. Describe the attitudes of the key individuals and their perceptions of the benefits of having an internal control program.

C. SCOPE, ASSUMPTIONS AND LIMITATIONS

This thesis was directed primarily toward a review of one shipyard's internal control program, with special emphasis on examining the specific controls used to correct actual or potential errors existing within that shipyard's
functions. A major assumption for this study was that, if the shipyard had not implemented an internal control program, there would have been no other internal method developed to cause line managers to evaluate how efficiently or effectively their functions operate. The fact that, until after the passage of FMFIA, there were no records to document whether line managers were in the habit of evaluating their areas of responsibility was the basis upon which the previous assumption was made. Without an internal control program, it was assumed that the ability of the Secretary of Defense to certify the effectiveness of his department's internal controls would have been most difficult.

This study was limited to on-site field work within a single shipyard and all contacts with the Naval Sea Systems Command were made through the use of telephone interviews.

D. STUDY DESIGN AND METHODOLOGY

This study was designed to be accomplished in four phases. Phase one was a historical search of the applicable laws, instructions and reports that pertained to the Navy's eventual implementation of a formal internal control program. The historical search for information was necessary in order to provide the basis for identifying the methods and measures needed to conduct phases two and three. Additionally, phase one was done so as to understand how the program evolved at the different administrative levels.
within the Department of Defense, which were responsible for executing the requirements of the Federal Manager's Financial Integrity Act of 1982.

Phase two encompasses the selection, contact and preliminary survey of an appropriate local activity for field work. The selection of a shipyard was based on its representation of a wide variety of financial, support and production functions. Each of those functions have a significant potential for resources being subjected to fraud, waste and abuse. A shipyard is a good candidate for study because it has a significant impact on and interfaces with both operational and non-operational forces within the Navy. The importance for having that interface within this study is because all important shore activities exist in the Navy to support the Fleet. The more support a shore activity provides, the greater its importance to the overall mission of the Navy. Usually, the largest assembly of the Navy's assets are in direct support of fleet operations.

The next part of phase two was to establish formal contacts with shipyard representatives. This part opened the channels of communication needed to gain access to records and line managers for conducting field work during phase three. The final part of phase two was a preliminary survey of the shipyard. A preliminary survey allowed for the opportunity to gain first-hand knowledge about organizational relationships and it allowed first-hand
examination of records for determining the appropriate functions to be selected for the phase three case studies.

Phase three focuses on the actual on-site field work. This field work was designed to identify the local program, obtain the requirements of that program, conduct interviews about the attitudes of the supporting organization and develop six case studies. The six case studies were used to examine specific examples of internal controls used to prevent material errors.

Phase four, the last phase, deals with interpreting the results from phases two and three.

E. THESIS ORGANIZATION

Chapter I is an introduction. It explains the importance of internal controls and describes the goals and objectives for this study. The scope and research method were briefly discussed to provide a frame of reference for the information to be presented.

Chapter II is a general description of what internal controls are and what things need to be considered when attempting to utilize internal controls for prevention of fraud, waste and abuse.

Chapter III is a historical review of the applicable laws and circulars that established the requirements for the Federal Government's programmed use of internal controls.

Chapter IV is a description and history of how the Department of Defense executed the requirements of the
Federal Manager's Financial Integrity Act through the Headquarters Component level. Topics discussed are responsibilities, written guidance, vulnerability assessments, management control reviews, the internal control program's operational process, the Naval Audit Service's review of the program, and the General Accounting Office's analysis of the internal control program.

Chapter V addresses how a shipyard developed and organized a local internal control program.

Chapter VI examines how the Internal Control Program actually works and provides some evaluation on how the actual operation reflects the design intended by the local activity.

Chapter VII summarizes the conclusions and recommendations supported by the field work.
II. INTERNAL CONTROLS OVERVIEW

A. INTRODUCTION

Organizations, either profit or non-profit, consume resources to achieve their objectives. Examples of these resources include personnel, information and capital. Resources are used in event cycles which are "groups of related steps or actions within a program or function that are held together by a significant beginning and ending point." [Ref. 5:p. A.3] Another term for an event cycle is a system. Although resources are essential, they are also scarce. Therefore, their consumption must be controlled. This is the purpose of an internal control system.

This chapter will outline important definitions, objectives, standards, risk and compliance testing as they relate to the use of internal controls.

B. IMPORTANT DEFINITIONS

There are two definitions of internal controls relevant to this discussion. The first definition is from the Secretary of Defense's Internal Control Course.

Internal Controls are operational checks and balances that prevent loss due to fraud, waste, abuse, and mismanagement of Government resources. Resources include: personnel, information, and capital. [Ref. 5:p. 3]
The second definition comes from the American Institute of Certified Public Accountants' (AICPA) *Statement On Auditing Procedure 54.*

Internal control comprises the plan of organization and all of the coordinate methods and measures adopted within a business to safeguard its assets, check the accuracy and reliability of its accounting data, promote operational efficiency, and encourage adherence to prescribed managerial policies. This definition possibly is broader than the meaning sometimes attributed to the term. It recognizes that a "system" of internal control extends beyond those matters which relate directly to the functions of the accounting and financial departments. [Ref. 6:p. 234]

The two definitions are similar in emphasis upon the protection of assets or resources through the use of internal controls. This is the basis for the Navy's Internal Control Program [Ref. 3], and is also expressed in the Federal Manager's Financial Integrity Act of 1982 [Ref. 1].

C. THE OBJECTIVES OF INTERNAL CONTROLS

Objectives are the desired outcomes of any internal control system. There are two levels of objectives: general and specific. Examples of general objectives, found in the definitions cited in the previous section, are safeguarding of assets or resources, promoting efficiency, promoting the reliability of data, promoting adherence to management's policies and preventing fraud, waste or abuse in event cycles. These objectives are considered general because they apply to any event cycle.
Specific objectives are developed from the general objectives. They relate general objectives to specific event cycles. For example, if a manager wants to safeguard cash in the cafeteria system, he may determine a specific objective to protect cash from theft during transportation from a cash register to the bank. The general objective is to safeguard an asset, and the specific objective is to safeguard cash during the collection event cycle.

D. ELEMENTS OR STANDARDS OF INTERNAL CONTROL

Internal controls are based on general and specific objectives. However, achieving those objectives depends on the internal controls having certain characteristics that cause them to operate in an effective manner. GAO has called these characteristics standards [Ref. 9:p. 31], while academicians often refer to these characteristics as elements [Ref. 7:p. 273]. Regardless of terminology, the following characteristics need to be considered:

(1) Reasonable assurance,
(2) Supportive attitude,
(3) Competent personnel,
(4) Control objectives,
(5) Control techniques,
(6) Documentation,
(7) Records,
(8) Authorization,
(9) Separation of duties,
Adequate supervision,

Security. [Ref. 8:pp. 31-36]

GAO recognizes the first five as general standards, and the remaining six are considered a subset of control techniques [Ref. 8:p. 30]. To gain an understanding of the general versus the specific standards as recognized by GAO, the following illustrates the relationship.

The general standards are the building blocks of an effective control system. If one block is missing, then the foundation will be incomplete. In other words, the ideal control system will meet all of the general standards. The specific standards apply to the control techniques used in an assessable unit. Some assessable units will not require control techniques in all of the areas reflected in the specific standard. Therefore, some specific standards may not be applicable to all assessable units. [Ref. 8:p. 35]

The assessable units mentioned in the last quote are the same as the event cycles discussed earlier [Ref. 5:p. A.1].

The general and specific standards are explained in detail below to provide a background for subsequent discussions.

1. General Standards
   
a. Reasonable Assurance

   An internal control must provide the manager with the confidence that he or she is able to understand the methods employed by the internal control and that the internal control, as he or she understands its operation, reduces risk within an event cycle. [Ref. 8:p. 31]
b. Supportive Attitude

An internal control often involves an interaction between management and workers. This standard places emphasis on the idea that an internal control works only if it is supported by all parties involved. [Ref. 8: p. 31]

c. Competent Personnel

An internal control requires that the personnel involved in implementing that control have the knowledge and skills necessary to understand their assigned tasks and to support the internal control system. [Ref. 8:p. 32]

d. Control Objectives

Specific internal control objectives are developed for each event cycle so that internal controls can address the specific risks normally inherent in that event cycle. The objectives are developed by management before management develops its internal controls, because those objectives are needed to provide an idea of what is to be controlled within the event cycle. [Ref. 8:p. 32]

e. Control Techniques

Control techniques are the mechanisms by which internal controls achieve general and specific objectives. GAO calls these control techniques the specific standards of internal controls [Ref. 8:p. 32]. Those standards are explained in detail in the next section.
2. **Specific Standards**

   a. **Documentation**

   Documentation is a control technique that provides an independent source of information that will indicate if a transaction has been executed. Confirmation of information is done by comparing documents to records and other documents. To illustrate, tool issue documents are compared against tool inventory records to detect unrecorded issues. Use of this procedure in a tool room enables a manager to detect if his procedures are being followed in recording of tool issues. [Ref. 8:p. 33]

   b. **Records**

   Recording transactions accurately and on a timely basis improves the reliability of records for audit and review. Records are useful as internal controls because they can be used to audit past transactions for problems or errors. For example, in a tool room inventory records are maintained to provide a history of receipts and issues. By using documents or records each transaction recorded on those inventory records can be checked for accuracy. Without the inventory records, a history of past transactions would not be available to detect actual or potential errors. [Ref. 8:p. 33]

   c. **Authorization**

   In the execution of transactions, evidence is maintained that all transactions are authorized by persons
acting within the scope of their authority. As part of the authorization process, transactions are checked to ensure that they conform to management's policies. To illustrate, tools are issued only to personnel whose names appear on a list authorized by the shipyard commander to use tools. An approval signature from the tool room supervisor is required before one worker can draw more than ten tools. [Ref. 8:p. 33]

d. Separation of Duties

Separation of duties means that one person is not allowed to control an asset or resource completely. As an example of this technique in a cash collection event cycle, the person collecting cash is not the same person keeping the accounting records; and the person keeping accounting records is not allowed to make the daily cash deposits to the bank. [Ref. 8:p. 33]

e. Adequate Supervision

To encourage workers to comply with management's policies and procedures, supervision provides the necessary guidance and visibility to prevent and correct errors. Adequate supervision depends on having a supervisor who is capable of assigning, reviewing and approving work. The supervisor must also possess the knowledge to provide training to subordinates. As an example, suppose an event cycle involves performing extremely complicated surgical procedures. Having a chief surgeon present when a new
intern is performing that individual's first operation would be a good control. [Ref. 8:p. 34]

f. Security

Access to resources is a security issue. To prevent unauthorized access to a resource, management can use physical controls, such as locks, guards or fences; or it can use administrative procedures to check on the intended use of a resource and evaluate whether the resource should be withheld to prevent misuse. An example of an administrative security control is to have all requests for classified material screened to see if the requestor has a valid need for the information. [Ref. 8:p. 34]

E. THE ROLE OF RISK IN DETERMINING INTERNAL CONTROLS

Since fraud, waste and abuse are always potential problems, a gauge of their impact is necessary to determine the degree to which preventive steps must be taken. Risk evaluation is a method for measuring the impact of those potential problems. As a measure of the degree of potential problems, risk can be defined in various terms, depending on what management is trying to accomplish. According to the Navy's Internal Control Program guidance, the only type of risk used to evaluate event cycles is normally referred to as inherent risk [Ref. 5:p. A.3]. However, two types of risk are addressed in the field work of this thesis. Those two types are inherent risk and control risk [Ref. 7:p. 244]. The Navy guidance on internal controls considers
control risk as part of the evaluation of the overall inherent risk in event cycles [Ref. 8:pp. 31-47].

Inherent risk measures the manager's or auditor's expectation that material errors exist in the event cycle, before considering the effectiveness of internal controls. Control risk measures the manager's or auditor's expectation that material errors in an event cycle will not be prevented or detected by the internal control system. [Ref. 7:p. 244]

Risk is not only an important management decision for evaluating internal controls, but it is also a key aspect to performing vulnerability assessments [Ref. 8:p. 3]. Vulnerability assessments are used as part of the Navy's Internal Control Program and are discussed later.

Risk is usually evaluated on a scale from high to low. But risk is not the only concern for managers. Internal controls have a cost associated with their use. That cost requires managers to consider how many internal controls should be used to reduce risk in an event cycle. To make a decision about the appropriate number of internal controls, the manager considers what level of risk is acceptable. The level of acceptable risk on a scale from high to low is determined partly on the basis of another factor, known as materiality [Ref. 7:p. 230]. Materiality is the relative significance of some quantity. Thus, if a person had only two dollars and lost one, that individual would consider the loss to be material. However, if a person had $1 million
and lost one, that individual most likely would consider the loss to be immaterial. Combining risk and materiality in the following example will illustrate why both factors are to be considered before implementing internal controls. In printing two dollar advertisements for a newspaper, a printer mistypes half of all advertisements daily. The risk of printing errors is very high. However, the revenues generated from selling two dollar advertisements represent less than one percent of the entire revenues generated by the newspaper on a single day. The cost of the errors to the newspaper is immaterial. The newspaper manager knows that, in order to lower the error rate, he must hire an additional printer, whose daily salary would be more than the revenues generated by the daily two dollar advertisements. If a manager considers only risk and not materiality, he or she may implement controls that are effective but not efficient.

F. COMPLIANCE TESTING

Once internal controls are designed and put into operation, they should be tested to ensure that they are meeting the specific objectives [Ref. 7:p. 316]. This is usually done through compliance testing. Compliance testing can be done in these three ways: observation of the event cycle to see if the internal controls are in place and working, inquiry of the workers using the event cycle to see if they understand and use the internal controls, and
examination of documentation to see if internal controls were designed and have been used [Ref. 7:p. 77].

Compliance testing was important for this study because it was used to determine if the internal controls implemented by a shipyard manager were effective in preventing identified weaknesses and if the internal controls were used as claimed in reports to superiors.

An example of how compliance testing relates to internal controls is presented in a simple shipyard event cycle. Distribution of office supplies is an event cycle that starts when a worker needs materials. The worker then goes to a place where supplies are located and draws the materials needed. At the point when the office supplies are issued or drawn, the event cycle is completed until office supplies are needed again. A manager notices that the use of office supplies has gone from a minor expense, a few hundred dollars a quarter, to a major expense of many thousands of dollars. The manager knows from experience that workload and personnel have not changed for many years. This manager considers the change from a few hundred dollars to a few thousand dollars to be a material difference. After investigation of the event cycle, the manager is unable to determine why there has been such a change in office supply expenditures. The manager realizes that there are no internal controls over the distribution of office supplies. All of the employees have access to the storage
area, and there is no documentation supporting removal of office supplies. One of management's general objectives is to safeguard assets and resources, and in this case it was not being done. The manager decides to implement some internal controls. The specific objective is to control the issue of office supplies in order to reduce expenditures. The internal controls chosen are as follows:

(1) Lock up all office supplies,
(2) Appoint an office supplies custodian,
(3) Require all issues be documented by a requisition, and
(4) Require the custodian to record all issues daily on a issue summary sheet and forward that record to the manager.

After the internal controls were implemented, the manager notices no change in the following quarter in expenses for office supplies. The manager had not followed-up on the internal control system to ensure that it was working. When the manager finally investigated the new system, the manager found that the custodian was leaving the door unlocked during the day. Employees were going in and getting whatever they wanted.

During the investigation of the problem the manager performed compliance tests. First, the manager observed how the office supplies were being issued. Then, the manager asked the custodian if the door to the supply room was being kept locked. Next, the manager asked other employees how they got their supplies. Finally, the manager reviewed the
requisitions kept by the custodian and compared those requisitions to the custodian's record summarizing daily issues. By using compliance testing's simple methods of inquiry, documentation and observation, the manager was able to find out where the internal controls failed to operate. The manager then decided to add one more control. The manager planned to conduct surprise spot checks to see if the supply room was being kept locked.

The previous example shows how compliance testing is useful for determining if internal controls are in place and working. During the field work for this study, this method was used to check whether internal controls were actually making changes within the shipyard.
III. THE HISTORY OF INTERNAL CONTROL
IN THE FEDERAL GOVERNMENT

A. INTRODUCTION

This chapter traces the history of internal controls from their beginnings in the Federal Government through the passage of the Federal Managers' Financial Integrity Act of 1982. Of importance in this historical review is the relationship between accountability and internal controls.

B. THE BUDGET AND ACCOUNTING ACT OF 1921

The Budget and Accounting Act of 1921 is significant because it is the precursor to the Budget and Accounting Procedures Act of 1950. It established several positions in the Federal Government that would eventually be responsible for enforcing the use of internal controls mandated by the 1950 act [Ref. 10:pp. 20-27]. The 1921 act was passed to provide for a national budget system and for the independent audit of government accounts by an independent office. The independent office is the General Accounting Office (GAO), headed by the Comptroller General of the United States. The Federal audit function was removed from the Treasury and the office of the Comptroller of the Treasury was abolished. The budgeting function formerly performed by the Comptroller of the Treasury was assigned to a new Bureau of the Budget. This bureau would eventually become the Office of Management...
and Budget in 1970. Separation of the budget and accounting functions is a significant event because it started to formalize a basic element essential in any good internal control system, the separation of duties. [Ref. 10:pp. 20-23]

The key aspects of the Budget and Accounting Act of 1921 are the formalization of accounting documentation for audit purposes and the reporting of financial information to the Congress and the President for budgeting purposes [Ref. 10:pp. 20-27]. Congress was concerned that the data necessary for the Federal Government to budget accurately and then to use appropriated funds efficiently were not being maintained. Congress stated that the submission of budget information by the President could not be evaluated adequately, when the budget and accounting functions were consolidated under the Treasury; so, they created the General Accounting Office to be an independent check on the executive branch of the government [Ref. 10:p. 23]. Within its charter, the General Accounting Office is charged as follows:

(a) The Comptroller General shall investigate, at the seat of government or elsewhere, all matters relating to the receipt, disbursement, and application of public funds, and shall make to the President when requested by him, and to Congress at the beginning of each regular session, a report in writing of the work of the General Accounting Office, containing recommendations concerning the legislation he may deem necessary to facilitate the prompt and accurate rendition and settlement of accounts and concerning such other matters relating to the receipt, disbursement, and application of public funds as he may think advisable. In such regular report, or in special
reports at any time when Congress is in session, he shall make recommendations looking to greater economy or efficiency in public expenditures.

(b) He shall make such investigations and reports as shall be ordered by either House of Congress or by any committee of either House having jurisdiction over revenue, appropriations, or expenditures. The Comptroller General shall also, at the request of any such committee, direct assistants from his office to furnish the committee such aid and information as it may request.

(c) The Comptroller General shall specially report to Congress every expenditure or contract made by any department or establishment in any year in violation of law.

(d) He shall submit to Congress reports upon the adequacy and effectiveness of the administrative examination of accounts and claims in the respective departments and establishments and upon the adequacy and effectiveness of departmental inspection of the offices and accounts of fiscal officers.

(e) He shall furnish such information relating to expenditures and accounting to the Bureau of the Budget as it may request from time to time. [Ref. 10:pp. 20-27]

The Comptroller General performs the duties listed above through internal audits, investigating all matters relating to the use of public funds [Ref. 10:p. 25].

Internal audit is a function that addresses both the accountability concerns of the Congress and the effectiveness issue with respect to public resources. Internal audit is a necessary part of the internal control process because, without it, the ability of an auditor to detect material errors is significantly reduced. The vast size of the Federal Government makes audit of every transaction expensive; therefore, the auditor must evaluate the internal controls within its accounting systems.
In summary, the Budget and Accounting Act of 1921, established formalized accounting systems, required internal audit within executive agencies, established the Bureau of the Budget, established an independent audit agency (GAO) under the Comptroller General, separated the disbursement and accounting functions within the executive branch of government and was the first federal act to emphasize adequacy and effectiveness of offices and accounts (internal control).

C. THE BUDGET AND ACCOUNTING PROCEDURES ACT OF 1950

The Budget and Accounting Procedures Act of 1950 amended the 1921 act and established the requirement to document accounting systems used within the Federal Government. While the 1921 act laid the foundations for internal control systems within the Federal Government, it did not specifically delineate the types of accounting systems nor did it use the specific words "internal control." The latitude and methods of execution were left to the discretion of the executive agency heads. The only real requirement for an accounting system's acceptance was to pass the adequacy and efficiency tests of the Comptroller General. The ever increasing size of the Federal Government, especially after World War II, dictated that the methods of communicating financial information be standardized and integrated throughout the Federal Government [Ref. 11:p. 835]. Congress was the defender of
the purse and demanded better explanations for the executive department's financial requests. Both the Budget and Accounting Act of 1921 and the Budget and Accounting Procedures Act of 1950 cited budgeting as the principal concern that motivated passage of the Law.

Although budgeting was the primary interest, Congress established that internal controls would make the budgeting and expenditure of appropriated funds more effective [Ref. 11:p. 836]. More definite guidance regarding internal controls was provided in three areas. First the Bureau of the Budget was directed to

...develop programs and to issue regulations and orders for the improved gathering, compiling, analyzing, publishing, and disseminating of statistical information for any purpose by the various agencies in the executive branch of the Government. [Ref. 11:p. 834]

Second the Comptroller General was directed to coordinate between the Bureau of the Budget and the Secretary of the Treasury and establish an integrated and standardized accounting system within the Federal Government. Finally, the heads of executive agencies were required to establish and maintain systems of accounting and internal control designed to provide (1) full disclosure of financial results of the agency's activities; (2) adequate financial information needed for the agency's management purposes; (3) effective control over and accountability for all funds, property, and other assets for which the agency is responsible, including appropriate internal audit; (4) reliable accounting results to serve as the basis for preparation and support of the agency's budget request, for controlling the execution of its budget and for providing financial information required by the Bureau of the Budget under section 213 of the Budget and Accounting Act, 1921. [Ref. 11:p. 836]
This three pronged approach was to provide greater control and better dissemination of financial information within the Federal Government. [Ref. 11:p. 832]

Even though Congress had provided greater guidance concerning accounting and the need to use internal controls, latitude for the execution of those functions was still vested in the executive agency heads and the Comptroller General. The Comptroller General was directed to determine the extent to which accounting and related financial reporting exercised adequate financial control over operations [Ref. 11:p. 835].

D. THE FOREIGN CORRUPT PRACTICES ACT OF 1977

The Foreign Corrupt Practices Act of 1977 was Congress' first legislative action to establish the requirement for maintaining a system of internal accounting controls. This act amended the Securities Exchange Act of 1934. Public companies were the target for this important legislation, but the significance of its passage lies in the fact that Congress acknowledged that internal controls could and should be used for preventing abuses of an organization's resources. [Ref. 12]

E. THE INSPECTOR GENERAL ACT OF 1978

With the Carter Administration's promise to reduce the size of the Federal Government, the pressure on Congress to become more accountable, economical and efficient
intensified. Congress desired a more active role in the budget execution process and copied the lead taken by the Department of Health Education and Welfare (HEW). In 1977, HEW was the first federal agency to establish an Inspector General position. [Ref. 13]

Congress, by establishing the Office of the Inspector General, could ensure that each agency had an independently dedicated party to carry out the functions of internal audit, investigation and control. Additionally, this position would provide a focal point for compiling data to report to Congress on the effective and efficient operation of executive agencies. [Ref. 14]

Besides requiring the appointment of an Inspector General, Congress went a step further to improve accountability within the Department of Defense. Section 8 of the Inspector General Act required the Secretary of Defense to take several actions. First, the Secretary was required to submit semiannual reports to Congress on the results of audit and investigations within the Department of Defense. Next, he was required to make public disclosure of audit results unless the results affected national security. Additionally, Congress also required the Secretary of Defense: (1) to submit proposed legislation to establish appropriate reporting procedures concerning the audit, investigative and inspection activities of the Department of Defense, (2) to establish a task force to investigate ways
to reduce fraud, waste and abuse, and (3) to issue a report summarizing the Inspector General's ability to work effectively and independently. [Ref. 14:p. 1105]

The Inspector General of the Department of Defense was not to become the head of each military department's independent audit function. Each service secretary was authorized to retain authority, direction and operational control over his or her internal audit and internal review organizations. For the Navy, the position responsible for internal audit was the Auditor General. [Ref. 15:pp. 2-3]

F. OFFICE OF MANAGEMENT AND BUDGET CIRCULAR A-123

The Office of Management and Budget (OMB) issued Circular A-123 on 28 October 1981 as an attempt to move the executive agencies toward compliance with the Budget and Accounting Procedures Act of 1950. Circular A-123 required agencies to: (1) establish directives on internal control, (2) make assessments of an activity's inherent risk for fraud, waste and abuse, and (3) develop a review schedule for internal controls. [Ref. 16]

The significance of Circular A-123 lies in the fact that this was the first Presidential sponsored document requiring the use of internal controls to combat fraud, waste and abuse. Circular A-123 was later revised in 1983 to reflect the changes caused by the Federal Managers' Financial Integrity Act of 1982 [Ref. 16]. It outlined the use of
vulnerability assessments and internal control reviews as the basis for using internal controls within the Federal Government.

G. THE FEDERAL MANAGER'S FINANCIAL INTEGRITY ACT OF 1982

The Federal Manager's Financial Integrity Act of 1982 (FMFIA) is the result of a combination of two bills that the House of Representatives and the Senate tried to pass in 1980. They were the Financial Integrity Act of 1980 and the Federal Manager's Accountability Act of 1980. [Ref. 17]

1. Details of Major Importance

Within this legislation, there are seven important details that have brought internal controls to center stage in combating fraud, waste and abuse. Each is discussed in detail below.

a. Internal Accounting and Administrative Controls

Each executive agency is required to establish internal accounting and administrative controls in accordance with standards prescribed by the Comptroller General and shall provide reasonable assurances that,

...obligations and costs are in compliance with applicable laws; funds, property, and other assets are safeguarded against waste, loss, unauthorized use, or misappropriation; and revenues and expenditures applicable to agency operations are properly recorded and accounted for to permit the preparation of accounts and reliable financial and statistical reports and to maintain accountability over assets. [Ref. 1:p. 814]
b. Evaluation Guidelines

The Director of the Office of Management and Budget, in consultation with the Comptroller General, shall establish guidelines for agencies to follow to ensure their internal accounting and administrative controls conform with the intent of this act.

c. Compliance Statement

Annually, executive agency heads are required to submit a statement of compliance or noncompliance in relation to this act.

d. Report

Along with the annual compliance or noncompliance statements, executive agency heads will prepare a report that states exactly any material weaknesses in the agency's systems of internal accounting and administrative control. This report will also contain a detailed schedule outlining the plan for corrective action.

e. Transmission of Statements and Reports

Each executive agency head will sign the statements and reports and forward them to Congress and the President. In addition, these reports will be made available to the public upon request.

f. Appropriations

The President will submit with each budget, to Congress, a detailed report explaining the funds requested on behalf of the Office of the Inspector General.
g. Agency's Accounting Systems

Each annual statement prepared shall include a separate report on whether the agency's accounting system conforms to the principles, standards and related requirements prescribed by the Comptroller General. [Ref. 1: p. 814]

2. The Role of the Office of Management and Budget

The Director of the Office of Management and Budget is tasked with assisting the President by developing efficient coordinating mechanisms to implement legislative enactments. By so doing, the Director is responsible for interpreting this act for other executive agencies to follow. This act specifically identifies the Director by title and it tasks that individual to take the appropriate actions Congress felt were ignored by the Executive Branch when the Budget and Accounting Procedures Act of 1950 was passed. [Ref. 1:p. 814]

3. The Role of the Comptroller General

Congress tasked the Comptroller General in the Accounting and Auditing Act of 1950 to standardize and integrate federal accounting systems and then to approve those systems. In the 1982 act, Congress re-emphasized this approval requirement and mandated that agencies seek out the Comptroller General's approval. [Ref. 1:p. 814]
4. **The Role of the Inspector General**

   It appears that Congress clearly believed that the Executive Branch was not providing sufficient resources to the Offices of Inspectors General. By making the Executive Branch detail budget submissions in this area, Congress ensured that the Executive Branch allocated adequate resources to allow the Inspector General to be free from the power of the purse held by the entity being audited or inspected. [Ref. 1:p. 814]

5. **Summary**

   The FMFIA is the most extensive attempt by Congress to date to hold the government accountable to the people. Internal controls and accounting systems were given standards by which progress in these areas could be measured. Reporting requirements made specific individuals accountable for instituting adequate internal controls. Internal controls have been made an important part of the way the United States Government conducts business.
IV. HISTORY OF INTERNAL CONTROLS WITHIN THE NAVY

A. INTRODUCTION

The purpose of this chapter is to describe the evolution of the internal control program within the Department of the Navy from its start in 1982 through its current state of operation in March of 1988. To accomplish this purpose, there are five facets that are discussed to provide a general description of how the FMFIA was implemented within the Navy. Facet one describes the internal control program guidance issued by the levels of command responsible for complying with the requirements of FMFIA. Facets two and three describe the importance of vulnerability assessments and management control reviews, respectively, and their relationships to the internal control program. Facet four provides an overview of how facets two and three are integrated into a process that forms the basis of the Navy's Internal Control Program. Finally, facet five summarizes the comments of the Naval Audit Service's latest review of the internal control program.

B. INTERNAL CONTROL PROGRAM GUIDANCE AND RESPONSIBILITIES

1. The Secretary of Defense (SECDEF)

As discussed in Chapter III, the FMFIA required that the Comptroller General prescribe internal control standards, OMB establish internal control guidelines, audit
findings be promptly resolved and Agency Heads certify and report on the use of internal controls within their respective agencies. It is with regard to those certification and reporting requirements that the SECDEF was assigned responsibility by law for establishing the use of internal controls [Ref. 1:p. 814].

The SECDEF, as the focal point for providing those certifications and reports, established the internal control program when he signed the Department of Defense (DOD) Directive 7040.6 on 24 March 1982. This implementing action was done prior to passage of FMFIA. Actually, the internal control program was started in response to an Executive Order, OMB Circular A-123 [Ref. 17:p. 23]. On 16 July 1984, DOD Directive 7040.6 was reissued as DOD Directive 5010.38. The change from the 7000 series to the 5000 series was made to remove the guidance from SECDEF's audit-related directives and to change it to a series reserved for internal review-related directives. This new directive incorporated the specific changes brought about by the FMFIA and the subsequently revised OMB Circular A-123 of 1983. [Ref. 17:p. 23]

With the issuance of the original directive, SECDEF directed each of the military services to establish internal control programs within their departments. This initial guidance was tailored from the OMB Circular A-123 issued in October of 1981 and the OMB Guidelines published in December.
of 1982. Because of the relatively short time between the passage of FMFIA and its required implementation, SECDEF did not immediately provide training or instruction on how these programs should be structured; the responsibility was left completely to the service secretaries. The GAO on 1 May 1984 issued a report to the SECDEF that highlighted the progress DOD had made toward implementation of FMFIA. [Ref. 18:p. 1] Within that review, two significant problems were highlighted. The first problem was that there was insufficient training on the requirements of FMFIA. The second problem emphasized that throughout the DOD insufficient documentation was maintained concerning the implementation of the internal control program. [Ref. 18:p. 1] In August of 1984, SECDEF issued a training course that was designed to correct the lack of training and adequate documentation. [Ref. 19:p. 1] This Internal Control Course [Ref. 19] comprised three volumes and a cover letter.

With the directive and the training course issued, the SECDEF left the operation of the internal control program to the service secretaries except for overall compilation of reports and certifications to Congress. The remainder of this thesis deals with the internal control program as it was implemented within the Department of the Navy (DON).
2. The Secretary of the Navy (SECNAV)

On 29 July 1983, SECNAV took his first formal action to implement the requirements of FMFIA, OMB Circular A 123 and DOD Directive 7040.6 [Ref. 17:p. 23]. The result of that action was SECNAV Instruction 5200.35. That instruction became the basic policy guidance which started the Navy's Internal Control Program, directed use of "OMB Guidelines" for the evaluation, improvement and reporting of internal control systems, and assigned specific actions throughout the chain of command. [Ref. 3:pp. 1-4]

SECNAV Instruction 5200.35 has been updated only once since 1983 and it is currently issued as SECNAV Instruction 5200.35A, dated 17 May 1985 [Ref. 20]. The instruction was reissued so as to address three objectives not specifically covered within the first instruction [Ref. 17:p. 24]. To summarize those reasons for change, the original instruction did not adequately emphasize the needs to:

(1) maintain effective operation and accounting control systems,

(2) maintain involvement by all levels of management for ensuring that effective controls exist, and

(3) maintain an adequate system to ensure that follow-up actions are in place to promptly correct internal control deficiencies. [Ref. 20]

Prior to the Comptroller of the Navy becoming the Assistant Secretary of the Navy for Financial Management, the original SECNAV instruction assigned the internal
control program's project management to the Deputy Under Secretary of the Navy for Financial Management. He was supported in that function by the Comptroller of the Navy [Ref. 3:p. 3]. SECNAV Instruction 5200.35A, the revision of the original SECNAV instruction, assigned the internal control program's project management to the Under Secretary of the Navy [Ref. 20:p. 2].

Currently, there is a draft revision to SECNAV Instruction 5200.35A that would shift the program management responsibility entirely from the Deputy Under Secretary of the Navy to the Assistant Secretary of the Navy for Financial Management (NAVCOMPT). Additionally, that revision emphasizes the need to have all levels of the DON comply with GAO standards and to involve all the levels of management on an on-going basis in the process of determining adequacy of internal controls. [Ref. 17:p. 25]

3. Commander, Naval Sea Systems Command (NAVSEA)

Originally, the next echelon for implementation, according to SECNAV Instruction 5200.35, was the headquarters component level and NAVSEA was designated as one of the original 26 so designated [Ref. 3]. However, when the revised SECNAV Instruction 5200.35A was issued in 1985, the Chief of Naval Operations (CNO) became the only headquarters component beside the Commandant of the Marine Corps to report on internal controls directly to NAVCOMPT. Also, the revised instruction stated that the CNO was
responsible for ensuring that all his subordinates complied with the guidance within the revised SECNAV instruction [Ref. 20:p. 2]. NAVSEA as a subordinate of the CNO reports to NAVCOMPT through the CNO [Ref. 20:encl. 2].

On 6 January 1986, the CNO issued OPNAV Instruction 5200.25A, applicable to all Naval activities. That instruction contained information similar to SECNAV Instruction 5200.35A but had two requirements that were not similar to the previously issued guidance. OPNAV Instruction 5200.25A identified a detailed inventory of assessable units that were to be included periodically for vulnerability assessments, and it identified CNO's demands for specific reporting requirements. [Ref. 17:p. 26]

NAVSEA, within five months of the CNO's issuance of OPNAV Instruction 5200.25A, issued NAVSEA Instruction 5200.13 [Ref. 22]. Under this specific guidance NAVSEA provides the internal control program policy for the Navy's eight active Naval Shipyards. This thesis focuses on the internal control program implemented within one of those eight shipyards. According to that shipyard's Director of Internal Review, the shipyard commander identified NAVSEA Instruction 5200.13 as the most important guidance to be followed for implementing the shipyard's internal control program. Since NAVSEA Instruction 5200.13 is identified as the most important guidance for the shipyard to use in
developing an internal control program, the important parts of that instruction are quoted below for future reference.

1. **Performance Appraisals.** The ability of personnel assigned duties to develop, implement or maintain internal controls or to perform Vulnerability Assessments or Management Control Reviews should be evaluated in their routine performance appraisals.
   a. **Military Personnel.** The internal control program does not reorient the current military fitness report or performance evaluation process. Rather, the normal appraisal process continues to review a military member's performance in internal control as it has in the past. For example, the Officer Appraisal Work Sheet, NAVPERS Form 1611, evaluates numerous elements of internal control. Internal control should be regarded as a normal part of the management process for military personnel.
   b. **Civilian Personnel.** Civilian personnel have structured performance appraisal system. Supervisors responsible for overseeing objective setting and performance appraisals should ensure that the internal control aspects of the functions being performed are emphasized.

2. **Quality Control.** To ensure that the objectives of this program are achieved, quality control shall be exercised at all levels of command. Quality control will include:
   a. Ensuring appropriate internal control training is provided.
   b. Performing adequate Vulnerability Assessments and Management Control Reviews.
   c. Preparing accurate and timely reports.
   d. Establishing a formal follow-up system for monitoring corrective actions to material and/or systemic deficiencies.
   e. Establishing a system of testing corrective actions to material or systemic deficiencies. No deficiencies can be dropped from a follow-up system until it has been tested (on-site review of the deficiency to determine if the stated corrective actions solved the deficiency).
   f. Conducting periodic on-site reviews of Management Control Review procedures at subordinate commands to ensure compliance with requirements set forth in this instruction.

3. **Vulnerability Assessments and Management Control Reviews.** Vulnerability Assessments and Management Control
Reviews shall be conducted of assessable units covering all programs and functions of the activity. An inventory of assessable units shall be developed and maintained by each activity. Vulnerability Assessments, Management Control Reviews and Other Management Actions shall be conducted and reported in accordance with this instruction.

4. Responsibilities
   a. Office of Internal Review, COMNAVSEA (SEA 00F3) will:
      (1) Establish and maintain the command-wide internal control program.
      (2) Provide overall policy, procedures and oversight of the command's internal control program.
      (3) Coordinate, prepare and submit all reports required for COMNAVSEA's signature.
      (4) Establish a Command training program.
      (5) Maintain COMNAVSEA's tracking system for internal control evaluations and corrective actions.
      (6) Establish and coordinate a quality assurance program.

   b. NAVSEA field activities, detachments and headquarters deputy commanders will:
      (1) Designate an internal control coordinator to administer the program.
      (2) Ensure internal control systems under their purview (including classified systems) are implemented and functioning.
      (3) Ensure that managers (both military and civilian) responsible for internal controls are identified and their fitness reports and performance appraisals reflect that responsibility.
      (4) Perform vulnerability assessments, management control reviews and other appropriate management actions and report the results.
      (5) Maintain documentation on all vulnerability assessments, management control reviews, other management actions and corrective actions.
      (6) Establish quality control to ensure that adequate internal controls are established to prevent loss or unauthorized use of resources, errors in reports and information, illegal or unethical acts, inefficiencies and adverse public opinion.

   c. Internal review offices will:
      (1) Evaluate respective command compliance with the requirements of this instruction.
      (2) Perform selected audits and test checks of internal control documentation and systems.
      (3) Provide technical assistance to managers in conducting reviews and assessments. (Internal review will not conduct vulnerability assessments and management
control reviews except in their own areas of responsibility.)

d. The NAVSEA Inspector General (SEA OON) will:
   (1) Include the implementation of the program as a specific review item during Command Inspections. [Ref. 22:pp. 2-5]

C. VULNERABILITY ASSESSMENTS

The second facet of this discussion focuses on the first of two critical processes essential to all internal control programs utilized within the Navy--vulnerability assessment.

A vulnerability assessment is a management evaluation of a program or function aimed at identifying the potential for mismanagement, loss, fraud, or waste in that program or function. The objective of these assessments is to attain a ranking of all programs and functions within an organization in terms of their susceptibility to loss or unauthorized use of resources, errors in reports or information, illegal or unethical acts and/or adverse or unfavorable public opinion. This ranking process enables management to determine priorities for conducting management control reviews.

The vulnerability assessment process consists of: (1) deciding which major programs/functions are applicable to the component; (2) determining what aspects of each major program/function are performed by the component; (3) identifying responsible managers to perform the assessments; (4) documenting the vulnerability factors; (5) establishing ratings and rankings based on experience and judgement; and (6) submitting a brief written report. [Ref. 3:encl. 1, p. 2]

The vulnerability assessment process was first required by OMB Circular A-123 [Ref. 23]. Since that process was designed to help managers logically assess the risk potential within their organizations, it became an essential part of all the internal control programs started within the Navy [Ref. 3]. As stated earlier, the CNO in his 1986 instruction established a detailed inventory of assessable
units and required that those units be assessed at a maximum interval of every two years [Ref. 21]. In August of 1986, when OMB revised its Circular A-123 in order to reduce the internal control program paper workload, the CNO issued interim guidance to reflect a change from the maximum two-year requirement for performing vulnerability assessments to a five-year requirement [Ref. 24]. Besides attempting to reduce the paper workload, the vulnerability assessment cycle was changed to provide management more time and resources to conduct management control reviews [Ref. 24].

D. MANAGEMENT CONTROL REVIEWS

Management control reviews represent the second and most critical process for having a good internal control program. It should be considered the most critical process because it is during this process that internal controls are corrected or added to an event cycle to prevent fraud, waste or abuse.

Management control reviews (also referred to as internal control reviews) are detailed examinations of a program/function to ensure internal controls exist, are documented and are functioning as intended. These reviews should identify weak, nonexistent or excessive controls and initiate actions necessary to correct noted deficiencies. Management control reviews are performed at each DON command and activity by the managers responsible for the system of internal controls under review.

The following steps provide a basic approach to performing internal control reviews.

a. Identify "event cycles." These cycles are the processes or series of events leading to accomplishment of a function.

b. Analyze the general control environment; i.e., management attitude, organization structure, personnel, delegation and communication of authority and
responsibilities, budgeting and reporting practices and organizational checks and balances.

c. Document event cycles. Documentation should be in the form of flow charts or narrative explanations in sufficient detail to permit an in-depth analysis of the existence and adequacy of internal controls. At a minimum, this documentation should identify procedures used, personnel performing the procedures and forms or other records used in executing the transactions. Also internal control points in the event cycle should be highlighted.

d. Identify needed controls for each transaction cycle and compare them to existing controls to determine nonexistent or unnecessary controls.

e. Test established controls to ensure they are functioning as intended.

f. Report the results of the reviews. Identify weaknesses and deficiencies in the internal control system and recommend necessary corrective actions. [Ref. 3:encl 1, p. 5]

E. THE INTERNAL CONTROL PROGRAM PROCESS

The internal control program process is similar throughout all levels of command within the Navy. It is a sequential process that works on a cyclical basis for conducting the following seven steps:

(1) Organizing the process,

(2) Segmenting the activity,

(3) Conducting the vulnerability assessments,

(4) Developing plans for subsequent actions,

(5) Conducting management control reviews,

(6) Reporting the results of the internal control process,

(7) Following up on corrective actions. [Ref. 2:p. I-5].

Of the steps listed above, step one emphasizes the assignment of overall coordination and reporting
responsibilities throughout a local activity's chain of command. It is during this step that overall management of the internal control program is assigned to one individual. After a focal point is identified, that individual begins by planning the remaining six steps with the activity commander and the department heads. Step two of the internal control process involves the person assigned overall management responsibility and the department heads coming together to identify how to segment the activity. The segmentation is done to recognize which event cycles should be included on the activity's list of assessable units. As described in Chapter II, assessable units are also known as event cycles. Next, department heads draw up the boundaries identifying where a line manager's responsibility for conducting vulnerability assessments and management control reviews begin and end. Steps three and five were explained in depth earlier in this chapter and step six was covered during the explanation of FMFIA in Chapter III. [Ref. 21]

Steps four and seven are quite important and deserve further explanation. Developing plans for subsequent actions is important because it focuses management's attention on the actions necessary to correct the potential risks identified during vulnerability assessments. This planning and scheduling allows management to coordinate the function from a central location within its activity. After the program was initially set up within DON, this step
became the initial action for continuing the process on a cyclical basis. Steps one and two were eliminated from the process unless the activity was reorganized on a significant scale. Finally, step seven indicates that follow-up is an essential element in the overall process. This step is the internal control inherent within the internal control program process to ensure that the efforts of the program are not lost by management's indifference. [Ref. 22]

While the process is similar throughout the Navy, the schedule for taking action on the process is driven by FMFIA's reporting requirements. Each command level within the Navy modifies its reporting requirements to allow sufficient time for SECDEF to compile his composite report to the Congress. Since the field work for this thesis deals with a Naval Shipyard, NAVSEA's reporting requirements and time frames are listed below as a typical example:

(1) Results of Management Control Reviews and Reviews of Other Management Actions (Annually),

(2) Internal Control Certification Statement (Annually),

(3) Consolidated Vulnerability Assessment Form (Every Fifth Year),

(4) Updated Inventory of Assessable Units (Every Fifth Year),

(5) Status of Corrective Actions (Semiannually). [Ref. 22:encl. 3, p. 6]

NAVSEA last updated the above schedule in July of 1987 after the CNO issued interim guidance on additional reporting requirements [Ref. 24].
F. INTERNAL CONTROL PROGRAM EVALUATION

Before turning in the next chapter to the results of an on-site study of one Naval Shipyard, a summary of the Naval Audit Service's latest evaluation is provided as an overview for comparing the observations made at a local activity.

The Naval Audit Service (NAVAUDSVC) is the internal review function for SECNAV. Since passage of FMFIA, NAVAUDSVC has been tasked with periodically reviewing the Navy's implementation of the internal control program. To date, NAVAUDSVC has issued three composite advisory reports, the last report being issued on 24 August 1987 [Ref. 25]. That last report covers Navy-wide implementation progress made through fiscal year 1986. Although that information is dated by 18 months, Report T30046, Implementation of the Department of the Navy's Internal Control Program is the latest opinion published by the NAVAUDSVC [Ref. 25].

Report T30046 had as its basic objectives to evaluate the accuracy of the procedures used to identify and report on material weaknesses, to determine if local commands had adequate follow-up systems in place, to determine the status of corrective actions from previous years, and to assess the accuracy of the SECNAV's Internal Control Statement to Congress [Ref. 25]. The report did not evaluate how the Navy's Internal Control Program promoted conformity to GAO standards and the general objectives of FMFIA. NAVAUDSVC limited this latest audit to reviewing results of the
implementing process [Ref. 25]. During that review, 28 major commands, including NAVSEA, were evaluated. Results of NAVAUDSVC's audit were classified into two parts. Part one covered findings from the previous audit, Report T30005 [Ref. 26] and part two covered the objectives of the latest audit, Report T30046 [Ref. 25]. The major finding in part one was that some of the 28 commands audited had not established effective follow-up systems for monitoring corrective actions. This failure was a repeat finding from the first audit in 1984, Report T30254 [Ref. 27]. Findings classified under part two were as follows: subordinate commands did not consider all sources for identifying material weakness, such as old audit reports or inspection findings; the required certification statements on the adequacy of internal controls forwarded up the chain of command as feeder statements by local activities were incomplete; follow-up systems were still ineffective or not established; and the CNO was submitting command inspections for operating forces instead of management control reviews. Findings in parts one and two represent the major concerns noted by the NAVAUDSVC on a Navy-wide basis. NAVSEA, while included in those reports, was found to have an adequate follow-up system and did not have any of the other major deficiencies noted above. [Ref. 17:p. 43]
V. AN INTERNAL CONTROL PROGRAM WITHIN
ONE NAVAL SHIPYARD

A. AN INTRODUCTION TO A SHIPYARD'S INTERNAL CONTROL
PROGRAM

This chapter describes an internal control program as
developed by a single Naval Shipyard. The time frame to be
described represents a period of six years from September
1982 through March 1988. Only one shipyard was studied and
may not be representative of all Naval Shipyards; however,
based on comparative accounting figures, the shipyard
selected for study is one of the top four in total revenues
and one of the top three in total labor hours utilized. All
accounting figures cited in this chapter and the next were
extracted from NAVSEA's Navy Industrial Fund Reports System
(NIFRS) report dated 2 February 1988. Descriptions
contained in this chapter are a combination of on-site
review of historical records, personal observations of the
shipyard organization and information obtained from
interviews with shipyard, NAVSEA and NAVAUDSVC personnel.
This chapter emphasizes the evolution, organizational
structure and internal control process used by the shipyard.
Individual internal control case studies are analyzed in
Chapter VI.
B. AN EVOLUTION OF ONE SHIPYARD'S INTERNAL CONTROL PROGRAM

As discussed in Chapter IV, the Navy did not officially start its development of an internal control program until SECNAV issued the first Navy guidance in July 1983. The Naval Shipyard that was studied had no records concerning a formal internal control program prior to that time as confirmed by the Director of Internal Review. While no formal internal control program existed prior to 1983, all of the nine shipyard employees interviewed acknowledged that internal controls were part of their existing accounting and nonfinancial systems. Personnel who were employed at the shipyard prior to FMFIA's passage attributed the responsibility for monitoring the use of internal controls exclusively to the internal review staff. The common belief of all the line managers interviewed was that breakdowns in internal controls were noted only when discovered by audits or inspections or when circumstances in an operation required management's attention. Prior to July 1983, according to the Director of Internal Review, internal controls were only considered as a management tool in response to problems. There was no formal mechanism or requirement that caused line managers to anticipate the possibility of fraud, waste or abuse. The Director of Internal Review said the anticipation of potential problems was a strategic planning function done mostly by top level management during budget formulation and execution.
Through interviews with the Director of Internal Review and the Internal Control Program Coordinator, along with examination of historical records, it was determined that the shipyard commander, in response to the July 1983 SECNAV guidance, did at least three things to implement an internal control program. First, he assigned responsibility for the internal control program to personnel in the Management Engineering Division. Duties were to be performed on a collateral duty basis. There were no other shipyard full time personnel or assets assigned to this function. The second accomplishment by the shipyard commander was to present a numerical summary of the corrective actions taken in response to weaknesses identified by vulnerability assessments and to provide a letter describing program implementation as an input to SECNAV's certification and report to Congress in December of 1983. Verification of the 1983 input was possible only through a verbal confirmation from personnel performing those duties because no records from that period could be located. The third and final action taken in 1983 by the shipyard commander was to require department heads to have their line managers support the program's identified objectives. In 1984, there were two advancements in the internal control program. As described by the Director of Internal Review, the Management Engineering Branch Director had obtained enough cooperation from line managers to complete the first
management control reviews based on the 1983 vulnerability assessments and to report semiannually on schedule as required. Confirmation for those actions was once again obtained only verbally because local files contained no documentation covering the internal control program for any part of 1984.

As noted in the last chapter, GAO and the NAVAUDSVC had reviewed DOD's Internal Control Program after the first year following FMFIA's passage. Those reports noted a lack of training and documentation concerning DOD's implementation of the internal control program. A lack of any records on the actions taken by the shipyard parallels those findings.

During 1985, the execution of the internal control program remained under the guidance of the Management Engineering Branch. The Director of Internal Review recalled that an audit of the internal control program during 1985 revealed that the program operated in the same manner as it had during 1984. He stated that from his perspective neither the quantity nor quality of actions concerning the internal control program had changed from the previous year's effort. However, there was one action taken in 1985 by the shipyard commander concerning the Director of Internal Review and his interface with the internal control program. The Internal Review function was separated from the Comptroller's Department. It was after this action that the Director of Internal Review said his staff's actions
concerning the audit of the internal control program became more formal and extensive. The Director of Internal Review's records concerning the shipyard's implementation and execution begin with the shipyard commander's December 1985 report to NAVSEA. This report was the same semiannual report that was to be forwarded up the chain of command so that the SECDEF could report to Congress which event cycles required internal controls and what actions the shipyard took to implement needed internal controls. Also, this report contained the shipyard commander's annual certification statement to the CNO for inclusion in the SECDEF's report to Congress on the adequacy of internal controls within the DOD.

As discussed in Chapter IV, GAO and NAVAUDSVC completed their reviews of DOD's implementation efforts in late 1984. According to the NAVSEA Internal Control Coordinator, NAVSEA in 1985 organized and began to execute quality assurance checks on its shipyards' internal control programs in response to the GAO and NAVAUDSVC reviews. The NAVSEA Internal Control Coordinator also stated that NAVSEA's quality assurance efforts began to affect the shipyard under study in January of 1986. Continuing the historical description, the NAVSEA Internal Control Coordinator stated she visited the shipyard and made three recommendations to improve the program's performance. The first recommendation was that the shipyard should start retaining documentation
on actions taken concerning the internal control program. To aid the shipyard in this task, NAVSEA's Internal Control Coordinator delivered the SECDEF 1984 Internal Control Course and conducted on-site training for the internal review staff and the Management Engineering Branch personnel. The last two recommendations were that the Internal Review Director be given responsibility for the internal control program and that one person be assigned as a full time coordinator for the program.

The Director of Internal Review confirmed that the shipyard commander followed all of those recommendations within one month's time. Shortly after this change in local policy, the following actions were taken:

(1) The shipyard performed detailed vulnerability assessments on 238 assessable units,

(2) The shipyard assigned 17 collateral-duty Departmental Internal Control Coordinators,

(3) The shipyard drafted a shipyard instruction on the internal control program,

(4) The shipyard conducted six complex management control reviews,

(5) The shipyard conducted detailed training on the Internal Control Course.

(6) The shipyard implemented 15 new internal controls.

According to the Director of Internal Review, the actions taken in 1986 should be considered the first actions to approach the requirements of FMFIA, because it was during 1986 that the shipyard completely employed all seven steps involved in the internal control process. In his words,
Without the proper documentation and the line manager's involvement in the internal control program, it is impossible in good faith to state that internal controls are adequate.

The Director of Internal Review stated that the improvement and expansion of the internal control program continued in 1987 with nine additional management control reviews being completed. The researcher's review of the internal control program records confirmed that all reports required by NAVSEA Instruction 5200.13 had been retained and forwarded to NAVSEA. The researcher examined all retained records concerning actions taken since January 1986 and confirmed the Director of Internal Review's statement that there were now adequate records for audit and review by concerned parties external to the shipyard. The NAVAUDSVC auditor also confirmed that the shipyard was retaining better documentation after the 1986 reorganization. During the records review, the researcher noted that 1987 was the first year to have an annual internal control program schedule on file. Further discussions with line managers revealed that the Internal Control Coordinator followed the schedule as part of the normal routine for the internal control program.

The research for this thesis concluded in March of 1988. Through that period the researcher was able to determine through interviews that all previous actions that were cyclical with regard to the internal control program were continuing. Also, the researcher found out from interviews
that the new improvements planned for the remainder of 1988 concerned a new schedule for vulnerability assessments, issuance of a drafted internal control program instruction and simplification of the supporting paperwork required by the Navy's Internal Control Program.

C. THE SHIPYARD'S INTERNAL CONTROL PROGRAM ORGANIZATION

As discussed earlier, local commanders are required to implement an effective system for monitoring and ensuring that good internal controls are used within their organizations. The shipyard commander has the overall responsibility for his internal control program. To support him, there are organizations internal and external to the shipyard that assist in the execution of the requirements of FMFIA. Internally, according to the local shipyard draft instruction and NAVSEA Instruction 5200.13, he is supported by the Internal Review Department, the Internal Control Program Coordinator, the Director of Industrial Relations, department heads and line managers [Ref. 22]. Externally, he is assisted by NAVAUDSVC's local shipyard on-site auditors [Ref. 3].

The principal working relationship necessary for the internal control program to function effectively is the interface between the shipyard commander and the Director of Internal Review [Ref. 22]. According to the Director of Internal Review, that interface is both frequent and mutually supportive. When the shipyard commander assigned
the Director of Internal Review the responsibility for program execution, he gave the Director a full time civil servant, an increased budget and the authority to develop policy for the shipyard's overall program execution. When asked by the researcher, the Director of Internal Review emphasized that the lines of communication between the shipyard commander and himself were both open and direct.

The next participant in the program is the Director of Industrial Relations. He is designated to assist managers and supervisors in developing Internal Control elements within employee performance appraisals. That action, as stated by the Director of Internal Review, is intended to provide the incentive for all civilian employees to cooperate with the requirements of the program.

During the researcher's interview with the Internal Control Program Coordinator, the facts that the Internal Control Program Coordinator was hired in 1986 and is a Management Analyst, GS-12, indicated when and what capabilities the shipyard commander agreed were required to manage the internal control program. As obtained from the shipyard's organizational chart, the Internal Control Program Coordinator was assigned to the Director of Internal Review. The Director of Internal Review stated that the Internal Control Program Coordinator is provided support from the Internal Review Staff for the purposes of scheduling, auditing and report compilation. According to
the Internal Control Program Coordinator's position description, he is assigned the primary responsibility for coordinating the internal control process. Although responsible for coordination, the Internal Control Program Coordinator does not interface directly with department heads. Coordination for the program at that organizational level is between department heads and the Director of Internal Review. In the draft internal control program instruction and as described by the Director of Internal Review, department heads are required by the shipyard commander to appoint departmental representatives to assist the Internal Control Program Coordinator and to ensure that the department heads take an active interest in the internal control process. As part of that process, department heads encourage and evaluate their line managers' cooperation with both the Departmental Internal Control Coordinator and the Internal Control Program Coordinator [Ref. 22].

At the line manager's level of authority, internal controls are evaluated, developed, improved and sometimes eliminated so as to prevent fraud, waste and abuse. It is the line managers who should provide the primary efforts necessary to ensure the program's success or failure. [Ref. 5:p. 7]

All the relationships described above are internal to the shipyard's organization. An organization external to the shipyard is the NAVAUDSVC. The NAVAUDSVC has auditors
permanently stationed at all eight Naval Shipyards, and perform audits on a continuing basis. As part of their responsibilities, auditors evaluate the effectiveness of internal controls. As those evaluations take place, the auditor provides recommendations to shipyard personnel on how systems or operations can be improved. Recommendations from the auditors assist the local line manager in developing the correct control to fix actual or potential problems. According to the NAVAUDSVC auditor interviewed, the Auditor General of the Navy has a policy that the Navy's Internal Control Program is to be an integral part of their daily work.

In summary, the shipyard's organization executes its program by delegating authority down to the Director of Internal Review who acts both laterally and vertically to execute the program. The Director of Internal Review's principal focal point for implementation is the Internal Control Program Coordinator. The Internal Control Program Coordinator then accesses line managers through departmental internal control program coordinators. The burden for taking corrective action rests primarily with the line managers who are expected to coordinate their actions with the overall internal control program [Ref. 22:encl. 3, p. 4].
D. HOW THE SHIPYARD USES THE INTERNAL CONTROL PROCESS

In Chapter IV, a seven step process was identified as the basic structure around which shipyards should form their internal control program. The shipyard in this study was found by the researcher to be utilizing that basic process. In this section, the shipyard's execution of that process is expanded upon to show how that process was tailored to fit the needs and desires of the shipyard commander. The discussion that follows in this section was developed by the researcher from interviews with the Director of Internal Review and the Internal Control Program Coordinator.

The first step in the internal control process was the organizing stage. In most cases this step should have been a one-time evolution if the internal control program was meeting the basic requirements identified in NAVSEA Instruction 5200.13 for an effective internal control program. But, the shipyard was required to undertake that step twice, once in 1983 when the program started and once again in 1986 after NAVSEA suggested that the internal control program be improved. The reorganization of the internal control program moved the program's responsibilities from the Management Engineering Branch to the Director of Internal Review. Also, reorganization provided the first opportunity to conduct necessary training through the use of the Navy's Internal Control Course. After conducting the
training, the shipyard was able to start maintaining records in accordance with NAVSEA Instruction 5200.13.

The next step in the internal control process was the segmentation of the shipyard into assessable units. That step was accomplished on at least three separate occasions, according to the Director of Internal Review, first in 1984, again in 1986 and finally again in 1987. Normally, the segmentation of the activity should be required only once. But in this case it occurred three times because, with each successive attempt the segmentation became more detailed. These facts were verified by the researcher's examination of the records retained after 1986. Those records contain correspondence between the shipyard commander and NAVSEA that explained the three attempts the shipyard made at updating its assessable units inventory. The Director of Internal Review explained to the researcher that he had found, that through greater segmentation of the assessable units, more line managers became involved in the program. Greater segmentation meant that, instead of line managers looking at a large event cycle, such as the supply function for the shipyard, they were required to break it down into smaller event cycles. Examples of smaller supply functions are event cycles like the material receiving process, the imprest fund process, the open purchase process. It was the Director of Internal Review's contention that as segmentation increased, greater numbers of line managers became
involved in the management control review process. With more line managers involved, event cycles could be more closely assessed for weaknesses and then those event cycles could be more easily corrected.

Step three, the vulnerability assessment step, had occurred twice since the program's inception. In 1984, only broad areas were assessed and only a handful of event cycles were found to have material weaknesses, according to the Director of Internal Review. After the 1986 reassessment, greater potential errors were discovered, as documented in the shipyard's semiannual report to NAVSEA. This increase in potential errors was not due to any specific decline in shipyard's performance but, according to the Director of Internal Review, the increase was caused by the improved efforts in assessing the segmented areas. After the 1986 vulnerability assessments and early in 1987, the shipyard commander issued a local notice advising line managers that in addition to the those assessments, potential future management control reviews would also be scheduled based on four additional inputs to the annual internal control program schedule. These additional inputs, according the shipyard commander's notice, were shipyard commander requests, findings from internal reviews, findings from NAVAUDSVC audit reports and CNO interest items.

The fourth step in the internal control process was developing plans for subsequent actions. According to the
Internal Control Program Coordinator, the shipyard performed this step on a semiannual basis starting in January of 1987. Prior to each semiannual report to NAVSEA, the Internal Control Program Coordinator said he updated the shipyard commander's annual internal control program schedule. He considered the following questions about the local program:

(1) How many vulnerability assessments require a management control review?

(2) How many audit findings need a management control review?

(3) How many new CNO interest items need a management control review?

(4) What previous actions identified by a management control review need to be completed?

(5) When should training for departmental coordinators be conducted?

(6) When should line managers conduct management control reviews?

(7) When should the Internal Review Staff conduct audits of management control reviews?

During this scheduling and planning process, the Internal Control Program Coordinator explained, he also conducted his follow-up of the internal control program. The researcher checked on this planning and follow-up process by inquiry of the Director of Internal Review and the six line managers interviewed during the field work conducted in March of 1988.

Step five of the internal control process was the execution of management control reviews. At the shipyard, this step was performed on a continuing basis and was not an
evolution limited to a particular point in time. The reason for extending the process was because complexity of evaluating, designing and implementing new internal controls required managers to spread the workload over time to fit their schedules, according to the Internal Control Program Coordinator. He would interface with line managers daily in some cases to help with the management control reviews. The line managers interviewed by the researcher confirmed that practice.

Step six in the internal control process concerned the reports and annual certification forwarded to NAVSEA. The files on hand after 1986 were complete and detailed when compared by the researcher to the standards outlined in NAVSEA Instruction 5200.13 [Ref. 22].

Step seven is the follow-up on corrective actions. The Internal Control Program Coordinator said he used the semiannual reports as his basis for conducting follow-ups and asking the Internal Review Staff to review management control reviews completed during the preceding six month period. As already mentioned, follow-up occurred prior to each semiannual report and involved the Coordinator, Internal Review Staff, line managers and, in some cases, both the Director of Internal Review and department heads. While the Director of Internal Review and the Coordinator insisted that follow-up actions were thorough, there was at least one case found during the field work where follow-up
was not aggressive enough to prevent the automated data processing functions from falling behind in taking corrective actions by at least one year.
VI. AN EVALUATION OF THE SHIPYARD'S
INTERNAL CONTROL PROGRAM

A. OVERVIEW

The primary purpose of this study is to examine the implementation and execution of the Navy's Internal Control Program at the local activity level. Chapter V described the implementation and some of the unique circumstances that caused the shipyard to develop its internal control program. This chapter describes and evaluates the execution of the internal control program. A combination of three approaches was used to examine the execution of the shipyard's program.

Approach number one was designed to obtain impressions from four key participants who had either oversight or management responsibilities. To obtain this general impression, two of the persons interviewed were external to the shipyard's organization and two of the persons interviewed were internal to the shipyard's organization. The two external persons interviewed were the on-site Naval Audit Service Auditor and the NAVSEA Internal Control Coordinator. The two internal persons were the Director of Internal Review and the shipyard Internal Control Program Coordinator.

Approach number two for evaluating the internal control program's execution was to compare the requirements mandated by NAVSEA against the actions taken by the shipyard.
for program implementation. The third and final approach was to describe six case studies of specific examples where internal controls were added to prevent potential errors or correct actual problems. The descriptions contain evaluations of the use of the internal control process and point out where the controls succeeded or failed.

All of the results identified within this chapter were obtained through an on-site examination of operations or records and by conducting person-to-person interviews. Facts and figures were obtained from the NIFRS report, a monthly summary of all eight Naval Shipyard's financial and management accounting reports, and from the shipyard's historical records retained since 1982.

B. FOUR PERSPECTIVES ON HOW THE SHIPYARD EXECUTES THE INTERNAL CONTROL PROGRAM

1. NAVSEA's Internal Control Coordinator Comments

The NAVSEA Internal Control Coordinator's comments apply to all the Naval Shipyards and do not reflect only the circumstances existing within the one shipyard studied. NAVSEA's program coordinator said that the shipyards' internal control programs are supportive of the overall goals set by NAVSEA. However, the implementation of the program has been slower than NAVSEA initially expected. According to the NAVSEA Internal Control Coordinator, the most beneficial accomplishment of the internal control program is that it lessens the burden on the shipyard
internal review staffs for detecting potential errors in all shipyard functions. The program has put that responsibility on the line managers and has increased both the coverage and the frequency of management control reviews. While NAVSEA's Coordinator said that the program is beneficial, she notes that the program is at times far too paperwork intensive. Because of the complexity of maintaining records and documenting actions taken, there is a reluctance by the shipyard personnel to use the internal control process extensively.

One of the more important aspects of a shipyard's internal control program is the freedom to investigate potential problems by local management and plan the necessary corrective actions. The NAVSEA Internal Control Coordinator said that in some instances, when shipyard commanders had identified potential or actual problems in their semiannual reports, those reports became a basis for criticizing shipyard operations. The identification of problems in too great a detail had invited micro-management from above the shipyard commander's level of authority. The NAVSEA Internal Control Coordinator said that, although that practice had only happened in one or two isolated cases during the early years of the Program's implementation, the impact of that practice caused greater care to be taken by shipyard commanders as to how and what problems were identified to higher authorities.
The NAVSEA Internal Control Program Coordinator explained that the shipyard commanders increased concern over the reporting requirement had two specific beneficial results. First, it eliminated the attempt by shipyard commanders to identify small or insignificant details that should have been handled locally. Second, it encouraged shipyard commanders to scrutinize more closely the content of the actions being submitted by line managers for the semiannual reports.

2. NAVAUDSVC Auditor Comments

The second external impression of the shipyard's execution of internal controls was obtained from an interview with the shipyard's on-site NAVAUDSVC Auditor. This auditor had an in-depth knowledge of this shipyard because he had been assigned to it since the passage of FMFIA. His tenure at that shipyard gave him the ability to evaluate the program's implementation over its entire history.

From the auditor's perspective, the program has several benefits and at least two major weaknesses. The benefits are these:

(1) Shipyard personnel and line managers support the internal control program.

(2) Internal controls are more widely used to prevent potential errors.

(3) The shipyard's internal review staff and the NAVAUDSVC auditor more frequently coordinated their efforts concerning the evaluation of internal controls in audits.
The most significant benefit is that the Internal Control Program causes shipyard managers to become more aware of their functions and how they operate with regard to potential or real material weaknesses. While the NAVAUDSVC auditor sees several benefits, he believes that the program is not as successful as it should be at combating fraud, waste and abuse. There are currently two significant problems. The first is that local managers focus too much of their management control review effort on reviews specifically mandated by the CNO. The second is that the follow-up efforts on newly implemented controls are insufficient in most cases to make long lasting changes. The NAVAUDSVC auditor believes that, if the follow-up aspect were emphasized, more the program could be a more effective management tool.

Having presented these two external views on the shipyard's internal control program, two internal perspectives are also provided to balance the overall impression about how the program was executed.

3. Director of Internal Review Comments

The first internal perspective was obtained from the Director of Internal Review. His general comments indicate that the program's biggest problems are twofold. The first problem is that the process requires too much paperwork, which tends to inhibit responsiveness from the line managers. Secondly, the shipyard is highly decentralized and production-oriented. Both circumstances work against the idea of a centrally managed internal control process.
Because of the decentralized nature of the shipyard's organization, attempts at improving event cycles that cross lines of authority are far too difficult and time consuming for a single line manager. To provide the coordination necessary to correct the complex event cycle's problems, one or more line managers would need to be taken away from their primary production goals. When the internal control program runs counter to those production goals, line managers accord compliance with the program a lower priority for accomplishment. Although the Director of Internal Review recognizes that situation, he summarizes command support to overcome that situation as follows:

The Office of Internal Review has a very supportive relationship with the current shipyard commander. The shipyard commander has depended on the Internal Review Organization for being the lead in the internal controls area and has provided the necessary tools and muscle to achieve this goal. As in any relationship, this remains a two way street. He has recognized the positive actions taken by the participants in this program by giving us and them more responsibility.

The Director of Internal Review stated it was his responsibility to monitor the overall efforts of the internal control program and to maximize its use. He noted that the shipyard's internal control program was to be conducted by the line managers without providing them additional time or personnel assets. The costs of executing the Program were absorbed within the shipyard's overhead costs.
4. **Internal Control Program Coordinator Comments**

As a final perspective, the views of the Internal Control Program Coordinator, who is the manager most closely associated with the internal control program, stated that since 1986 the shipyard has made significant improvements in documentation, training and control. Those accomplishments were made possible only through the strong support given by the shipyard commander and the Director of Internal Review. Line managers are becoming more effective at identifying problems and designing controls. However, two areas still require further improvements to make the program manageable. The first area concerns further attempts to streamline the paperwork involved in the process. The second area concerns the need for a more effective follow-up procedure. The Internal Control Program Coordinator believes that it is most difficult to convince managers that the process is only effective if it is coupled with a strong follow-up procedure.

C. **HOW THE SHIPYARD MET THE REQUIREMENTS OF THE NAVY'S INTERNAL CONTROL PROGRAM**

Approach number two compares the shipyard's execution of the internal control program with the requirements mandated by SECNAV, CNO and NAVSEA. As may be recalled from Chapter IV.B.3, there are at least six basic requirements that should be followed in executing a good internal control program [Ref. 22]. The following descriptions provide a
comparative review of how the shipyard met those commitments.

1. **Requirement Number One**
   
The shipyard is to designate an Internal Control Program Coordinator. The shipyard performed this function twice, once in 1983 on a collateral duty basis and again during the 1986 reorganization of the program.

2. **Requirement Number Two**
   
The shipyard is to ensure that an internal control system is implemented and functioning. This requirement was accomplished by drafting a shipyard internal control program instruction and by continuously performing the seven steps of the internal control process identified in Chapter IV.E.

3. **Requirement Number Three**
   
The shipyard is to ensure that both military and civilian personnel have their responsibilities regarding internal controls documented within their evaluations and performance appraisals. According to the December 31, 1985 report to NAVSEA, the shipyard was achieving this goal for only 36 percent of its line managers. The Director of Internal Review knew of no further improvement concerning this requirement since that 1985 report. Subsequent audits of the Program confirmed the Director's belief about the shipyard's status with respect to this requirement.
4. **Requirement Number Four**

The shipyard is to ensure that vulnerability assessments, management control reviews and other appropriate management actions are performed and reported. A review of the historical records revealed that in the early years of the program those efforts were minimal. Prior to 1986 the shipyard conducted approximately 37 vulnerability assessments and only 24 management control reviews. After 1986, the shipyard conducted approximately 250 vulnerability assessments and 77 management control reviews.

5. **Requirement Number Five**

The shipyard is to maintain documentation on all vulnerability assessments, management control reviews, other management actions and corrective actions. All the required documentation was being maintained after the 1986 reorganization. The additional management actions included correspondence on required reports, annual schedules, periodic training, updates on actions taken and historical files of vulnerability assessments and management control reviews.

6. **Requirement Number Six**

The shipyard is to establish quality control to ensure that adequate internal controls are in place to prevent loss or unauthorized access to resources, prevent errors in reports and information, prevent illegal or
unethical acts and to prevent inefficiencies and adverse public opinion. Under this requirement, the shipyard's line managers believed that the Internal Review Staff and Internal Control Program Coordinator were to perform the quality control function. However, this quality control review requirement was designated by NAVSEA to be a shipyard-wide requirement and not an internal review requirement. The internal review function was given its own detailed responsibilities to evaluate overall program compliance, to audit internal control documentation and systems and to provide technical assistance to managers conducting vulnerability assessments and management control reviews [Ref. 22]. At the time of this field work, there was no internal procedure that required managers to follow-up on internal control actions taken. While interviewing the Director of Internal Review, it was discovered that there were no surprise audits or spot checks performed on an unannounced basis to encourage compliance with the newly implemented controls.

D. SIX EXAMPLES OF HOW THE INTERNAL CONTROL PROGRAM WAS USED TO MAKE A DIFFERENCE IN SHIPYARD OPERATIONS

1. Case Study Format

The third phase of this examination of the execution of a shipyard's internal control program uses six case studies. All information in these six case studies was obtained through on-site observation or examination of
records, facilities and personnel performing the functions described. Accounting data cited were obtained from the February 1988 NIFRS report and locally prepared operating statements. Operating procedures evaluated were matched against local instructions governing those procedures. Since the exact shipyard selected for examination and evaluation is not specifically identified to maintain confidentiality, local instructions are not cited by name or number. Navy-wide guidance concerning a function involved in any of the following case studies is identified. All six case studies were conducted in the same manner, using a standard format. The format was designed by the researcher to provide a consistent approach for drawing conclusions later. The basic format for the six studies is as follows:

1. Background. This section describes the general working environment of the function being studied to indicate how the function impacts on shipyard operations.

2. Event Cycle. This section describes the systematic steps involved in the function in which a weakness was identified.

3. Finding. This section describes a material weakness discovered by the line manager of the event cycle being described.

4. The Controls Used To Prevent Potential Errors. This section describes the controls the shipyard line manager implemented to prevent the deficiency noted in a finding.

5. Compliance Testing. This section describes the compliance testing performed by the researcher to determine how well the newly implemented internal controls were working.
(6) Risk Assessment. This section describes how the researcher evaluated risk in the event cycle after the line manager implemented the new internal controls. Risk is described by using two classifications, inherent risk and control risk. Inherent risk measures the researcher's expectation that material errors may exist in the event cycle before considering the effectiveness of internal controls. Control risk measures the researcher's expectation that material errors in the event cycle will not be prevented or detected by the internal controls.

(7) Weaknesses With The System In Place. This section describes additional weaknesses discovered by the researcher after the event cycle was corrected by the shipyard's line manager.

(8) Management's Commitment Rating. This section describes how the line manager of the event cycle being studied was rated by using a standardized questionnaire (Appendix) designed by this researcher.

2. Case A--Blanket Purchase Agreement Function

   a. Background

   The Blanket Purchase Agreement Function is a Supply Department activity performed within the Purchase Division, Code 530. There are five blanket purchase agreement agents assigned to handle 350 indefinite delivery contracts. The Naval Shipyard uses this type of contract for approximately 40 percent of its annual purchase requirements. Total expenditures for shipyard purchases is approximately $33 million annually, of which $13.2 million is expended by using indefinite delivery contracts. Open purchase requirements are received from the Naval Shipyard, Naval Base and tenant activities to support a primary mission of ship repair and overhaul.
b. Event Cycle

The blanket purchase agreement function begins with a customer's request for non-standard material or supplies. If the non-standard request can be provided by an established indefinite delivery contract, the request is forwarded to one of five blanket purchase agreement agents for processing. The agent is authorized in writing to place a verbal order with an approved vendor for the materials requested. The blanket purchase agreement agent directs the vendor to deliver a specified quantity to the customer. Prior to placing a verbal or written order, the agent is required to ensure that the original request has the critical elements necessary to authorize the placement of that order. Examples of the required elements are proper technical review, appropriate funding, adequate descriptions of the requested items, requisition numbers and any other key elements required by the Naval Supply Acquisition Regulation Supplement [Ref. 28:sec. 16.5, pp. 1-5]. The receipt for material and the ultimate payment for that material is done separately from the ordering function. Therefore, this event cycle ends with the agent's forwarding of the order to the Comptroller for payment. The Comptroller will pay the vendor upon receipt of a "confirmation of material receipt" from the customer authorized to receive and accept that material.
c. Finding

During a management control review in Fiscal Year 1986, the line manager identified the fact, that if competent personnel were not functioning as blanket purchase agreement agents, the authorization function fulfilled by this cycle would be in jeopardy of failure. Additionally, it was noted that agents were not appointed in writing. This control was designed by the Director of the Purchasing Division to limit the persons authorized to place verbal orders against indefinite delivery contracts. Without this control, the chance of an unauthorized purchase was greatly increased.

d. The Controls Used to Prevent Potential Errors

There were two controls identified by the Director of the Purchasing Division to ensure that the mandatory policies for contracting described in the Naval Supply Acquisition Regulation Supplement [Ref. 28:sec. 16.5, pp. 1-5] were met. The two requirements were that all persons placing verbal orders against blanket purchase agreements be appointed in writing and that all purchasing agents will attend formal Navy training for contracting.

Control number one was an administrative control to have one blanket purchase agreement agent attend the Naval Supply System's approved Small Purchase Course and to have four blanket purchase agreement agents attend the Small Purchase Refresher Course.
Control number two was to authorize all blanket purchase agreement agents in writing to place verbal orders.

e. Compliance Testing

Since the target date for implementing the training control was dependent upon the availability of training quotas, the Director of the Purchasing Division was waiting for the quotas to become available in July 1988. This delay prevented the researcher from performing compliance tests of the first control during the March 1988 field work. Although compliance testing for the first control was impossible, an investigation into the interim actions taken by the line manager was considered an appropriate alternative to evaluate the program's impact. A review of the system in place revealed that all blanket purchase agreement agents had more than one year's contracting experience and they all had been given local training on the applicable regulations. Additionally, all agents were routinely supervised by an appointed Contracting Officer. Compliance testing of the second control was accomplished by asking the line manager if the agents had been authorized in writing to place verbal orders.

f. Risk Assessment

The inherent risk for this event cycle is high because the complexity of purchasing materials from the open market is great. The requirements to authorize the placement of an order is a very detailed process outlined in
the Naval Supply Acquisition Regulation Supplement [Ref. 28: sec. 16.5, pp. 3-5]. This process is further complicated by the wide variety of materials requested in these non-standard purchase requests. The dollar value for these materials can range from small amounts to hundreds and even thousands of dollars. Since blanket purchase agreement agents are not experts in all the applicable areas relating to procurement of non-standard material, a heavy reliance is placed on the following of published guidance. The control risk is considered low in this case because the control is only an administrative control designed to comply with the Navy regulations. The Navy regulation allows the option to have customers place verbal orders directly with vendors. However, the shipyard segregated the receipt function from the ordering function by having blanket purchase agreement agents place all verbal orders.

g. Weaknesses with the System in Place

The field work review of this system revealed no other potential or existing weaknesses.

h. Management's Commitment Rating

A commitment rating was given to the line manager based on the results of a standardized interview (Appendix). All six line managers from the selected shipyard were interviewed using the questionnaire in the Appendix. The interview questionnaire was designed to ask questions that would indicate knowledge of the Internal
Review Program, use of the program, coordination with other affected personnel and attitude toward the use of internal controls. The line manager responsible for the blanket purchase agreement function was the only participant to receive a score of 100 percent. This means that he (or she) gave what the researcher regarded as the "right" answer to all of the 31 questions in the interview questionnaire.

3. Case B—Imprest Fund Function

a. Background

The imprest fund function is a Supply Department activity found within the Purchasing Division, Code 530. Imprest fund purchasing provides a simplified and economical way to purchase non-standard materials or supplies. The use of this method was limited to purchases not in excess of $500 per transaction. As a reimbursable cash fund, the imprest fund cashier was authorized to retain $10,000 as working capital. The cashier was also authorized to have an alternate cashier who retained part of the $10,000 to provide workload relief. A turnover rate of 3.4 times per month was the velocity of the cash requested and disbursed to meet cash on delivery requests. That turnover rate equated to a dollar volume of $30.4 thousand per month. Of the $33 million in annual open purchase business, the imprest fund accounted for about 1.0 percent.
b. Event Cycle

For this case study two separate event cycles were studied. They were the order/receipt/payment cycle and the reimbursement cycle.

The order/receipt/payment cycle begins with a customer's request for a non-standard type of material. The normal purchasing requirements are performed by a small purchase buyer who reviews, approves and places the order with the vendor. Once the buyer establishes that the appropriate purchase method is to use the imprest fund, he or she completes the required documentation for ordering the requested material. This completed documentation is the approval for the imprest fund cashier to take one of two actions. These two actions involve either a cash advance to the customer for pickup and payment or an establishment of a material due-in order filed by delivery due-date. This allows the cashier to monitor the requests for overdue material requests. If material is overdue, the cashier initiates a follow-up with the vendor to determine the status of the expected material and to determine if any further expediting is required by the original buyer or customer. If the material is overdue for more than sixty days, the order is returned to the buyer for a cancellation action.

When a vendor delivers material for payment, the delivery can take place in one of three ways. First, if
delivery is made by the vendor through a customer pickup process, the customer who wants to pickup the material has received cash from the imprest fund cashier by signing a cash-advance receipt. He then proceeds to the vendor with the cash to receive and inspect the requested material. The vendor provides a paid invoice to the customer, who will ultimately return that invoice to the cashier in exchange for a cash-advance receipt. Once this takes place, the cycle is completed for the first example.

A second method for receipt and payment involves delivery of the material to the Supply Department's receiving section. Under this method, the material is received and inspected at the shipyard. The receiving branch acknowledges receipt on the vendor's delivery ticket and returns the ticket to the vendor. The vendor then presents the delivery ticket for payment to the imprest fund cashier. At this point, the second example of the cycle is completed.

The third way that material is delivered for payment is through a direct material turnover process to the customer. This third method for receipt is more of an exception to the cycle than an expected norm. Certain items require direct turnover due to their bulk or expendable nature. A good example is dry ice. Because of the nature of the material, the vendor delivers the material directly to the customer. However, the vendor is still required to
have the material inspected by the receiving section. This requires the vendor to have an extra stop in the delivery of the material. The vendor, after inspection, delivers the material to the customer who signs the delivery ticket, allowing the vendor to go to the cashier and receive payment. Documentation received as part of a completed order becomes part of a subvoucher that is retained until the imprest fund is reimbursed [Ref. 28:sec. 13.4, p. 16].

A second cycle involved in the imprest fund function is the reimbursement cycle. This cycle starts when the cashier's fund is expended to a point where insufficient cash is available to make any more cash payments on delivery or to a point where no more cash advances can be provided to a requesting customer using the direct material pickup process. The cashier prepares a reimbursement voucher, along with the supporting completed orders, to be exchanged for a check from the shipyard's Comptroller. The check is then cashed at the local bank. After receiving the cash, the cashier returns the fund to his or her safe.

c. Finding

During the Fiscal Year 1986 management control review, the functional line manager recognized one weakness within each of the two imprest fund cycles. The weakness attributable to the order/receipt/payment cycle centered around the third method of material receipt. In those exceptional cases, material was not always being received
and inspected before the cashier made a payment to the vendor. The error in the order/receipt/payment cycle was that the cashier was not getting adequate documentation for inspection and acceptance of material; improper payments occurred.

The second weakness occurred in the reimbursement cycle. It dealt with the adequate safeguarding of assets. As it turned out, the imprest fund cashier was transporting cash over long distances within the shipyard without benefit of any type of physical security. The risk was a potential loss of cash through theft; however, no robbery attempts had ever been made.

d. The Controls Used to Prevent Potential Errors

The order/receipt/payment cycle control implemented after the management control review was to reiterate the policy that all material paid for out of the imprest fund would be inspected and signed for by the Receiving Section prior to payment.

The reimbursement cycle control implemented was to have shipyard Security escort the imprest fund cashier when transporting cash to prevent theft.

e. Compliance Testing

The alternate imprest fund cashier performed the routine duty of making payments. The imprest fund cashier, on the other hand, acted as a supervisor who was expected to maintain the larger quantity of cash and to monitor the
alternate cashier's work. When the implemented control used to correct the weakness in the order/receipt/payment cycle was checked, the alternate cashier was still paying for the exceptional purchases without a proper receipt and acceptance delivery ticket. The control failed again because the imprest fund cashier was not checking the alternate cashier's work. A control that would have encouraged the alternate cashier and the imprest fund cashier to follow the policy of paying only properly received and accepted delivery tickets would have been to perform routine spot checks of both cashiers' work by the Assistant to the Director of Purchasing. As the imprest fund cashier's military supervisor, the Assistant to the Director of Purchasing is knowledgeable of the procedures and has no access to cash, receipts or authority to authorize the purchase of materials. If the policy was being violated, the director's assistant would catch the problem in a more timely manner and take action to stop further improperly authorized payments and, perhaps, relieve one or both the cashiers of their responsibilities.

When the implemented control used to correct the reimbursement cycle was checked, the alternate cashier was getting a shipyard Security escort from the bank back to her safe. What should have been taking place was the alternate cashier being escorted from the Imprest Fund safe to the Comptroller's building, where a check was to be exchanged
for the completed imprest fund orders. Then, the alternate cashier was to be escorted from the Comptroller's building to the bank, where the check was to be exchanged for cash. Finally, the alternate cashier was to be escorted from the bank back to the imprest fund safe. Because the alternate cashier was getting the escort only from the bank back to the safe, shipyard policy requiring the escort for the entire trip was being violated.

f. Risk Assessment

The order/receipt/payment cycle's inherent risk is high because of the complexity of the cycle and the use of a highly pilferable asset, cash. The control risk is moderate because the control used does not always work. The alternate cashier, in some cases, allows small dollar items that are for direct delivery to bypass the receiving control.

The reimbursement cycle involves the use of cash so the inherent risk is high. Control risk is moderate because the weaknesses indentified in the next section still exist even after the controls were added to the reimbursement cycle.

g. Weaknesses with the System in Place

In both cycles physical protection of assets had the potential for loss; the cashier's office was openly accessible by other departmental personnel and they also had access to the material due-in orders.
h. Management's Commitment Rating

Using the standardized questionnaire (Appendix), the imprest fund line manager received a 97 percent score. Program support was high, but the results of the compliance testing indicated that follow-up on corrective actions was not effective.

4. **Case C--Cash Flow in the Cafeteria System**

a. Background

The cafeteria system is a non-appropriated fund activity working as part of the Industrial Relations Organization, which reports directly to the shipyard commander. Its primary function is to provide retail service outlets for shipyard employees' convenience in the areas of shoes, bakery products and food services. The system consists of eight outlets, including three cafeterias, one shoe store, one bake shop and three canteens. Annual revenues total approximately $1.5 million. Direct cash collections through retail outlets total approximately $6,000 daily, on a 20 day per month operating cycle. Cash collections represent 96 percent of annual cafeteria system revenues. Operation of non-appropriated fund activities is supported by the Navy Industrial Fund only to the extent to which those activities receive facilities support. All other operations and expenses are paid from revenues generated within the retail outlets.
b. Event Cycle

This cash flow cycle begins with a collection agent who picks up locked bags daily. The collections are made to transport the daily earnings held by cashiers in various locations to the cafeteria office. Each cashier has an independently operated cash register which utilizes serialized and metered cash register tapes. Cafeteria cashiers share two consolidated collection bags, the three canteen cashiers use individual collection bags and the bake shop and the shoe shop use individual collection bags. Although there are 12 cashiers there are only seven collection bags for the collection agent to collect daily. In the consolidated and the individual collection bags, the cashiers place the cash register tapes and the individual original Daily Activity Records, along with the cash generated from sales in excess of the authorized change funds. Each cashier retains a copy of the Daily Activity Record, which represents each cashier's accountability. This copy is later forwarded to the manager for cross verification and filing.

The manager of the cafeteria system has total responsibility for the proper operation of all accounting and financial controls within the cafeteria system. As part of the manager's office staff, three people are involved in the cash flow process. Those persons are an assistant manager, a collection agent and a secretary. The assistant
The manager is responsible for accounting, the secretary prepares the daily deposits and the collection agent collects cash receipts and also handles the office telephone and food ordering duties. The collection agent has no access to the contents of the locked bags. They are given to the office secretary, who validates the receipts, prepares the daily deposit, and prepares a daily cash report summary in two copies. One copy is forwarded to the manager and one copy is given to the assistant manager for posting journal entries. The secretary places the deposit in a locked bag, which is given to the assistant manager for delivery to the bank. The assistant manager does not have access to the contents of any locked bag. The bank returns the deposit slip via mail to the manager. Periodic reconciliation is made by the manager, using the original Daily Activity Reports, deposits and daily summaries. Each person who has access to cash has one or more independent checks of their work performed.

c. Finding

During the management control review in Fiscal Year 1986, the line manager identified two weaknesses. First, all funds and cash were not verified daily and, secondly, cashiers were aware of the time and place when their change funds were to be audited. The potential problem resulting from not completely verifying cash collections daily was that, if the secretary did not feel
like prelisting all the receipts on the daily cash report summary, she could hold one of the lock bags in her safe overnight and make the entries on the following day. This practice could cause two discrepancies. First, the audit trail tracing the complete days sales receipts from the deposit slips would not match an audit made by the manager when adding the individual daily activity records forwarded from the cashiers. This would make tracing cash difficult. Also the activity's accounting records would not show the true sales on the day on which they occurred. The second problem caused by the secretary holding cash overnight was that the potential existed for her to use that cash for personal purposes. This could be done by always leaving one day's collection out to be posted later. With regard to the second weakness noted, cashiers knowing the time and place of change fund audits allowed for the possibility that dishonest people could use the change fund for personal business until they could return it to the cash register.

d. Controls Used to Prevent Potential Errors

As a result of the management control review, the line manager developed two controls to eliminate the potential errors identified in the preceding section. The first control was designed to prevent the destruction of an audit trail. The assistant manager performed daily spot checks of the secretary's cash verifications to ensure that all cash collection bags were included in the daily deposit.
To eliminate the cashier's knowledge of when a change fund was to be audited, the assistant manager conducted random audits requested by the manager on short notice.

e. Compliance Testing

A review of this cycle by on site observation of the process revealed all controls were in place and operating as designed. The two new controls were also operating and were verified by questioning the responsible persons involved in the cycle.

f. Risk Assessment

The inherent risk in this cycle is high because of the large number of cashiers and the extensive use of cash. Control risk is low because controls are in place to prevent theft. No one person or even one pair of persons controls the collection process. This makes theft without collusion quite difficult.

g. Weaknesses with the System in Place

During the compliance testing phase, one additional weakness was noted and discussed with the line manager. The potential weakness dealt with the fact that neither the assistant manager nor the manager documented the performance of the surprise change fund audits. Without some sort of documentation proving the control was in place, the manager could not verify which cashiers had undergone surprise verification or if all cashiers were routinely included for surprise verification. It was still possible
for some cashiers to assume they may never be audited, if they were missed routinely through oversight by the manager.

h. Management's Commitment Rating

Based on the standardized questionnaire (Appendix) the line manager for this cash flow cycle was rated at 97 percent. The tight controls and working implementation noted during the compliance testing were consistent with the attainment of that score.

5. Case D--The Automated Data Processing Security Function

a. Background

Automated data processing security function includes all the measures required to protect against unauthorized disclosure, modification, destruction or access to Automated Data Processing (ADP) systems and data. Within the shipyard, Navy Industrial Fund Accounting is performed on ADP systems. The value of dollar transactions processed on those ADP systems is $500 million annually. In addition to the accounting consideration, shipyard ADP processes three levels of information. Level one is classified information, level two is information not available for public or foreign access, and level three is all other information. In order to provide adequate control over ADP systems and data, the shipyard has an ADP Security Officer who acts as the shipyard commander's expert for these matters. The shipyard was using one main-frame computer, eight mini-computers and hundreds of micro-computers with
possible modem access to the mainframe. To provide adequate security control, 39 ADP Systems Security Officers, four Terminal Area Security Officers, two Office Information Security Officers and two Network Security Officers report to the shipyard's ADP Security Officer. The system is large and expanding.

b. Event Cycle

There were ten different event cycles assigned to the ADP Security Officer within the shipyard's ADP instruction. The one identified for management control review dealt with the ADP equipment acquisition process. When a customer, usually a line manager, desires acquisition of ADP equipment, he or she submits an 18-point justification to Code 149, the Planning/Project Management Division Head for authorization to initiate a procurement action. The approval and purchase request are then forwarded to code 530, the shipyard's Purchasing Division, where the procurement is started. Upon receipt of the material, Supply's Receiving Section turns the equipment over to the originator of the purchase request. The cycle is designed to provide a centralized authorization point for shipyard ADP procurement in order to maintain control over assets and their applications.

c. Finding

During the management control review conducted in Fiscal Year 1986, it was discovered that ADP equipment
had been purchased for use on classified data, for which the level of control was insufficient. Line managers were requesting ADP equipment and Supply's Purchasing Agents were buying ADP equipment that was not adequately secured to process classified information. Thus, the possibility existed that, once the ADP equipment was purchased, expensive retro-fit would be required to protect the classified material against unauthorized access.

d. The Controls Used to Prevent Potential Errors

The control used to correct the potential error for purchasing inappropriate ADP equipment was to provide a written security plan, along with the 18-point justification, that identified the types of data and uses expected for the equipment being requested. The ADP Security Officer ensures that the equipment requested is appropriate for the level of data being processed on that machine before any procurement action can be taken.

e. Compliance Testing

Review of the cycle and the control in place indicated that the new control was working. Observation and interviews confirmed that an inappropriate procurement was not being forwarded to Supply. Documentation was on file for all requests that had been made since the control was implemented.
f. Risk Assessment

Inherent risk is high, considering the decentralized use of ADP equipment and the levels of information processed on those assets. Control risk is moderate because, even with the new control in place, there is still the possibility that the ADP collateral duty security officers are not being notified that new equipment has been added to their areas of responsibility. This additional weakness is discussed in the next section.

g. Weaknesses with the System in Place

One weakness was noted in the system. The new control was designed to provide a centralized authorization and control over ADP procurement. However, after the ADP equipment was received by Supply, the material was turned over to the originator of the purchase request. No notification was sent to the approving authority, Code 149, that the equipment was added to shipyard assets. The ADP Security Officer had to depend upon the originator of the request informing the supporting ADP collateral-duty security officers that their area of control had been expanded.

h. Management's Commitment Rating

Based on the standardized questionnaire (Appendix), this line manager scored 44 percent. The internal control program did not appear to be an effective tool for this line manager.
Because this line manager scored so poorly on the standardized questionnaire, the researcher interviewed him further to understand why the responses were so different from those received from the other five line managers interviewed. As explained in detail by this line manager, he believed that in the beginning the internal control program was a way to make permanent changes. He had been disappointed to find that overall shipyard policy concerning his areas did not change because of the weaknesses he identified during the vulnerability assessments. Almost all of the areas that he had assessed were originally evaluated as being high in their exposure to risk. When his assessments were forwarded to his department head, he was required to reassess the ratings and provide more detailed justifications as to the potential problems or errors. He was firm in his belief that his original assessments were correct and refused to make the requested changes or to provide the additional detail outlining specific weaknesses. Eventually, he was required to lower his assessments because of not providing more specific details. He stated that, from that point on, he would provide only the inputs for the internal control program specifically requested by the Internal Control Program Coordinator.

The researcher went further to ask the Director of Internal Review and the Internal Control Program
Coordinator if they believed this line manager was unfairly treated by his department head. They both confirmed that this line manager was known to be overly zealous about the potential risks and very vague in providing facts or recommending possible corrective solutions. They attributed these problems to that manager's poor health, which had necessitated an involuntary job reassignment and induced his superiors to make allowances for his opinions. Without detailed weaknesses or corrective actions supplied by the ADP Security Officer, the department head of this area had no choice but to lower the assessments. The researcher believes that the 44 percent score received by this line manager is more attributable to the line manager's attitude than actual lack of knowledge about the program.

The corrective action in this case fixed only part of the entire cycle. Upon review, in nine other areas not studied in detail here, this line manager failed to meet any other target dates for making changes to weaknesses identified during the Fiscal Year 1986 management control reviews.

6. Case E--Material Control in Shop 07
   a. Background

Shop 07 is one of three facilities support shops within the shipyard's Public Works Department. This shop has an annual budget of $12 million, which represents three percent of the entire shipyard's budget. Shop 07 employs
pipe-fitters, machinists, equipment operators, carpenters, masons, painters, electricians and at least seven other types of tradesmen. Shop 07's mission is to support the maintenance and repair of all buildings and mechanical distribution systems. In order to perform this ongoing maintenance effort, Shop 07 utilizes a material warehouse, tool room and key shop. All of these areas contain expensive and highly pilferable materials. The warehouse alone protects inventory that is valued at nearly $500 thousand.

b. Event Cycle

Material control is the event cycle recognized as the most vulnerable within Shop 07. It starts with material receipt by a custodian who places the material on his inventory. Breakouts of the materials from the warehouse, tool room or key shop are done by presenting the appropriate requisitioning paperwork to the responsible custodian. Each of the above three activities has its own independent custodian, since each activity requires daily operation and access. The custodian issues the material and makes the requestor acknowledge receipt of the material or tools in writing. This documentation is then used to reduce the on-hand balance of the inventory. In case of tools, when the requesting worker returns the tool the documentation is returned to the worker and the custodian increases his inventory. For the key shop, the emphasis of
the cycle is to control physical access to equipment that would allow the making of unauthorized keys. After hours issues are controlled by computerized locking systems.

c. Finding

During the Fiscal Year 1986 management control review, the line manager recognized that two weaknesses required correcting. First the warehouses fire control sprinkler system had no backup water shut-off capability. The potential error here was the unnecessary accidental exposure of material stored in the warehouse to water damage caused by the sprinkler systems failure. Failures were possible because of corrosion, water surges and earthquakes. The second weakness focused on warehouse, tool room and key shop access after the responsible custodian was gone for the day. Emergency issues were not tightly controlled after normal working hours. Accountability could never be completely established when emergency issues required that numerous keys be distributed to many foreman. This policy contributed to a situation that could encourage the custodian to make an unauthorized issue, because the unrecorded issue could always be blamed on an emergency issue.

d. Controls Used to Prevent Potential Errors

Two controls were implemented to eliminate the weaknesses identified during the management control review process. The first control was to place an external water
shut off valve on the warehouse sprinkler system for protection. The second control addressed the issue of emergency access to the warehouse, tool room and key-shop. Computerized locks were installed. This new locking system electronically recorded all accesses made to the controlled areas. It employed the use of serialized keys that were assigned in writing to the various shop foreman and custodians. If entry to a controlled space was made at anytime, the date, time and person entering were recorded by the computer. Daily the shop superintendent was given one of two copies of the entries recorded on the previous day or weekend. Personnel making emergency issues were tracked down and the appropriate documentation was forwarded to the custodian to reduce his accountability. The custodian got one of the two entry printouts to alert him that emergency issues were made. He could then follow up on the missing paperwork and take a spot inventory.

e. Compliance Testing

Through observation and inquiry of the line manager and his organization, the previously identified controls were found to be in place and working as designed. The internal control program worked in this case.

f. Risk Assessment

Inherent risk within the material control system is high because of the large numbers of personnel requiring after hours access to warehoused materials and tools. Also,
the assets within those two areas of control are highly pilferable items. Control risk is low because the cycle is simple and direct.

g. Weaknesses with the System in Place

The only weakness noted with the new controls in place was that the external shut off valve is not an automatic system. The potential for damage was reduced but not eliminated. However, the cost for a completely automated water shut-off system was felt to be uneconomical by the Public Works Officer, and funding was not available.

h. Management's Commitment Rating

The line manager in this case was interviewed using the standardized interview (Appendix) and received a score of 88 percent. The program for this manager was working and being utilized in a similar but different format on a daily basis. This alternate format was called the "Error Cause Removal/Corrective Action" (ECR/CA) program. The ECR/CA program is based upon the premise that each employee executes a mini-management control review. When potential problems exist, the individual employees are requested to identify the problem and recommend corrective actions they feel will correct the problem. The shop superintendent reviews the recommendation and, if the new control is determined to be a viable solution, he gives it his full support for implementation.
7. **Case F--Shop 67 Tool Control**

   a. Background

   Shop 67 is one of 16 production shops within the Naval Shipyard. It is responsible for weapon systems electronic support. There were approximately 350 employees that use tools and electronic test equipment on a daily basis. Shop 67 represents 5 percent of the shipyard's annual budget, with an $18.5 million expenditure in support of the repair and overhaul mission. Tools are essential in all production shops and this function has been a continuing problem for management. The Naval Audit Service has routinely found problems with the tool control function in all shipyards. In this case, management of tools is examined because it is a representative function common to all shipyard production shops.

   b. Event Cycle

   Shop 67 tool control management begins with a worker's need for a tool or tools. He proceeds to the central tool room where he draws the required tool or tools. The central tool room custodian records the tool, the date drawn, the person drawing the tool, his shop and other applicable data necessary to track the tool. Central tool room issues are recorded by a computerized system. After the tool is issued, the worker is given a due date when the tool should be returned to the central tool room. The interaction between the worker, the tool room and shop
management is performed by computerized reports and delinquency cards forwarded to Shop 67. Shop 67's management is then responsible to utilize these reports to aid the shipyard's overall management and control of the tool function. Shipyard instructions direct the shop superintendents to coordinate with Code 906, the Central Tool Shop Superintendent and to designate a shop tool coordinator. His responsibility is to monitor delinquent and missing tool reports and initiate follow-up actions.

Shop 67's management cycle starts with the shop tool coordinator. He receives four documents to aid control: a Delinquent Tools Listing, Delinquent Tool Cards, a Tools Due in 30 days Listing and a Missing Tools Report. The shop tool coordinator sends Delinquent Tool Cards to the worker's supervisor. The supervisor takes the appropriate action to motivate the worker to return the tool to the Central Tool Room. The worker is required to return the tool and then provide proof to his supervisor in the form of a returned custody chit or a delinquency card stamped "returned" by the Central Tool Room. The supervisor initials the card and returns it to the shop tool coordinator, who monitors the return process.

The shop tool coordinator monitors the process by using one listing, three reports, and one supervisor's notice. The delinquency card return rate is monitored by using the delinquency listing as a cross check to track
delinquency cards issued and returned. Next, the shop tool coordinator uses three Shop 67 reports to evaluate the process of the overall tool control program. These reports are a Summary of Administrative Actions and Lost Report, a Lost Tools Report and a Monthly Delinquent Tool Report. Finally, the shop tool coordinator issues a Supervisors Delinquent Tool Notice that highlights which supervisors have problems managing tool control actions. Using the notice and the delinquency listings, the shop tool coordinator initiates actions for the shop superintendent to have the supervisors reprimand formally or informally workers abusing the system. Stronger actions can also be taken to collect money for loss of tools due to negligence or theft. All tool losses are eventually charged to the shop's overhead, but supervisors cannot approve losses in excess of $50. All losses greater than $50 are approved by the shop superintendent before they are charged to overhead. An additional part of Shop 67's tool control cycle is the placement of all shop-owned tools in the central tool room for issue and tracking. Shop-owned tools are not available for issue to other shipyard shops.

c. Finding

During the Fiscal Year 1986 management control review, the line manager recognized that delinquent shop-owned tools were not being controlled and were causing critical jobs to be delayed because of lost or missing
specialized tools. The potential problems were theft and lost time in repair of critical electronic systems.

d. The Controls Used to Prevent Potential Errors

There were two controls implemented to help track shop-owned tools. First, all shop tools were inventoried and turned into the Central Tool Room for issue and control through the computerized system. Second, all shop owned tools were placed on reserve for Shop 67's use only.

e. Compliance Testing

Observation of the system and review of the shop tool coordinator's Delinquent Tools Listing, Summary of Administrative Actions and Lost Report, Lost Tools Report, and the Supervisors Delinquent Tool Notice indicated the controls were in place. The internal control program worked well in this case. Missing and delinquent tools dropped 18 percent between January and February 1988.

f. Risk Assessment

The inherent risk is very high because of the decentralized use of tools and enforcement through large numbers of supervisors. Tools are often pilfered and this compounds the problems faced in controlling tools. Control risk is high because most controls center in the Central Tool Room, and these procedures do not extend past the assignment of custody to the requesting worker.
g. Weaknesses with the System in Place

There were no other weaknesses noted with the controls in place.

h. Management's Commitment Rating

Based on a standardized questionnaire (Appendix) this line manager received a score of 85 percent. Many of the controls in the overall shipyard system were initiated as recently as the past three years. Shipyard-wide commitment for this area was reflected in Shop 67's intense management of tools. Costs are controlled tightly and losses are charged to the Shop's overhead. Considering the environment and attitude of the persons observed within Shop 67's tool control function, support for the use of internal controls was outstanding in Shop 67.
VII. CONCLUSIONS AND RECOMMENDATIONS

A. SUMMARY

The purpose of this thesis was to determine if the internal control program caused line managers to improve their organization's event cycles; to determine under what circumstances internal controls were used to make improvements; and to determine if the controls used made a lasting difference.

This thesis began with a general discussion of what internal controls do, when they are applied, and how they are tested. That discussion provided a general background for the remainder of the study. Next the history of internal controls in the Federal Government, the Department of the Navy and one shipyard were provided to trace the evolution of an internal control program. Included within the historical review were requirements for an internal control program and the internal control process. In conclusion, the study focused on interviews, program compliance and case studies to evaluate the implementation and execution of the internal control process five years after passage of FMFIA.

B. CONCLUSIONS

There are five conclusions drawn from this study.
1. The Navy's and the shipyard's internal control programs have continually improved since the passage of FMFIA. This conclusion is based on two things, a documented history of improvements since 1983 and the examination of one shipyard's internal control program. Having started with a simple one page certification of whether the shipyard's internal control systems meet the requirements of FMFIA, the shipyard is now maintaining extensive records of vulnerability assessments, management control reviews and certifications. The certification, supported by this additional information, comes closer to reflecting the true status of the internal control systems used within the shipyard. NAVAUDSVC audit reports covering the use of internal controls also reflect that Navy-wide there has been a steady improvement since the passage of FMFIA.

2. The internal control process worked best on small and well defined event cycles where responsibility was clearly identified. This conclusion is based on the interview with the Director of Internal Review and the researcher's ability to find documented cases where only small and well defined event cycles were corrected by using the internal control process. Recall that the Director of Internal Review stated upper level management, at the present, was unable to commit the personnel that are necessary to address large complex event cycles. He based his comments on the knowledge that the production mission
consumed most of the available manpower. The researcher reviewed all retained documents concerning the shipyard's internal control program. There were no cases where management control reviews were conducted on an event cycle that extended beyond one manager's scope of authority. Where management control reviews were performed by two separate managers on similar event cycles, corrective actions taken by one manager were independent of the other manager's efforts.

3. The quality of the information used to certify that the shipyard's internal control systems comply with the requirements of FMFIA is heavily dependent upon the voluntary cooperation of line managers. The questionable reliability of that input is the extensive paperwork associated with the internal control process. The Internal Control Program Coordinator's strong dependence on the cooperation of line managers results from his lack of resources to thoroughly audit all the event cycles involved in the internal control program. The program, during the last update of vulnerability assessment inventories, resulted in over 238 different assessable units. The expertise necessary to evaluate that many different assessable units and their possible resulting management control reviews is beyond the limited resources of the internal review staff or the Internal Control Program Coordinator. Therefore, the coordinator has to rely on the
input provided by line managers. However, a factor that impacts on the quantity and quality of that input is the extensive paperwork required by the internal control program. Recall that the Director of Internal Review, the Internal Control Program Coordinator and the line managers all stated that one of their biggest problems with the program was that it required too much paperwork. Also recall that line managers were not given additional personnel resources to conduct the internal review process. So, with the manpower remaining constant and the workload increasing, the line manager is forced to make a decision to concentrate on completing the detailed paperwork or to concentrate on conducting the vulnerability assessments and management control reviews.

4. The shipyard's internal control program improved after responsibility for the program was given to a department head who was permitted to hire an internal control coordinator. Prior to 1986, the internal control program was performed on a collateral-duty basis within the Management Engineering Branch. Documentation was nonexistent, management control reviews and vulnerability assessments were conducted by untrained personnel, certifications of the shipyard's internal control systems compliance with the requirements of FMFIA were made without comprehensive supporting information and follow-up on the program's results was not performed. After NAVSEA's
Internal Control Coordinator reviewed the shipyard's internal control program in 1986, a recommendation was made to reassign responsibility for the program to the Director of Internal Review. Once the shipyard commander made the change, the Director of Internal Review hired a full time Internal Control Program Coordinator. The coordinator caused all deficiencies, with the exception of an aggressive follow-up program, to be corrected. The coordinator does perform overall program review with the assistance of the internal review staff. Review is not the same as aggressive follow-up, however.

5. Aggressive follow-up on actions started, in progress and completed remains a problem for management. This conclusion is substantiated in all three NAVAUDSVC audit reports conducted Navy-wide since the program's start. From the field work, this researcher found cases where target dates for management control reviews were missed and found cases were internal controls were ineffective because line managers failed to follow-up on the controls they implemented. As already stated, the internal review staff and the Internal Control Program Coordinator were performing program review. A separate quality assurance effort is a mandatory requirement for all levels of the shipyard's management by NAVSEA Instruction 5200.13 [Ref. 22], and the aggressive follow-up is supposed to be a part of that effort.
C. RECOMMENDATIONS

The existence of an internal control process is assured as long as FMFIA remains the law. However, there remains the need to make the internal control process part of a manager's routine and not just a special evolution. The recommendations that follow are based on this researcher's experience from this study.

1. Since aggressive follow-up through the use of quality assurance checks continues to be a problem, the shipyard should develop a compliance testing schedule. It should be executed by the departmental internal control coordinators. The schedule should include all event cycles that implemented internal controls during the previous year's management control reviews. Results should be given to the line managers and the Internal Control Program Coordinator. Where controls fail to work, event cycles should be included for another management control review. To ensure that the departmental coordinators perform their jobs, the internal review staff should perform surprise audits to see if the coordinators are complying with the follow-up program.

2. The internal control program should be encouraged by coupling it with an incentive system. In the Navy, there is a beneficial suggestion program that pays federal employees for suggesting changes that save money. An attempt should
be made by the shipyard management to tie the internal control process to the beneficial suggestion program.

3. The shipyard commander should appoint a committee to identify large and complex event cycles that need to be corrected by using the internal control process. The committee would assign personnel to a task force that would conduct a coordinated management control review. By using a task force, no one manager would be made to accept the entire burden for making changes. The workload could be coordinated to identify a specific control objective that meets the needs of all managers, and necessary internal controls could be developed to meet that common objective.

4. Training needs to be expanded throughout all levels of supervision within the shipyard. Currently, training is provided only to departmental internal control coordinators. The line managers train themselves by using SECDEF's Internal Control Course [Ref. 5]. If management is to use the internal control process as a matter of routine, all personnel involved in the system need to have an idea of how, when and where internal controls are used. Just as the Navy requires monthly general military training or periodic safety training, internal control training could be handled on the same basis.

5. The last recommendation is to have more quality assurance checks made by superiors outside the shipyard. In the six year history of the Navy's Internal Control Program,
NAVSEA visited the shipyard only once to review the program's implementation. A periodic on-site review encourages the shipyard to provide continued support to the program. Without this on-site review, the shipyard would eventually assume whatever input they provided was adequate.
APPENDIX

QUESTIONNAIRE

Name: ___________________________ Date: ___________________________

Directions: Circle Appropriate Answer

1. Do you provide personnel for conducting vulnerability assessments and management control reviews? (yes/no)

2. Do you have a current organizational structure in place? (yes/no)

3. Are the right people doing the right jobs? (yes/no)

4. Do you have written guidance for workers defining their jobs and the standards expected? (yes/no)

5. Do you have a good working knowledge of all your areas of responsibility? (yes/no)

6. Is training available for you covering your job? (yes/no)

7. Is training available for your subordinates covering their jobs? (yes/no)

8. Have you considered each of the following objectives listed below when managing your area of responsibility?
   a. Management and supervisory responsibilities and authority are clearly stated and understood? (yes/no)
   b. Resources are safeguarded against waste, loss, unauthorized use and mismanagement? (yes/no)
   c. Accounts, record and reports are reliable and accurate? (yes/no)
   d. Obligations are made in accordance with applicable laws? (yes/no)
   e. Transactions are executed in accordance with regulations and policies? (yes/no)
f. Internal control systems you use emphasize prevention of specific or systematic weaknesses? (yes/no)

Note: In the following questions, assume you are considering developing internal controls to correct potential problems.

9. Does the cost of the controls currently used in most of your systems outweigh the benefits from having the controls in place? (yes/no)

10. Do you strongly support the use of the internal control process by your subordinates? (yes/no)

11. Would you say all personnel working for you are completely competent? (yes/no)

12. Are all the controls used in your systems effective for getting the job done? (yes/no)

13. Do you maintain all the required records and files for the internal control program? (yes/no)

14. Are transactions that require recording in your systems recorded on time more than 85 percent of the time? (yes/no)

15. Do you audit your subordinates work routinely to ensure quality work? (yes/no)

16. Do you understand the purpose for having segregation of duties? (yes/no)

17. Do your systems employ segregation of duties to protect resources that could be used to personally benefit someone in some way? (yes/no)

18. Is there adequate supervision of all personnel assigned within your area of responsibility? (yes/no)

19. Are pilferable assets safeguarded by locks or other similar security methods? (yes/no)

20. Do any of your areas of responsibility currently need improvement to prevent the loss of assets and resources? (yes/no)

21. Do you reevaluate your systems at least twice a year to correct or add needed internal controls? (yes/no)

22. Have you requested an outside audit if one has not been performed in the past two years? (yes/no)
23. Have you any outstanding audit findings that are overdue for correction? (yes/no)

24. Do you have procedures in place to discipline persons caught committing fraud, waste or abuse? (yes/no)

25. Do you monitor corrective actions more often than semiannually? (yes/no)

26. Are corrective actions from audits completed more often than 50 percent of the time? (yes/no)

27. Is training performed in your areas more often than semiannually? (yes/no)

28. Does training include training on the use of internal controls? (yes/no)

29. Do you ask the internal review staff for help in correcting difficult problems? (yes/no)

30. Do you use the internal review process for systems beyond those mandated by the annual schedule from the Internal Control Coordinator? (yes/no)

31. Do feel the internal control program is excessive? (yes/no)

Key used in scoring: All answers are yes except numbers 9, 20, 23 and 31.
LIST OF REFERENCES


3. Secretary of the Navy Instruction 5200.35, Internal Controls within the Department of the Navy, July 29, 1983.


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