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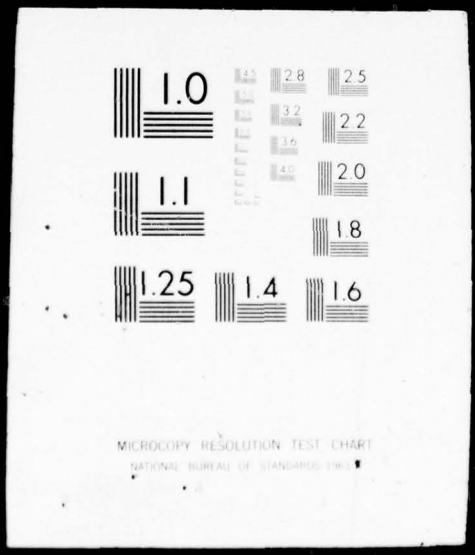

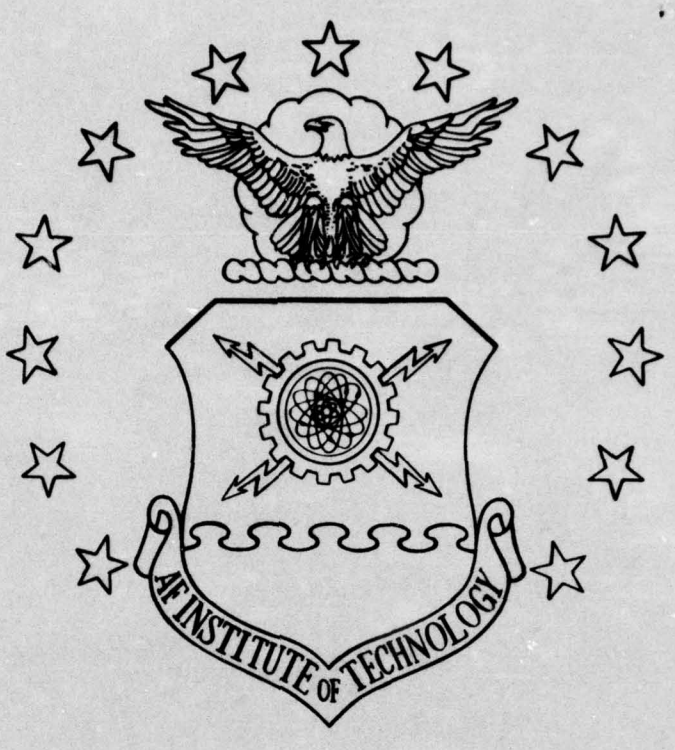

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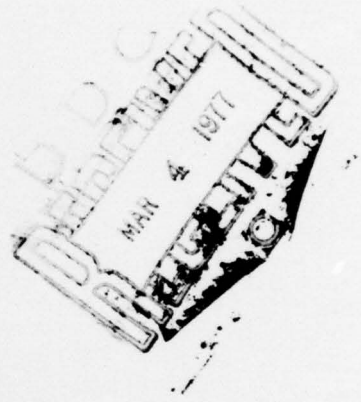
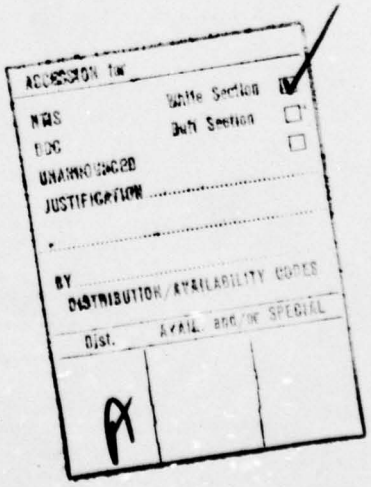


PROBLEMS WITH THE NEW DEPARTMENT OF DEFENSE PROFIT POLICY

THESIS

GSM/SM/76D-26 Robert J. Blair
Capt USAF



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PROBLEMS WITH THE NEW DEPARTMENT OF DEFENSE PROFIT POLICY

THESIS

Presented to the Faculty of the School of Engineering
of the Air Force Institute of Technology

Air University

in Partial Fulfillment of the
Requirements for the Degree of

Master of Science

by

Robert J. Blair, B.S.
Capt USAF

Graduate Systems Management
December 1976

Preface

It was personally satisfying for me to be able to complete a study that both fulfilled part of the requirements for a degree in Systems Management from the Air Force Institute of Technology and provided some timely information to the Profit '76 study group. By filling both of these squares, I can truthfully state that the effort I expended on this study was worthwhile.

I could not have performed this research without the help and guidance that I received from both Major Tom Michalowski and Dr. William Letzkus. My confidence was bolstered knowing that these two individuals were always willing to help me solve the many problems that I ran up against throughout this effort.

One person deserves special mention as she had the talent to solve the problems that no one else had answers for. Whenever I needed someone to encourage me, type for me or console me, my wife Pat was always there.

Robert J. Blair

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Abstract

The objective of this study was to identify potential problem areas that may hinder the successful implementation of the new Department of Defense (DoD) profit policy. A draft copy of the policy was distributed to forty DoD procurement personnel assigned to the Air Force Systems Command, Aeronautical Systems Division. These individuals were interviewed to collect their perceptions as to the potential problem areas associated with the new profit policy. Problems related to the allocation of facilities capital to a contract, the computation of the pre-negotiation profit objective for facilities investment, the inclusion of facilities capital cost of money as an allowable cost and the application of the productivity reward were identified. Recommended solutions to these problem areas were briefed to the chairman of the Profit '76 study group prior to the implementation of the new DoD profit policy.

PROBLEMS WITH THE NEW DEPARTMENT OF DEFENSE PROFIT POLICY

I. INTRODUCTION

Defense profit policy in the United States is traceable as far back as the original thirteen colonies. This chapter, however, deals only with more recent DoD profit policy starting with the weighted guidelines policy introduced in 1964. The evolution of profit policy since 1964 is discussed to accomplish the purpose of this chapter, which is to provide a framework from which one can understand both the rationale behind the latest Department of Defense (DoD) profit policy and the reason for this research effort. This chapter provides the background for the succeeding chapters which are the heart of this study.

The discussion in this chapter begins with the broad goal of DoD profit policy in order to show what the profit policy is designed to accomplish. Next, unique aspects of the DoD procurement environment are discussed to illustrate obstacles in the way of achieving the goal. Two previous policies, weighted guidelines and contractor capital employed, are discussed to illustrate problem areas associated with two policies that did not fully satisfy the goal of DoD profit policy. Finally, discussion is focused on the Profit '76 profit policy, the most recent DoD profit policy.

Goal of DoD Profit Policy

The goal of DoD profit policy is to pay the contractor a fair profit for the work performed on a contract. Fair profit is interpreted as rewarding the contractor for risk assumed and facilities provided, while recognizing outstanding performance and encouraging efficiency. (Ref 6: 13)

Profit Policy Environment

The goal of DoD profit policy is not always attainable, however, because of certain aspects of the environment in which it functions. The two major forces that seem to impact the DoD procurement community most heavily are the political environment, which encompasses the pressures from Congress, defense industry groups and the taxpayer, and the contracting environment, which includes the laws, regulations and unique problems associated with purchasing military hardware.

Political Environment

Congress exerts great influence on how DoD spends the taxpayer's money. An example of Congressional influence on DoD profit policy occured during the McClellan Hearings in 1962. During these hearings it was stated that defense contractors were earning excessive profits on their subcontracted work. Congress termed this "profit pyramiding" and declared it to be wasteful of the taxpayer's

dollars. As a result, DoD clearly understood that if action within the department was not taken to revise the profit policy, the Congress would step in and revise the policy for the DoD. (Ref 7: 11)

Pressures from the defense industry were also being felt by DoD during this same time period. The average profit rates earned by the defense industry were declining and, according to the defense industry, profits were too low. Profits had to be increased on defense work or DoD faced the possibility that defense contractors would employ their resources on more lucrative commercial business. (Ref 7: 12)

As a result of these political pressures, the weighted guidelines profit policy was implemented by DoD in 1964. This policy was designed to both discourage "profit pyramiding" and offer guidance that the designers believed would result in generally higher profits. (Ref 7: 12) Some ingenuity was required to design and then implement a policy that satisfied both of these interest groups.

Another aspect of the political arena surrounding DoD contracting is the degree in which Congress reviews purchases of major weapon systems. The defense contractor routinely lives with the possibility that Congress may either cancel work completely on a weapon system or decrease the scope of the work. DoD profit policy must be designed to adequately reward the contractor for this risk. In designing a policy that rewards for this risk, DoD

must be able to anticipate Congressional decisions. Anticipating the actions of a political body the likes of Congress is a major obstacle in the design of a profit policy that rewards for risks assumed.

A third aspect of political influence on DoD profit policy is the visibility defense profits receive from newspapers, independent research efforts, and watchdog agencies of the Congress. Profits earned on defense work provide a constant source of data for a newsworthy article or report.

The General Accounting Office, Logistics Management Institute and the RAND Corporation all have conducted major research efforts on the subject of defense profits. Several authors have paid their bills studying DoD profits.

The approach most of these articles take is to compare measures of profitability of defense business with commercial business. The assumption made by these studies is that profit earned on commercial business represents fair and reasonable profit as determined by competition in the markets. DoD profit policy may not be providing satisfactory guidance if profits negotiated on defense business are significantly different from profits earned on commercial work.

Each of the profit studies has had various degrees of influence on DoD profit policy. Perhaps the most authoritative study is the General Accounting Office study published in 1971. (Ref 16: 175) This study was conducted

by an agency independent of both DoD influence and the influence of defense industry groups, therefore, it is relatively free of bias. The GAO study presumably had some influence on the flurry of DoD activity in 1971, that was directed toward developing a new profit policy.

The facts collected on seventy-four large firms in the GAO study indicate that the profits earned on their defense business are less than the profits earned on their commercial work. This was true for three different measures of profitability as illustrated in Table I-1.

Two authorities on DoD profits, Mr. Richard Kaufman and Mr. Murray Weidenbaum, both used the GAO data to illustrate that defense work was more profitable than commercial business. Kaufman used the profitability of twelve firms selected from the GAO sample and Weidenbaum used a sample of six as evidence to support the contention that defense profits are too high. Each of these studies has been criticized for selecting a small sample of firms that do not accurately represent the profitability of the defense industry. (Ref 16: 175) Regardless of the criticism, these two authors have played a role in shaping DoD profit policy by advertising publicly that profit inequities may be perpetrated by the DoD profit policy guidance.

Contracting Environment

Discussion to this point has centered on the external

TABLE I-1

GAO Profit Data for 74 Firms, 1966-1969

	Total Sales Dollars	Profit as % Sales	Profit as % Total Capital Invested	Profit as % Equity Capital Invested
DoD Work	23.7 billion	4.3%	11.2%	21.1%
Commercial Work	66.8 billion	9.9%	14.0%	22.9%

pressures that are applied on DoD every day with regard to profit policy. In addition to these pressures DoD must contend with laws that specify limits to DoD procurement authority.

Title 10 of the United States Code specifies two broad categories of DoD contracts; formally advertised and negotiated contracts. The law states that it is preferable to formally advertise as many contracts as possible, because the price paid will be a function of the competition in the market.

Under certain circumstances it is impossible for DoD to formally advertise for the purchase of military hardware. For example, DoD frequently purchases goods that are of such a nature that DoD is the only possible customer and, furthermore, only one or two contractors are the possible suppliers. A nuclear submarine or an air to air missile have little appeal to anyone outside the military. Furthermore, only a handful of contractors possess the

resources to build these specialized weapons. Therefore, the law provides DoD with the authority to negotiate the prices on specific contracts.

Negotiated contracts amount to about $20 billion dollars of defense business a year. (Ref 17: 2) This large amount of negotiated business forces DoD to closely monitor the mechanisms and policies employed to develop the final contract price. The specific policies and procedures used to control DoD procurement and ensure compliance with the law are spelled out in the Armed Services Procurement Regulation (ASPR). The ASPR places a great deal of emphasis on providing direction and guidance to DoD procurement personnel with regard to negotiated contracts. Conversely, since prices on formally advertised contracts are determined by competition, DoD is not as concerned with profits on advertised business as it is with negotiated procurements.

The DoD profit policy is included in sections of the ASPR that deal with negotiated contracts. Profits on negotiated contracts are a part of the overall contract price and are negotiated along with other elements of the total price. This element of the contract price is determined predominately through use of the guidance provided in ASPR. Therefore, it is DoD's responsibility to ensure that this guidance is satisfactory to enable procurement personnel to negotiate reasonable profits.

A problem for DoD exists in designing a profit policy

that closely simulates the mechanisms found in the open market environment. DoD profit policy must provide DoD procurement personnel the proper guidance to determine fair profits in an environment where profits are negotiated on a contract by contract basis. These profits must be high enough to keep defense contractors in business while not being so high as to draw undue attention from Congress. This is the environment in which DoD profit policy must survive.

Weighted Guidelines Profit Policy

The weighted guidelines profit policy has survived in the DoD procurement environment from 1964 to 1976. Several shortcomings of weighted guidelines were identified in studies of the policy, however, specific suggestions for improving weighted guidelines were never adopted.

One major shortcoming of the weighted guidelines profit policy is that it is a cost-based policy. Sixty-five percent of the profit objective on a contract is based on a percentage markup of the estimated costs of a contract. The higher the cost estimates, the higher the dollar amount of profit received on the contract.

Comptroller General Staats, in testimony to the Congressional Joint Economic Committee, criticized the weighted guidelines profit policy because it rewards inefficiency and discourages cost reduction in defense contracts. As long as the profits are based on the cost of the contract,

there is no motivation for the contractor to employ new technology to reduce costs. (Ref 10: 15)

Mr. Staats further suggested in his testimony that DoD profit policy should recognize the contractor's investment in assets when calculating the profit objective for a contract. Mr. Staats stated that the following three factors should be considered in determining the profit objective:

1. The actual contractor funds invested;
2. contractor risk;
3. outstanding managerial capability. (Ref 10: 15)

The improvements to weighted guidelines suggested by many authorities on defense profits focus on several points. The majority of suggestions recommend reducing the emphasis that contract cost has on profit, increasing the emphasis on the contractor's capital investment, recognizing the risk assumed by defense contractors and compensating contractors for outstanding managerial effort. Mr. Staats suggestions, coupled with similar suggestions from other authorities, provided the impetus for DoD to introduce a revised profit policy in January 1972.

Contractor Capital Employed Profit Policy

Mr. Henry Paulson, from the office of the Assistant Secretary of Defense, Comptroller, presented the Contractor Capital Employed (CCE) profit policy during an address before the San Francisco Chapter of the National Contract

Management Association on March 14, 1972. He stated that two basic objectives of this policy are to attract adequate capital to ensure an efficient and responsive industrial base for national security and to reduce the overall cost of weapons by providing incentives for industry to invest in modern efficient equipment and facilities.

In contrast to weighted guidelines where sixty-five percent of the profit objective was related to cost, thirty percent tied to a measure of risk and five percent to a variety of other factors, the CCE policy based fifty percent of the profit objective on cost and fifty percent on an assessment of risk and the contractor's capital investment.

The CCE policy reduced the emphasis placed on cost in determining contractor profits, thereby, answering Mr. Staats criticism of a cost-based profit policy. The CCE policy also increased the emphasis placed on risk and contractor investment which may motivate the contractor to invest in new capital equipment and eventually drive down the cost of weapon systems.

The CCE policy was quite a radical departure from weighted guidelines. It was so much of a change that it was first implemented on a voluntary basis to allow DoD time to evaluate and improve the policy prior to making the policy mandatory. The CCE policy did not, however, have the hoped for success during the voluntary implementation period and thus was never introduced on a wider scale.

Several reasons have been given for the lack of success of the CCE policy. The Air Force Business Research Management Center conducted a survey of those personnel who used the policy and the results of this survey indicate that the policy required too many complex calculations and required too much effort for the results obtained. (Ref 15: 19) Furthermore, since the policy was introduced on a voluntary basis, very little interest was ever generated by the policy, and thus only a small segment of the DoD procurement community studied and understood the policy.

Since the Contractor Capital employed policy did not work, weighted guidelines remained in force as the DoD profit policy. The shortcomings of weighted guidelines did not disappear, however, and a revision of the DoD profit policy was still warranted.

Profit '76

The Profit '76 study group was formed in 1975 under the direction of Brigadier General James Stansberry to take a critical look at DoD profit policy. A definite need for a new profit policy was indicated because of the decrease in the number of contractors bidding on defense work, the obsolete equipment used in the defense industry, the high cost and low availability of money for defense contractors and the unstable state of the economy. These factors, in addition to the shortcomings of weighted

guidelines, had some bearing on the decision to study the DoD profit policy on negotiated contracts. At the same time, the Cost Accounting Standards Board had issued a new standard on depreciation that the defense industry indicated might cut defense profits and was planning to issue a standard on the cost of capital. (Ref 11: 41) The failure of the CCE policy also had some influence on the decision to study DoD profit policy.

The Profit '76 study examined contractor's profitability in both defense and nondefense business and it analyzed the relationship of earnings to capital investment in cost reducing assets. The primary product of the study was the introduction of a new DoD profit policy designed to strengthen the defense industrial base and reduce the cost of weapon systems.

The new profit policy employs aspects of both the weighted guidelines profit policy and the Contractor Capital employed policy. The pre-negotiation profit objective is based fifty percent on cost, forty percent on a measure of risk and ten percent on the contractor's investment in facilities capital. It is a step away from the cost-based weighted guidelines policy, but not as drastic a step as the CCE policy.

The new profit policy will not have a trial implementation period like the CCE policy. One cornerstone of the study was the planned involvement by both industry and government users of the profit policy throughout the

development process. (Ref 11: 42) By involving users of the policy in the design effort the Profit '76 study group expect the policy to be well received upon implementation.

Statement of the Problem

General Stansberry and members of his Profit '76 study group were interested in identifying problem areas which may hinder the implementation of the new DoD profit policy. Results of an Air Force Business Research Management Center study indicated that one reason for the failure of the CCE policy was that it could not be understood by the policy users. (Ref 15: 19) Therefore, concern was expressed as to whether the new profit policy could be understood and implemented at the user level.

If the problems with the clarity of the new policy could be identified prior to implementation, these problems could be eliminated. The Profit '76 team needed to know whether problems existed with understanding the new policy, therefore, this study was initiated to satisfy that need. The problem treated in this study was the identification of problem areas that may hinder the implementation of the new DoD profit policy.

Order of Presentation

Chapter Two explains the selection process followed in deciding on the research approach. The sections of the new profit policy, which could present the most

difficulty when implemented are explained in Chapter Three.

Chapters Four through Seven identify and analyze the problem areas associated with the four major sections of the new DoD policy. The allocation of facilities capital, the profit objective for facilities investment, facilities capital cost of money and the productivity reward are the respective topics of these four chapters. Chapter Eight presents a summary of the problems identified in Chapters Four through Seven and the recommended action to solve these problems.

II. RESEARCH APPROACH

Introduction

As identified in the statement of the problem at the end of Chapter One, this study was initiated to provide the Profit '76 study group with information with respect to whether the new profit policy could be understood and implemented at the user level. The purpose of this chapter is to describe the approach taken to collect the information requested by the Profit '76 team.

Discussion begins with the objective of this study. The research plan and the actions carried out in accordance with this plan are discussed next to illustrate the steps taken to satisfy the research objective. The last topic discussed identifies the assumptions made with regard to the research approach utilized in this study.

Research Objective

The objective of this study is to identify potential problem areas that may hinder the successful implementation of the new DoD profit policy. Identification of these problem areas would provide the Profit '76 study group some indication as to how clearly the new policy was explained where emphasis was needed in training programs and what changes may be required. By completing this study prior to the implementation of the new profit policy,

action could be taken to clarify the draft copy of the profit policy and develop training programs that may smooth the implementation process.

Planning for the Study

In May, 1976, initial plans for this study were formalized during a meeting with members of the Profit '76 study group. Prior to this meeting, the chairman of the Profit '76 effort, Brigadier General J. W. Stansberry, stated both his perceptions as to the information he needed and his desire for a study that would identify potential problems with the new profit policy. In support of this study General Stansberry stated that he would provide a preliminary draft copy of the new profit policy and assistance in enlisting help from DoD procurement personnel.

In return for his support, General Stansberry requested a briefing of the research findings at least one month prior to the October, 1976 implementation date of the new profit policy. This commitment was necessary to allow the Profit '76 team sufficient time to correct any potential problems identified by this study prior to implementing the new profit policy.

Scope

The requirement to brief the results of this study the end of August, 1976 imposed a time constraint on this study. With regard for this time limitation, decisions

were made during detailed planning as to the reduction in scope of this study.

Experts in the area of DoD procurement were consulted to narrow the draft profit policy down to the aspects that might cause the users of the policy the most difficulty. The possible study participants were reduced to the procurement personnel located at Wright-Patterson Air Force Base because they were readily accessible to the researcher.

Profit Policy

Upon receipt of the draft copy of the new profit policy, it was apparent that the policy was too large to address in the time allotted for this study. A reduction in scope was deemed necessary.

In examining the draft copy of the new profit policy it was found that the allocation of facilities capital to a contract, the facilities investment portion of the profit objective, facilities capital cost of money and the productivity reward were the new concepts incorporated in the profit policy. The majority of problems were thought to exist in these four aspects of the policy because they were new and had not previously been implemented as part of a DoD profit policy. This study was limited to coverage of these four new aspects of the new DoD profit policy. The sections of the draft policy addressed in this study are in Appendix A.

By limiting this study, the contractor effort (cost based) and contract risk segments of the profit objective were ignored. These two segments of the profit objective were carried over into the new policy from the weighted guidelines profit policy. The basic change to these segments was that less emphasis was to be placed on contract risk. Figure 2-1 illustrates this shift in emphasis.

Figure 2-1 also illustrates that the other factors part of the profit objective has been replaced by facilities investment in the new profit policy. These special factors have not disappeared with the advent of the new profit policy, however, as the independent development and foreign military sales aspects are carried over unchanged into a special profit objective of the new profit policy. A new concept, the productivity reward, is also incorporated in this special profit objective. The productivity reward is covered in this study because it is thought that it may present DoD procurement personnel some problems when implemented.

Participants in the Study

General Stansberry made it clear that he did not want the draft copy of the new profit policy to be distributed outside DoD. This restriction reduced the potential population of participants in that it eliminated defense contractors.

Despite this limitation, however, there was still a

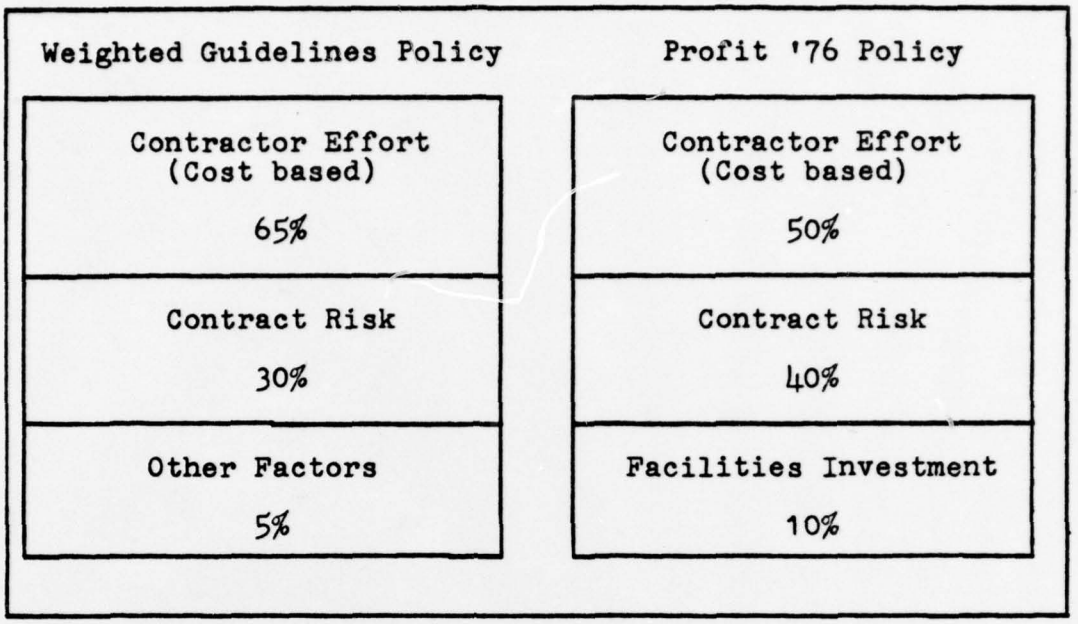

Figure 2-1. Profit Objective Comparison

wide range of personnel within DoD who would use the new profit policy. Possible candidates for participation in this study were available from the Departments of the Army, Navy, and Air Force, Defense Contract Audit Agency and Defense Contract Administrative Services. The final choice as to who would participate in the study was narrowed down however, to include only procurement personnel assigned to the Aeronautical System Division (ASD) of the Air Force Systems Command.

The primary reason for selecting ASD procurement personnel was due to their close proximity to the researcher. The following list provides some additional reasons as to why a sample of ASD procurement personnel were chosen as the participants in this study.

1. ASD procurement purchases a wide variety of goods

and services; such as research and development, avionics, engines, missiles, support equipment and aircraft.

2. The entire spectrum of contract types are let at ASD; contracts range from firm fixed price formally advertised to cost plus fixed fee negotiated contracts.

3. It was judged that ASD would provide a sample that would be representative of DoD procurement personnel.

4. The procurement staff at ASD were accessible to the researcher.

Due to a time constraint imposed upon the researcher it was not possible for all ASD procurement personnel to participate. A sample of forty individuals participated in this study.

With such a small sample size it was important to select a representative sample of ASD procurement personnel. Colonel R. C. Hastler, Chief of Procurement at ASD was asked to select a group of individuals that included a wide range of grade levels and sampled procurement contract officers, price analysts, negotiators and policy staff. He was further asked to provide a distribution that was to the extent possible patterned after the distribution of these categories of procurement personnel at ASD.

The civilian and military range of grade levels participating in this study were GS-11 through GS-15 and Captains and Majors. The job categories of the study participants are presented in Table II-1.

TABLE II-1

Classifications of Participants

Job Classification	Number	Function
PCO's	18	Responsible for all aspects of the contract from start to finish.
Price Analysts	12	Performs the analysis of the contract pricing data.
Contract Negotiators	7	Negotiates the contract price and terms.
Policy Staff	3	Interprets DoD procurement policies to the ASD procurement staff.

Selection of the Data Collection Device

The scope discussed the steps taken to both determine what portions of the policy were distributed and decide who received a copy of the draft profit policy. This discussion outlines the steps taken to arrive at methodology used to collect the respondent's perceptions as to the potential problem areas associated with implementing the new profit policy.

Current literature on the subject of data collection indicates that the two best approaches for collecting research data as to an individual's perceptions are the structured interview and the survey questionnaire. In judging the merits of using both techniques, two primary factors emerged as the major influences on the decision to use the structured interview. In this instance, both

the complexity of the new profit policy and the anticipated complexity of the questions necessary to identify potential problems with the policy were the major factors that suggested the structured interview was the better of the two approaches.

Discussions with experts in the field of collecting research data indicated that several benefits accrued as a result of using the structured interview. These benefits are as follows:

1. The face to face interview would ensure a high response rate and minimize missing research data.

2. Questions about the profit policy and the interview questions could be answered during the interview. This would reduce potential misunderstandings and result in a more accurate measurement of the level of understanding of the new profit policy and permit the researcher to better identify potential problem areas.

3. Aspects of the profit policy that were not delved into in the interview questions may emerge in the open-ended discussion during the interview. This would allow the researcher to gain additional insights into potential problems associated with the new profit policy that otherwise would be lost.

Research Instrument

Once the structured interview was chosen to collect the research data, it was necessary to develop the research

instrument. This was the list of questions asked during the interview that would measure whether respondents perceived problem areas with the new profit policy.

A four step approach was used to produce the final copy of the research instrument. Several iterations of these steps were necessary before a satisfactory instrument was developed. The final copy of the research instrument is included as Appendix B of this study.

The design steps are:

1. Identification of potential problem areas was accomplished first through reading the draft policy and discussing the new policy with procurement experts.

2. Interview questions were then designed to determine whether problem areas in fact exist.

3. Procurement and survey experts reviewed the questions to ensure that they covered the topic and were clearly written.

4. Unsatisfactory questions were either revised or discarded.

A major constraint in the design of the research instrument was the time limitation for the interview. The interview was planned to last no longer than one hour, therefore, several potential questions were eliminated to comply with this time limitation.

Classification of the Questions

Demographic questions and profit policy related

questions were included in the research instrument. The demographic questions were included in the instrument to collect data on the respondent's work background. Questions related to the profit policy were designed to measure the clarity of the policy, and to identify the potential problem areas associated with the policy.

Demographic Questions. At the time the demographic questions were included, it was thought that the perceptions of problem areas associated with the profit policy might be related in some way to the work background of the respondents. This anticipated dependence never emerged in the statistical analyses performed on the data. The techniques used to analyze the demographics are listed in the analysis section of this chapter.

Profit Policy Questions. Specific questions were included in the interview to measure clarity and to identify potential problem areas relating to the allocation of facilities capital, the profit objective for facilities investment, facilities capital cost of money and the productivity reward. The possible responses to these questions were either structured responses or open-ended responses.

Structured questions were included to provide a data base for statistical analysis. Responses to these questions were based on either a five point scale or on a yes/no response. Open-ended questions were included to provide additional data that would explain both the answers given

to specific structured questions and aspects of the policy that could not be treated with a structured response.

Scheduling and Conducting the Interviews

Prior to conducting the interviews, each respondent was invited to attend a briefing given by Mr. John Snight and Mr. Dave Koonce, members of the Profit '76 study group. This briefing was intended to provide background information as to the design of the new profit policy and the broad concepts employed in the policy. The letter inviting the respondents to this briefing is included in Appendix C.

After this briefing, participants in the study were given a copy of an abbreviated version of the profit policy and scheduled for an interview. At this time each participant was asked to read the policy prior to the interview in order for him to be prepared to discuss it during the interview time allotted.

Unfortunately, not all of the respondents were able to read the policy prior to the interviews. This made it necessary to explain portions of the policy during the interviews. In conducting these interviews some bias may have been introduced into the responses as a result of explaining the policy.

Bias may also have been introduced in one other way as in those instances where the questions asked during the interview required some explanation by the interviewer. This bias can neither be measured nor removed from the

data collected during the interviews. In reading the results of this study, however, one must recognize that the data may reflect a better understanding of the policy than would have been the case without any explanation.

Analysis of the Research Data

Two types of analysis were performed on the data collected during the interviews. Statistical analysis techniques were used to analyze the responses to the structured questions and content analysis was performed on the open-ended responses. As a result of these analyses, potential problems were identified that may hinder the implementation of the new profit policy.

Statistical Analysis

The statistical techniques employed to analyze the structured response data included frequency distribution analysis, Spearman rank-order correlation, contingency table analysis and paired-T analysis. The data were examined to determine whether relationships existed between the demographic variables and the structured responses to the profit policy questions. Analysis was also performed to determine whether relationships existed among the profit policy questions.

Demographics with the Profit Policy Questions. Contingency table analysis and Spearman rank-order correlation analysis were performed to determine whether relationships

existed between the demographic questions and the profit policy questions. Initial results of these analyses indicated that there was no significant relationship. Analysis of demographic variables with the profit policy variables was not examined in any greater depth, because it was judged that the results of further analysis would not provide meaningful insights to problem areas associated with the new profit policy.

Profit Policy Questions. No meaningful results were obtained when contingency table analysis, Spearman rank-order correlation and the paired-T test were used to identify possible relationships among the profit policy questions. Therefore, the primary statistical technique used to analyze the research data was the analysis of frequency distributions.

Content Analysis of Open-Ended Responses

The content of open-ended responses was analyzed and placed in categories. A judgment was made as to the importance of a category by discussing responses with procurement experts, and observing how many respondents offered the same general response. Analysis of open-ended responses provided a more comprehensive explanation of problem areas than was obtained from the structured responses alone.

The accuracy of this analysis is dependent on how accurately the open-ended responses were recorded during the interviews and how accurately the researcher interpreted

the response. It is thought that the probability of misinterpreting the open-ended comments was reduced during the screening process used to categorize the responses.

Assumptions

In order to identify the potential problems associated with the implementation of the new DoD profit policy, it was assumed that the draft copy of the policy used in this study would reflect the concepts introduced in the final profit policy. If the Profit '76 study group planned to significantly change the draft copy of the policy, then a study based on this draft would not identify problems associated with the final profit policy.

General Stansberry made it clear during the initial meeting that formalized this study that the draft copy of the profit policy would not be significantly different from the final copy. If the draft of the profit policy was, with few exceptions, the same as the final policy, problems identified with the draft would also appear as problems with the final copy of the new profit policy. The study proceded based on General Stansberry's assurances.

One other assumption was necessary with regard to the draft profit policy. Prior to distributing the draft policy to the study participants, it was decided that the draft policy did not clearly explain the procedures for completing the Business Unit Facilities Capital Form (DD1860) and the Contract Facilities Capital and Cost of Money

Form (DD1861). With the brief explanation provided, it was assumed that ASD procurement personnel would have difficulty understanding the use of these two forms, therefore, hypothetical numerical examples illustrating use of the DD1860 and DD1861 were included with the draft profit policy.

During the interviews each respondent was asked whether the numeric examples of the DD1860 and DD1861 helped him significantly in his understanding of the procedures followed to complete these forms. This question was asked in order to measure the impact of including these examples in the draft policy. Twenty-seven respondents of the forty interviewed stated that the examples helped significantly in their understanding of the procedures followed to complete the DD1860 and DD1861. These examples, therefore, had a significant impact on the clarity of this aspect of the draft profit policy.

III. SELECTED ASPECTS OF THE NEW PROFIT POLICY

Introduction

In narrowing the scope of this study, it was determined that the allocation of facilities capital to a contract, the profit objective for facilities investment, facilities capital cost of money and the productivity reward were the four aspects of the new profit policy to be examined in this study. The first three of these aspects all relate to recognizing the contractor's investment in facilities capital. The purpose of this chapter is to explain these three new aspects of the DoD profit policy.

The productivity reward is explained in Chapter Seven. This reward is a new element of profit that is intended to recognize the contractor's productivity gains. The productivity reward is not discussed in this chapter because it is not related directly to recognizing the contractor's investment in facilities.

The explanation of the facilities capital aspects of the new profit policy focuses first on the procedures used to allocate facilities capital to a contract. Next, the steps taken to compute the profit objective for facilities investment and the cost objective for facilities capital cost of money are addressed. Explanation is then provided, along with an example, with regard to the relationship between the profit objective for facilities investment

and facilities capital cost of money.

The explanation of the facilities investment based part of the profit objective focuses on two major issues. The procedures used to compute the profit objective for facilities investment are discussed first. The relationship between the facilities investment aspect of the profit policy and facilities capital cost of money is discussed next. In order to explain this relationship, the procedures used to compute a new element of contract cost, facilities capital cost of money are given. Additionally, an example is provided that illustrates how both the profit objective for facilities investment and the cost objective for facilities capital cost of money impact the overall contract price.

Facilities Capital Allocation

The dollar amount of facilities capital allocated to a contract, termed contract facilities capital employed, is used to compute the prenegotiation profit objective for facilities investment. This element of the profit objective reflects the guidance provided in the draft profit policy which states that it is DoD policy to recognize capital employed as an element in establishing the contract price for certain negotiated procurements. (Ref 14: 3-1300.1)

The computation of the dollar amount of facilities

capital employed should be understood to better understand the new element of the profit objective which recognizes the contractor's facilities investment. The following discussion explains the process used to allocate facilities capital to specific contracts. This explanation provides the framework for understanding the computation of the pre-negotiation profit objective for facilities investment.

Definition of Facilities Capital

The first step of allocating facilities capital to a contract is to identify what constitutes the contractor's facilities capital. Facilities capital is defined as the net book value of tangible capital assets and those intangible capital assets that are subject to amortization. Tangible assets are those that have physical substance, more than minimal value and are expected to be held by the business unit for continued use beyond the current accounting period for the services they yield. Intangible assets meet the same criteria, but have no physical substance. (Ref 14: 3-1300.2) Tangible assets include the net book value of contractor owned fixed assets, the constructive cost of ownership of leased assets and an allocable share of corporate assets. Intangibles include assets such as patents and trademarks.

Cost Accounting Standard 414 (Appendix D) defines the business unit as a unique business entity that is not divided into segments. (Ref 13: 414.3) Another common

term for business unit is profit center, hence, the two terms are used synonymously.

Cost Accounting Standard 414 defines leased property as the capitalized value of leases for which the constructive costs of ownership have been allowed in lieu of rental costs under chapter fifteen of the ASPR. (Ref 13: 414) Briefly, ASPR states that when it costs the contractor more to lease an asset than it would if the contractor bought that asset, the contractor is reimbursed only up to the cost of owning the asset. It is this cost that is recognized as a segment of the contractor's facilities capital.

The dollar amounts of the contractor's assets are taken from the contractor's books and recorded on the Business Unit Facilities Capital Form (DD1860) illustrated in Figure 3-1. The total dollar amount of facilities values recognized is the sum of the net book value of the contractor's fixed assets, constructive cost of ownership of leased assets and an allocable share of general purpose assets. It is this dollar amount that is allocated to defense contracts.

Allocation Process

After the dollar value of facilities capital recognized is determined, the next step to allocate this dollar amount to specific contracts. Two forms are used in this allocation process, the DD1860 and the Contract Facilities

BUSINESS UNIT FACILITIES CAPITAL	CONTRACTOR: BUSINESS UNIT: ADDRESS:				OMB No.
COST ACCOUNTING PERIOD: HISTORICAL ___ or PROJECTED ___		FACILITIES NET BK. VALUE	OVERHEAD POOLS		5. FACILITIES CAPITAL EMPLOYED FACTORS
		1. ACCUMULAT. and DIRECT DISTRIBUTION	2. ALLOCATION OF UNDISTRIBUT	3. TOTAL NET BOOK VALUE	4. OVERHEAD ALLOCATION BASE
BUSINESS UNIT	RECORDED-TANGIBLE-LAND	2,000,000	Basis of allocation:	Col's 1 + 2	Unit of measure:
	-BUILDINGS	2,000,000			Direct Labor $
	-EQUIPMENT	4,000,000			Direct Labor Hours
	-OTHER				Computer Hours
	-INTANGIBLES				Direct Labor $
	CAPITALIZED LEASES	270,000			
	HOME OFFICE and/or CORPORATE	450,000			
	TOT. FAC. VALUES RECOGNIZED	8,720,000			
	UNDISTRIBUTED ALLOCATED TO POOLS	3,450,000			
	DIRECTLY DISTRIBUTED BELOW	5,270,000			
OVERHEAD POOLS	ENGINEERING	320,000	756,000	1,076,000	$1,800,000
	MANUFACTURING	4,500,000	2,250,000	6,750,000	300,000 hrs
	TECHNICAL COMPUTER		444,000	444,000	3,000 hrs
	GENERAL and ADMINISTRATIVE	450,000		450,000	$1,800,000
	TOTAL OVERHEAD POOLS		3,450,000	8,720,000	

Col's 3 ÷ 4
.598
22.500
148.000
.25

Figure 3-1. Business Unit Facilities Capital Form (DD 660)

Capital and Cost of Money Form (DD1861). The allocation process is explained by discussing the steps taken to complete these two forms. This discussion is enhanced by the inclusion of hypothetical numeric examples which illustrate the completed forms.

Facilities Capital Employed Factors. Facilities capital employed factors are computed from the DD1860. The following discussion explains the steps taken to calculate a facilities capital employed factor for one overhead pool within a business unit. The engineering overhead pool serves as an example to explain this procedure.

The example provided in Figure 3-1 illustrates that the total facilities values recognized at this business unit total $8,720,000. Of this total, $5,270,000 are facilities that are directly assignable among the overhead pools. All assets that are identified in the contractor's books as wholly assigned to or located in an organizational unit corresponding to a specific overhead or G & A expense pool are listed against the applicable account and classified as directly distributed assets. (Ref 14: 3-1300.4) In the example, the engineering cost pool is assigned $320,000 worth of directly assignable assets.

Undistributed assets make up the remaining $3,450,000 worth of facilities recognized at this business unit. These are assets that cannot be wholly assigned to one overhead cost pool, because they benefit and are utilized

by organizational units assigned in the contractor's books to several different overhead pools. These undistributed assets are allocated to overhead pools on any reasonable basis that approximates the actual usage of these facilities. The allocation base shall be consistent with the base used for computing overhead expense rates for each overhead pool. (Ref 14: 3-1300.4) The engineering overhead pool in the example is assigned $756,000 worth of undistributed assets. This dollar value is based on the approximate usage of these assets by the engineering overhead pool. Thus, the total net book value of facilities allocated to the engineering cost pool is $1,076,000.

The allocation base for the engineering overhead account reflects an activity level anticipated in that overhead account for an accounting year. The unit of measure of the allocation base for the engineering overhead account is specified in the example as direct labor dollars. To total dollars expended on direct labor is specified to be $1,800,000.

A facilities capital employed factor is derived by dividing the net book value of facilities allocated to the cost pool by the overhead allocation base for that pool. This factor for the engineering overhead pool is $1,076,000 ÷ $1,800,000 = .598. This factor means that for every dollar of direct labor cost attached to a contract, the engineering overhead pool employs .598 dollars worth of facilities capital. This factor is used to estimate the facilities

capital employed on a contract.

Contract Facilities Capital Employed. The facilities capital employed factors are required to compute the dollar value of the facilities capital employed on a contract. One computation of these factors is normally all that is required for the duration of the contractor's accounting year. The contractor uses these facilities capital employed factors to compute the dollar amount of the facilities capital employed on each of his defense contracts let during that account year.

It was useful to use hypothetical numeric example of a completed DD1860 to aid in the explanation of how to compute the facilities capital employed factors. The same technique is used to aid in the explanation of calculating contract facilities capital employed. The facilities capital employed factor of .598 for the engineering overhead pool is recorded in column four of the DD1861, Figure 3-2. The estimated cost of direct labor for the contract in this example is $1,000,000. This cost is currently available by overhead pool on the contractor's Pricing Proposal (DD633). The $1,000,000 cost is recorded in column three of the DD1861.

The dollar amount of facilities capital employed on this contract that is allocated to the engineering overhead pool, is $1,000,000 x .598 = $598,000. The dollar values from each overhead pool and the G & A expense are now added to arrive at the total contract facilities capital

CONTRACT FACILITIES CAPITAL & COST OF MONEY				OMB No.
CONTRACTOR: BUSINESS UNIT: ADDRESS:			RFP/CONTRACT PIIN NO: PERFORMANCE PERIOD:	
1. OVERHEAD POOLS	2. COST ACCOUNTING PERIOD	3. CONTRACT OVERHEAD ALLOCATION BASE	FACILITIES CAPITAL EMPLOYED	
			4. FACTORS	5. AMOUNT
Engineering		$1,000,000	.598	$ 598,000
Manufacturing (hours)		100,000	22.500	2,250,000
Technical Computer (hours)		1,000	148,000	148,000
G & A		$1,000,000	.25	250,000
6. TOTAL CONTRACT FACILITIES CAPITAL EMPLOYED				$3,246,000
7. FACILITIES CAPITAL COST OF MONEY RATE				x .08
8. CONTRACT FACILITIES CAPITAL COST OF MONEY				$ 259,680

Figure 3-2. Contract Facilities Capital & Cost of Money (DD1861)

employed. This completes the procedures followed to allocate facilities capital to a contract.

Historical and Projected Estimating Techniques

Two different estimating techniques complicate the process of allocating facilities capital to a contract. The historical technique employs accounting data from the previous accounting year as the basis for computing facilities capital employed for contracts during the upcoming accounting year. The projected technique uses the prospective budgetary estimates of the business unit's facilities capital requirements and the corresponding activity levels in computing the facilities capital employed on that contract.

Historical Estimating Technique

When historical estimates are used in the computation of facilities capital employed, a relationship is established between the average facilities capital employed by an overhead pool in a given cost accounting period and the total cost incurred during that same period. In other words, the computation of historical facilities capital employed factors is dependent both on the average dollar value of facilities capital recorded on the books in the previous accounting year and the business unit's activity level experienced during that same year. Historical facilities capital employed factors are computed each fiscal year at the business unit level.

One set of facilities capital employed factors based on historical estimates are used to compute contract facilities capital employed on all defense contracts let by the business unit during a given accounting year. Even contracts that require work to be performed over a number of years employ only one set of facilities capital employed factors to compute contract facilities capital employed.

Unfortunately, it is not always adequate to use last year's data to predict this year's business. Therefore, an alternative to the historical estimating technique was required.

Projected Estimating Method

Under certain circumstances the historical estimating method would not provide an accurate dollar figure for the facilities capital to be employed on a contract. Changes in the dollar value of the contractor's recorded assets and changes in the contractor's activity level both influence facilities capital employed factors. If the contractor anticipates any changes in his activity level or facilities capital base which would significantly change the facilities capital employed factors over the performance period of an upcoming contract, then the projected estimate of these factors may be applicable to that contract.

The use of the projected estimating technique requires a separate projection at the business unit level for each fiscal year during which performance is anticipated on the contract. (Ref 14: 3-1300.3) Therefore, a contract that will take five years to complete must have estimates

of the facilities capital requirements and activity bases for each of the five years in which work will be performed on that contract. Five separate estimates are required when using the projected technique, whereas, only one estimate is required by the historical method.

Corporate budgetary information must be used to obtain both the estimates of the business unit facilities capital values and the business unit activity level projected out into the future. The facilities capital employed factors computed from these data are used in conjunction with the estimated annual activity levels on the specific contract to compute separate estimates of the facilities capital employed for each year in which work will be accomplished on the contract. The total of each yearly estimate of facilities capital employed is the dollar figure of the contract facilities capital employed.

The projected method is to be used only when the historical estimate would result in a cost and/or profit objective materially different from the projected estimate. The final decision should recognize the materiality of the difference and the increased complexity and administrative burden involved for all concerned when the projected estimate is used. (Ref 14: 3-1300.3)

The materiality of the difference between the historical and projected estimates of facilities capital employed is to be judged by the impact it has on the pre-negotiation profit objective and the facilities capital

cost of money. These are the only aspects of the contract that ultimately are influenced by the type of estimating technique that is used.

The prenegotiation profit objective for facilities investment increases directly with an increase in the contract facilities capital employed. Therefore, a portion of the contractor's profit is influenced in some situations by the estimating technique chosen. When profits are affected, one can be certain that the contractor will look closely at the differences between the historical and projected estimating techniques before negotiating the terms of the contract.

The interim billing rates provide for the reimbursement of facilities capital cost of money, a new element of cost allowed in the ASPR. These billing rates increase directly with an increase in facilities capital employed. This is another factor that will impact on the decision of which estimating technique to use.

Facilities Investment Prenegotiation Profit Objective

The computation of the dollar amount of the contract facilities capital employed is the first step in calculation of a prenegotiation profit objective for facilities investment. The second step requires procurement personnel to assess the risk associated with the contractor's investment in facilities capital. The risk factor is used in conjunction with the dollar value of contract facilities

capital employed to compute the prenegotiation profit objective for facilities investment.

Assessment of Investment Risk

The draft ASPR states that the dollar amount of profit for facilities investment is the consideration to be given in the profit objective to the investment risk applicable to facilities capital employed in the performance of a contract. Some factors that the contracting officer will need to consider in connection with this risk are: term of investment, stability of the government program under procurement and the availability of government funding to preserve continuity of the procurement and the program in general. (Ref 14: 3-808.3)

Versions of the new profit policy which were written after the draft copy used in this study included some additional factors that relate to investment risk. These factors are included in this discussion to further define investment risk. These factors are: the age of the contractor's facilities, the relationship of the remaining "write-off life" of the investment to the length of the program on which the facilities are employed, whether special purpose or general purpose facilities are employed on the contract, and the undepreciated dollar value of the facilities utilized on the contract.

A 1961 Harbridge House study offered the following additional factors to consider when assessing the risk

associated with research and development contracting: risk of termination, nonrenewal, long-term lease, failure, technical competition, early obsolescence, delays in funding and subcontracting. (Ref 1: 80)

The relationship of investment risk and profit stems from one economic theory that explains profit as a reward for bearing risks and uncertainty. (Ref 5: 6) This economic link between risk and profits is a conceptual justification for recognizing investment risk in the calculation of the contractor's profit.

Recent events in the defense contracting community highlight the risks defense contractors assume with government business. For example, the production decision on the B-1 bomber has been delayed by Congress until after the 1976 Presidential election. Because of this delay, Rockwell International is placed in the position of either trying to acquire new business to replace the B-1 or to continue making decisions on the assumption that production of the new bomber will be approved. This example illustrates the belief of one research that the uncertainty and risk of a program being cancelled is more pronounced in the defense industry than it is in the civilian sector of the economy. (Ref 12: 23)

From the preceding discussion, investment risk is defined to be the uncertainty a contractor is exposed to when he purchases new facilities specifically for a contract or program. The risk assumed by the contractor deals with

whether a program will last long enough for the contractor to receive an adequate return on capital investments made for the program.

The assessment of risk will be an extremely difficult task for the government procurement personnel. The Harbridge House study states that of all the factors affecting profits and rate of return, risk is the most important. However, although risk is stated to be the most important factor, it is also the most difficult to evaluate and analyze. (Ref 1: 75)

The most difficult part of computing the element of the prenegotiation profit objective for facilities investment will be to develop an accurate appraisal of the risks a contractor will be assuming in the performance of a contract. Indeed, the selection of a percentage value for risk may well be the most demanding task that the new profit policy will ask of government procurement personnel.

Computation of the Facilities Investment Profit Objective

The assessment of the contractor's investment risk enables the contracting officer to choose an appropriate percentage between six and nine percent. This percentage reflects various degrees of risk assumed by the contractor in his investment in facilities. A value of six percent in the contracting officer's judgment reflects low risk investments and nine percent is associated with high risk facilities investment.

Once a value for investment risk is chosen, it is entered in Part C of the Weighted Guidelines Profit/Fee Objective, DD Form 1547 (Figure 3-3). This percentage is multiplied by the contract facilities capital employed to arrive at the prenegotiation profit objective for facilities investment.

Objective of Recognizing Facilities Investment

One additional question left unanswered is what DoD hopes to gain from recognizing facilities investment in the computation of a prenegotiation profit objective. Besides the conceptual justification for recognizing investment risk, a more pragmatic reason emerges as the raison d'etre of the investment risk concept. DoD hopes that the new policy will motivate the contractor to increase capital investment, thereby increasing production efficiencies and ultimately holding down the cost of new weapon systems. (Ref 3: 2)

Brigadier General James Stansberry, Chairman of Profit '76, stated that by introducing the new profit policy DoD is cautiously moving away from the current cost-based profit policy to a policy which is more investment based. (Ref 3: 2) The present system of calculating profits gives no incentive to reduce costs, because inefficiency may be rewarded with higher dollar amounts of

Contractor	RFP/Contract No.		Contract Type	
Profit Factors	Measurement Base	Weight Range	Assigned Weight	Dollars of Profit
PART A	CONTRACTOR EFFORT			
Material Acquisition				
Subcontract Items	$	1 to 5	%	$
Purchased Parts	$	1 to 4	%	$
Other Material	$	1 to 4	%	$
Engineering	$ (Labor)	9 to 15	%	$
	$ (Overhead)	6 to 9	%	$
Manufacturing	$ (Labor	5 to 9	%	$
	$ (Overhead)	4 to 7	%	$
General Management	$ (G & A)	6 to 8	%	$
Sub Total				$
Adjustment Factor				X .69
1 Total	a $			b $
PART B	CONTRACTOR RISK			
2 Cost	$ (line 1a)	0 to 10	%	$
PART C	FACILITIES INVESTMENT			
3 Capital Employed	$	6 to 9	%	$
4 Basic Profit Objective (1b + 2 + 3)				$
PART D	SPECIAL FACTORS			
Foreign Military Sales	$	1 to 4	%	$
Productivity	$ (3-807.7)		%	$
Independent Development	$ (Line 4)		%	$
5 Special Profit Objective				$
6 Total Profit Objective (4 + 5)				$

Figure 3-3. Weighted Guidelines Profit/Fee Objective (DD Form 1547)

profits. Investment in cost reducing capital equipment is thus implicitly discouraged. Conversely, a policy which bases profits on facilities investment should to some degree encourage the contractor to invest in cost reducing capital equipment.

Facilities Capital Cost of Money

Recognizing facilities investment in the profit objective is not the only DoD tool that will recognize and reward a contractor for investment in facilities. Recognition of facilities capital will also be included as an element of cost in the contract cost objective. This area of the policy has been developed by the Cost Accounting Standards Board in the form of Cost Accounting Standard 414. Facilities Capital Cost of Money will be a new element of cost in all defense procurements which are priced on the basis of cost analysis.

The Concept of Facilities Capital Cost of Money

Many terms are currently applied to the concept of cost of money in contemporary business literature. Cost of capital, implicit interest, imputed cost and interest, are some of the terms used synonymously with cost of money. Therefore, one should not be surprised that confusion exists as to what this concept is, whether or not

it should be accounted for and how managers put the concept into actual practice.

Economists define capital as one of the factors of production. Therefore, cost of capital is the cost a business must pay the owners of capital to be able to use it in the production of an output. (Ref 2: 90)

Accountants do not recognize the term cost of capital in financial accounting. The only capital costs financial accountants recognize are those that can be measured with a documented transaction. In measuring the costs of operation, interest expense is the closest corollary to cost of capital that can be found on an income statement. The costs of debt and equity financing are totally ignored by accountants, when costing production and inventory. (Ref 2: 90)

Managerial accounting and financial texts explain various approaches to the measurement of a firm's cost of capital. The most widely used approach, the weighted-average method, is defined in one finance text as a collection of the estimates of the separate costs of the several sources of funds from which a business may be expected to draw its funds brought together in the form of a composite cost with each source weighted in some way. (Ref 9: 185)

None of these definitions, however, fit the concept of facilities capital cost of money as defined by Cost

Accounting Standards Board (CASB). CAS 414 recognizes only the contractor's investment in facilities capital. Investment in working capital is ignored. Additionally, the CASB has chosen a published interest rate that defines the cost of money rate for all defense contractors rather than developing procedures such as the weighted-average technique to compute interest rates for each individual contractor.

Computation of Facilities Capital Cost of Money

The definition of facilities capital and the procedures for allocation of facilities capital to specific contracts were both discussed earlier in this chapter. Figure 3-2 illustrates the computation of the dollar amount of the contract facilities capital employed. Contract facilities capital employed is used for the computation of both the profit objective for investment risk and facilities capital cost of money.

One multiplies the total contract facilities capital employed by the cost of money rate published by the Secretary of Treasury to arrive at the contract facilities capital cost of money. This dollar amount is listed on the contract Pricing Proposal (DD633) as an element of the cost objective of the contract.

Recognition of Facilities Capital Cost of Money

The main difference between the concepts of the profit objective for facilities investment and facilities capital cost of money is that profit reflects an assessment of the contractor's risk in facilities investment, whereas, facilities capital cost of money recognizes the financial costs of investing in capital equipment. The rationale for incorporating these two concepts in the ASPR is the same, however, as both facilities capital cost of money and the profit objective for investment risk are intended to motivate defense contractors to invest in cost reducing facilities.

Some differences exist between how the profit and cost objectives are viewed after the contract has been negotiated. After the profit rate has been negotiated, this rate does not change over the life of the contract. The rate of profit paid on the contract is determined during negotiations and is an assessment of what constitutes a fair profit rate, based on the information available at the negotiating table.

On negotiated contracts the target cost reflects the best estimate of what the actual cost will be. The actual cost will very likely differ from the target cost, however, due to inaccurate estimates of labor cost, material prices, overhead rates and with the introduction of the new profit policy, facilities capital cost of money.

As work progresses on a cost type contract, the actual

cost data are collected. The estimates of facilities capital cost of money and other cost elements are updated to reflect the actual costs at the end of the contractor's accounting year. This treatment does not apply to the facilities investment profit objective, however, as the profit objective is not updated to reflect the actual facilities capital employed on the contract.

Fluctuations in the facilities capital cost of money will impact the interim billing rates over the life of the contract. Interim billing rates for the next accounting year are determined from the actual cost data of the previous accounting year. A multi-year cost type contract will require several adjustments to the facilities capital cost of money to compute the final contract settlement. Differences between estimated and actual cost of money figures are resolved upon final contract settlement.

Facilities capital cost of money is different from the materials costs, labor costs and overhead costs that are used to compute the cost-based portion of the profit objective. Facilities capital cost of money is not a profit bearing cost, therefore, it does not enter into the computation of profit.

Relationships Between Cost of Money and Profit

A relationship exists between the economic cost termed cost of capital and profit. John F. Childs, author of a book discussing this relationship, states that a

manager must understand the concept of cost of capital before correct decision making can be made in the entire area of expenditures, acquisitions and plant abandonment. (Ref 4: 8) Childs further states that in order for any company to be successful, its profits must be greater than its cost of capital. Furthermore, expansion requires profits to be much greater than the cost of capital. (Ref 4: 13)

By explicitly recognizing facilities capital cost of money, the new DoD profit policy is recognizing as an allowable cost what was previously reimbursed under the guise of profit. If one assumes that the new DoD profit policy does not intend to increase the contract price, then some downward adjustment in the profit objective is necessary to adjust the contract price for the addition of facilities capital cost of money as an allowable cost.

Figure 3-4 illustrates the difference between the structure of the contract price under the weighted guidelines profit policy and the structure that may occur under the new guidelines when facilities capital cost of money is recognized. If one assumes that the total contract price will be equal under both the weighted guidelines policy and the new profit policy, then a hypothetical profit under weighted guidelines of eleven percent may equate to a ten percent profit rate when using the new profit policy. If profit rates are not adjusted downward to compensate for allowing facilities capital cost of

Figure 3-4. Pricing Proposal Comparisons

money, then contract prices will increase with the advent of the new profit policy.

A relationship exists between profit and facilities capital cost of money that should be understood by the DoD procurement personnel before they negotiate contracts under the guidelines provided in the new profit policy. If this relationship is not understood, then DoD procurement personnel may not be aware that lower profit rates may be called for under the new profit policy. The final contract profit rate is determined through negotiations and influenced by the judgment of DoD procurement personnel.

Summary

This chapter discusses three aspects of the new profit policy. It explains the procedures followed to allocate a contractor's investment in facilities capital to a contract. The chapter illustrates how the contractor's facilities capital is recognized in the computation of a prenegotiation profit objective. Finally, the discussion centers on the facilities capital cost of money.

Facilities capital is defined to be the sum of the net book value of contractor owned fixed assets, constructive cost of leases and a share of G & A facilities costs. The allocation process is discussed in detail to show how the facilities capital at the business unit level is allocated to individual defense contracts. The DD1860 and DD1861 are the forms used to allocate the facilities capital

to a contract. The allocation process is performed similarly to the way in which overhead is allocated.

Either the historical or the projected estimating techniques are used to determine the value of facilities capital allocated to a contract. The historical method uses the historical data from the previous year to estimate the value of facilities capital for this year's business. The projected method employs budgetary estimates of future cost data to arrive at a value for facilities capital. The projected method is to be used only under certain circumstances as specified in the new profit policy, otherwise, the historical method will be used.

The relationship between cost of money and profit is illustrated in this chapter to highlight the fact that the new profit policy does not necessarily call for an increase to profit rates. This relationship must be understood to enable DoD procurement personnel to excercise proper judgment in the negotiation of fair and reasonable profit rates.

The concepts discussed in this chapter serve as the basis for the following three chapters. In these chapters problem areas that may hinder the successful implementation of the new DoD profit policy are identified.

IV. ALLOCATION OF FACILITIES CAPITAL

Introduction

The preceding chapter explained the procedures for allocating a contractor's facilities capital to a contract. The first step of this procedure takes the estimated dollar value of the contractor's facilities capital and an estimated activity level to compute facilities capital employed factors. These factors in turn are applied to the relevant estimates of the contract cost and/or activity level to arrive at the dollar amount of contract facilities capital employed.

It is important to identify any potential problems with this aspect of the profit policy because of the impact the dollar value of facilities capital employed has on both the profit and cost objectives of a contract. If facilities capital employed is computed incorrectly, then both the profit and cost objective of the contract will not be accurate.

The purpose of this chapter is to identify and discuss potential problems, perceived by the Aeronautical Systems Division (ASD) procurement personnel, with regard to allocating facilities capital. To assess the impact of these perceptions, some measurement was necessary as to the degree in which ASD procurement personnel thought they would be involved in allocating facilities capital.

This measurement was necessary because the contractor, administrative contracting officer (ACO) and the cognizant auditor are the primary personnel responsible for performing this allocation process. According to the draft profit policy, the ASD procurement personnel will evaluate the data provided by the field personnel and not actively participate in the work involved to arrive at the facilities capital data. The potential problem areas identified, therefore, are based on perceptions as to how often those interviewed thought they would be involved in allocating facilities capital.

After the level involvement is discussed, perceptions are addressed as to how well the draft profit policy explains the historic and projected estimating techniques, and how accurate the estimates emerging from each estimating technique would be. Finally, an assessment is made as to how clearly the policy described the methodology to be used to complete the Business Unit Facilities Capital Form (DD1860) and the Contract Facilities Capital and Cost of Money Form (DD1861).

Involvement in Calculating Facilities Capital

The ASD procurement personnel are not the primary individuals responsible for calculating, reporting and evaluating facilities capital data. The ACO and auditor are supposed to supply ASD procurement personnel the

required information. Each individual interviewed was asked the extent to which he thought that he would be involved in the calculation of facilities capital employed.

The ASD procurement staff perceived that they will be involved infrequently in the actual calculation of facilities capital employed. Any level of involvement by ASD procurement will, however, require a certain degree of familiarity with the computations.

Further insight as to how the ASD staff may be involved in the computation of facilities capital employed can be gained from comments offered during the interviews. The following comments were made:

1. Facilities capital will be as much of a problem as overhead rates. It takes some time today to straighten them out, so one can expect to spend time on facilities capital too.

2. The procurement contracting officer (PCO) is often called upon to interpret policy for the ACO and auditor. Facilities capital will be another area that will require interpretation.

3. Small contractors that do not have government field support will go to the PCO for assistance with calculating facilities capital employed.

4. If the PCO pressures the field for data, the ACO and auditor will ask him to help solve the problems that prevent them from collecting the data.

Those interviewed related the problems they currently encounter in collecting data to the new policy. From their current frame of reference they reasoned that if the current policy gives them difficulty with collecting data, then the new policy, which is more complex, will give them trouble.

Based on the responses as to the anticipated level of involvement and the comments offered above, it is apparent that ASD procurement personnel expect to have some involvement in computing facilities capital employed. The comments indicate that ASD procurement personnel expect to act only as advisors to the field personnel and do not expect to take an active part in the actual computation of facilities capital employed. To be able to provide this guidance, however, ASD procurement personnel must first understand the procedures involved in the computation of facilities capital employed.

Computation of Facilities Capital Employed

Each respondent was asked how clearly the draft profit policy defines facilities capital, explains the computation of the facilities capital employed factors and explains the calculation of contract facilities capital employed. The perceptions offered on these three questions are summarized in Table IV-1.

Based on the aggregate of these three questions, it is indicated that the majority of respondents understood

TABLE IV-1

Clarity of Aspects of Facilities Capital Employed

	Definition of Facilities Capital		Computation of Facilities Capital Employed Factors		Calculation of Facilities Capital Employed	
Responses	Frequency	Relative Frequency	Frequency	Relative Frequency	Frequency	Relative Frequency
Very Unclear	0	0	0	0	0	0
Unclear	2	5.0%	4	10.0%	2	5.0%
Some Difficulty	12	30.0%	12	30.0%	14	35.0%
Clear	23	57.5%	20	50.0%	20	50.0%
Very Clear	3	7.5%	4	10.0%	4	10.0%

how to calculate facilities capital employed, therefore, no implementation problem is indicated.

The responses listed in Table IV-1, however, reflect the influence of the hypothetical numeric examples of the DD1860 and DD1861 forms, which were included with the draft profit policy. Twenty-seven respondents out of the forty interviewed stated that the examples helped significantly in their understanding of this aspect of the new profit policy.

This same group of twenty-seven respondents stated that numeric examples of the Weighted Guidelines Profit Objective Form (DD1547) and the Pricing Proposal (DD633)

should be included in the new policy in order to provide a cross reference between all applicable forms. These respondents stated that it would be more difficult to trace the facilities capital data among the various forms without hypothetical examples.

Clarity of the Projected and Historic Methods

Differentiation Between the Two Methods

One decision that influences the values of the facilities capital employed data is whether to use the historic or projected estimating technique. The draft copy of the new profit policy states that the decision as to which technique to apply is made by the contractor, ACO and the PCO. The decision as to how to collect the facilities capital data must be made before one can compute contract facilities capital employed.

The ASD procurement personnel will participate in the decision, therefore, these personnel should understand both the historical and projected estimating techniques. The questions used to measure the level of understanding were how clearly does the new profit policy explain when to use each method, how clearly does the policy explain each technique and how accurately does each method estimate facilities capital employed.

When to Use Each Method

The historic estimating technique is used to estimate facilities capital data, except under certain circumstances.

The projected estimate is used, when it would arrive at results materially different from the historic method. A situation that may warrant use of the projected method is when the contractor is planning a substantial investment in new facilities capital.

The draft profit policy leaves the final decision as to which estimating technique to use with the PCO. This decision is based on the PCO's judgment and the guidance provided in the new profit policy. Each respondent was asked to indicate his perception of the guidance provided in the policy by classifying his level of agreement with the following statement: The policy clearly differentiates between the situations in which the historic and projected estimating techniques would be used. Table IV-2 lists the responses to this statement.

These responses do not provide overwhelming evidence indicating whether the policy is either clear or unclear in its explanation of the situations in which the projected estimate would be used. Enough confusion appears to exist to identify this as a potential problem that may surface when the policy is implemented.

The issue of deciding which estimating technique to use centers on the materiality of the difference between the results obtained by each method. The estimate of contract facilities capital employed impacts both the prenegotiation profit objective and the interim billing rates for facilities capital cost of money. A judgment

TABLE IV-2

The Policy Clearly Differentiates Between Historic and Projected Estimating Techniques

Responses	Frequency	Relative Frequency
Strongly Disagree	1	2.5%
Disagree	15	37.5%
Neutral/No Opinion	3	7.5%
Agree	19	47.5%
Strongly Agree	2	5.0%

must be made as to whether these two aspects of the contract are materially different before the projected estimating technique is used. In order to justify use of the projected method, the difference must be sufficient to offset the associated increased administrative burden and cost of using this technique.

A potential problem was indicated by some respondents with this policy guidance. Their belief was that the contractor would incur the cost of making both projected and historical estimates of facilities capital employed to assess the materiality of the difference. From the contractor's point of view this comparison makes good sense as it would allow the contractor to select the estimating technique which is most beneficial to him. It was thought, however, that the additional cost of making this comparison, would increase the contractor's administrative workload and add to the cost of the contract.

Perhaps a more specific definition of the concept of materiality and examples of situations in which the projected method should be used would clear up the new profit policy. It is difficult, however, to tie down the concept of materiality in the form of policy guidance; therefore, the solution to this problem may lie in the development of training programs to cover this topic.

Explanation of Both Techniques

In order to assess the extra administrative workload assoicated with the projected estimating method, one must understand the procedures employed in both the historic and projected techniques. Each respondent was asked how clearly the policy explains the projected and historic methods. The opinions expressed by the respondents are summarized in Table IV-3.

More than half of those responding to these questions had at least some difficulty in understanding the explanation offered in the policy. The responses indicate that the policy was not completely successful in explaining the two approaches.

Accuracy of Projected and Historic Estimates

The perceptions as to how accurate the ASD procurement personnel thought that the estimates of facilities capital factors might be provides an assessment of the level of confidence they would have in using the two approaches. To measure this level of confidence each respondent was

TABLE IV-3

Clarity of Projected and Historic Methods

	PROJECTED METHOD		HISTORIC METHOD	
Responses	Frequency	Relative Frequency	Frequency	Relative Frequency
Very Unclear	1	2.5%	1	2.5%
Unclear	9	22.5%	7	17.5%
Some Difficulty	13	32.5%	12	30.0%
Clear	13	32.5%	16	40.0%
Very Clear	4	10.0%	4	10.0%

asked to classify how accurate he perceived each estimating technique to be. The responses to these questions are summarized in Table IV-4.

These responses indicate that those interviewed may place more confidence in the accuracy of data emerging from the historical estimate than the projected method. The significance of this finding must be viewed from the standpoint that the choice of the estimating method will impact both the prenegotiation profit objective and the initial interim billing rates.

The differences between the actual billing rates and the estimated billing rates are resolved upon the final contract settlement. This dollar amount should be relatively insignificant when compared to the overall contract price.

TABLE IV-4

Accuracy of Projected and Historic Estimates

	Accuracy of Projected		Accuracy of Historic	
Responses	Frequency	Relative Frequency	Frequency	Relative Frequency
Very Inaccurate	0	0	1	2.5%
Inaccurate	9	22.5%	6	15.0%
Some Accurate/ Some Inaccurate	24	60.0%	13	32.5%
Accurate	6	15.0%	18	45.0%
Very Accurate	1	2.5%	2	5.0%

This perception may have a more significant impact on the assessment of investment risk, when computing the prenegotiation profit objective for facilities investment. The profit objective for facilities investment is based on the estimate of the dollar amount of contract facilities capital employed and is not updated to reflect the actual facilities capital employed. If the estimate of facilities capital employed is inaccurate, this inaccuracy is carried over into the profit objective.

Summary

The ASD procurement personnel interviewed indicated that they would be involved to some extent in the computation of contract facilities capital employed. It follows that these individuals should clearly understand the

procedures for computing facilities capital employed.

The responses to interview questions asking how clearly the new profit policy explains the various aspects of facilities capital indicate that those interviewed did not have difficulty understanding the procedures used to calculate facilities capital employed. This was due in part, however, to the numerical examples included with the draft of the profit policy.

Twenty-seven respondents stated that numerical examples of the DD1860 and DD1861 were an aid in helping them understand the computation. This group of respondents also suggested that examples of the DD1547 and the DD633 should be included with the new profit policy to illustrate the interrelationships between the data on these forms.

Some difficulty with understanding the projected and historical estimating techniques was indicated by the responses to questions in this area. The problems identified in this area may be solvable during policy training sessions.

Those interviewed perceived that the estimate of facilities capital employed would be more accurate if the historic method were used than if the projected estimate were employed. This perception may influence the PCO's assessment of risk when computing the prenegotiation profit objective for facilities investment.

V. FACILITIES INVESTMENT

Introduction

The preceding chapter identified potential problem areas associated with computing the dollar amount of contract facilities capital employed. The dollar value of contract facilities capital employed is used in conjunction with an assessment of the contractor's investment risk to arrive at a profit objective for facilities investment.

The purpose of this chapter is to identify potential problems associated with the profit objective for facilities investment. In order to accomplish this goal, two major issues are discussed. First, the perceived problem areas associated with assessing the contractor's investment risk are covered. In particular, problems are identified that the procurement contracting officer (PCO) may encounter in determining the percentage factor that recognizes the contractor's investment risk. Next, potential behavioral problems that may impinge on the contractor's motivation to invest in new facilities are discussed.

Risk in Facilities Investment

When computing a dollar value of the prenegotiation profit objective for facilities investment, the PCO must assess the risk the contractor has in facilities investment. Briefly, investment risk is the chance the contractor takes

when, in anticipation of a contract, he invests in capital facilities to perform work on that contract.

In evaluating the investment risk, the PCO is required to consider the factors identified in the new profit policy that have a bearing on risk and assign a quantitative percentage factor between six and nine percent. When the risk is quantified, the assigned percentage is multiplied by the dollar amount of contract facilities capital employed to calculate the prenegotiation profit objective for facilities investment.

Risk Factors

The PCO's assessment of the contractor's level of risk depends on both his perceptions of what constitutes high or low risk investments and the information available to the PCO to make his evaluation. The new profit policy provides guidance which states that the PCO should consider the following factors when evaluating the risk associated with the investment in facilities employed on a contract: stability of the program under contract, term of the contractor's facilities investment and availability of government funds to preserve the continuity of the program in general.

As discussed in Chapter Three, subsequent drafts of the profit policy included four other factors that could be considered when assessing risk. These factors are whether special or general purpose facilities are used on the contract, the age of the facilities, the relationship

of the remaining "write-off" life of the facilities to the length of the program and the undepreciated dollar value of the facilities investment.

Analysis of Risk Perceptions

Each respondent was asked to give his perception of the relative importance of each of these seven factors with regard to the assessment of risk in facilities investment. Table V-1 lists the responses to this question in descending order of importance.

Two potential problems are indicated by these responses. The first potential problem is that no one factor emerged as the most important in assessing the contractor's risk. The other problem deals with how each factor is perceived.

Factor Importance. No one factor from the list of seven emerged as the most important in assessing the contractor's risk in facilities investment. Each respondent had a somewhat different perception of which factor is best suited to measure risk.

The final choice as to the dollar amount of the profit objective that recognizes the risk in facilities investment is based on the PCO's judgment. Therefore, the judgment of the PCO has a bearing on whether the goal of motivating contractors to invest in new facilities is realized.

In order to motivate the contractor to invest in new facilities, the contractor must have some assurance

TABLE V-1

Relative Importance of Risk Factors

Factor	Range of Weights	Frequency	Mean Value of of Weights
1. Stability of the Program	0	6	1.950
	1	5	
	2	18	
	3	8	
	4	2	
	5	1	
2. Special or General Purpose Equipment	0	7	1.775
	1	13	
	2	8	
	3	7	
	4	4	
	5	1	
3. Term of Investment	0	7	1.575
	1	10	
	2	17	
	3	5	
	4	1	
4. Age of Facilities	0	14	1.300
	1	12	
	2	7	
	3	3	
	4	3	
	5	1	
5. Availability of Funding	0	16	1.225
	1	8	
	2	12	
	3	2	
	4	0	
	5	1	
	6	1	
6. Relationship of the "Write-off Life" to the Program Length	0	9	1.200
	1	21	
	2	5	
	3	3	
	4	2	
7. Undepreciated Dollar Value of Facilities	0	18	.700
	1	18	
	2	2	
	3	2	

that his investment will be recognized. For example, if the contractor makes a substantial investment in contractor owned special purpose equipment for a contract, he may expect a higher profit rate to recognize this investment. A conflict of opinion results if the PCO judges that the investment in special purpose equipment does not deserve higher profit. This conflict, if not resolved during negotiations, may have an influence on whether the contractor invests in special purpose equipment in the future.

It seems likely that if the contractor observes that different PCO's each have different ideas of what risk factors are most important, then the new profit policy may not be very successful in motivating investment in new facilities. The contractor may not take the chance on an investment unless he judges that the extra risk will be rewarded with additional profit. Inconsistency among PCO's adds a new element of risk that the contractor may not be willing to deal with.

Application of the Factors. The way in which respondents would apply the risk factors to the determination of the profit objective for facilities investment was also inconsistent. The guidance in the new profit policy did not explain how to apply each factor, therefore, each respondent made his own determination as to how each factor should influence the profit objective.

For example, when discussing the age of the facilities employed on a contract, there was no consistent perception

among those interviewed as to whether old facilities deserved higher or lower profit. One point of view was that old facilities justify a higher profit in order to give the contractor additional funds to update his facilities. Others interviewed thought that old facilities deserved lower profit because they did not represent a high risk investment.

A potential problem is associated with this apparent inconsistent application of the risk factors. For example, imagine the confusion that may result if a contractor negotiating two contracts, each with a different PCO, receives a higher profit for his old facilities on one contract and a lower profit on the other. The contractor would have difficulty deciding how the age of his facilities influences the profit for facilities investment, therefore, he would have very little motivation to invest in new equipment.

Facilities Investment Information Requirements

Another potential problem with assessing the contractor's risk in facilities investment is related to the lack of descriptive information currently available on the contractor's facilities. Respondents stated that they currently do not have information on hand to assess the various factors relevant to the contractor's risk.

An accurate assessment of risk is improbable unless the procurement staff has access to information describing the contractor's facilities. Without this information, the assignment of a profit objective for facilities

investment may be characterized as a "shot in the dark". No provision is incorporated in the new policy to supply the PCO with this information, therefore, this is identified as an oversight that may hinder the implementation process.

Behavioral Problems Impacting Facilities Investment

Those interviewed identified some potential behavioral problems that may impinge on the contractor's motivation to invest in cost reducing facilities. The first problem area deals with motivating the contractor to invest in new equipment. The other problem is related to whether the DoD procurement personnel either work with or work around the new profit policy.

Contractor Motivation

Each respondent was asked how successful he expected the new profit policy to be in motivating the contractor to invest in cost reducing capital equipment. The responses to this question are summarized in Table V-2.

The perception seems to exist among those interviewed that DoD will not be particularly successful in motivating defense contractors to invest in new equipment. The rationale offered for these responses was that DoD profit policy may not be able to influence the defense contractor's capital budgeting decisions.

Several reasons were given as to why corporate capital

TABLE V-2

Perceived Success of Facilities Investment Profit Objective

Responses	Frequency	Relative Frequency
Very Unsuccessful	5	12.5%
Unsuccessful	7	17.5%
Limited Success	19	47.5%
Successful	7	17.5%
Very Successful	0	0
No Response	2	5.0%

budgeting decisions may not be influenced by the new profit policy. These reasons may be classified in two main groups. First, the change in the profit objective was thought not to be significant enough to be noticed by the capital budgeting function of the corporation. Second was the concern that the range of six to nine percent was not sufficiently wide to differentiate between high risk and low risk facilities investment.

Inadequate Change in Profit Rates. Of the thirty-one respondents who thought the policy would have at most, limited success, three opinions were expressed about the direction that profit rates would move under the new profit policy. These responses are grouped in the following three areas:

1. Profits will increase, however, the increase will not be sufficient to motivate the contractor to invest. (10 respondents)

2. Profits will not change when the new policy is implemented; hence, there will be no motivation to invest. (6 respondents)

3. Profits will decrease when the new policy is implemented. (3 respondents)

An apparent conflict exists among these responses. This conflict is explained by illustrating why respondents believed profits may increase, decrease or stay the same when the new profit policy is implemented.

The respondents who thought profits would increase reasoned that the goal of the policy was to make defense business more profitable. They stated that the new policy was a technique designed to justify a small additional profit.

These respondents stated that the small additional profit negotiated as a result of the new profit policy would not be sufficient to compensate the contractor for additional investment risk. The motivator, profit for facilities investment, is only ten percent of the profit objective. This group of respondents perceived that ten percent of the profit objective will not produce enough profit dollars to motivate the contractor's investment decisions.

The second group of respondents perceived that the new profit policy is intended to maintain the same profit rates as the weighted guidelines policy. This perception was based on statements made at a briefing presented by members of the Profit '76 team where it was stated that profits may not increase with the advent of the new profit policy. This group stated that the contractor will not be motivated to invest in new facilities unless he receives more profit dollars.

The third group thought that profits would decrease under the new profit policy. This opinion was expressed by those respondents dealing primarily with research contracts or with contractors operating government owned plants. If the contractor does not have a substantial investment in facilities, he will not receive much profit for facilities investment. Contractors in this position stand to lose profit under the new policy.

Smaller profits will surely not motivate the contractor to invest in facilities. This group of respondents stated that the new profit policy may force some contractors out of the defense industry. This is contrary to the desired effect of the DoD profit policy.

Inadequate Profit Range. Five respondents stated that the range of six to nine percent is not sufficiently large to motivate investment decisions. A three percent spread to differentiate between a contractor who has invested in modern production facilities and a contractor

using outdated production facilities was judged by those interviewed as too restrictive. If sufficient differentiation between various levels of the contractor's investment was not perceived, the contractor would not be motivated to acquire new cost reducing equipment.

This rationale is again based on the perception that the contractor must anticipate a reward for his investment in facilities. This group of respondents perceived that the reward of moving from six percent to nine percent for assuming more risk is insufficient to motivate the contractor to invest in new equipment.

Changing Established Procurement Practices

In addition to a potential problem with contractor motivation, a problem may also exist within the DoD procurement staff. A behavioral problem may exist that could impact the success of the new profit policy.

The defense industry conveyed two issues to members of the Profit '76 study with regard to anticipated actions of DoD procurement agents. These issues are the following:

1. The new profit policy would not be fully understood and/or implemented at the operational level.

2. The government negotiators would give the contractor the same profit percentage as before, regardless of the method used to compute the profit objective.

Each individual interviewed was asked to comment on these two issues. Twenty-eight out of forty interviewed

agreed that the new profit policy may not be fully understood and/or implemented properly at the operational level. Twenty-four stated that the new profit policy probably would not change the profit percentage negotiated on defense contracts.

Understood and/or Implemented Properly. It is interesting to note why those interviewed indicated that the new policy would not be fully understood, would not be implemented properly or would not change the government negotiating habits. Twelve respondents stated that either their supervisor or the procurement review panel would dictate the profit rate paid. The new profit policy thus would not be the primary tool to compute the prenegotiation profit objective.

Seven respondents indicated that the increased complexity of the new profit policy prevents both government and contractor personnel from understanding it. This group thought that if DoD persisted in making procurement practices more complicated, neither the contractor nor the DoD staff could properly implement policies. People will naturally revert to their previous practices, if they do not understand what is required under the new policy.

Practices Will Not Change. Seven other individuals stated that the profit objectives presently are "backed into" under the weighted guidelines policy, and they do not expect a change in practice under the new policy.

This means that the basic profit objective is decided upon first, and the PCO then selects the elemental percentages that will justify that profit rate. This procedure directly conflicts with the guidance provided in ASPR which states that elemental percentages should be chosen before computing the profit objective.

Respondents stated that the underlying problem rests with the supervisors either forcing the profit policy to be misused or looking the other way while their staff misuses the policy. If the policy is not used the way in which it is intended, it's chance for motivating the contractor to invest in new capital equipment may be significantly diminished. The way in which procurement supervisors enforce this new profit policy may well be the primary factor that dictates the success or failure of the policy.

Summary

The goal of recognizing facilities capital employed within the basic profit objective is to motivate the defense contractor to invest in modern cost reducing equipment. Based on the perceptions of those interviewed, two potential problem areas identified in this chapter may limit the success of the new profit policy.

One problem area relates to the inconsistent way in which investment risk is perceived by those individuals interviewed. When asked to assign relative weights to various factors that may have a bearing on risk, no one

factor emerged as the most important. This inconsistency was compounded by the fact that among those interviewed, there was no common application of these risk factors.

If government procurement personnel randomly apply these risk factors, contractors will not be certain as to how the profit objective for facilities investment is determined. If each PCO looks at a different risk factor as being the most important and judges the level of risk in his own way, the contractor will not be sure what influences his profits. The contractor, who is not assured of additional profits as a result of his investment actions, thus will probably not be motivated by this profit policy to invest in new facilities.

Perceptions as to what motivates the contractor to invest in facilities capital highlighted the other potential problem area. Several of those interviewed stated that the new policy would have little success in influencing the contractor's investment decisions. The reasons offered for this perception all centered around the opinion that the change in profits with the introduction of the new profit policy will not motivate the contractor to invest in facilities. Some confusion thus exists as to what impact the profit policy will have on profit rates.

In addition to the possible lack of motivation on the contractor's part, several respondents stated that behavioral problems may be encountered within the DoD

procurement community. This problem centered around the perceived possible misuse of the new policy by government procurement personnel. The underlying cause of this problem seems to be the supervisory levels within the procurement community. Respondents stated during the interviews that their supervisors must support the new profit policy for it to have a chance at being successful.

VI. FACILITIES CAPITAL COST OF MONEY

Introduction

Both the profit objective for facilities investment and facilities capital cost of money are included in the new profit policy to motivate defense contractors to invest in cost reducing facilities. The computation of the profit objective discussed in the preceding chapter is based on the dollar value of facilities capital employed and an assessment of the contractor's risk associated with his facilities investment. The cost objective is computed by applying an imputed cost of money rate to the dollar value of facilities capital employed. The purpose of this chapter is to identify potential problems related to facilities capital cost of money.

The potential problems associated with facilities capital cost of money can be grouped into two categories. The first set of problems deals with whether those interviewed understood both the underlying concept of cost of money and the relationship this new cost has with profit. The next category discusses the respondents' perceptions as to how successful facilities capital cost of money would be in motivating the defense contractors to invest in cost reducing facilities.

Understanding the Cost of Money Concept

As discussed in Chapter Three, by explicitly allowing facilities capital cost of money the new DoD profit policy is recognizing as an allowable cost what was previously reimbursed as profit. Users of the new profit policy should understand the cost of money concept and how it relates to profit in order to determine fair and reasonable profit rates. DoD procurement personnel should be aware that if they do not intend to increase contract prices, then a downward adjustment in profit rates may be necessary to compensate for the addition of facilities capital cost of money.

Classification of Cost of Money

Each respondent was asked to classify his understanding of facilities capital cost of money in order to measure the level of understanding these individuals had as to what facilities capital cost of money is and why it is to be recognized as an allowable cost. Table VI-1 lists the responses to this question.

Those individuals classifying cost of money as compensation for interest expense reasoned that DoD is finally recognizing interest as an allowable cost. Under current ASPR guidance, interest expense is disallowed. Disagreement with ASPR was indicated as nine out of the ten respondents in this group stated that it was about time that DoD recognized interest expense as an allowable cost.

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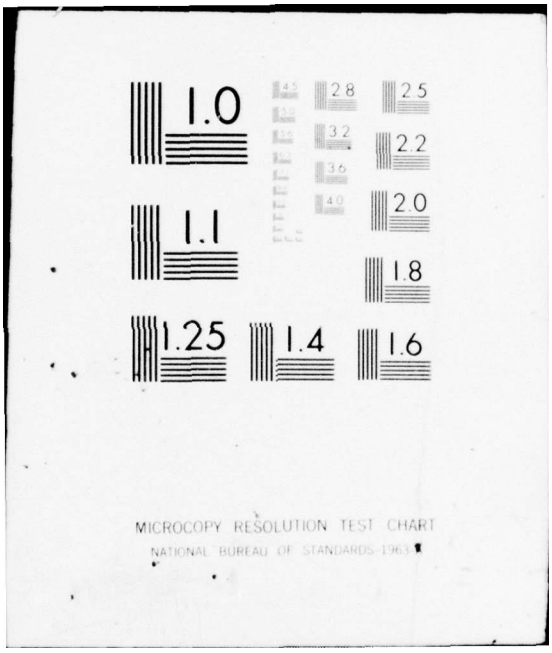
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TABLE VI-1

Facilities Capital Cost of Money Categories

Responses	Frequency	Relative Frequ
Compensates for Interest Expense	10	25.0%
Imputed Cost that should be Reimbursed	24	60.0%
Technique to give more profit while not calling it profit	6	15.0%

The majority of respondents correctly identifie facilities capital cost of money as an imputed cost. Horngren defines imputed cost as a cost that does not appear in conventional accounting records and does nc entail dollar outlays. (Ref 8: 371) Twenty responde from this group stated that facilities capital cost o money should be allowable. This group, which presuma understood the cost of money concept, felt that DoD s pay defense contractors for this economic cost of doi business.

Six respondents classified cost of money as a t nique to pay more profit while not calling it profit. This group stated that if the goal of the new profit was to pay more profit, then why not just pay a few m percentage points instead of complicating their job w the cost of money. Of the six respondents classifyir cost of money as another form of profit, four stated this cost should not be reimbursed.

Relationship Between Cost of Money and Profit

Although this last group, which identified cost of money as additional profit, neither classified cost of money as an imputed cost nor thought that it should be allowable, it did come close to explaining the relationship that exists between profit and facilities capital cost of money. Since contemporary business literature does not have a universally accepted definition of cost of money, then classifying it as a form of profit cannot be entirely wrong.

The discussion at the end of Chapter Three addressed this profit/cost of money relationship. Briefly, if one assumes that the total price of a contract will remain the same, then by adding facilities capital cost of money as a new element of cost, a compensating downward adjustment is necessary in the profit objective. On the whole, profit rates under the new policy should be somewhat lower than they were under weighted guidelines. If profit rates do not decrease under the new profit policy, one can predict that the price of contracts will increase.

During the interviews, discussions emerged as a result of classifying cost of money. The profit/cost relationship and its impact on the contract price were conspicuously absent from these discussions. Not one respondent stated that profit rates should be adjusted downward now that facilities capital cost of money is an allowable cost. This is not an indictment of the qualifications of those

interviewed, but rather an indication of the confusing nature of the relationship between profit and cost of money. If the ASD procurement organization did not understand this relationship it is reasonable to assume that few, if any, DoD procurement organizations will be able to grasp this relationship.

Consequences of Misunderstanding the Relationship

The consequences of misunderstanding the relationship between cost of money and profit are not entirely clear. If one considers facilities capital cost of money as an element of profit, the contractor owning a substantial amount of facilities may receive much higher profits, while the contractor with a low level of facilities investment may get lower profits. This is due to the fact that both facilities capital cost of money and the profit objective for facilities investment are directly related to the contractor's investment in facilities.

The test of this new profit policy will be how successful it is in motivating the contractor to invest in new facilities. One can only guess at the motivation of the contractor who presently does not have a substantial investment in facilities, when DoD tells him he will receive lower profits.

Anticipated Success of Facilities Capital Cost of Money

Each respondent was asked whether or not he thought

facilities capital cost of money would be successful in motivating the contractor to invest in new facilities. The responses to this question are summarized in Table VI-2. As discussed above these responses thus reflect the belief that a downward adjustment in the profit objective will not be made in order to compensate for adding facilities capital cost of money to the cost objective. Even with this belief, twenty-two respondents were not optimistic that facilities capital cost of money would motivate the contractor to invest in cost reducing facilities.

Perceived Lack of Success

Two main reasons surfaced as to why respondents believed that facilities capital cost of money would not succeed. First, the dollar amount of the cost of money may be insufficient to motivate capital budgeting decisions. Next, the cost of money rate issued by the Secretary of Treasury may not be as high as the contractor's actual cost of capital.

Capital Budgeting Decisions. Respondents compared the potential success of facilities capital cost of money with how successful they thought the profit objective for facilities investment may be. They reasoned that if the profit objective will not motivate investment decisions, then the cost of money will also not be successful in accomplishing the same purpose.

TABLE VI-2

Facilities Capital Cost of Money Will Motivate Investment

Responses	Frequency	Relative Frequency
Strongly Disagree	5	12.5%
Disagree	10	25.0%
Neutral/No Opinion	7	17.5%
Agree	18	45.0%
Strongly Agree	0	0%

The apparent basis for this argument was the respondent's judgment as to how much money is necessary to influence the contractor to invest. Based on their belief that the contract price would increase with the advent of the new profit policy, respondents stated that the combination of higher profits and facilities capital cost of money would not be sufficient motivation to influence the contractor to invest in cost reducing facilities.

Cost of Money Rate. Concern was also expressed that the cost of money rate would not reflect the actual cost of capital of the defense contractors. The current rate of 8.5 percent was thought to be significantly lower than the market rate that defense contractors must pay for capital. If the contractor must pay 10 percent for capital and DoD allows only 8.5 percent for facilities capital employed, several respondents thought that this aspect of the new policy would not motivate the contractor to invest in facilities.

It is beyond the scope of this thesis to investigate whether or not this concern is warranted, because neither information about the contractor's actual cost of capital nor an explanation of how defense contractors make capital budgeting decisions are readily available. This may be one of many areas associated with the new DoD profit policy in which further research is required.

Summary

Two potential problem areas associated with facilities capital cost of money are identified in this chapter. The first deals with the relationship that exists between profit and cost of money. The other potential problem deals with whether facilities capital cost of money will motivate contractors to invest in cost reducing facilities.

Each respondent was asked to classify facilities capital cost of money as either interest expense, imputed cost or profit. A majority of respondents correctly classified cost of money as an imputed cost. However, during discussions about this cost, not one respondent related this cost to the profit objective. Given the assumption that the contract price will not increase as a result of adding facilities capital cost of money to the cost of a contract, it seems as though a compensating downward adjustment in the profit objective is necessary. If this relationship is not understood at the operational level, then users of the new profit policy may fail to negotiate fair

and reasonable profits on defense work.

In addition to classifying cost of money, each respondent was asked how successful he thought facilities capital cost of money would be in motivating defense contractors to invest in modern facilities. Those interviewed perceived that the dollar amount of cost of money would not be sufficient motivation to influence investment decisions. This perception was offered despite the respondent's belief that the price of the contract would increase. This line of thinking was reinforced by the opinion that the cost of money rate would not be as high as the contractor's actual cost of capital.

Regardless of the reason given, twenty-two respondents were not confident that cost *of money* would motivate investment decisions. This lack of confidence may hinder the success of this aspect of the new DoD profit policy.

VII. PRODUCTIVITY REWARD

Introduction

If a corporation effectively employs both it's managerial and engineering talent toward the reduction of production cost, this effort is usually reflected in the corporation's increased profit margin. Corporations attempting to maximize profits place a great deal of emphasis in the area of cost reduction, because a reduction in production cost will normally be rewarded by an increase in profits. Due to the present procurement policies followed by the Department of Defense, this reward has not always been forthcoming on defense contracts. There thus is no great incentive for defense contractors to exercise a significant effort in the area of cost reduction.

In particular, defense contractors do not always realize increased profit margins on follow-on negotiated production contracts, because the cost and profit for the follow-on business is negotiated based on the actual cost of production realized in the preceding production contract. Due to the DoD cost based profit policy, the profit rates for follow-on production contracts will decrease as a result of cost reductions in the initial production run. This decrease in the contractor's profit opportunity is an inequitable reward for a cost reduction effort on the preceding production run.

The productivity reward has been included in the new profit policy to correct this inequity. The productivity reward in the new profit policy is an attempt to motivate the contractor to reduce production costs in return for an opportunity to increase the corporation's profit margins.

The elements of the basic profit objective are related to contract cost, risk and facilities investment. The productivity reward is outside the framework of the basic profit objective and is classified as an element of the special profit objective. The productivity reward is not applicable to all contracts, because certain criteria must be met before this reward can be applied. When it is applicable, the reward is added to the basic profit objective as additional profit.

This chapter discusses the criteria that must be met before the productivity reward can be applied and the computation of the dollar amount of the reward. After this discussion, potential problem areas associated with implementing the productivity reward are identified.

Criteria for Application of the Productivity Reward

A loss of profit opportunity due to cost reductions and productivity gains occurs only in certain situations, therefore, the productivity reward is not applicable to all negotiated contracts. The new profit policy includes certain criteria that must be met before the productivity reward can be included in the pre-negotiation profit

objective. These five criteria are as follows:

1. The instant procurement action involves a follow-on production contract.

2. Reliable actual cost data are available for a preceding production contract to establish a fair and reasonable base unit cost.

3. No substantial changes have been made in the configuration of the item being procured compared with the base unit.

4. The instant purchase quantity is at least equal to the purchase quantity under the base contract.

5. The estimated unit cost of the instant contract is less than the base unit cost. (Ref 14: 3-808.7)

If these five criteria were not understood by the users of the policy, then a potential problem area exists that may hinder implementation of the new profit policy. Therefore, each individual interviewed was asked how clearly these criteria are explained in the new policy. The responses to this question are listed in Table VII-1.

These responses indicate that those interviewed had little difficulty understanding the criteria listed in the new profit policy. From these responses one may conclude that no problem area exists with understanding and applying the productivity reward criteria. The open-ended responses to this question, however, do identify where problems may occur.

TABLE VII-1

How Clear are the Criteria for Application of the Productivity Reward

Responses	Frequency	Relative Frequency
Very Unclear	1	2.5%
Unclear	2	5.0%
Some Difficulty	5	12.5%
Clearly	25	62.5%
Very Clearly	7	17.5%

Open-ended Responses to the Criteria

Several respondents stated that they agreed with the attempt to reward increased productivity in the new profit policy, and they believed that inequities currently exist in the form of decreased profit opportunities in follow-on production contracts. The major objection to the productivity reward criteria was that they were too restrictive. Some examples of this restrictiveness are offered as explanation for this concern.

The first hypothetical situation relates to a follow-on production contract that would be an agreement to purchase five end items less than were purchased in the preceding production buy. If the end item costs less in the follow-on contract due to productivity increases realized in the initial contract, several respondents thought that the contractor should be reimbursed for this

cost reduction effort. Criterion four, which requires the end item quantity of the current contract to be greater than or equal to the quantity purchased under the basic contract, prohibits applying the productivity reward to this contract. Responses indicate that criterion four is too restrictive in this instance.

Another situation involves a follow-on contract in which all criteria for applying the productivity reward are met, except the estimated end item cost for the follow-on contract is greater than the end item cost of the preceding contract solely due to inflation. When the estimated end item cost is adjusted for the effects of inflation, the cost for the follow-on contract is less than the initial contract. Those interviewed stated that there should be an adjustment for inflation in order to apply the productivity reward to this contract. The lack of any adjustment for inflation in the new profit policy eliminates consideration of applying the productivity reward to the follow-on contract, when cost increases are related to inflation.

These two examples illustrate that the implementation of the productivity reward, as written in the new profit policy, may not be a satisfactory solution to the problem of recognizing productivity gains in the profit objective. Those interviewed thought that the criteria, as written, would eliminate many contracts that deserve recognition in the profit objective for productivity gains. In the

judgment of several respondents the criteria actually compounded the inequities of the current profit policy.

Computation of the Productivity Reward

After all the criteria for applying the productivity reward are met, the dollar amount of the productivity reward to be applied in the profit objective must be computed. Four formulas are used to compute this dollar amount. The formulas and a definition of each of the terms that makeup these formulas are listed in Figure 7-1.

A hypothetical numerical example of the calculations necessary to compute the productivity reward was neither included in the new profit policy nor was it a part of the package distributed to those individuals interviewed. This omission may cause confusion among users of the policy and may lead to problems when implementing the policy. Therefore, each respondent was asked how difficult it was for him to understand the terms and expressions used to compute the dollar amount of the productivity reward. The aggregate responses to this question are listed in Table VII-2.

The most difficult portion of the computation of the productivity reward was found to be the quantity adjustment factor. This is not surprising, however, because the quantity adjustment factor in the policy is a table of numbers with no explanation of how the numbers were derived. The remainder of the computations presented

1.	Base Unit Cost	X	Quantity Adjustment Factor	=	Base Unit Cost Adjusted for Current Quantity
2.	Base Unit Cost Adjusted for Current Quantity	-	Current Unit Cost	=	Unit Cost Decrease Due to Productivity Gains
3.	Unit Cost Decrease Due to Productivity Gains	X	Current Quantity	=	Contract Cost Decrease Due to Productivity Gains
4.	Contract Cost Decrease Due to Productivity Gains	X	Basic Profit Objective Rate	=	Profit Productivity Reward

For the purpose of the above calculation, the following definitions/explanations apply:

Base Unit Cost - Lowest unit cost (exclusive of Profit) for a preceding production run.

Quantity Adjustment Factor - An adjustment to arrive at that portion of the cost decrease which is attributable to productivity gains as opposed to quantity differences between the base and instant contracts.

Base Unit Cost Adjusted for Current Quantity - represents how much the base unit would have cost, given the same actual level of productivity, had the quantity now being purchased been produced under the base contract. This isolates unit cost decreases attributed solely to differences in quantity.

Current Unit Cost - The estimated unit cost (exclusive of profit) for the items covered by the instant follow-on production contract.

Base Profit Objective Rate - Basic profit objective ÷ cost objective.

Figure 7-1. Computation of Productivity Reward

TABLE VII-2

Difficulty Experienced with Computing the Productivity Reward

Term or Expression	Frequency/Relative Frequency of Responses				
	Very Difficult		Some Difficulty		Very Easy
	1	2	3	4	5
Quantity Adjustment Factor	1/2.5%	8/20%	7/17.5%	8/20%	15/37.5%
Base Unit Cost	1/2.5%	2/5.0%	6/15%	9/22.5%	5/52.5%
Adjusted Base Unit Cost	2/5%	3/7.5%	6/15%	8/20%	20/50%
Current Unit Cost	0/0%	1/2.5%	6/15%	8/20%	24/60%
Base Profit Objective Rate	0/0%	2/5.0%	6/15%	9/22.5%	22/55%

no problem to the respondents. No significant problem area is indicated with the computation procedure that must be followed to calculate the dollar amount of the productivity reward.

Success of the Productivity Reward

Given that the productivity reward is included in the new profit policy to recognize a contractor's efforts in increasing productivity and decreasing cost, each respondent was asked how successful he thought the productivity reward would be in accomplishing this goal. The

summary of responses to this question are listed in Table VII-3.

These responses indicate that those interviewed were not convinced that the productivity reward will recognize productivity gains adequately in the pre-negotiation profit objective. As discussed earlier in this chapter, several respondents stated that the criteria for applying the reward would negate the effectiveness of the productivity reward as a device to motivate the contractor to reduce costs and increase productivity.

The application of the productivity reward is dependent on too many factors outside the control of both the contractor and the procuring agency to have a motivational effect on the contractor. Those interviewed thought that the contractor would not expend a great deal of resources to increase productivity on the chance of gaining only a little extra profit on the follow-on production run. The chance that the follow-on contract would be ineligible to receive a productivity reward, due to the criteria that must be met, was just too great.

Summary

The potential problem that may hinder the implementation of the productivity reward relates to the criteria that must be met before the productivity reward can be applied to a contract. It was thought that the criteria are too restrictive, because they eliminate some contracts

TABLE VII-3

Success of the Productivity Reward

Responses	Frequency	Relative Frequency
Very Unsuccessful	2	5.0%
Unsuccessful	5	12.5%
Limited Success	22	55.0%
Successful	9	22.5%
Very Successful	2	5.0%

from consideration that should not be eliminated.

Two of the criteria that present the most problem are the purchase quantity criterion, and the end item cost criterion. Both of these criteria are outside the control of both the procurement agency and the contractor.

In order to motivate a contractor to increase productivity, the contractor should have some assurance that he will be rewarded for his efforts. The productivity reward would not motivate the contractor, because the contractor could not be sure he would get the reward to compensate him for his efforts.

Those interviewed thought that the recognition of productivity gains in the profit objective of follow-on production contracts was a good idea. The objection to the productivity reward was that it would not motivate the contractor to increase productivity. This feedback indicated that some revision of the productivity reward may be necessary to ensure the success of this aspect of the new profit policy.

VIII. FINDINGS AND RECOMMENDATIONS

Introduction

Several problem areas that may hinder the successful implementation of the new profit policy have been discussed and identified in the preceding chapters of this study. The purpose of identifying these problem areas has been to provide meaningful feedback from the users of the new profit policy to those responsible for writing the new profit policy. This feedback from the field identifies areas of the policy that may further require study, clarification and/or training prior to implementing the final policy. This chapter suggests possible actions to be taken with respect to the problem areas identified by this study.

Specific training techniques are not suggested in this chapter because those interviewed stated that several different types of training could be used in explaining the new profit policy. Formal lectures, case studies, workshop sessions and continuing refresher courses were all mentioned by those interviewed as possible training approaches.

In this chapter, potential problem areas are first cross-referenced to the preceding chapter in which the problem was discussed. Next, recommended actions to solve each of these problem areas are addressed.

Allocation of Facilities Capital

The explanation of the projected and historical estimating techniques and the clarity of the procedures followed to compute facilities capital employed were two problem areas identified in Chapter Four. These problems require resolution, because the allocation of facilities capital directly impacts both profit and cost with the advent of the new profit policy.

Clarity of Projected and Historic Estimating Techniques

Nearly half of those interviewed stated that the draft profit policy did not clearly explain and/or illustrate when to use the projected and historical estimating techniques. The choice of which estimating technique to use must be made before allocating facilities capital to a contract, computing the prenegotiation profit objective and determining facilities capital cost of money. The choice of technique in turn determines the complexity of the actions required to allocate facilities capital to a contract.

A potential problem exists if DoD procurement personnel do not understand both how and when to use the historical and projected estimating techniques. Clarification of the profit policy and training are the recommended actions for ensuring that procurement personnel understand both the projected and historical estimating techniques.

The choice of which technique to use depends on a

subjective judgment as to the materiality of the difference between the two techniques. Training sessions would allow procurement personnel to exercise their judgment in hypothetical situations and then reflect on the impact of their choice of technique. An appreciation of the actions required by both the historical and projected techniques could be gained by using each approach on hypothetical problems. Forty percent of those interviewed stated that training was necessary in this aspect of the new profit policy.

Computation of Facilities Capital Employed

The computation of facilities capital employed is a complex, new procedure. It is so complex that the decision was made to clarify the draft profit policy by providing those interviewed with hypothetical numeric examples of the forms used in the computation.

Those interviewed agreed that this procedure was complicated in that twenty-seven of the forty interviewed stated that hypothetical numeric examples of the new forms would help significantly in their understanding of the procedures. It is necessary for ASD procurement personnel to understand these procedures because they will be called upon to provide guidance in the computation of facilities capital employed.

Respondents indicated that hypothetical numeric examples of the following forms should be included in the

new profit policy:

1. DD1860 - Business Unit Facilities Capital Form
2. DD1861 - Contract Facilities Capital and Cost of Money Form
3. DD1547 - Weighted Guidelines Profit/Fee Objective Form
4. DD633 - Contract Pricing Proposal

Respondents further stated that the examples provided should clearly illustrate the data flow from form to form to enable the users of the policy to trace the data among the forms. The DD1547 and the DD633 are included in this list to illustrate this data flow.

Facilities Investment

The problem areas associated with the prenegotiation profit objective for facilities investment were addressed in Chapter Five. These problems relate to the assessment of the contractor's investment risk and to anticipated behavioral problems that may interfere with motivating the contractor to invest in cost-reducing facilities.

Assessment of Risk

A total of seven factors are identified in Chapter Five that relate to the Procurement Contracting Officer's (PCO's) assessment of investment risk. Those interviewed had varying perceptions as to which of these factors was most important or how to apply these factors to the assessment of investment risk. It is thought, that if these

risk factors are not applied consistently in the assignment of profit, the contractor may have difficulty determining what impacts the profit objective for facilities investment.

Capital budgeting decisions may not be influenced by the new profit policy unless the contractor has some idea as to what factors influence the profit objective for facilities investment. If each PCO assesses investment risk differently, the contractor will not be able to determine how the profit objective is calculated; hence, he will not be motivated to invest in cost reducing facilities.

Fifty five percent of those interviewed stated that training devoted to the assessment of investment risk would be useful. During the interviews a preference for case study training was indicated.

Additionally, a more detailed explanation of investment risk factors in the new profit policy would provide a common understanding of the factors to DoD procurement personnel. This explanation might then be used as the basis for training sessions in which procurement personnel practice the assessment of investment risk on hypothetical problems.

Behavioral Problems

Two potential behavioral problems emerged during the interviews. These problems center around the respondents' perceptions as to the contractor's motivation to invest

in facilities and to the DoD procurement personnel's motivation to use the new profit policy properly.

Contractor Motivation. Respondents indicated that the new profit policy may not influence defense contractor's capital budgeting decisions. These perceptions were based on judgments as to how high profit rates must climb to motivate the contractor to invest in facilities. Those interviewed indicated that profits would not be sufficiently changed with the advent of the new profit policy so as to motivate facilities investment.

Recommendations as to the specific actions to correct this situation are beyond the scope of this study. Further research is necessary which would be designed to measure whether or not facilities investment decisions are being made as a result of the new profit policy. The facilities investment process moves rather slowly so sufficient time should be allowed prior to beginning this research, for the contractor to acquire new facilities.

Established Procurement Practices. More than half of those interviewed stated that they were doubtful that the new profit policy would change the current practices used to determine a prenegotiation profit objective. These respondents indicated that the new policy would probably be misunderstood, not applied properly and/or not change profit rates when implemented.

Respondents indicated that the underlying problem is

that supervisors either encourage misuse of the profit policy or look the other way while their subordinates misuse it. The action indicated as a result of this finding is to encourage supervisors to properly apply and implement the new profit policy during some form of supervisory training. Supervisors must understand and support the new profit policy before users of the policy will implement it properly.

Facilities Capital Cost of Money

Chapter Six addresses two potential problem areas with respect to facilities capital cost of money. First, those interviewed did not understand the relationship between facilities capital cost of money and profit. Second, those interviewed thought that facilities capital cost of money would not motivate contractors to invest in cost-reducing facilities.

Profit/Cost of Money Relationship

Based on the assumption that contract prices will not increase, profit rates computed under the new profit policy should decrease to compensate for allowing facilities capital cost of money as an element of contract cost. If the profit rates do not decrease, contract prices will most likely increase. It is behond the scope of this study to resolve the matter as to whether contract prices will go up or stay the same with the new profit policy.

In keeping with the DoD goal of negotiating fair and reasonable profits, procurement personnel may have to alter their thinking with regard to profit rates as a result of allowing facilities capital cost of money. Fair profit rates under the new policy may not equate to fair profit rates under weighted guidelines. Training sessions would be effective in both explaining the profit/cost of money relationship and illustrating the adjustment of profit rates. Fifty-five percent of those interviewed expressed the desire for training in the concepts of facilities capital cost of money.

Contractor Motivation

Over half of the respondents stated that facilities capital cost of money would not be successful in motivating defense contractors to invest in cost reducing facilities. This perception existed even though they thought contract prices would increase by the amount of contract facilities capital cost of money; in other words, profit rates would not decrease to compensate for allowing facilities capital cost of money. These respondents stated that the dollar amount of facilities capital cost of money would be insufficient to motivate facilities investment.

One reason for this perceived lack of contractor motivation was these respondents thought that the cost of money rate issued by the Secretary of Treasury would not be as high as the contractor's actual cost of capital.

If the cost of money rate was 8.5 percent and the contractor's cost of capital was 10 percent, then those interviewed stated that there would be insufficient recognition of the contractor's capital costs to motivate capital expenditures on facilities. No discussion ever addressed how high the cost of money rate must be before it would motivate the contractor to invest in cost reducing facilities.

Further research in this area is recommended to determine whether these perceptions are correct. The study of facilities capital cost of money should address both the profit/cost of money relationship and the contractor's motivation as to the cost of money rate.

Productivity Reward

The new profit policy provides for the payment of additional profit to defense contractors if they are able to reduce production costs due to gains in productivity. This additional profit is paid in the form of a special profit objective and is applied to follow-on production contracts for productivity gains in a preceding production run.

The potential problem areas with regard to the productivity reward relate to the criteria that must be satisfied before the productivity reward can be applied to a contract. The potential problems identified in Chapter Seven deal with two out of the five criteria. These two criteria are:

1. The instant purchase quantity must be at least equal to the purchase quantity under the preceding (base) contract.

2. The estimated unit cost of the instant contract must be less than the unit cost under the preceding (base) contract.

These two criteria were criticized as being too restrictive. Respondents criticized the first criterion on the basis that productivity gains are possible regardless of the quantity purchased. The second criterion was attacked because the effects of inflation on contract costs were not considered.

These findings indicate that some revision to the productivity reward criteria is necessary. Specific recommendations are beyond the scope of this research effort, therefore, further study with regard to the productivity reward is recommended.

Epilogue

The eventual success of this new DoD profit policy can only be measured by how successful it is in motivating the defense industry to invest in cost reducing capital equipment. Those interviewed perceived that the success of the new policy would be limited. Further research is necessary to determine whether or not this perception is correct.

With the implementation of the new profit policy, DoD has answered some of the criticisms aimed at previous profit policies. One can anticipate that this new policy will also be the subject of some criticism. Regardless of the shortcomings that may be associated with the new policy, implementation of this new policy can be considered as a "cautious move in the right direction." (Ref 3: 2)

It is hoped that this study, by identifying potential problem areas associated with the draft profit policy, offered some contribution to the implementation of the new Department of Defense profit policy.

Bibliography

1. An Investigation into the Contractual Relations of the United States Air Force with Research and Development Contractors. Boston: Harbridge House, Inc., June 1961.

2. Anthony, Robert N. "Accounting for the Cost of Equity." Harvard Business Review, 51: 88-102 (November-December 1973).

3. Bacon, Kenneth H. "Pentagon Drafts Policy to Spur Spending by Defense Contractors on New Facilities," Wall Street Journal, 2 (July 6, 1976).

4. Childs, John F. Profit Goals and Capital Management. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1968.

5. Dean, Joel. Managerial Economics. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1951.

6. Fisher, I. N. and Hall, G. R. Defense Profit Policy in the United States and the United Kingdom. Santa Monica, California: The RAND Corporation, 1968.

7. Hall, G. R. The Impact of the Weighted Guidelines Profit System on Defense Contract Fees. Santa Monica, California: The RAND Corporation, 1969.

8. Horngren, Charles T. Cost Accounting. Englewood-Cliffs, New Jersey: Prentice-Hall, Inc., 1972.

9. Hunt, Pearson., et al. Basic Business Finance (Fourth Edition). Homewood, Illinois: Richard D. Irwin, Inc., 1971.

10. Johnson, Katherine. "Congress Urged to Base Profits on Investment." Aviation Week, May 10, 1971, p. 15.

11. Stansberry, J. W. "Contractor Productivity and Profit: Impetus for New DoD Initiatives." Defense Management Journal, 11: 39-42 (October, 1975).

12. Strayer, Daniel E. An Inquiry into the Feasibility of Employing Return on Investment as the Principal Criterion for United States Government Negotiated Contract Profit Determination. Unpublished MBA Thesis. Columbus, Ohio: The Ohio State University, 1965.

13. U. S. Cost Accounting Standards Board. Proposed Rules. "Cost of Money as an Element of the Cost of Facilities Capital," Federal Register, 41: 9562-9567 (March 5, 1976).

14. U. S. Department of Defense. Office of Assistant Secretary of Defense. Installation and Logistics. Draft Copy of the Proposed New Department of Defense Profit Policy. Washington, D. C.: Pentagon, June 1976.

15. U. S. Department of Defense. Office of Assistant Secretary of Defense. Installation and Logistics. An Evaluation of the Employed Capital Concept of Profit Establishment. Study by the Air Force Business Research Management Center, Wright-Patterson Air Force Base, Ohio, August 1976.

16. U. S. Department of Defense, Comptroller. The Economics of Defense Spending - A Look at the Realities. Washington, D. C.: Government Printing Office, 1972.

17. Wall Street Journal. Editorial, August 25, 1975.

Appendix A

Draft Copy of the Proposed New Department of Defense Profit Policy

GSM/SM/76D-26

DEPARTMENT OF THE AIR FORCE
AIR FORCE INSTITUTE OF TECHNOLOGY (AU)
WRIGHT-PATTERSON AIR FORCE BASE, OHIO 45433

REPLY TO ATTN OF: ENS/5254

23 JUN 1976

SUBJECT: Profit '76

TO: Evaluator of Profit Policy

1. Todays briefing has introduced you to the broad concepts incorporated in the new profit policy. As was stated in your invitation to the briefing, you have been selected to comment on the new DoD profit policy so that potential problem areas can be identified and hopefully corrected prior to its implementation. Since you cannot be expected to comment on a complex profit policy solely on the information provided in one briefing, attached to this cover letter are selected parts of the new policy.

2. Three major changes appear in the new profit policy. These changes are categorized under the following headings: Facilities Capital Cost of Money, Facilities Capital Investment Risk and Special Factors. You have been given only the sections pertaining to these categories of the policy so as to relieve you of a substantial amount of reading and to help you focus on the policy changes. Additionally two general conceptual changes are included in the introductory part of the package.

3. Please read the attached sections of the policy and take note of any problems you have now in understanding and interpreting the policy. Also note any problems you perceive in the implementation of this policy. You will be individually interviewed regarding this policy, whereupon, you will be permitted to ask questions about the policy and questions will be asked of you concerning your perceptions of the policy. The interview is planned to last approximately one hour.

4. Your responses to the questions asked in the interview will not in any way be connected by name to you. The results of this study, however, will be analyzed in summary form and presented both in a briefing to General Stansberry and in an AFIT thesis.

5. Due to the limited amount of time available to accomplish all of the interviews, it is requested that you contact Capt Bob Blair, AFIT-ENS, phone 52549 or 429-1250, if you

cannot be available during your scheduled interview time. As a memory aid, the time and date of your interview is written on the front of this letter.

6. Your assistance in this research effort is greatly appreciated.

Robert J Blair

ROBERT J. BLAIR, Capt, USAF
GSM76D

1 Atch
Profit Policy

Profit Policy Package

The profit policy has been categorized into three general areas. These areas will be referenced during the interview. The following list will serve as a table of contents to the policy.

Contents

I. General Conceptual Changes

ASPR 3-808.1

The new DoD profit policy has changed the way in which the profit objective will be used. The following is a quote from the proposed policy change.

DoD Profit Policy refers to the quidance provided contracting officers as they attempt to establish their pre-negotiation profit objective for a contract - that is an amount with which to open their negotiations. DoD profit policy should not specifically determine the rate of profit that will result, for that decision is made bi-laterally during negotiations.

ASPR 3-808.3

The second general change concerns the steps taken to compute a profit objective for a change order or a modification to the existing contract. The following is a quote taken from the proposed policy change.

Prior to the negotiation of a contract, change order, or contract modification, where cost analysis is undertaken, the negotiator shall develop a profit objective. The weighted guidelines method, if applicable, shall be used for developing this profit objective. If a change or modification is of a relatively small dollar amount and is basically the same type of work as required in the basic contract, the application of the weighted guidelines method will generally result

in a profit objective similar to the profit objective in the basic contract, and therefore this basic rate may be applied to the contract change or modification. However, in cases where the change or modification calls for substantially different work, then the basic contract profit and the contractor's effort may be radically changed and a detailed analysis is necessary. Also, if the dollar amount of the change or contract modification is very significant in comparison to the contract dollar amount, a detailed analysis should be made.

II. Facilities Capital

This section of the package treats the concept of facilities capital and its application to profit policy.

A. Facilities Capital as applied to the Profit Objective.

Facilities Capital

This factor applies to the consideration to be given in the profit objective to the investment risk applicable to facilities capital in the performance of a contract. Some factors that the Contracting Officer will need to consider in connection with this risk are (i) term of investment, (ii) stability of Government program under procurement, (iii) availability of Government funding to preserve continuity of the procurement and the program in general. The facilities capital to be employed will be determined in accordance with ASPR 3-1300.

B. 3-1300 CAPITAL EMPLOYED

3-1300.1 POLICY

3-1300.2 DEFINITION
Facilities Capital

3-1300.3 CAPITAL EMPLOYED ESTIMATING METHODS
(a) General
(b) Historical Method
(c) Projected Method
Projecting Facilities Capital
(d) Estimating Method Selection Criteria
Facilities Capital

3-1300.4 FACILITIES CAPITAL ESTIMATING PROCEDURES
(a) General
(b) Basic Procedures
(c) Historical-Based Estimates
(d) Projected Estimates

3-1300.5 PRE-AWARD CAPITAL EMPLOYED APPLICATIONS
Facilities Capital Employed Estimates
(1) Facilities Capital Cost of Money
(i) Cost Objective
(ii) Profit Objective
(2) Facilities Capital Investment Risk

3-1300.6 POST AWARD CAPITAL EMPLOYED APPLICATIONS
Facilities Capital - Cost of Money
(1) Interim Billings
(i) Updated Facilities Capital Factors
(ii) Revised Cost of Money Rates
(2) Final Settlement

3-1300.7 ADMINISTRATIVE PROCEDURES
(a) Evaluation of Contractor's Submissions
(b) Internal Report Requirements

EXHIBITS - PROCESS FLOW CHARTS

A. Historical Facilities Capital Employed Factors
B. Facilities Capital Employed - Cost and Investment Risk
C. Weighted Guidelines Profit/Fee Objective
D. DD Form 1860 - Instructions
E. DD Form 1861 - Instructions

3-1300 Capital Employed.

3-1300.1 Policy.

(a) It is the policy of the Department of Defense to recognize capital employed for the benefit of defense contracts as an element in establishing the contract price for certain negotiated procurements. Capital employed includes facilities capital as defined below. The inclusion of this recognition is intended to reward contractor investments and motivate increased productivity and reduced costs through the use of modern manufacturing technology and to generate other efficiencies in the performance of defense contracts. The recognition of contractor investments in the development of the profit objective will result in a profit objective based on a combination of cost and investment factors rather than solely on estimated contract costs.

(b) Separate recognition shall be given to the cost of capital and the special risk associated with the capital employed for defense contract purposes. The risk aspect of facilities capital employed, will be recognized as a part of profit in the manner prescribed in the Armed Services Procurement Regulations (See 8XX). Cost of facilities capital, will be recognized as a cost in the manner prescribed by CAS #414 as promulgated by the Cost Accounting Standards Board (See Appendix O) and as implemented by the Armed Services Procurement Regulations (See 15-2XX).

3-1300.2 Definitions.

Facilities Capital. The net book value of tangible capital assets and those intangible capital assets that are subject to amortization.

Facilities capital is calculated by taking the sum of the book value of (i) contractor-owned fixed assets, (ii) constructive cost of ownership of all leased fixed assets, and (iii) allocable share of general purpose assets and subtracting amortization and depreciation costs.

3-1300.3 Capital Employed Estimating Methods.

(a) There are two methods for estimating the amount of facilities capital to be employed in connection with a given contract: the historical (or business unit average) method and the projected (or specific contract) method. A capital employed factor will be established for application in determining the dollar amount of capital employed on a proposed contract. These dollars of capital to be employed will in turn be used as the basis for calculating the cost of that capital and for compensating the contractor for the risk associated with his capital investment.

(b) Historical Method. Under the historical/business unit method a relationship is established between the average facilities capital employed by a profit center in a given cost accounting period and the total cost (including G&A Expense) incurred during that same period. This relationship establishes the amount of facilities capital historically employed per dollar of costs incurred by the profit center. Application of these historical profit center capital employed factors to the appropriate elements of the cost objective of a proposed contract results in the estimated facilities capital dollars to be employed on that contract.

In actual pratice this process is refined to recognize that contractors facilities investments to support commercial vs Government work will differ. Facilities capital employed factors will be updated annually by contractors. Normally updated factors should be provided within 60 days after the end of the contractor's fiscal year. The factors derived from the last completed fiscal year will be employed in connection with all new procurement actions until the annual update is completed.

(c) Projected Method. Estimates of facilities capital to be employed which are based on the projected method are separately developed in reference to facts and circumstances of an individual contemplated contract action. This method is much more detailed and complex than the historical method and further it requires access to a substantial amount of budgetary data. It will be selected for use only under the limited conditions set forth below.

Projecting Facilities Capital. The contractor projects the estimated net book value of facilities to be employed by a profit center/ business unit in the conduct of all its business. A separate projection at the profit center/business unit level is required for each fiscal year to the future during which Government contract performance is anticipated. In each instance, overhead allocation techniques and procedures are employed to determine which portion of the profit center facilities will be allocated to any given contract for contract pricing purposes. This process results in allocating certain facilities to the engineering effort,

production effort, etc. The basis for allocating facilities to these efforts shall be the same as those used to allocate facilities depreciation expense to the engineering, production and any other indirect cost pools. These facilities may be allocated on the basis of direct labor hours, direct labor dollars or some other approved basis. By relating the projected amount of facilities and the number of projected direct labor hours to be associated with the production operation, for example, a projected facilities capital employed factor can be developed. This factor will indicate the amount of facilities to be employed to support production for each hour of direct production labor involved. This factor can then readily be applied to the direct labor hour estimate in future contracts to arrive at the amount of facilities capital to be employed in the contract in support of production effort. This same process would apply for the engineering and other efforts associated with total contract performance.

Use of the projected method does not relieve the contractor of also annually updating the facilities capital employed factors on the basis of actual results in the historical method. These actual factors must be computed at the end of every cost accounting period for each overhead pool including G&A. Only one form is used for each profit center/business unit, but the form enables a separate facilities capital employed factor to be computed for each overhead or G&A expense pool with that business unit.

The projected factors and the annually calculated actual factors each serve a separate and distinct purpose. Projected facilities capital employed factors are used as the basis for developing (i) a prenegotiation

profit objective as it relates to the risk associated with facilities investments and (ii) an interim billing rate for reimbursing the cost of facilities capital employed. Pursuant to 15-2XX, the cost of facilities capital invested will be reimbursed as an allowable cost as the cost is determined by applying a designated imputed interest rate to the actual facilities capital employed. In this regard the annually updated actual factors are required as a basis for final cost settlement and final pricing in a manner similar to forward pricing rate agreements.

(d) Estimating Method Selection Criteria. The historical method shall be used to estimate the amount of facilities capital to be employed.

(1) Facilities capital employed may also be developed by the projected method when the historical method would result in capital employed factors which would materially affect the price negotiation objective. Materiality should be basically assessed in relation to the difference in the cost and/or profit objective based on the historical vs projected methods. This basic assessment should be tempered by the added complexity and administrative burden involved for contractor and Government personnel when the projected method is used. The final judgment, though subjective, should represent a fair and reasonable result which recognizes the interests of both parties and the facts and circumstances of the particular procurement action. Justification for using the projected method shall be prepared by the contractor, reviewed by the auditor and ACO, and assessed by the PCO. Selection of the projected method for estimating facilities capital employed for defense contract pricing purposes does not eliminate the need to comply with the fundamental requirement of CAS #414 that "the cost of money for facilities capital shall be separately computed for each contract for each cost accounting period."

(2) Exhibits A and B, at the end of this part 1300, diagramatically display the process of facilities capital estimates, using both historical and projected data, and also display the application of the estimates for negotiated contract cost and profit purposes. Reference to these Exhibits will facilitate understanding the detailed implementation procedures which follow.

3-1300.4 Facilities Capital Estimating Procedures.

(a) General. The Facilities Capital Employed Factors to be used in estimating facilities to be employed in a proposed contract action shall be derived from historical accounting data or projection data, as appropriate, in accordance with the Estimating Method Selection Criteria set forth in paragraph 3-1300.3(d). The format and basic procedures for estimating facilities capital are essentially the same for both the historical method and projected method. There are, however, material differences in the source of information and the time frames associated with the source information that are peculiar to estimates developed on the basis of historical vs projected data. These common basic procedures and peculiarities are discussed below.

(b) Basic Procedures. Guidelines and procedures which apply in common to the historical and projected methods of estimating facilities capital are discussed in the paragraphs that follow. Form number 1860 is used by the contractor to estimate the book values of fixed assets to be employed by a Profit Center/Business Unit in the conduct of all its business, including non-Federal Government work.

(1) Fixed Asset Data Base. The data base of facilities capital shall consist of Recorded, Leased, and Corporate Assets. "Recorded" facilities are the normal Facilities Capital Items Owned by and carried on the books of the Profit Center/Business Unit. "Leased" property is the capitalized value of leases for which constructive costs of ownership have been allowed in lieu of rental costs under ASPR 15-025.34 and .48. "Corporate" facilities are the Profit Center/Business Unit's allocable share of corporate-owned and leased facilities. All of the facilities shall be reported at their net book value after amortization and depreciation

allowable under Section XV, Part 2. The reported net book values of facilities available to a contractor for less than a full year's depreciation, or amortization should be reported on an annualized basis.

(2) Recorded Assets. Facilities Capital to be reported for this purpose shall include only those tangible fixed assets (i) used in the regular business activities of a profit center/business unit, (ii) not intended for sale, (iii) capitalized on the books in accordance with the contractor's accepted accounting system, and (iv) that, except for land, are subject to an allowable depreciation or amortization expense in accordance with the contractor's accepted accounting system. Leasehold improvements (as distinguished from the lessor's real or personal property) and ADP system software that meet the criteria of (i) through (iv) above shall be reported as "recorded" Facilities Capital. Only recorded intangible fixed assets subject to amortization (e.g., patents, copyrights, franchises) shall be reported as Facilities Capital.

(3) Leased Property. If full rental costs have been accepted in overhead pools, no capitalized value shall be recognized. If rental costs have been limited to the constructive cost of ownership, the constructive value of the leased property shall be recognized. When contractors enter into a long-term lease of property whereby the conditions of such lease require the advance payment by the tenant of the lease, such prepaid rental payments made by the contractor under a long-term lease shall be treated similarly to contractor-owned fixed assets and a capitalized value of the prepayment shall be included in the category

of "Leased Property", on the Form 1860, provided that the lease payments are otherwise considered allowable under Section XV. The capitalized value reported shall be the average of the prepaid base account for the year involved, except when such leased facilities cover only a portion of the year. In those circumstances, an annualized prepayment amount shall be reported. In the event any leased fixed assets are included as Facilities Capital, a separate attachment to Form 1860 shall show the following information:

(i) Description of the asset.

(ii) Initial valuation of leased property and basis for value.

(iii) Amortization Schedule.

(iv) Net Book Value included on Form 1860.

(v) Identification of Government authority and date when determination was made to allow only the constructive cost of ownership for the asset, in lieu of full lease or rental costs. (Not applicable in case of prepaid leases).

(4) Corporate Assets. The net book value of general purpose items of Facilities Capital which are held or controlled by the corporation outside the Profit Center/Business Unit shall be allocated to the Center/Unit on bases consistent with the data base used for corresponding overhead or G&A expense allocation. In the case of home office expense the allocation bases used in the 403 Standard shall be employed. All of the above are summed on the "Total" line which represents the Profit Center/Business Units' Total net bjok value of facilities capital recognized for this purpose.

(5) Allocation of Facilities Capital. The total facilities capital of the Profit Center/Business Unit by some process must be allocated to individual contracts. The amount so allocated shall represent the facilities capital employed to support performance of an individual contract for cost reimbursement and profit objective purposes. The process to be used to allocate facilities capital is similar to the process used to allocate overhead costs. All facilities capital items that are identified in the contractor's records as wholly assigned to or located in an organizational unit (e.g., production or engineering) corresponding to a specific overhead or G&A expense pool, are listed against the applicable Overhead or G&A expense pools and are classified "Distributed". "Undistributed" facilities is the remainder of the Profit Center/Business Unit's facilities capital. When some costs of a service or support center are charged direct to customers on a "use charge" basis (e.g., computer center), the assets of such center shall be allocated between "distributed" and "undistributed" assets in the ratio that the service or support center direct charges bear to the indirect charges. The sum of "Distributed" and "Undistributed" must also correspond to the amount on the "Total" line.

(i) Allocation of Distributed Facilities. The direct assignment to or location of facilities in overhead and G&A Expense pools constitutes an allocation of "Distributed" facilities and the amounts so directly allocated shall be recorded in the appropriate space in the Facilities Capital Form.

(ii) Allocation of Undistributed Facilities. Profit Center/ Business Unit "Undistributed" facilities are allocated to Overhead and G&A expense pools on any reasonable basis that approximates the actual absorbtion of the related costs of such facilities. Allocation bases may be direct input bases (e.g., direct labor dollars, direct labor hours, direct material dollars or machine hours) for each overhead or G&A expense pool (including service or support centers) for the purpose of allocating overhead costs or use charges. This allocation will usually reflect the method of allocating G&A and/or "Service Center" costs for the purpose of computing overhead rates. The allocation base for the capital employed computation shall be consistent with the base used for overhead expense rates of each burden center. In addition, when a overhead and G&A expense allocation base for overhead rate purposes includes the efforts to be expended in the accomplishment of IR&D and B&P tasks, the allocation base for this computation shall exclude such efforts. Such allocation base exclusions shall be consistent with the estimated amounts of these bases used in establishing the allowable costs under either an advance agreement or a formula computation.

(c) Historical Method. The basic procedures and guidelines described above require only minor adaptations to arrive at facility capital employed estimates based on historical data.

Values for the fixed assets-contractor-owned, leased, and allocable corporate assets - are derived from the last completed fiscal year of

the profit center/business unit. Net Book Values which represent the average balances outstanding during the cost accounting period shall be used. Normally it will be adequate to ascertain the net book value of these assets at the beginning and end of the cost accounting period, and to compute an arithmetic average of those two sets of figures. Allocation base information (i.e., direct labor hours or dollars, etc) is likewise derived from the last completed fiscal year. The relationship of these elements produces the historical capital employed factors by overhead pool. These factors are used to estimate the Facilities Capital requirements for the entire performance period of the contract by applying them to the projected allocation bases in the proposed contract.

(d) Projected Method. Under the projected method the contractor shall estimate net book value of fixed assets to be employed by the Profit Center/Business Unit in the conduct of all its business. Projections of overhead allocation bases must also be made. A separate Form 1860 must be prepared to reflect both asset and allocation bases for each contractor fiscal year during which Government contract performance is anticipated. Projections of Facilities Capital data and allocation bases on Form 1860 must be consistent with the data base used by a contractor for overhead rate forecasting. For example, net book values of fixed assets reported on Form 1860 shall be the same values that generate related depreciation expenses in projected overhead pools, and the Facilities Capital allocation

bases shall be reconcilable with the bases projected for overhead rate pricing purposes.

If a Forward Pricing Rate Agreement for overhead rates has been negotiated, the inclusion or exclusion of net book value for capital-employed determinations shall be consistent with the allowability or unallowability of costs generated by those facilities, for overhead and pricing purposes. For example, if costs of excess facilities have been disallowed in forward pricing rates, the value of those same facilities shall be excluded from the capital base. The file shall contain similar information relative to the overhead and Facilities Capital allocation bases. When audited overhead data are used for contract pricing, both the audit report recommendations and subsequent contract pricing negotiations shall treat the facilities values and allocation bases reported on DD Form 1860, and the related facilities expenses and bases contained in the overhead rate(s) proposal on a consistent basis.

In either of the above methods for allocating indirect expenses to individual contracts, overhead rates often are arrived at on an "overall" basis, i.e., without settlement of individual elements of the overhead cost proposal. Under such circumstances it will be necessary, when establishing a contract profit objective, for the Government negotiators to estimate any adjustments to the proposed Facilities Capital data considered appropriate. Also, when an advance agreement covering the cost of idle facilities or idle capacity exists for a contractor Profit Center, the fixed asset values reported on DD Form 1860 shall be consistent with the provisions of such agreement.

3-1300.5 Pre-Award Capital Employed Applications. Both the historical and projected estimating methods result in capital employed factors from which are derived estimates of the facilities capital to be employed in support of a given contemplated contract. The estimated facilities capital employed figure is used in connection with developing a cost objective, profit objective, and in structuring the overall contract price.

Facilities Capital Employed Estimate.

(1) Facilities Capital Cost of Money. The cost of money computation for a specific proposed contract involves multiplying the amount of facilities capital allocable to the contract by the appropriate cost of money rate. In pre-contract pricing situations it will be necessary to estimate the cost of money for the full contract term on a prospective basis. Pursuant to CAS #414, the appropriate rate to use when prospective determinations are required is the most recent available rate published by the Secretary of the Treasury. This rate shall be used regardless of the length of the contract term. Cost of money, calculated in the manner prescribed, shall be applied as follows:

(i) Cost Objective. This special, imputed cost of money shall be used, together with normal, booked costs, in establishing a cost objective or the target cost when structuring an incentive type contract. Target costs thus established at the outset, shall not be adjusted as actual cost of money rates become available for the periods during which contract performance takes place.

(ii) Profit Objective. Cost of money shall not be included as part of the cost base when measuring the contractor's effort in connection with establishing a pre-negotiation profit objective. The cost base for this purpose shall be restricted to normal, booked costs.

(2) Facilities Capital Investment Risk. The profit opportunity to be provided in connection with the risk associated with capital employed shall be assessed and weighted in accordance with the profit guidelines set forth in 3-8XX.

3-1300.6 Post Award Capital Employed Applications.

Facilities Capital. The risk aspect of facilities capital is also used only in developing an overall pre-negotiation profit objective. However, in regard to the facilities capital cost of money treatment, certain procedures are required to govern the post award handling of this cost, even though it is an allowable cost in accordance with 15-205.50. The following procedures apply:

(1) Interim Billings. Facilities capital cost of money may be included in invoices for cost reimbursement and progress payment purposes. The amount to be invoiced is a function of the actual costs incurred, facilities capital employed factors, and cost of money rates applicable to the billing period involved. Facilities capital employed factors are applied to the base of the respective actual costs (manufacturing or engineering direct labor dollars e.g.) incurred during the billing period. The resulting capital employed base is multiplied by the cost of money rate to arrive at the cost of money to be invoiced.

(i) Facilities Capital Employed Factors. Initially the factors (historical or projected) used in pricing the contract as awarded will be used in invoicing for cost of money. As these factors are annually updated at the end of each cost accounting period, the updated historical actual factors may be substituted for invoicing purposes during the current cost accounting period.

(ii) Cost of Money Rate. The latest cost of money rate will have been used in arriving at the initial contract price. That rate will be used for invoicing cost of money until an average cost of money rate for the particular contractor's accounting period is determined in accordance with CAS #414. These annually determined average cost of money rate may be substituted when they become available.

Cost of money rates and facilities capital employed factors should, to the maximum extent possible, be concurrently updated as soon as practicable after the end of the cost accounting period. Whether to use these updated fates and factors in connection with interim billings for cost of money should be made on practical gounds. If a particular contract will be completed and final pricing will take place a relative short time after updated rates and factors become available, it may be impractical to use the new information.

(2) Final Settlement. Determination of the cost of money for facilities capital to be allowed for final pricing purposes shall be made on the basis of calculations pertaining to each cost accounting period during which contract performance took place. For each such cost accounting period actual figures shall be used for each of the elements affecting the capital employed calculation, viz, profit center/business unit fixed asset base, profit center/business unit allocation bases, and the instant contract allocation bases. These calculations will produce the actual capital employed, period by period, for the contract being finally priced. The actual capital employed for a given cost accounting period will be multiplied by the average cost of money rate for that same cost accounting period pursuant to the provisions of CAS #414, to arrive at a final determination as to the allowable cost of money. Final settlement will involve necessary adjustments to reconcile the amount of cost of money paid on an interim basis and the amount determined to be allowable for final pricing purposes. In order to expedite final pricing, Contracting Officers may exercise discretion in seeking contractor agreement to proceed with a determination of cost of money and final pricing on the basis of unaudited statements, prepared prior to detailed completion of the year-end closing of the books. The rule of reason and principle of materiality shall apply in the exercise of this discretion. In any event, however, Government auditors shall review the information used by the Contracting Officer.

3-1300.7 Administrative Procedures.

(a) Evaluation of Contractor's Submission.

The cognizant ACO, shall, with the assistance of the cognizant auditor, evaluate the contractor's capital employed data when submitted. Evaluations shall be in writing and furnished to the PCO with other field pricing support information.

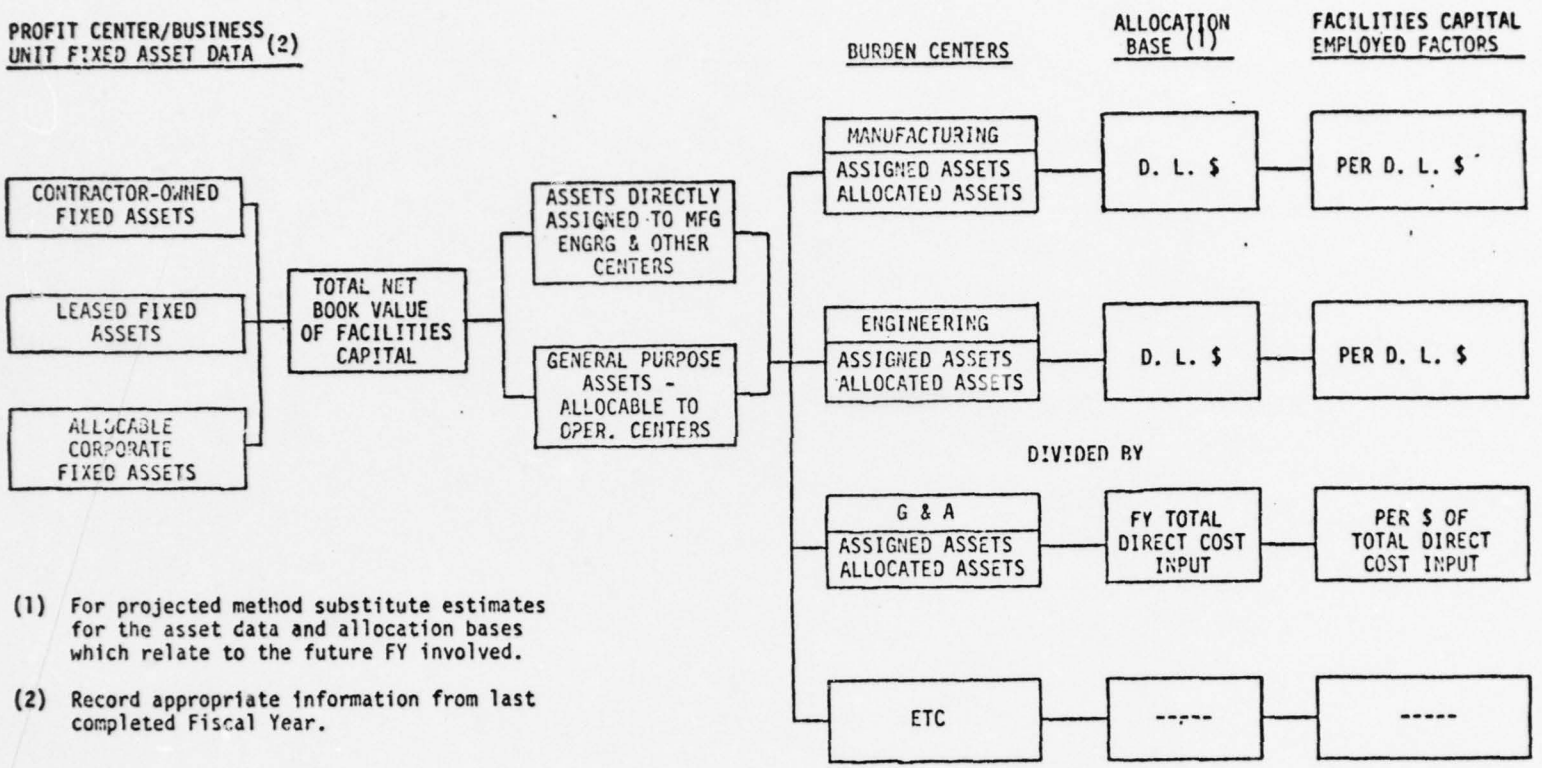
The PCO shall obtain ACO and auditor's evaluation of capital employed data in time for use in establishing pre-negotiation cost and profit/fee objectives.

(b) Reporting Requirements.

To provide the data necessary for evaluating the capital employed policy, reports shall be made in accordance with the instructions setforth herein.

EXHIBIT A

HISTORICAL(1) FACILITIES CAPITAL EMPLOYED FACTORS
ELEMENTS AND PROCESS FLOW

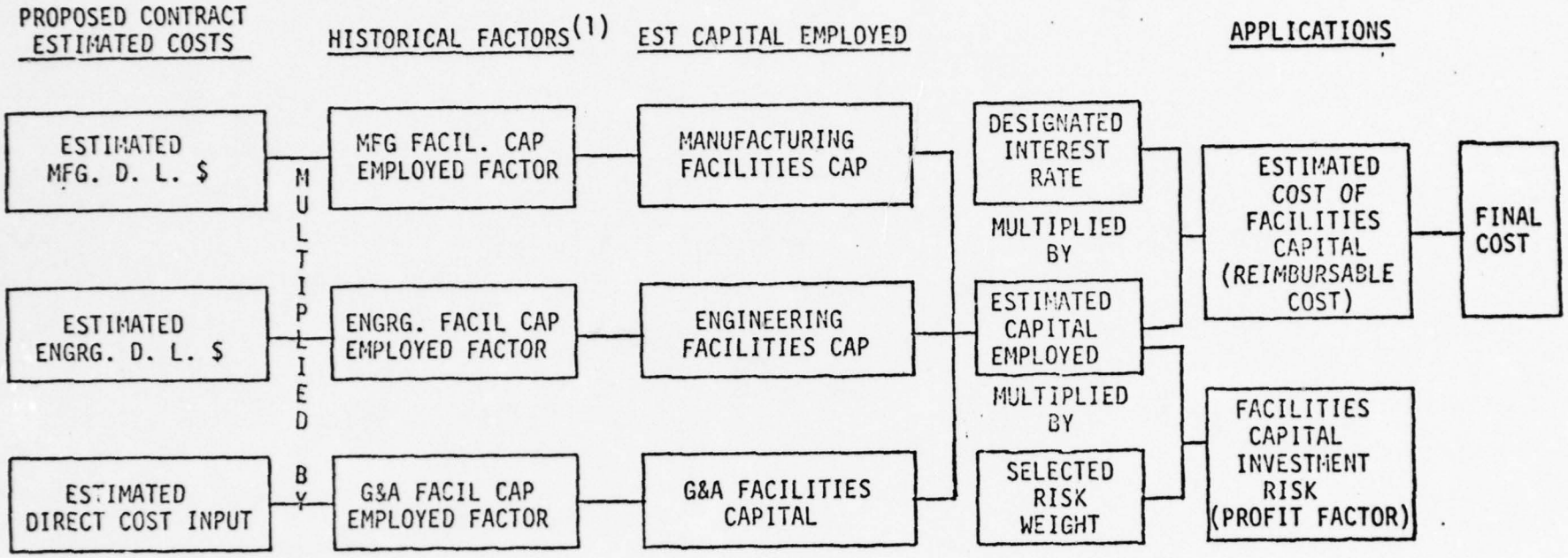


(1) For projected method substitute estimates for the asset data and allocation bases which relate to the future FY involved.

(2) Record appropriate information from last completed Fiscal Year.

EXHIBIT B

FACILITIES CAPITAL EMPLOYED - COST AND INVESTMENT RISK
PROCESS FLOW AND APPLICATIONS



(1) For projected method substitite projected estimated factors.

Contractor	RFP/Contract No.		Contract Type	
Profit Factors	Measurement Base	Weight Range	Assigned Weight	Dollars of Profit
PART A	**CONTRACTOR EFFORT**			
Material Acquisition				
Subcontract Items	$	1 to 5	%	$
Purchased Parts	$	1 to 4	%	$
Other Material	$	1 to 4	%	$
Engineering	$ (Labor)	9 to 15	%	$
	$ (Overhead)	6 to 9	%	$
Manufacturing	$ (Labor	5 to 9	%	$
	$ (Overhead)	4 to 7	%	$
General Management	$ (G & A)	6 to 8	%	$
Sub Total				$
Adjustment Factor				X .69
1 Total	[a]$			[b]$
PART B	**CONTRACTOR RISK**			
2 Cost	$ (line 1a)	0 to 10	%	$
PART C	**FACILITIES INVESTMENT**			
3 Capital Employed	$	6 to 9	%	$
4 Basic Profit Objective (1b + 2 + 3)				$
PART D	**SPECIAL FACTORS**			
Foreign Military Sales	$	1 to 4	%	$
Productivity	$ (3-807.7)		%	$
Independent Development	$ (Line 4)		%	$
5 Special Profit Objective				$
6 Total Profit Objective (4 + 5)				$

INSTRUCTIONS FOR DD FORM 1860

BUSINESS UNIT FACILITIES CAPITAL

PURPOSE. The purpose of this form is to (a) accumulate total facilities values recognized at the business unit level, for either historical or projected cost accounting periods, and (b) reduce those values to Facilities Capital Employed Factors applicable to the same Allocation Bases used for overhead cost allocation. Such factors represent the value of facilities employed (or to be employed) to support each unit-of-measure of the overhead allocation base.

BASIS. All data pertains to the same cost accounting periods for which the contractor computes or projects overhead rates and costs, and should be compatible and reconcilable with those procedures. For example, facilities values accumulated here should correspond to facilities-generated costs allowed or proposed in overhead rate computations, and the Overhead Allocation Bases here should likewise agree with those computations.

IDENTIFICATION. Identify the contractor, business unit, address and cost accounting period to which the data pertains. Indicate whether the period is Historical (actual) or Projected. If Projected, sufficient cost accounting periods must be included to cover the estimated performance periods of contracts to be negotiated.

DEFINITIONS. See ASPR for definitions of the facilities values to be included, the different sources, classes and types of those values, the distinction between Distributed and Undistributed facilities, and methods of allocating the latter to Overhead Pools. Terms and definitions used on this form are intended to be compatible with similar usage in Cost Accounting Standards, which should also be referred to.

OVERHEAD POOLS. List every Overhead Pool within the Business Unit for which overhead rates are calculated for the allocation of indirect costs. The structure reported must be compatible with that used in retroactive overhead rate proposals and/or DD 633 cost proposals or supporting detail, including G&A and Home Office pools if used. Miscellaneous loading factors and bases that do not reflect facilities usage costs, such as material burden, scrap factors and labor fringe benefits factors should be ignored for this purpose.

RECORDED, LEASES, HOME OFFICE. Recorded facilities are the normal Fixed Assets owned by and carried on the books of the business unit. Capitalized Leases are the capitalized value of leases for which constructive costs of ownership have been allowed in lieu of rental costs under ASPR 15-205.34 and .48. The government determination must be identified. Home Office and/or Corporate facilities are the business units' allocable share of higher-level owned, recorded or leased facilities. The allocation should be consistent with that of Home Office Expense under CAS 403.

TANGIBLE AND INTANGIBLE. Tangible facilities are capital assets that have physical substance, more than minimal value, and are expected to be held by the business unit for continued use beyond the current accounting period for the services they yield. Intangible facilities are capital assets that meet the same conditions but have no physical substance. Both must be used in the regular business activities of the business unit, not intended for sale, capitalized on the books and (except for land) subject to allowable depreciation or amortization. This excludes Goodwill and other intangibles not subject to allowable amortization.

TOTAL FACILITIES VALUES RECOGNIZED. This line totals the facilities net book values accumulated above, and therefore represents the total value that will be reflected in the Facilities Capital Employed Factors.

DIRECTLY DISTRIBUTED (Col. 1). All facilities whose usage costs can be directly identified with a single Overhead Pool should be directly distributed to that pool. If Service or Support Center costs are charged directly on a use charge basis, the Center should be treated as an Overhead Pool and its facilities directly distributed thereto. The breakdown is totaled upward to the Directly Distributed line. The remainder of the Total Facilities Values Recognized is Undistributed. Both source and distribution of business unit facilities must balance at the Total line.

ALLOCATION OF UNDISTRIBUTED (Col. 2). Undistributed Facilities are allocated to Overhead Pools on any reasonable basis that approximates the actual absorption of the related costs of such facilities. If Undistributed Facilities are principally G&A and/or Home Office type facilities and the related costs are charged to the G&A pool, then the Undistributed Facilities should likewise be allocated to the G&A pool. Therefore, the allocation of Undistributed Facilities will usually reflect the method of allocating G&A and/or Service Center costs for the purpose of computing overhead rates.

OVERHEAD POOL TOTAL NET BOOK VALUE (Col. 3). The sum of Columns 1 and 2 by Overhead Pools. Total downward and prove the redistribution to the business unit Total Facilities Values Recognized.

OVERHEAD ALLOCATION BASE (Col. 4). The same direct input allocation bases (e.g., DL$, DLH, DM$, M-H, etc.) that are used for computing overhead rates or service/support center use charges. Identify each base unit-of-measure. Both units-of-measure and quantities must agree with historical overhead rate computations, or proposals for forward pricing purposes or FPRAs (ASPR 3-807.12).

FACILITIES CAPITAL EMPLOYED FACTORS (Col. 5). The quotients of each Overhead Pool Total Net Book Value (Col. 3) divided by its related Overhead Allocation Base (Col. 4). Carry each Factor to three decimal places, e.g., X.XXX. This Factor represents the amount of Facilities Capital required to support each unit of the Overhead Allocation Base.

BUSINESS UNIT FACILITIES CAPITAL	CONTRACTOR: BUSINESS UNIT: ADDRESS:				OMB No.
COST ACCOUNTING PERIOD: HISTORICAL or PROJECTED	FACILITIES NET BOOK VALUE		OVERHEAD POOLS		5. FACILITIES CAPITAL EMPLOYED FACTORS
	1. ACCUMULAT. and DIRECT DISTRIBUTION	2. ALLOCATION OF UNDISTRIBUTED	3. TOTAL NET BOOK VALUE	4 OVERHEAD ALLOCATION BASE	
BUSINESS UNIT					
RECORDED - TANGIBLE - LAND		Basis of allocation:	Col's 1 + 2	Unit of measure:	Col's 3 ÷ 4
- BUILDINGS					
- EQUIPMENT					
- OTHER					
- INTANGIBLES					
CAPITALIZED LEASES					
HOME OFFICE and/or CORPORATE					
TOTAL FACILITIES VALUES RECOG.					
UNDISTRIBUTED ALLOCATED TO POOLS					
DIRECTLY DISTRIBUTED BELOW					
OVERHEAD POOLS					
GENERAL and ADMINISTRATIVE					
TOTAL OVERHEAD POOLS					

BUSINESS UNIT FACILITIES CAPITAL	CONTRACTOR: BUSINESS UNIT: ADDRESS:				OMB No.
COST ACCOUNTING PERIOD: HISTORICAL ___ or PROJECTED ___		FACILITIES NET BK. VALUE		OVERHEAD POOLS		5. FACILITIES CAPITAL EMPLOYED FACTORS
		1. ACCUMULAT. and DIRECT DISTRIBUTION	2. ALLOCATION OF UNDISTRIBUT	3. TOTAL NET BOOK VALUE	4. OVERHEAD ALLOCATION BASE	
BUSINESS UNIT	RECORDED-TANGIBLE-LAND	2,000,000	Basis of allocation:	Col's 1 + 2	Unit of measure:	Col's 3 ÷ 4
	-BUILDINGS	2,000,000				
	-EQUIPMENT	4,000,000			Direct Labor $	
	-OTHER					
	-INTANGIBLES				Direct Labor Hours	
	CAPITALIZED LEASES	270,000				
	HOME OFFICE and/or CORPORATE	450,000			Computer Hours	
	TOT. FAC. VALUES RECOGNIZED	8,720,000				
	UNDISTRIBUTED ALLOCATED TO POOLS	3,450,000			Direct Labor $	
	DIRECTLY DISTRIBUTED BELOW	5,270,000				
OVERHEAD POOLS	ENGINEERING	320,000	756,000	1,076,000	$1,800,000	.598
	MANUFACTURING	4,500,000	2,250,000	6,750,000	300,000 hrs	22.500
	TECHNICAL COMPUTER		444,000	444,000	3,000 hrs	148.000
	GENERAL and ADMINISTRATIVE	450,000		450,000	$1,800,000	.25
	TOTAL OVERHEAD POOLS		3,450,000	8,720,000		

INSTRUCTIONS FOR DD FORM 1861

CONTRACT FACILITIES CAPITAL AND COST OF MONEY

PURPOSE. The purpose of this form is to compute the Facilities Capital Cost of Money for a specific contract (historical) or proposal (projected). An intermediate step is to compute Facilities Capital Employed or to be employed on the contract, using the Facilities Capital Employed Factors developed on DD Form(s) 1860. This procedure is intended to implement the requirements of Cost Accounting Standard 414 "Cost of Money as an Element of the Cost of Facilities Capital."

IDENTIFICATION. Identify the contractor, business unit and address. Identify the specific contract or RFP to which the computation pertains, by PIIN number. Identify the total performance period, actual or estimated, of the contract.

OVERHEAD POOLS (Col. 1). List all [illegible] Overhead Pools and Service/Support Centers whose costs will be allocated or applied to this contract. The breakdown must correspond to historical contract cost reports or projected cost proposals, price analysis reports and/or audit reports, and must also correlate to the facilities breakdown used on DD Form 1860.

COST ACCOUNTING PERIOD (Col. 2). This column is used only for the projected method of estimating facilities to be employed in the future. Each Overhead Pool listed must be further broken down by each Cost Accounting Period affected by the Performance Period of the contract. This breakdown must also correspond to projected cost proposals, price analysis reports and/or audit reports, and must correlate to separate DD Forms 1860 for each Cost Accounting Period. If the historical method is used, the column should be ignored.

CONTRACT OVERHEAD ALLOCATION BASE (Col. 3). For each Overhead Pool and Cost Accounting Period listed, record the same Contract Overhead Allocation Base quantities used in historical contract cost reports or projected cost proposals to derive the contract total cost. These bases should be the same as those used for burdening contract overhead or applying Service/Support Center use charges. The base units-of-measure must agree with those used on the DD Forms 1860.

FACILITIES CAPITAL EMPLOYED FACTORS (Col. 4). Carry forward the appropriate Facilities Capital Employed Factors from one or more DD Forms 1860. Business units, overhead pools and cost accounting periods must agree.

FACILITIES CAPITAL EMPLOYED AMOUNT (Col. 5). The product of each Contract Overhead Allocation Base (Col. 3) multiplied by its related Facilities Capital Employed Factor (Col. 4).

TOTAL CONTRACT FACILITIES CAPITAL EMPLOYED (Line 6). The sum of Col. 5. This represents the allocable share of the business unit Total Facilities Value Recognized, that was or will be employed on the contract.

FACILITIES CAPITAL COST OF MONEY RATE (Line 7). The interest rate determined by the Secretary of the Treasury pursuant to P.L. 92-41, 85 Stat. 97. See Cost Accounting Standard 414.

CONTRACT FACILITIES CAPITAL COST OF MONEY (Line 8). The product of Line 6 multiplied by Line 7. This represents the business units' Facilities Capital Cost of Money that is allocable to the contract.

CONTRACT FACILITIES CAPITAL & COST OF MONEY				OMB No.
CONTRACTOR: BUSINESS UNIT: ADDRESS:			RFP/CONTRACT PIIN NO: PERFORMANCE PERIOD:	
1. OVERHEAD POOLS	2. COST ACCOUNTING PERIOD	3. CONTRACT OVERHEAD ALLOCATION BASE	FACILITIES CAPITAL EMPLOYED	
			4. FACTORS	5. AMOUNT
6. TOTAL CONTRACT FACILITIES CAPITAL EMPLOYED				
7. FACILITIES CAPITAL COST OF MONEY RATE				
8. CONTRACT FACILITIES CAPITAL COST OF MONEY				

CONTRACT FACILITIES CAPITAL & COST OF MONEY				OMB No.
CONTRACTOR: BUSINESS UNIT: ADDRESS:			RFP/CONTRACT PIIN NO: PERFORMANCE PERIOD:	
1. OVERHEAD POOLS	2. COST ACCOUNTING PERIOD	3. CONTRACT OVERHEAD ALLOCATION BASE	FACILITIES CAPITAL EMPLOYED	
			4. FACTORS	5. AMOUNT
Engineering		$1,000,000	.598	$ 598,000
Manufacturing (hours)		100,000	22.500	2,250,000
Technical Computer (hours)		1,000	148,000	148,000
G & A		$1,000,000	.25	250,000
6. TOTAL CONTRACT FACILITIES CAPITAL EMPLOYED				$3,246,000
7. FACILITIES CAPITAL COST OF MONEY RATE				x .08
8. CONTRACT FACILITIES CAPITAL COST OF MONEY				$ 259,680

c. 15-205.50 Facilities Capital Cost of Money (CWAS-NA).

a. Facilities capital cost of money is the cost of facilities capital employed in support of Department of Defense contracts. A cost of money rate is derived from a common source and uniformly imputed to all contractors. Capital employed is determined without regard to its source as between equity or borrowed capital. The resulting cost of money is an imputed cost and is not a form of interest on borrowings as discussed in 15-205.17.

b. Facilities capital cost of money is an allowable cost provided (i) it is authorized by the contract, (ii) the contractor's capital investment is measured, allocated to contracts, and costed in accordance with criteria and procedures set forth in CAS 414 and 13-1300 and (iii) the contractor maintains adequate records to demonstrate compliance with item (ii).

c. Cost of money for facilities capital need not be entered on the company's books of account. However, a memorandum entry of the cost shall be made. All relevant schedules, cost data and other data necessary to fully support the entry shall be maintained in a manner to permit audit and verification.

d. Cost of money which is calculated, allocated and documented in accordance with these regulations shall be deemed an "incurred cost" for cost reimbursement purposes pursuant to the payment provision of applicable cost type contracts. (see E-509.5 re: applicability of cost of money for progress payment purposes under fixed price contracts.)

e. Final determination of allowable facilities capital cost of money shall be made in accordance with 13-1300.7

III. 3-808.7 Special Considerations

(1) Foreign Military Sales Effort

Contractors actively engaged in the development of foreign markets for military items frequently exert sales efforts and assume risks beyond the normal risks recognized in the weighted guidelines method. In such cases in connection with procurements for Foreign Military Sales (FMS), it is appropriate to recognize outstanding sales effort in the Foreign markets and attendant risks by a special profit factor to be considered within the weighted guidelines in arriving at a profit objective, 1 to 4 percent of the value of the FMS order is established as the normal range of value for this profit factor. The criteria for selection of the specific percentage shall be based upon such factors as the contractor demonstrating that he has (i) initiated the sale or expended efforts in furthering the sale, (ii) assumed responsibility for the product after delivery beyond that which may be priced in the contract, or (iii) assumed other risks associated with the foreign military sale. It is not intended that this special profit factor be applied to all Foreign Military Sales, but only in those cases when a contractor can, in fact, demonstrate that additional profit beyond that normally recognized in the weighted guidelines is warranted for that sale. This special profit factor shall not apply to sales made from inventories or stocks or to procurements for replenishment of inventories or stocks.

(2) Other

(a) Productivity Reward

Certain types of contractual coverage provide various sharing arrangements for cost incentives which reward contractor increases

in productivity by sharing the resulting cost reductions measured from the cost target. For example, a FPI type contract is typically used for the first production contract of a major weapons system program, because of the design and production risks involved and the lack of reliable cost estimating data. However, this incentive to increase productivity and reduce cost within one contract works against a contractor on follow-on production contracts, because the reduced unit cost becomes the basis for pricing (both cost and profit) of subsequent contracts.

In order to mitigate the loss of profit opportunity that occurs when costs are reduced due to productivity gains, a special "Productivity Reward" may be included in the pre-negotiation profit objective of an instant procurement when the following criteria are met:

(1) The instant procurement action involves a follow-on production contract.

(2) Reliable actual cost data is available for a preceeding production contract to establish a fair and reasonable base unit cost.

(3) No substantial changes have been made in the configuration of the item being procured compared with the base unit.

(4) The instant purchase quantity is at least equal to the purchase quantity under the base contract.

(5) The estimated unit cost of the instant contract is less than the base unit cost.

An estimate of the cost reduction on the instant contract due to productivity gains as compared with the base contract, shall be calculated in accordance with the following procedures:

Base Unit Cost	X	Quantity Adjustment Factor	=	Base Unit Cost Adjusted for Current Quantity
Base Unit Cost Adjusted For Current Quantity	X	Current Unit Cost	=	Unit Cost Decrease Due to Productivity Gains
Unit Cost Decrease Due to Productivity Gains	X	Current Quantity	=	Contract Cost Decrease Due to Productivity Gains
Contract Cost Decrease Due to Productivity Gains	X	Basic Profit Objective Rate	=	Profit Productivity Reward

For the purpose of the above calculation, the following definitions/ explanations apply:

Base Unit Cost - Lowest unit cost (exclusive of Profit) for a preceeding production run.

Quantity Adjustment Factor - An adjustment to arrive at that portion of the cost decrease which is attributable to productivity gains as opposed to quantity differences between the base and instant contracts.

Base Unit Cost Adjusted For Current Quantity - represents how much the base unit would have cost, given the same actual level of productivity, had the quantity now being purchased been produced under the base contract. This isolates unit cost decreases attributed solely to differences in quantity.

Current Unit Cost - The estimated unit cost (exclusive of profit) for the items covered by the instant follow on production contract.

Base Profit Objective Rate - Basic profit objective ÷ cost objective.

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QUANTITY ADJUSTMENT FACTORS
FIXED COSTS AS PERCENT OF TOTAL COST

CURR QTY/ BASE QTY	5.00	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0500	.9976	.9952	.9929	.9905	.9881	.9857	.9833	.9810	.9786	.9762
1.1000	.9955	.9909	.9864	.9818	.9773	.9727	.9682	.9636	.9591	.9545
1.1500	.9935	.9870	.9804	.9739	.9674	.9609	.9543	.9478	.9413	.9348
1.2000	.9917	.9833	.9750	.9667	.9583	.9500	.9417	.9333	.9250	.9167
1.2500	.9900	.9800	.9700	.9600	.9500	.9400	.9300	.9200	.9100	.9000
1.3000	.9885	.9769	.9654	.9538	.9423	.9308	.9192	.9077	.8962	.8846
1.3500	.9870	.9741	.9611	.9481	.9352	.9222	.9093	.8963	.8833	.8704
1.4000	.9857	.9714	.9571	.9429	.9286	.9143	.9000	.8857	.8714	.8571
1.4500	.9845	.9690	.9534	.9379	.9224	.9069	.8914	.8759	.8603	.8448
1.5000	.9833	.9667	.9500	.9333	.9167	.9000	.8833	.8667	.8500	.8333
1.5500	.9823	.9645	.9468	.9290	.9113	.8935	.8758	.8581	.8403	.8226
1.6000	.9813	.9625	.9438	.9250	.9063	.8875	.8688	.8500	.8313	.8125
1.6500	.9803	.9606	.9409	.9212	.9015	.8818	.8621	.8424	.8227	.8030
1.7000	.9794	.9588	.9382	.9176	.8971	.8765	.8559	.8353	.8147	.7941
1.7500	.9786	.9571	.9357	.9143	.8929	.8714	.8500	.8286	.8071	.7857
1.8000	.9778	.9556	.9333	.9111	.8889	.8667	.8444	.8222	.8000	.7778
1.8500	.9770	.9541	.9311	.9081	.8851	.8622	.8392	.8162	.7932	.7703
1.9000	.9763	.9526	.9289	.9053	.8846	.8579	.8342	.8105	.7868	.7632
1.9500	.9756	.9513	.9269	.9026	.8782	.8538	.8295	.8051	.7808	.7564
2.0000	.9750	.9500	.9250	.9000	.8750	.8500	.8250	.8000	.7750	.7500
2.0500	.9744	.9488	.9232	.8976	.8720	.8463	.8207	.7951	.7695	.7439
2.1000	.9738	.9476	.9214	.8952	.8690	.8429	.8167	.7905	.7643	.7381
2.1500	.9733	.9465	.9198	.8930	.8663	.8395	.8128	.7860	.7593	.7326
2.2000	.9727	.9455	.9182	.8909	.8636	.8364	.8091	.7818	.7545	.7273
2.2500	.9722	.9444	.9167	.8889	.8611	.8333	.8056	.7778	.7500	.7222
2.3000	.9717	.9435	.9152	.8870	.8587	.8304	.8022	.7739	.7457	.7174
2.3500	.9713	.9426	.9138	.8851	.8564	.8277	.7989	.7702	.7415	.7128
2.4000	.9708	.9417	.9125	.8833	.8542	.8250	.7958	.7667	.7375	.7083
2.4500	.9704	.9408	.9112	.8816	.8520	.8224	.7929	.7633	.7337	.7041
2.5000	.9700	.9400	.9100	.8800	.8500	.8200	.7900	.7600	.7300	.7000
2.5500	.9696	.9392	.9088	.8784	.8480	.8176	.7873	.7569	.7265	.6961
2.6000	.9692	.9385	.9077	.8769	.8462	.8154	.7846	.7538	.7231	.6923
2.6500	.9689	.9377	.9066	.8755	.8443	.8132	.7821	.7509	.7198	.6887
2.7000	.9685	.9370	.9056	.8741	.8426	.8111	.7796	.7481	.7167	.6852
2.7500	.9682	.9364	.9045	.8727	.8409	.8091	.7773	.7455	.7136	.6818
2.8000	.9679	.9357	.9036	.8714	.8393	.8071	.7750	.7429	.7107	.6786
2.8500	.9675	.9351	.9026	.8702	.8377	.8053	.7728	.7404	.7079	.6754
2.9000	.9672	.9345	.9017	.8690	.8362	.8034	.7707	.7379	.7052	.6724
2.9500	.9669	.9339	.9008	.8678	.8347	.8017	.7686	.7356	.7025	.6695
3.0000	.9667	.9333	.9000	.8667	.8333	.8000	.7667	.7333	.7000	.6667

USED 5.19 UNITS

(b) Independent Development

Contractors who develop military items without Government assistance are entitled to special profit consideration on those items as a special profit factor to be considered within the weighted guidelines in arriving at a profit objective, 10 to 30 percent of the Basic Profit Objective is established as the normal range of value for this profit factor. The criteria for selection of the specific percentage shall be the importance of the development in furthering defense purposes, the demonstrable initiative in determining the need and application of the development, the extent of the contractor's cost risk, and whether the development cost was recovered directly or indirectly from Government sources.

Appendix B

I. Background Questions

1. How many years experience do you have in your present position? _____

2. Do you have any related job experience in positions other than your present position? _____

   If yes, what type of experience?

3. What is the highest educational level you have achieved?

   - ☐ High School
   - ☐ Some College
   - ☐ Bachelors Degree
   - ☐ Some Graduate work
   - ☐ Masters Degree
   - ☐ Some beyond Masters Degree
   - ☐ Phd.

4. What was your major field of study in the highest level of education attained?

   - ☐ Engineering
   - ☐ Accounting
   - ☐ Physics
   - ☐ Law
   - ☐ General Business
   - ☐ Economics
   - ☐ Chemistry
   - ☐ Other _____

5. Could you give me an estimate of the time you spent studying this policy before the interview? _____

6.
   - ☐ Procurement Contracting Officer
   - ☐ Price Analyst
   - ☐ Negotiator
   - ☐ Policy Staff

7. GS-_____

II. Calculation of Facilities Capital Factors

8. What best explains your view of the amount of profit that defense contractors currently receive?

- ☐ Very Low
- ☐ Low
- ☐ About Right
- ☐ Excessive
- ☐ Very Excessive

9. The contractors and auditors provide the data to complete the DD1860 and DD1861, and the government field representatives are the principal personnel concerned with providing an objective evaluation that is necessary to prepare estimates of facilities capital employed.

   How often do you expect to be involved in the calculation of facilities capital employed?

- ☐ Never
- ☐ Seldom
- ☐ Sometimes
- ☐ Frequently
- ☐ Very Frequently

10. The policy clearly differentiates between the situations in which the historical or projected methods of estimating facilities capital may be used.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral/No Opinion
- ☐ Agree
- ☐ Strongly Agree

Even though the ACO, contractor and auditor are responsible for providing facilities capital data, the PCO will from time to time be called on to settle problems that may arise in providing the data.

The policy explains two methods for calculating facilities capital employed; the Historical Method and the Projected Method. Keeping this in mind, answer questions 11 and 12.

11. How clearly was the procedure for computing facilities capital employed using the historical method explained in the proposed profit policy?

- ☐ Very Unclear
- ☐ Unclear
- ☐ Can be understood with some difficulty
- ☐ Clear
- ☐ Very Clear

12. How clearly was the procedure for computing facilities capital employed using the projected method explained in the proposed profit policy?

- ☐ Very Unclear
- ☐ Unclear
- ☐ Can be understood with some difficulty
- ☐ Clear
- ☐ Very Clear

13. When using the historical method, how accurate do you expect the estimates of facilities capital employed to be?

- ☐ Very Inaccurate
- ☐ Inaccurate
- ☐ Some Accurate Some Inaccurate
- ☐ Accurate
- ☐ Very Accurate

14. When using the projected method, how accurate do you expect the estimates of facilities capital employed to be?

- ☐ Very Inaccurate
- ☐ Inaccurate
- ☐ Some Accurate Some Inaccurate
- ☐ Accurate
- ☐ Very Accurate

15. Look at Exhibit A on page 23 of the policy.

This flow chart is necessary to understand the method used to compute facilities capital employed factors.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral/No Opinion
- ☐ Agree
- ☐ Strongly Agree

16. Look at Exhibit B on page 24 of the policy.

This flow chart is necessary to understand the difference between Facilities Capital Cost of Money and Facilities Capital Investment Risk.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral/No Opinion
- ☐ Agree
- ☐ Strongly Agree

On pages 26 thru 30 of the policy, the procedures for completing the DD1860 and DD1861 are explained. The purposes of these two forms are to:

a) Accumulate total facilities values at the business unit level.

b) Compute facilities capital employed factors allocated to overhead pools.

c) Compute the facilities capital cost of money for a contract.

Refer to these pages and answer questions 17, 18 and 19.

17. How clearly does the policy explain the method used to accumulate the values of facilities capital employed?

- ☐ Very Unclear
- ☐ Unclear
- ☐ Can be understood with some difficulty
- ☐ Clear
- ☐ Very Clear

18. How clearly does the policy explain the method used to compute facilities capital employed factors?

- ☐ Very Unclear
- ☐ Unclear
- ☐ Can be understood with some difficulty
- ☐ Clear
- ☐ Very Clear

19. How clearly does the policy explain the method used to compute the facilities capital cost of money?

- ☐ Very Unclear
- ☐ Unclear
- ☐ Can be understood with some difficulty
- ☐ Clear
- ☐ Very Clear

III. Contractor Assumption of Investment Risk

20. Recognition in computing a profit objective, of the risk associated with facilities capital employed, is intended to motivate the contractor to increase productivity, reduce costs through the use of modern technology and equipment, and generate other efficiencies in the performance of defense contracts.

How successful do you expect the new policy to be in accomplishing the goal just stated?

- ☐ Very Unsuccessful
- ☐ Unsuccessful
- ☐ Limited Success
- ☐ Successful
- ☐ Very Successful

21. The range applied to facilities capital in computing the profit objective for investment risk is 6-9%. How successful do you think this range will be in accomplishing the goal of the policy?

- ☐ Very Unsuccessful
- ☐ Unsuccessful
- ☐ Limited Success
- ☐ Successful
- ☐ Very Successful

22. A profit for investment risk is recognized in the new profit policy. A value of 6-9% is assignable as profit for the contractors' investment risk. The new policy states that the contracting officer will need to consider the following factors in assigning the value of risk applicable as profit for investment: Term of investment, stability of the program, availability of funds.

Which of the following additional factors would you consider in choosing a value for the investment risk applicable to facilities capital?

- ☐ The age of the facilities.
- ☐ Relationship of the remaining write-off life of the investment and the length of the programs or contracts on which the facilities are employed.
- ☐ Special purpose or general purpose facilities.
- ☐ Undepreciated dollar value of the facilities.
- ☐ Other

23. Assign relative weights to the factors that you would consider in assigning a value for investment risk, When you add your weighting factors, they should add to 10.

- __ Term of investment.
- __ Stability of the program.
- __ Availability of funds.
- __ Age of facilities.
- __ Special purpose or general purpose facilities.
- __ Relationship of remaining write-off life to program length.
- __ Undepreciated dollar value of the facilities.
- __ Other

Total= 10

24. When computing a pre-negotiation profit objective for facilities investment risk, either the historical estimate or a projected estimate of a dollar value of facilities capital employed will be used.

Will the method used to estimate facilities capital influence your assignment of a profit factor for facilities investment risk?

☐ Yes ☐ No

IV. Cost of Money

25. Classify your understanding as to why the proposed policy includes facilities capital cost of money as a reimbursable expense?

- ☐ Compensate for interest expense.
- ☐ It is an imputed cost that should be reimbursed.
- ☐ It is a technique to give more profit while not calling it profit.
- ☐ Other - Explain.

26. Facilities capital cost of money should be an allowable cost.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral/No Opinion
- ☐ Agree
- ☐ Strongly Agree

27. Inclusion of facilities capital cost of money as an allowable cost is intended to motivate the contractor to increase productivity, reduce costs through the use of modern technology and equipment, and generate other efficiencies in the performance of defense contracts.

This aspect of the policy will be successful in accomplishing the goal just stated.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral/No Opinion
- ☐ Agree
- ☐ Strongly Agree

28. Facilities capital cost of money is an allowable cost that will be invoiced for progress payments. During the first accounting year, the estimate of facilities capital employed will be used for computing the interim billing rate. The actual performance of the contractor will be measured at the conclusion of the accounting year and the facilities capital employed factors will be updated to reflect actual performance. The interim billing rate for the next accounting year will then be based on the actual factors.

    How accurate do you expect the interim billing rates for facilities capital cost of money to be?

    - ☐ Very Inaccurate
    - ☐ Inaccurate
    - ☐ Some Accurate Some Inaccurate
    - ☐ Accurate
    - ☐ Very Accurate

29. The final contract settlement will adjust any overpayments or underpayments that occured during interim billing as a result of the difference between estimated and actual facilities capital factors. Actual facilities capital factors will be used to compute the final settlement.

    Based on the procedure explained in the proposed policy, how difficult will it be to compute the cost of money for the final contract settlement?

    - ☐ Very Easy
    - ☐ Easy
    - ☐ Some Difficulty
    - ☐ Difficult
    - ☐ Very Difficult

30. What problems do you anticipate when the cost of money rate issued by the Secretary of Treasury changes.

31. The policy states that the facilities capital cost of money is to be excluded from the computation of the profit objective for contractor effort. Only booked costs are to be considered when computing a profit objective for contractor effort.

How clearly does the new policy explain the use of cost of money in the target cost but not in the profit objective?

- ☐ Very Unclear
- ☐ Unclear
- ☐ Can be understood with some difficulty
- ☐ Clear
- ☐ Very Clear

32. The dollar amount of the profit objective applicable to investment risk is set when computing the prenegotiation profit objective. A dollar amount is calculated by multiplying the estimated facilities capital employed by the value of the investment risk assigned. This dollar amount does not change. The dollar amount of the cost applicable to facilities capital cost of money changes when actual facilities capital factors are calculated at the completion of the accounting year and at the completion of the contract.

How clearly does the new policy explain this?

- ☐ Very Unclear
- ☐ Unclear
- ☐ Can be understood with some difficulty
- ☐ Clearly
- ☐ Very Clearly

33. Facilities capital is utilized to determine the cost of money allowable as an expense, and it is applied to the profit objective as investment risk.

What best explains your view of the amount of emphasis placed on facilities capital in the new policy?

- ☐ Very Low
- ☐ Low
- ☐ About Right
- ☐ Excessive
- ☐ Very Excessive

V. Productivity Reward

34. Contractors are sometimes penalized in follow-on contracts for productivity gains in the basic contract. The productivity reward is intended to compensate the contractor in follow-on contracts for increased productivity in the basic contract.

How successful do you expect the productivity reward will be in accomplishing the goal stated?

- ☐ Very Unsuccessful
- ☐ Unsuccessful
- ☐ Limited Success
- ☐ Successful
- ☐ Very Successful

35. There are five criteria listed in the policy that explain when the productivity reward is applicable. Please reread these criteria (p. 33).

How clearly are these criteria explained in the new policy?

- ☐ Very Unclear
- ☐ Unclear
- ☐ Can be understood with some difficulty
- ☐ Clearly
- ☐ Very Clearly

36. There are many terms and expressions used to compute the dollar amount, assignable as profit, of the productivity reward. (See p. 34).

Which of the following list of terms and expressions, if any, are difficult to understand?

- ☐ Quantity Adjustment Factor.
- ☐ Base Unit Cost.
- ☐ Base Unit Cost adjusted for current quantity.
- ☐ Current Unit Cost.
- ☐ Base profit objective rate.

VI. General Questions

37. Contractors have expressed concern that any new profi policy changes will not be fully understood and/or implemented at the operational level.

Based on your experience, do you believe that this concern is warranted?

☐ Yes
☐ No

There are many new concepts and procedures in the profit policy. Do you think that special training is necessary to understand and apply this new policy? Answer 38 and 39.

38. Training for PCO's, Price Analysts, Negotiators.

☐ Yes
☐ No

39. Training for ACO's, Auditors, Contractors.

☐ Yes
☐ No

40. Assign a numerical value to each of the following general areas of the policy which best explains how difficult it was for you to understand.

Very Difficult		Some Difficulty		Very Easy	
1	2	3	4	5	Imputed Cost of Money
1	2	3	4	5	Projected vs. historic estimating techniques
1	2	3	4	5	Investment Risk
1	2	3	4	5	Productivity Reward
1	2	3	4	5	Other

41. Do you recommend special training in any specific area of the policy?

42. What best explains your view of the amount of profit that you expect defense contractors will receive under the new policy?

- ☐ Very Low
- ☐ Low
- ☐ About Right
- ☐ Excessive
- ☐ Very Excessive

43. A common statement made by contractors who have reviewed the new policy is:

Why should I be concerned with a new profit policy and how it will benefit me, when I know that the government negotiator will give me the same profit percentage as before no matter how you compute the profit objective.

Do you think the contractor has accurately portrayed the DoD procurement community in making this statement?

- ☐ Yes
- ☐ No

44. Has the briefing by the Profit '76 team and your early involvement in reviewing the profit policy influenced your attitude toward the policy?

- ☐ Yes
- ☐ No

Appendix C

Letter of Invitation

GSM/SM/76D-26

DEPARTMENT OF THE AIR FORCE

HEADQUARTERS AERONAUTICAL SYSTEMS DIVISION (AFSC)
WRIGHT-PATTERSON AIR FORCE BASE, OHIO 45433

We at ASD have been on the leading edge of innovative procurement programs over the past few years. Certainly high visibility programs such as the F-15, B-1, F-16, ALCM & F-111 have not only caught the attention of the public, but have taxed our procurement management skills. Unknown to many are the hundreds of "little" programs which frequently require greater talent, but receive less attention than the larger funded major program. Our abilities have not gone unnoticed. We are being given an opportunity to comment on a new profit policy which will affect the entire defense community, both contractors and military services alike.

Some of you may have heard of Profit '76. The project was initiated last summer and is chaired by Brig Gen J. W. Stansberry. He is chartered to examine the profit earned by defense contractors on negotiated procurements and develop a new DOD profit policy to replace or complement the existing weighted guidelines method. Many hours of study, analysis and idea searching have boiled down to a new draft policy upon which selected members of the ASD procurement staff will be asked to provide their professional opinion. You have been selected to participate in this group.

To ensure a good initial understanding of the new policy, an overall briefing is planned on 23 June at 1330 hours, in the auditorium of Bldg. 640 (AFIT, School of Engineering). During this presentation the scope of the new policy will be explained by a member of General Stansberry's staff. At the conclusion of this briefing, a copy of selected portions of the policy will be provided and an appointment set up to interview each attendee during which time their opinions on the proposed policy will be secured. These interviews will be conducted during the June/July time period.

Your cooperation on this effort is extremely important. Not only will you be able to evaluate a new DOD policy before it is released for general use, but you will be able to provide suggestions to adjust the policy from the point of view of a field practitioner. If for some reason you cannot participate in this effort please contact Mr. Jim Schaeffer, ASD/PP at Ext. 53741 so a replacement can be secured. Any questions on this subject should be directed to Mr. Schaeffer or the local Profit '76 study member, Maj Thomas J. Michalowski, Ext. 72851.

Sincerely

R. C. Hastler Jr.

R. C. HASTLER, JR.
Colonel, USAF
Deputy for Procurement & Production

Appendix D

Cost Accounting Standards 414

The Board's beginning research was in both the area of inflation impact and the area of the cost of capital as a cost of contract performance. On October 9, 1975, the Board published a proposed Cost Accounting Standard No. 413, on Adjustment of Historical Depreciation Costs for Inflation. Both that earlier proposal and the one being published today deal with the recognition, as a part of contract cost, of imputed costs of capital investment which have not been explicitly treated under the generally accepted accounting principles applicable to external financial reporting. The costs dealt with under these two proposals, furthermore, have not been considered in determining contract costs under Government procurement regulations.

The Board, in its October 9, 1975, proposal for Standard No. 413, pointed out that it might be appropriate to "include recognition of the impact of inflation in a provision for capital cost recognition," but it indicated its tentative choice to proceed with the separate development of two proposals.

The Board received over 90 comments on the October 9, 1975 proposal. The Board takes this opportunity to thank the individual companies, Government agencies, professional accounting associations, industry associations, public accounting firms, universities, and others who have provided helpful comments on that publication.

Many of these comments raised substantial questions about the specific details and form of proposed Standard No. 413. Some comments questioned the need for the Standard at all. Commentators urged the Board to combine that topic with the topic of cost of money as an element of the cost of facilities capital. In the staff research work which preceded today's publication of the proposal on cost of money, consideration was given to the rate to be used. The Board's research found that a semiannual rate established by the Secretary of the Treasury under Public Law 92-41, requires that the current private commercial rates of interest for new loans maturing in approximately five years, be taken into account. The impact of future inflation would be clearly reflected in the rate so established.

The Board is persuaded that its cost of money proposal relating to facilities capital should use a rate reasonably representing the cost which can be imputed to all contractors, except for consideration of the differences among them as to specific risk and efficiency evaluations which influence the various rates they actually face.

The Board believes that the proposed Cost Accounting Standard being published today will provide reasonable recognition for the cost of a contractor's investment in facilities, by using the semiannual interest rate established under Public Law 92-41, which also includes a factor for the risk of inflation. The Board is therefore withdrawing its proposed Standard No. 413 on Adjustment of Historical Depreciation Costs for Inflation.

COST ACCOUNTING STANDARDS BOARD

[4 CFR Part 414]

COST OF MONEY AS AN ELEMENT OF THE COST OF FACILITIES CAPITAL

Proposed Standard

Notice is hereby given that the Cost Accounting Standards Board is considering the promulgation of a Standard on Cost of Money as an Element of the Cost of Facilities Capital. The proposed Standard is designed to implement further the requirements of Section 719 of the Defense Production Act of 1950, as amended (50 U.S.C. App. 2168).

The proposed Standard, if adopted, would be one of a series of Cost Accounting Standards which the Board is promulgating "to achieve uniformity and consistency in the cost accounting principles followed by defense contractors and subcontractors under Federal contracts." (See Section 719(g) of the Defense Production Act, as amended.)

Since various proposals for accounting for inflation are under study by accounting bodies, and those studies are incomplete, the Board believes it should proceed at this time to deal with the inflation problem through a single Standard on the cost of facilities capital. The Board will, however, continue to observe efforts by other authoritative accounting bodies to develop appropriate techniques to deal in a practical manner with the impact of inflation.

The proposal being published today deals with investments in facilities. The Board recognizes that some contractors also have significant investments in working capital. The Board's staff has, indeed, engaged in preliminary research related to techniques for measuring the costs allocable to contracts because of such working capital investments. The Board will continue to study the issues related to the cost of these commitments of working capital with a view toward developing a possible Cost Accounting Standard covering the cost of these investments.

The Board solicits comments on the proposed Cost Accounting Standard on the Cost of Money as an Element of the Cost of Facilities Capital. Interested persons should submit written materials which will assist the Board in its consideration of the proposal. Views and data should be submitted to the Cost Accounting Standards Board, 441 G Street, N.W., Washington, D.C. 20548.

To be given consideration by the Board in its determination relative to final promulgation of the Cost Accounting Standard covered by this Notice, written submissions must be made to arrive no later than April 19, 1976.

NOTE: All written submissions made pursuant to this Notice will be made available for public inspection at the Board's office during regular business hours.

PART 414—COST OF MONEY AS AN ELEMENT OF THE COST OF FACILITIES CAPITAL

Sec.

AUTHORITY. Sec. 719 of the Defense Production Act of 1950, as amended, Public Law 91-379, 50 U.S.C. App. 2168.

§ 414.10 General applicability.

General applicability of this Cost Accounting Standard is established by § 331.30 of the Board's regulations on applicability, exemption, and waiver of the requirement to include the Cost Accounting Standards contract clause in negotiated defense prime contracts and subcontracts (4 CFR 331.30).

§ 414.20 Purpose.

The purpose of this Cost Accounting Standard is to establish criteria covering the explicit recognition of the cost of money for facilities capital as an element of contract cost. Consistent application of these criteria will improve cost measurement by providing for allocation of cost of contractor investment to negotiated contracts.

§ 414.30 Definitions.

(a) *Business unit.* Any segment of an organization, or an entire business organization which is not divided into segments.

(b) *Facilities capital.* The net book value of tangible capital assets and those intangible capital assets that are subject to amortization.

(c) *General and Administrative (G&A) Expense.* Any management, financial, and other expense which is incurred by or allocated to a business unit and which is for the general management and administration of the business unit as a whole. G&A expense does not include those management expenses whose beneficial or causal relationship to cost objectives can be more directly measured by a base other than a cost input base representing the total activity of a business unit during a cost accounting period.

(d) *Intangible capital asset.* An asset which has no physical substance, has more than minimal value, and is expected to be held by an enterprise for continued use of possession beyond the current accounting period.

(e) *Tangible capital asset.* An asset that has physical substance, more than minimal value, and is expected to be held by an enterprise for continued use of possession beyond the current accounting period for the services it yields.

§ 414.40 Fundamental requirement.

(a) The cost of contractor's capital investment shall be measured and allocated to contracts in accordance with the criteria set forth in this Standard.

(b) The cost of money rate to be used in this Standard shall be based on the interest rate determined by the Secretary of the Treasury (pursuant to P.L. 92-41, 85 Stat. 97) computed in accordance with the terms of this Standard.

(c) The cost of money for facilities capital shall be separately computed for each contract for each cost accounting period.

§ 414.50 Techniques for application.

(a) The investment base used in computing the cost of money for facilities capital shall be computed from accounting data used for contract cost purposes. The form and instructions stipulated in this Standard shall be used to make the computation.

(b) The cost of money rate for any cost accounting period shall be the arithmetic mean of the interest rates specified by the Secretary of the Treasury pursuant to P.L. 92-41 (85 Stat. 97). Where the cost of money must be determined on a prospective basis the cost of money rate shall be based on the most recent available rate published by the Secretary of the Treasury.

(c) (1) A facilities capital cost of money factor shall be determined for

each overhead, G&A, or other indirect cost pool (e.g., service center) which is used to allocate indirect costs to final cost objectives.

(2) The facilities capital cost of money factor for an indirect cost pool shall be determined in accordance with Form CASB–CMF, and its instructions which are set forth in Appendix A. One form will serve for all the indirect cost pools of a business unit.

(3) For each CAS-covered contract, the applicable facilities-related cost of money for a given cost accounting period is the sum of the products obtained by multiplying the amount of allocation base units (such as direct labor hours, or dollars of total cost input) identified with the contract for the cost accounting period by the facilities capital cost of money factor for the corresponding indirect cost pool.

§ 414.60 Illustrations.

The use of Form CASB–CMF and other types of computations anticipated for this Cost Accounting Standard are illustrated in Appendix B.

§ 414.70 Exemption.

This Standard shall not apply to any prime contract or subcontract if (i) the date of award of such prime contract or subcontract, or (ii) the date of final agreement on price as shown on a contractor's signed certificate of current cost or pricing data, precedes the effective date of this Standard.

The provisions of § 414.50(c) of this Standard and the requirement of § 414.40(c) to compute cost of money for facilities capital shall not apply where compensation for the use of tangible capital assets is based on use allowances as provided by the provisions of Federal Management Circular 73–8 (Cost Principles for Educational Institutions), Federal Management Circular 74–4 (Principles for Determining Costs Applicable to Grants and Contracts with State and Local Governments), or other appropriate Federal procurement regulations.

§ 414.80 Effective date.

The effective date of this Cost Accounting Standard is [Reserved].

APPENDIX A

FACILITIES CAPITAL COST OF MONEY FACTORS COMPUTATION

BUSINESS UNIT FACILITIES CAPITAL					Contractor: Business Unit:		Address:	
COST ACCOUNTING PERIOD:		1. Applicable Cost of Money Rate ___%	2. Accumulation & Direct Distribution of N.B.V.	3. Allocation of Undistributed	4. Total Net Book Value	5. Cost of Money for the Cost Accounting Period	6. Overhead or G&A Allocation for the Period	7. Facilities Capital Cost of Money Factors
BUSINESS UNIT FACILITIES CAPITAL	Recorded			Basis of Allocation	Col's 2 + 3	Col's 1 x 4	In Unit(s) of Measure	Col's 5 ÷ 6
	Leased Property							
	Corporate or Group							
	Total							
	Undistributed							
	Distributed							
OVERHEAD POOLS								
G&A EXPENSE POOLS								
TOTAL							//////////	//////////

CASB-CMF

APPENDIX A

INSTRUCTIONS FOR FORM CASB–CMF

Purpose. The purpose of this form is to (a) accumulate total Facilities Capital net book values allocated to each Business Unit for the contractor cost accounting period and (b) convert those values to Facilities Capital cost of money factors applicable to each overhead or G&A expense allocation base employed within a business unit. Only those facilities capital items used in the regular business activity of the business unit should be used for the purpose of this computation.

Basis. All data pertain to the cost accounting period for which the contractor prepares overhead and G&A expense allocations. The cost of money computations should be compatible with those allocation procedures. More specifically, facilities capital values used should be the same values that are used to generate depreciation or amortization that are allowed for Federal Government contract costing purposes.

Applicable Cost of Money Rate (Col 1). Enter here the percent of the average periodic cost of money rate as computed in accordance with § 414.50(b).

Accumulation and Direct Distribution of Net Book Value (Col. 2). *Recorded, Leased Property, Coporate*—The Net Book Value of Facilities Capital items in this column shall represent the average balances outstanding during the cost accounting period. This applies both to items that are subject to periodic depreciation or amortization and also to such items as land that are not subject to periodic write-offs. Unless there is a major fluctuation, it will be adequate to ascertain the net book value of these assets at the beginning and end of each cost accounting period, and to compute an arithmetic average of those two sets of figures. "Recorded" facilities are the normal Facilities Capital items owned by the contractor and carried on the books of the Business Unit. "Leased Property" is the capitalized value of leases for which constructive costs of ownership have been allowed in lieu of rental costs under Government procurement regulations. Corporate or group facilities are the Business Unit's allocable share of corporate-owned and leased

facilities. The net book value of general purpose items of Facilities Capital which are held or controlled by the Home Office shall be allocated to the Business Unit on a basis consistent with the Home Office expense allocation.

Distributed and Undistributed. All facilities capital items that are identified in the contractor's records as solely applicable to an organizational unit corresponding to a specific overhead or G&A expense pool, are listed against the applicable Overhead or G&A expense pool, are listed against the applicable Overhead or G&A expense pools and are classified as "Distributed." "Undistributed" is the remainder of the Business Unit's facilities capital. The sum of "Distributed" and "Undistributed" must also correspond to the amount shown on the "Total" line.

Allocation of Distributed. List in the narrative column all the overhead and G&A expense pools to which "Distributed" facilities capital items have been allocated. Enter the corresponding amounts in (Col. 2). The sum of all the amounts shown against specific overhead and G&A expense pools must correspond to the amount shown on the "Distributed" line.

Allocation of Undistributed. (Col 3) Business Unit "Undistributed" facilities are allocated to overhead and the G&A expense pools on any reasonable basis that approximates the actual absorption of depreciation and the related costs of such facilities. The basis of allocation of undistributed assets in each Business Unit between, e.g., engineering overhead pool and the manufacturing overhead pool, should be related to the manner in which the expenses generated by these assets are absorbed in the two overhead rates. The choice of the basis for allocation is up to the contractor within the limits stated above. Thus, the basis for allocation of undistributed assets assumes an analysis was made of overhead distribution. The net book value of "service center" facilities capital items appropriately allocated should be included in this column. The sum of the entires in Column 3 is equal to the entry in the undistributed line, Column 2.

A supporting work-sheet of this allocation should be prepared if there is a multiplicity of "service centers" or other similar "intermediate" cost objectives involved in the reallocation process.

As an alternative to the detailed allocation process outlined above, the undistributed assets may be allocated in total to the G&A expense pool. Thus the resulting cost of money related to these undistributed assets will be distributed to all final cost objectives on the basis that is used to allocate the G&A expense to these final cost objectives. This alternative procedure may be adopted only where the contracting parties agree that the results are not likely to differ materially from those which would be produced under the procedure described in the preceding two paragraphs.

Total Net Book Value. (Col 4) The sum of Columns 2 and 3. The total of this column should agree with the Business Unit's Total shown in Column 2.

Cost of Money for the Cost Accounting Period. (Col 5) Multiply the amounts in Column 4 by the percentage rate in Column 1.

Overhead or G&A Allocation Base. (Col 6) Show here the total units of measure used to allocate overhead and G&A expense pools (e.g., DLS, DLH, DMS, M-H, etc.). Include "service centers" that make charges to final cost objectives. Identify each base unit-of-measure, which must be compatible with the bases used for applying overhead in the Federal Government contract cost computation.

The total base unit of measure used for allocation in this column refers to all work done in an organizational unit associated with the indirect cost pool and not to Government work alone.

Facilities Capital Cost of Money Factors. (Col 7) The quotients of cost of money for the cost accounting period (Col 5) separately divided by the corresponding overhead or G&A expense allocation bases (Col 6). Carry each computation to five decimal places. This factor represents the cost of money applicable to Facilities Capital allocated to each unit of meausre of the Overhead or G&A expenses allocation base.

APPENDIX B

EXAMPLE—ABC CORPORATION

ABC Corporation has a home office that controls three operating divisions (Business Units A, B & C). The home office includes an administrative computer center whose costs are allocated separately to the business units. The separate allocation conforms to the requirements specified in the Cost Accounting Standard No. 403. Tables I through VI deal with home office expense allocations to business units.

The A Division, falling within the scope of a business unit as defined by CASB, has two overhead pools used for charging overhead to final cost objectives: the engineering and the manufacturing overhead pools. In addition to the two overhead pools, the indirect cost allocation process also uses two "service centers" with their own indirect cost pools: occupancy and technical computer center.

The costs accumulated in the occupancy pool are allocated among manufacturing overhead, engineering overhead, and the technical computer center on the basis of floor space occupied. The costs accumulated in the technical computer center cost pool are allocated to users on the basis of a CPU hourly rate. Some of these allocations are made to engineering or manufacturing overhead while others are allocated direct to final cost objectives.

At the business unit level, all the indirect expense incurred is regarded either as an engineering or manufacturing expense. Thus the sole item that enters into the business unit G&A expense pool is the allocation received by the A Division from the home office.

Operating results for the A Division are given in Table VII. Facilities capital items for the division are given in Table IX.

The example is based on a single set of contract cost data given in Table VIII. However, it has been assumed that this could be either a cost reimbursement contract or fixed price contract where some progress payments are made. Since two methods have been made available for computing cost of money on facilities capital items two different results, as shown in Table XIII, become possible.

Throughout the example, where appropriate, cross references have been made to the text of the relevant parts of the Standard.

TABLE I.—*Net book value of home office facilities capital*

[In thousands]

	Dec. 31, 1974	Dec. 31, 1975
Administrative computer center	$550	$450
Other home office assets	420	380
Total	970	830

The depreciable assets in the above table generate allowable depreciation as explained in instructions for form CASB-CMF. Thus they should be included in the asset base for cost of money computation.

TABLE II.—*Home office facilities capital, annual average balances*

[In thousands]

Administrative computer center facilities capital	$500
Other home office facilities capital items	400
Total	900

The above averages are based on data in table I computed in accordance with the criteria in instructions for form CASB-CMF.

$$\$970,000+\$830,000=\$1,800,000\div 2=\$900,000$$

TABLE III.—*Home office depreciation for 1975*

Administrative computer center facilities capital	$100
Other home office facilities capital items	40
Total	140

TABLE IV.—*Allocation of ABC home office expenses to divisions (business units)*

[In thousands]

	Total expense	Allocation to business units		
		A	B	C
Administration computer center facilities capital	$1,800	$900	$900	
Other home office facilities capital items	4,800	2,400	1,200	1,200
Total	6,600	3,300	2,100	1,200

The above allocation is carried out in accordance with standard 403.

The expense allocated to individual business units above is then used as a basis for allocating depreciation to these same units in table V.

TABLE V.—*Depreciation component of ABC home office expense*

[In thousands]

	Total depreciation expense	Allocation to business units		
		A	B	C
Administration computer center facilities capital	$100	$50	$50	
Other home office facilities capital items	40	20	10	$10
Total	140	70	60	10

TABLE VI.—*Allocation of home office facilities capital to business units*

(a) Depreciation allocation in table V converted to percentages.

[In percent]

	Total depreciation expense	Allocation to business units		
		A	B	C
Administration computer center facilities capital	100	50	50	
Other home office facilities capital items	100	50	25	25

(b) Application of percentages in (a) to average net book values in table II, in accordance with criteria in instructions for form CASB–CMF.

[In thousands]

	Total net book value	Allocation to business units		
		A	B	C
Administration computer center facilities capital	$500	$250	$250	
Other home office facilities capital items	400	200	100	$100
Total	900	450	350	100

TABLE VII.—*Division A 1975 operating results*

[In thousands]

	Total cost input and general and administrative	Fixed price cost accounting standard-covered contracts	Cost reimburse cost accounting standard-covered contracts	Commercial and other work
Direct material:				
Purchased parts	$2,000	$100	$100	$1,800
Subcontract items	21,530	11,750	7,205	2,575
Total	23,530	11,850	7,305	4,375
Direct labor:				
Engineering labor	2,000	1,500	500	
Engineering overhead (80 pct of direct engineering labor)	1,600	1,200	400	
Manufacturing labor	3,000	1,200	200	1,600
Manufacturing overhead (200 pct of direct manufacturing labor)	6,000	2,400	400	3,200
Other direct charges:				
Technical computer center direct charge—2,280 h at $250/h	570	200	370	
Total cost input	36,700	18,350	9,175	9,175
General and administrative (8.99 pct of cost input)	3,300	1,650	825	825
Total	40,000	20,000	10,000	10,000

TABLE VIII.—*Cost data for the contract*

Purchased parts	$85
Subcontract items	900
Technical computer time 280 h at $250/h	70
Engineering labor	330
Engineering overhead at 80 pct	264
Manufacturing labor	1,210
Manufacturing overhead at 200 pct	2,420
Total cost input	5,369
General and administrative at 8.99 pct	483
Total cost input and general and administrative	5,852
Total profit or fee	425

TABLE IX.—*Division A facilities capital*

Average net book values are computed in accordance with instructions to form CASB-CMF. Average figures only are given, the underlying beginning and ending balances for 1975 have not been reproduced.

[In thousands]

Name of indirect cost pool, the asset is associated with—	Average net book value	Annual depreciation
Engineering overhead	$320	$40
Manufacturing overhead	4,500	900
Technical computer center	450	90
Occupancy	3,000	200
Facilities capital recorded by division A. (See form CASB-CMF instructions for description of "recorded.")	8,270	1,230
Allocated from home office, table VI	450	
Total division A	8,720	

TABLE X.—*Allocation of undistributed facilities capital*

(a) Reallocation of the occupancy pool assets: Total occupancy pool expenses are assumed to be $1,000,000 of which $200,000 is depreciation per table IX. Allocation of the $3,000,000 net book value of assets per table IX is performed on the basis of floor space utilization.

Indirect cost pool	Occupancy expense and depreciation allocation	Percent of total floor space utilized	Asset allocation
Manufacturing	750,000	75	2,250,000
Engineering	200,000	20	600,000
Technical computer	50,000	5	150,000
Total	1,000,000	100	3,000,000

(b) Reallocation of technical computer center assets: Total technical computer center expenses for the year are assumed to be $770,000 including $90,000 depreciation per table IX and $50,000 charge from the occupancy pool per (a) above. A charging rate of $250/h is computed assuming a total of 3,080 chargeable central processing unit hours per annum. The net book value of assets amounting to $600,000 ($450,000 per table IX, plus the $150,000 allocated per (a) above) is allocated on the basis of estimated utilization of the central processing unit hours.

TABLE X.—*Allocation of undistributed facilities capital*—Continued

Overhead pool or cost objective	Hours charged	Amount charged	Percent	Asset allocation
Fixed price contracts—table VII	800	$200,000	26	$156,000
Cost reimbursement contracts—table VII	1,480	370,000	48	288,000
Engineering overhead pool	800	200,000	26	156,000
Total	3,080	770,000	100	600,000

(c) Summary of undistributed facilities capital allocation: Undistributed (per instructions to form CASB-CMF assets per table IX).

[In thousands]

Technical computer center	$450
Occupancy	3,000
Total	3,450

Distribution per (a) or (b) above of balances to overhead pools that result in charges direct to final cost objectives.

[In thousands]

Overhead pool	(a)	(b)	Total
Manufacturing	$2,250		$2,250
Engineering	600	$156	756
Technical computer center (direct charge part only)		444	444
Total	2,850	600	3,450

TABLE XI

FACILITIES CAPITAL COST OF MONEY FACTORS COMPUTATION
("Regular" Method)

BUSINESS UNIT FACILITIES CAPITAL			Contractor: Business Unit:		Address:		
COST ACCOUNTING PERIOD: Y.E. 12/31/75	1. Applicable Cost of Money Rate 8 %	2. Accumulation & Distribution of N.B.V.	3. Allocation of Undistributed	4. Total Net Book Value	5. Cost of Money for the Cost Accounting Period	6. Overhead or G&A Allocation for the Period	7. Facilities Capital Cost of Money Factors
BUSINESS UNIT FACILITIES CAPITAL: Recorded	Table IX	8,270,000	Basis of Allocation	Col's 2 + 3	Col's 1 x 4	In Unit(s) of Measure	Col's 5 ÷ 6
Leased Property							
Corporate or Group	Table VI	450,000	Worksheet Table X				
(Total)		8,720,000				Table VII	
Undistributed		3,450,000					
Distributed		5,270,000					
OVERHEAD POOLS: Engineering	Table IX	320,000	756,000	1,076,000	86,000	$2,000,000	.04304
Manufacturing	Table IX	4,500,000	2,250,000	6,750,000	540,000	$3,000,000	.18
Technical Computer			444,000	444,000	35,520	2,280 hr	15.57895
G&A EXPENSE POOLS: G&A Expense	Table VI	450,000		450,000	36,000	$36,700,000	.00098
TOTAL			3,450,000	8,720,000	697,600	//////////	//////////

CASB-CAS

TABLE XII

FACILITIES CAPITAL COST OF MONEY FACTORS COMPUTATION
("Alternative" Method)

BUSINESS UNIT FACILITIES CAPITAL			Contractor: Business Unit:		Address:		
COST ACCOUNTING PERIOD: Y.E. 12/31/75	1. Applicable Cost of Money Rate 8 %	2. Accumulation & Distribution of N.B.V.	3. Allocation of Undistributed	4. Total Net Book Value	5. Cost of Money for the Cost Accounting Period	6. Overhead or G&A Allocation for the Period	7. Facilities Capital Cost of Money Factors
BUSINESS UNIT FACILITIES CAPITAL: Recorded	Table IX	8,270,000	Basis of Allocation	Col's 2 + 3	Col's 1 x 4	In Unit(s) of Measure	Col's 5 ÷ 6
Leased Property							
Corporate or Group	Table VI	450,000	All to G&A Expense Pool				
(Total)		8,720,000				Table VII	
Undistributed		3,450,000					
Distributed		5,270,000					
OVERHEAD POOLS: Engineering	Table IX	320,000		320,000	25,600	$2,000,000	.0128
Manufacturing	Table IX	4,500,000		4,500,000	360,000	$3,000,000	.12
Technical Computer							
G&A EXPENSE POOLS: G&A Expense	Table VI	450,000	3,450,000	3,900,000	312,000	$36,700,000	.0085
TOTAL			3,450,000	8,720,000	697,600	//////////	//////////

CASB-CAS

TABLE XIII.—*Summary of cost of money computation on facilities capital*

Overhead or general and administrative expense allocation base	Allocated to contract, table VIII	Regular facilities capital cost of money factor, table XI	Amount	Alternative facilities capital cost of money factor, table XII	Amount
Engineering labor	$330,000	0.04304	$14,203	0.0128	$4,224
Manufacturing labor	1,210,000	.18	217,800	.12	145,200
Technical computer time, 280 h		15.57895	4,328		
Cost input	5,369,000	.00098	5,621	.0065	45,636
Total imputed interest on facilities capital			240,628		195,060

ARTHUR SCHOENHAUT,
Executive Secretary.

[FR Doc.76-6344 Filed 3-4-76;8:45 am]

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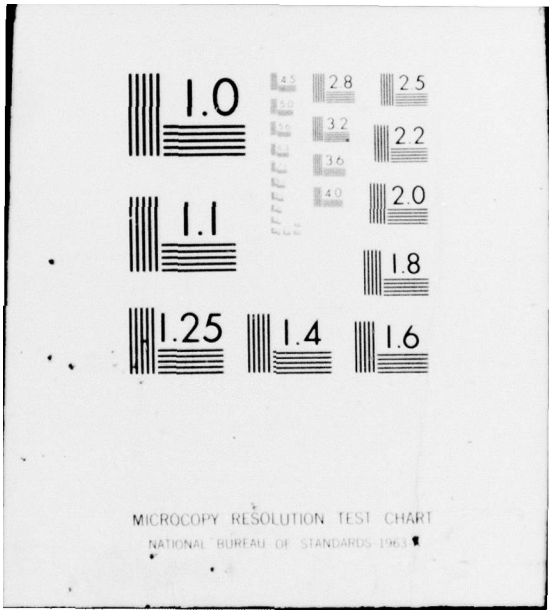
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

Vita

Born on 7 December 1946, Robert J. Blair lived his first seventeen years near Chicago, Illinois. He left home to attend Millikin University in Decatur, Illinois where he graduated in 1968, with a Bachelor of Science degree majoring in Industrial Engineering.

Upon graduation, he accepted a job with Headquarters, Air Force Logistics Command where he worked until entering the Air Force in 1971. He received his commission from Officer Training School and went to Reese Air Force Base, Texas for pilot training. After receiving his wings, he was assigned to Moody AFB, Georgia where he was an instructor pilot in the T-37. He completed his tour at Moody and entered the Air Force Institute of Technology in 1975.

His wife's name is Patricia. They have one daughter named Erin.

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The objective of this study was to identify potential problem areas that may hinder the successful implementation of the new Department of Defense(DoD) profit policy. A draft copy of the policy was distributed to forty DoD procurement personnel assigned to the Air Force Systems Command, Aeronautical Systems Division. These individuals were interviewed to collect their perceptions as to the potential

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problem areas associated with the new profit policy. Problems related to the allocation of facilities capital to a contract; the computation of the prenegotiation profit objective for facilities investment; the inclusion of facilities capital cost of money as an allowable cost; and the application of the productivity reward were identified. Recommended solutions to these problem areas were briefed to the chairman of the Profit 76 study group prior to the implementation of the new DoD profit policy.

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