

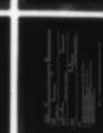
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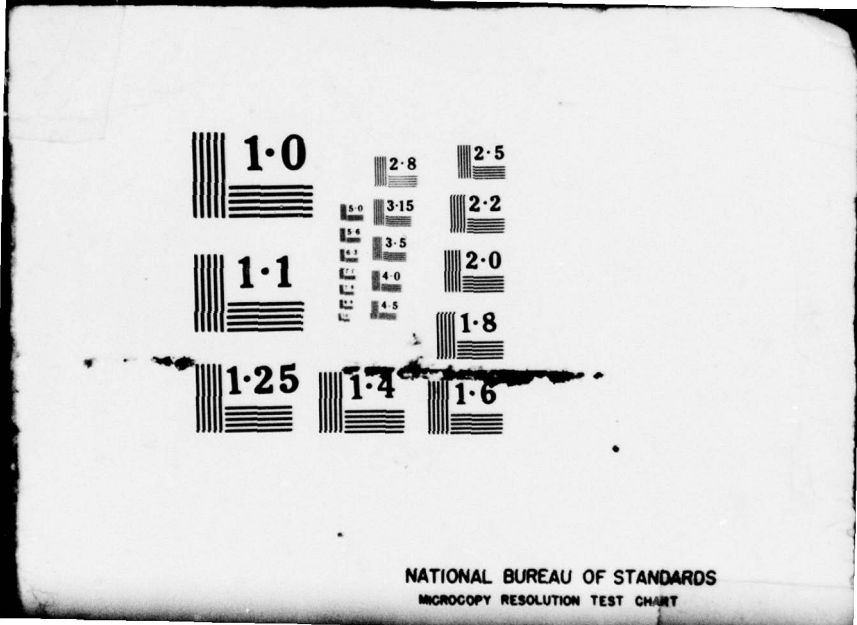
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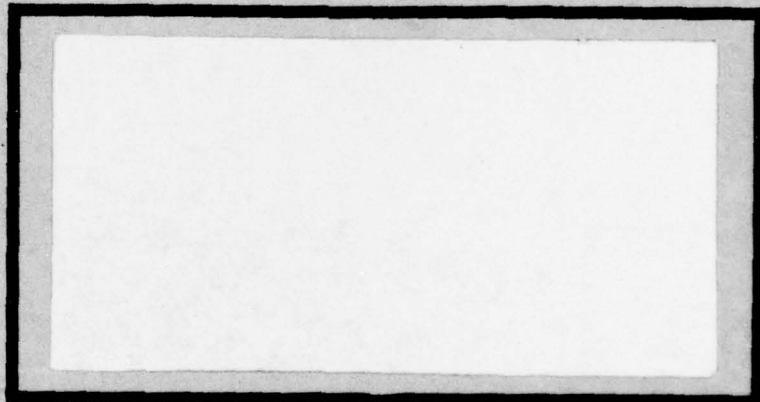
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AN ANALYTICAL EVALUATION OF
PROCEDURES FOR CLOSING
COST-TYPE CONTRACTS

Michael B. Bristow, GS-13
Joseph E. Moad, GS-9

LSSR 15-79A

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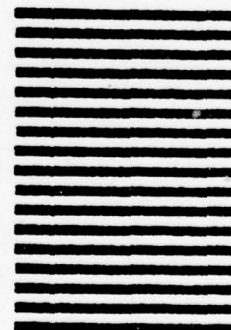


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1. REPORT NUMBER 14 AFIT LSSR-15-79A	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) 6 AN ANALYTICAL EVALUATION OF PROCEDURES FOR CLOSING COST-TYPE CONTRACTS.		5. TYPE OF REPORT & PERIOD COVERED Master's Thesis,
7. AUTHOR(s) 10 Mr. Michael B. Bristow, GS-13 Mr. Joseph E. Moad, GS-9		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS Graduate Education Division School of Systems and Logistics Air Force Institute of Technology, WPAFB OH		8. CONTRACT OR GRANT NUMBER(s)
11. CONTROLLING OFFICE NAME AND ADDRESS Department of Research and Administrative Management AFIT/LSGR, WPAFB OH 45433		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS 12 147p.
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		12. REPORT DATE Jun 1979
		13. NUMBER OF PAGES 92
		15. SECURITY CLASS. (of this report) UNCLASSIFIED
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) JOSEPH P. HIPPS, Major, USAF Director of Information		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) contract closeout overhead cost overage contract indirect cost early closeout procedures		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Thesis Chairman: Jack L. McChesney, Lt. Col, USAF		

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Physically completed open contracts are an administrative and financial burden to the government. The Air Force had a procedure for the early closeout of cost-type contracts overage due to overhead negotiation. This procedure was superseded by an early closeout procedure subsequently published in the Defense Acquisition Regulation (DAR). The primary objectives of this *thesis* *are* ~~research were~~ to (1) compare current data to previous data which had indicated that overhead negotiation was the primary reason for overage contracts to determine if this condition still *exists;* ~~existed~~ and (2) determine if the DAR early closeout procedure *is* ~~was~~ accomplishing its goal. This study concluded that (1) negotiations of overhead continued to be the primary reason for contracts becoming overage; and *that* (2) the DAR procedure had hindered the early closeout of contracts by certain contractors who were previously agreeable to closing contracts using the Air Force procedure. The latter conclusion was attributed to the increased cost risk to the contractor. It was recommended that a more flexible procedure be adopted for the early closeout of physically completed cost-type contracts. This flexibility *will* ~~would~~ allow procedural variations to be used as required by each particular situation.

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SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

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AN ANALYTICAL EVALUATION OF PROCEDURES
FOR CLOSING COST-TYPE CONTRACTS

A Thesis

Presented to the Faculty of the School of Systems and Logistics
of the Air Force Institute of Technology
Air University

In Partial Fulfillment of the Requirements for the
Degree of Master of Science in Logistics Management

By

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June 1979

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This thesis, written by

Mr. Michael B. Bristow

and

Mr. Joseph E. Moad

has been accepted by the undersigned on behalf of the
faculty of the School of Systems and Logistics in partial
fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN LOGISTICS MANAGEMENT

DATE: 13 June 1979


COMMITTEE CHAIRMAN

ACKNOWLEDGEMENTS

We express our sincere appreciation to our Faculty Advisor, Lieutenant Colonel Jack L. McChesney, for his guidance and direction in the preparation of this thesis. His constructive comments and encouragement were essential to the completion of this thesis effort.

We also thank Messrs. Jim Bibler and Don O'Neill for their invaluable insight into the problem and the information provided for use in this thesis.

A special debt of gratitude is given to Carolyn Bristow for her patience, understanding, and skill in the preparation and typing of this thesis.

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Chapter 1

INTRODUCTION AND RESEARCH METHODOLOGY

INTRODUCTION

Problem Statement

The subject of closeout of physically completed contracts received little attention until 1967 but since then has been monitored regularly by all of the military services (8:4). As the defense share of the federal budget declined, interest in physically completed contracts grew as did interest in all areas of government contracting where costs could be reduced. One research project conducted in the area of closeout identified many reasons why physically completed contracts remained open and cited the fact that there were opportunity costs associated with those contracts (9:52). This same project also identified the major concerns of individuals performing functions related to contract closeout. Of three concerns most commonly mentioned, two dealt with inadequacy of procedures and the other was that negotiation of final overhead rates was preventing the timely closeout of contracts (9:13).

Physically completed contracts which remain open for any reason are a potential financial and administrative

burden upon the government. This burden becomes apparent as we consider that (i) open contracts which are physically completed "probably have obligated monies left on them that may be used for other valid purposes once they have been deobligated [23:9C1]," and (ii) "negotiation issues tend to get blurred as time passes [23:9C1]" Consequently, it is good administrative practice to close as many contracts as possible and as quickly as feasible. For example, contracts remaining open because of overhead rates may be closed prior to final overhead settlement when the unsettled indirect costs allocable to the contract are relatively insignificant and agreement can be reached on a reasonable estimate of allocable dollars (23:9C2). There is a need, therefore, to determine the extent to which Air Force contracts remain open after completion and to determine the adequacy of the procedure for closing contracts remaining open because of pending overhead rate negotiations.

Overview

The satisfactory physical completion of a contract may be a primary goal of a procurement officer, but in many cases, a contract is not closed at the time of physical completion:

A contract accorded limited administration and having a face value of \$10,000 or under is closed when evidence of physical completion is received by the procuring contracting officer (PCO). A contract accorded limited administration and having a face value exceeding \$10,000 is closed when it is physically complete and

when the PCO receives evidence of final payment. All other contracts are closed when they are physically complete and when all administrative actions are taken, including the accomplishment of one of two contract completion statements However, a contract cannot be considered closed while it is in litigation, or if an appeal is pending before the Armed Services Board of Contract Appeals (ASBCA) [24:p.s2-15].

A contract is considered overage when it is physically complete and a reasonable length of time has passed within which it should have been closed. Overage is defined by Supplement 2 to the Defense Acquisition Regulation (DAR) as follows (14:127):

<u>Category</u>	<u>Contract Type</u>	<u>Calendar Months After the Month In Which Physically Completed</u>
A	Fixed Priced Unilateral Purchase Order	3
B	Firm Fixed Price (Exclude "A" above)	6
C	All Other Contracts	20

Until a contract is closed and its file retired, there remains work to be accomplished: it may be a purely administrative matter, negotiation of final overhead rates may be needed, or a decision by the ASBCA may be required. Additionally, many physically completed but open contracts have unliquidated obligations remaining which, if not needed, could possibly be used to meet other Air Force requirements of the year in which the funds were appropriated. It is primarily the elimination of an administrative cost and

nuisance factor, plaguing many administrative contracting officers (ACO), which has prompted the Air Staff to question whether current procedures are adequate for closing contracts more quickly (12).

JUSTIFICATION

As a result of a new procedure in the DAR (formerly the Armed Services Procurement Regulation (ASPR)) 3-708, dated August 1978, the Directorate of Contracting and Acquisition Policy, AF/RDCP, received complaints from some ACOs that the procedure was a major deterrent to closing small cost-type contracts (12). As a result, AF/RDCP requested a study to determine the extent of the problem in the Air Force and to determine whether sufficient evidence existed to support a change to that procedure.

Additional justification for this study follows:

1. A thesis by Galante, Peterson, and Williams in 1975 concluded that opportunity costs resulted from unliquidated obligations remaining on a contract due to delays in the contract closeout process. They demonstrated opportunity cost as a function of unliquidated obligations, overage timespan, and the discount rate defined in Department of Defense Instruction 7041.3 (9:73-92).

2. In House Report 95-431, Department of Defense (DOD) Appropriation Bill for 1978, there was a comparison of

workload to the number of contracts being managed by the Defense Contract Administration Service (DCAS).

The manpower and workload trends for fiscal years 1969-75 indicate that the correlation between the number of contracts being managed by DCAS and the number of employees has been historically constant

The investigative staff also determined that of the total prime and support contract count of 199,931 as of November 30, 1975, 41,601 were classified . . . as physically complete or dormant. Physically complete or dormant contracts are those on which final shipment has been made and any final closeout actions are primarily clerical in nature [28:184].

The report suggests that aggressive action to close contracts may not have been taken in order to support a sustained high level of manpower through an inflated contract workload count (28:184).

This statement is further supported by a study of DOD contract management systems for the Office of the Secretary of Defense which states that there were "instances in which completed contracts were intentionally not closed out in order to display higher workloads [6:67]."

3. A letter from the Chief of Contract Administration at one Air Force Plant Representative Office (AFPRO), to the Air Force Contract Management Division (AFCMD), states that "it takes resources and space to accommodate a backlog of physically completed but financially open contracts [16]."

4. A "Contract Management Lessons Learned" publication issued by AFCMD on 1 May 1978 stated that "in June 1977, 75 per cent of physically completed contracts at one AFPRO

were overage [21].* The most common reason given was that overhead rates were not settled for the years involved.

It appears evident from these examples that a sustained effort to close contracts is essential.

LITERATURE REVIEW

Our literature review revealed very little research performed in the area of the closeout of cost-type contracts. Initially the search was conducted using the resources of the Defense Documentation Center, Defense Logistics Studies Information Exchange, and the Air Force Institute of Technology (AFIT) Library. The only formal research study obtained from these sources that pertained specifically to contract closeout was the previously referenced AFIT thesis. That research was primarily concerned with the opportunity costs associated with funds remaining on overage contracts.

Two of the major findings of this study pertained to overage contracts and the reasons why those contracts remained open after physical completion (9:73-78). These were:

1. A few overage reason codes accounted for a large number of the contracts which had long overage time spans.
2. A majority of the opportunity cost incurred on overage contracts was attributed to a small number of reason codes.

This study therefore provided historical data for comparison with the currently gathered data to determine whether significant changes had occurred since 1975.

Although not specifically related to the closeout process, two studies were found which broadly covered the topic of overhead or indirect cost. The first of these studies was a dissertation written by Otto Martinson entitled "Classification System for Indirect Costs of Defense Contractors in the Aircraft Industry." The importance and magnitude of indirect costs was presented in this study. Martinson found that indirect costs accounted for an average of 66 per cent of prime contractor in-plant costs. He then proceeded to develop a model for analyzing and forecasting these indirect costs (15:31).

The second study pertaining to overhead was a master's thesis written by Captains Thomas Jones and Richard Volpe (13), entitled "An Analysis of Forward Pricing Rates and Their Effectiveness In Indirect Cost Management." The purpose of this study was to determine if statistically significant differences existed among the forward pricing rates proposed by the contractor, the rates negotiated or recommended by the government, and the rates actually experienced by the contractor. No statistically significant differences were found among these three rates as they applied to each of the defense contractors studied (13.45). ~~These rates were used.~~

in the present research to demonstrate the impact of the early closeout process upon the total overhead costs.

In addition to an analysis of forward pricing rates, their study also provided a basic background of the processes required to equitably allocate indirect costs. A summary of these processes follows to provide the reader an explanation of the allocation process.

Indirect costs cannot be traced to specific units of production. Therefore, a cost allocation process must be used to equitably distribute those indirect costs to each unit of production. Only then can the true cost of each item be determined (13:11-12).

There are normally four steps in this indirect cost allocation process:

1. Indirect cost expenditures are estimated for each major and support overhead pool.
2. The estimated costs accumulated in support pools are then transferred to the major overhead pools.
3. The total accumulated in each major overhead pool is divided by an estimate of activity giving an overhead rate.
4. Using this rate, indirect costs are allocated to each product passing through the product cost center or deriving benefit from the administration cost center [13:12].

The first three steps are accomplished prior to the beginning of the operating year. Therefore, the overhead rate applied to the production unit is only an estimate of what the actual rate will be. Any difference between this estimated rate and the final actual rate is identified after the end of the operating year so that the appropriate

adjustments may be made (13:12). Figure 1 is an example of the overhead rate negotiation cycle.

Indirect cost projections are normally made during the budgeting cycle. Costs are budgeted for each overhead pool based upon the planned activity of that pool. After estimated costs have been accumulated in these overhead pools, the costs from these support pools are allocated to major overhead pools. Distribution of costs to their major pools can be done by either the direct charge or allocation method (13:12-13).

The direct charge method requires that costs be charged to the major overhead pools based upon a predetermined rate for each unit of work, and the allocation process distributes costs to these pools based upon the benefit derived or the "fair share" of the costs incurred (13;13).

After the costs have been distributed to each major overhead pool, the overhead is allocated to each unit of production by means of an overhead rate, computed by dividing the total overhead pool by an activity base (13:13).

In addition to these formal studies, official correspondence and regulations were obtained from those agencies which are affected by the early closeout process. A detailed review of these letters and regulations is presented in Chapter 2 of this study.

Time Year	Year		Year																				
	Y-1	Y	01	02	03	04	05	06	07	08	09	10	11	12	01	02	03	04	05	06	07	08	09
Costs Year Y-1																							
Costs Year Y+1																							

- Event:
- Contractor submission of proposed forward pricing rates for year Y.
 - Negotiation of FPRA for year Y.
 - Contractor submission of proposed final rates for year Y-1.
 - Negotiation of final rates for year Y-1.
 - Contractor submission of proposed forward pricing rates for year Y+1.
 - Negotiation of FPRA for year Y+1.
 - Negotiation of final rates for year Y.

Fig. 1. Overhead Rate Negotiation Cycle for Year Y (13:3)

Due to a lack of written literature pertaining to early closeout procedures, most of the knowledge for this study was obtained from interviews with personnel working in the contract closeout and overhead fields. These personnel have related the history of the early closeout procedures, current problems in the area and have offered suggestions for solving these problems. The results of those interviews, as they pertain to each research question, are detailed later in this study.

DEFINITIONS

To provide a common frame of reference, definitions of some of the key terms used in this study are provided below: Physically Completed Contract. "A contract is physically completed when (i) the contractor has completed the required deliveries of supplies, (ii) the contractor has performed all services, and the government has accepted such services . . . [24:p.S2-15]."

Cost-Reimbursement Contract. A type of contract used when the cost of the work cannot be adequately described to guarantee performance, and, the contractor is reimbursed for the costs he experiences in the performance of the contract. Certain types of cost-reimbursement contracts provide for an incentive-fee or fixed-fee that is paid to the contractor (9:4).

Contract Face Value. The total value of the contract, which includes the original contract amount plus any amounts that have been added to the original contract by supplemental agreements (9:8).

Administrative Contracting Officer (ACO). The ACO is an individual assigned the responsibility to administer a contract by request of the PCO. He insures that all contract requirements are adhered to (26:Section 4,71-77).

Overhead. This term is commonly referred to by its descriptive title, indirect cost, and refers to those costs not directly associated with the item being manufactured. For example, electricity and rent are considered indirect or overhead costs (13:10).

Overhead Base. In order that indirect costs can be allocated to the work supported by those costs, an allocation base must be determined.

In general, the base that is to be used for allocating indirect costs should have the following characteristics;

1. It should produce a rate that will result in an equitable allocation of the indirect costs among the various cost objectives.
2. It should be applied consistently from year to year and cost objective to cost objective.
3. It should be in accordance with generally accepted accounting principles and the particular cost accounting standards applicable in the circumstance (13:14).

Bases commonly used are total activity or number of physical units produced, the amount of direct labor dollars expended, amount of direct labor hours expended, and machine

hours. The particular base used depends upon the pool being allocated and how well the base reflects the costs being distributed.

Overhead Pool. A group of incurred costs identified with two or more cost objectives such as contracts, items, or functions but not specifically identified with any one in particular (23:1A-B11).

Cost Allocation. The process of distributing costs which are assignable or chargeable to one or more cost objectives in accordance with the benefits received, relationships defined, or agreements made between the contracting parties (23:p.1A-B1).

Forward Pricing Rate Agreement (FPRA). An agreement negotiated between the ACO and the contractor which includes overhead rates which may be used for pricing of contracts which are negotiated for a specific time frame. A FPRA eliminates the necessity for negotiating overhead costs for every new procurement during the time period covered by the agreement (13:12).

RESEARCH OBJECTIVES

The objectives of this research were to (1) compare current overage contracts to those identified in the 1975 study by Galante et al. to determine whether overhead negotiations continued to be a detriment to closing contracts, and (2) determine whether the existing policy and procedures for

the quick closeout of small, cost-type contracts were adequate to meet the goal indicated by the DAR 3-708 requirement titled "Quick Closeout Procedure."

In accomplishing these objectives, data concerning contract closeout were gathered and analyzed, and the regulation and policy material, and the ideas and opinions of knowledgeable people in the contract administration and indirect cost management fields were combined into one source. Additionally, criteria were developed with which to analyze the present policy and procedures in order to provide Air Staff personnel with the information needed to aid them in determining the acceptability or unacceptability of the DAR 3-708 language.

APPROACH TO THE STUDY

The first objective will illustrate the basic data and develop further rationale for the study. The second objective could be expected to rely heavily upon empirical evidence in answering the research questions; however, much empirical data were unobtainable for several reasons. First, the procedure focuses on negotiation of overhead rates, many of which were not yet negotiated. Secondly, not all contractors were willing to negotiate interim rates for use under the quick closeout procedure. Thirdly, the DAR 3-708 procedure has only been in effect since August 1978, and as a result, the data were sparse and difficult to use

in arriving at any specific conclusions. Finally, with one exception, the people contacted said that early closeout or interim rates used in prior years were impractical to obtain because they do not keep historical records of such data, and they were reluctant to request such data from their respective contractors.

This study is not totally theoretical, however, in that data were obtained from the Air Force, the DCAS and the National Aeronautics and Space Administration (NASA) concerning the various methods and approaches used to implement the quick closeout policy both before and after the issuance of the present DOD procedure. These data were used to construct a hypothetical model which would parallel actual data, if such data had been available; and, the model illustrates the various potential outcomes of each method or approach.

RESEARCH QUESTIONS

1. What is the current status of overage contracts compared to the 1975 data when the prior research was performed?
2. What were the differences among the quick (contract) closeout procedures used by the Air Force and other agencies which prompted coverage of the subject in the DAR?

3. Has the quick closeout procedure, as stated in the August 1978 DAR, been effective in closing small cost-type contracts?

a. Is the procedure uniformly applied in the Air Force and DCAS by contract administration personnel?

b. What are the possible alternatives for treating overhead under an early closeout procedure, and what are the pros and cons of each of these alternatives?

4. Should the DAR 3-708 procedure remain unchanged?

METHODOLOGY

Overview

The data used for this study were obtained from government regulations, letters, reports, text books and a substantial number of personal and telephone interviews. Interviews were conducted with knowledgeable people who work in the areas of contract administration and indirect cost management. The primary sources were people who had already developed opinions concerning the issue of the effectiveness of the recent DAR 3-708 procedure. It was considered most important to talk with those who actually used the quick closeout procedure or those who would receive the greatest benefit from the procedure. Additionally, prior research in the areas of contract closeout and indirect cost monitoring were heavily relied upon for background. Although the

primary method of researching each question was through interviews, the support and validation of each question was accomplished through review of literature in each respective area.

Research Question 1

What is the current status of overage contracts compared to the 1975 data when the prior research was performed?

Means of Evaluation. To determine the current status of overage contracts, data were gathered from the Acquisition Management Information System (AMIS) to compare with the data presented by Galante et al. in their 1975 study of overage contracts. These data were combined with that received from DCAS to better evaluate the pervasiveness of the overage problem. These data were then broken out by reason code for those overage contracts to identify which codes were the most critical. This information was used to confirm earlier concerns with the overhead reason code.

Research Question 2

What were the differences among the quick (contract) closeout procedures used by the Air Force and other agencies which prompted coverage of the subject in the DAR?

Means of Evaluation. This question pertains to the procedures used prior to August 1978. The question was answered through a study of the procedures existing prior to that date and the views of those people who were responsible for interpreting the early closeout requirements as well as those responsible

for their implementation. Since the Air Force indicated a primary concern with the procedure, the study began with the Air Force method of quick closeout and branched to the other methods to determine why the DOD regulation superseded, and in essence voided, the Air Force methodology.

Data were obtained from the Air Force, DCAS, and NASA. Data were gathered from NASA because they have contracts administered by both Air Force and DCAS ACOs.

These data were in the form of opinions collected by means of telephone interviews using the questions in Appendix B as a guide. The guide was a prompting device to the interviewers to ensure a collection of needed data and to maintain a consistency in the interviews. The guide was tested with knowledgeable people in the contract administration field to validate the reliability and objectivity of the questions.

Interviews were conducted with representatives of eight AFPROs having large numbers of overage contracts where overhead was given as the reason for the overage status. Additionally, interviews were conducted with representatives of each of the nine DCAS regions and with representatives of NASA, Air Staff, and Air Force Systems Command.

Research Question 3

Has the quick closeout procedure, as stated in the August 1978 DAR, been effective in closing small cost-type contracts?

- a. Is the procedure uniformly applied in the Air Force and DCAS by contract administration personnel?
- b. What are the possible alternatives for treating overhead under an early closeout procedure, and what are the pros and cons of each of these alternatives?

Means of Evaluation. The data used for evaluating and answering this question were primarily those collected from the interviews discussed previously. Part a of the question was answered solely with interview data. For part b of the question, we developed a simple model to demonstrate the results of applying the alternate methods for treating overhead under varying conditions.

Research Question 4

Should the DAR 3-708 procedure remain unchanged?

Means of Evaluation. This question was answered by use of the model illustrated in answering question 3. Criteria were then established by which to evaluate the acceptability of the alternate approaches demonstrated by the model. The model illustrates potential outcomes (Appendix A) of hypothetical situations for eight contractors using actual rates extracted from a recent thesis (13:56).

The evaluation criteria were developed with the assistance of professionals in the fields of contract

administration and indirect cost management to provide confidence in the ultimate conclusion. The criteria follow:

1. The procedures must be in accordance with generally accepted accounting principles.

2. The procedure should not result in a significant over or under allocation of total overhead costs.

3. The procedure should not result in a significant over or under allocation of overhead to any one contract.

4. The procedure should be one that encourages the contractor to negotiate early closeout rates.

5. The procedure must result in the early closeout of contracts.

6. The procedure should allow the early release of funds (for other requirements).

7. The procedure should minimize the manpower requirements in the administration of contracts.

8. The procedure should minimize risk to both the contractor and the government.

Applying these criteria to the alternatives demonstrated by the model resulted in the recommendation of the most appropriate alternative for the treatment of overhead.

SUMMARY LIST OF ASSUMPTIONS

1. The opinions expressed in the interviews are true and factual and are based upon actual experiences with the various contractors.

2. The data obtained for this study from AMIS and the DCAS regions are accurate.

3. The sample of contracts used is representative of contracts within the Air Force as a whole.

ORGANIZATION OF THE STUDY

In the following chapter, background is established for the early closeout procedures used by various government agencies prior to the standardization of the DAR 3-708 procedure. In Chapter 3, a comparison is made between past and present data and rationale for the study is further developed. Chapter 4 establishes the differences among the methods of the agencies that used an early closeout procedure. The effect upon contract closeouts by the new DAR 3-708 procedure is the subject of Chapter 5. This chapter also discusses the potential alternatives for treating overhead under an early closeout procedure. Chapter 6 discusses whether a procedural change is warranted and presents criteria by which to evaluate the question. Finally, Chapter 7 details the recommendations of the current study and suggests further research opportunities.

Chapter 2

BACKGROUND

Imperative to the understanding of the quick closeout procedure and its implications is a knowledge of the process leading to the current situation. This chapter provides that historical background.

Air Force Requirements

A review of AFSC supplements to the ASPR revealed that the Air Force had procedures in effect to administratively close small cost-type contracts which would otherwise remain open due to the requirement for overhead negotiation.

The procedure used by the Air Force for early closeout of contracts pending negotiation of final overhead rates was contained in AFSC ASPR Supplement 3-701.1 which states:

Where negotiated final overhead rates apply to the contractor, the ACO is authorized to negotiate final overhead rates to closeout completed contracts provided the total of such actions does not have a significant impact on final overhead rate negotiations. Generally, no substantial impact will occur when the total amount of indirect cost involved in closing the contracts does not exceed 10 to 15 per cent of the total indirect cost allocable to cost-type contracts for the contractor's fiscal year. Emphasis should be given to closing contracts with small dollar balances. However, in no event will such indirect costs applicable to any one contract

in 1 fiscal year exceed \$100,000. ACO will coordinate with the cognizant contract auditor to assure application of jointly acceptable rates [22:Section 3-701.1].

This policy gave ACOs rather definitive guidelines to determine whether a contract was eligible to be closed using this procedure, i.e., the 10 to 15 per cent and \$100,000 overhead limitations. Under this policy, some ACOs were applying an interim overhead rate to close contracts meeting that criteria. The final base and pool were then adjusted by the respective bases and pools of contracts closed early (1). Although it may not be apparent at first glance, this netting of the base and pool insures that, even if the final negotiated overhead rate differs from the applied early closeout overhead rate, the contractor will ultimately be reimbursed for the exact amount of actual allowable overhead costs which are included in the overhead pool (2).

Although the above procedure did not specifically state that the base and pool were to be adjusted, the Air Force was using this practice because it was in consonance with the procedure set forth in ASPR 8-404.4, dating as far back as 1963, for the termination settlement of cost-type contracts (1). This procedure stated:

When an amount of overhead is negotiated . . . the contractor will eliminate such overhead and the related direct costs on which it was based from the total pool and base used to compute overhead for other contracts performed during the applicable accounting period [26:Section 8-404.4].

It appears that terminated contract closeout procedures have basically the same purpose as the early closeout procedure, i.e., the efficient and fair settlement of cost-type contracts in advance of final overhead negotiations in order to eliminate the attendant cost of their remaining open. Although the AFSC procedure did not specifically state the method to be used, it was considered to be flexible enough to allow the use of the base and pool adjustment to achieve its purpose (1).

Two examples are presented to illustrate the effect of adjusting the base and pool upon the allocation of overhead. Only one overhead pool is used in these examples, and the base is stated in direct labor dollars (DLD). The total overhead pool will be \$100,000 and the base will be \$25,000 DLD for each example. The first example assumes that an overhead rate of 200 per cent per DLD was negotiated using the early closeout procedure for contracts which had a base of \$5,000 DLD. The second example uses the same information as example 1 except the negotiated DLD rate for early closeout is assumed to be 600 per cent.

	<u>Example 1</u>	<u>Example 2</u>
Direct Labor Dollars	\$ 5,000	\$ 5,000
Early Closeout Rate	<u>200%</u>	<u>600%</u>
Early Overhead Allocation	10,000	30,000
Overhead Base	\$ 25,000	\$ 25,000
Less: Base Used for Early Closeout	<u>5,000</u>	<u>5,000</u>
Adjusted Base	\$ 20,000	\$ 20,000
Overhead Pool	\$100,000	\$100,000
Less: Pool Allocated for Early Closeout	<u>10,000</u>	<u>30,000</u>
Adjusted Pool	\$ 90,000	\$ 70,000
Final Overhead Rate	450%	350%
Adjusted Base	\$ 20,000	\$ 20,000
Final Overhead Rate	<u>x 450%</u>	<u>x 350%</u>
Allocation at Final Negotiation	\$ 90,000	\$ 70,000
Early Allocation	<u>10,000</u>	<u>30,000</u>
Total Overhead Allocation	\$100,000	\$100,000

These examples illustrate that even though the early closeout rate may be either less than or greater than the final negotiated rate, there will be no total over or under payment of overhead to the contractor for overhead expenses during the period. The use of this method insures that the contractor is fully reimbursed for all allowable overhead costs while at the same time preventing him from collecting more for overhead than he is entitled to.

Even though this procedure does prevent an over or under allocation of total overhead to the contractor, there will be an over or under application of overhead to specific contracts if the early closeout rates differ from the final overhead rates. For instance, referring again to

example 1 in which the early closeout rate was less than the final overhead rate, the contracts which were closed using the early closeout procedure would receive an under allocation of overhead because of the lower early closeout overhead rate. At the time of final overhead negotiation, the overhead which was previously under allocated would then be distributed to the remaining unclosed contracts in direct proportion to the direct labor dollars attributed to each contract. When the base and pool are adjusted, as in this example, the under allocation of overhead at the time of early closeout will be equal to the over allocation at the time of final settlement. Therefore, the final overhead allocation on contracts not qualifying for early closeout automatically provides an adjustment for any over or under recovery of overhead due to the differences between the early and final overhead rates.

This process reflects similar results if the early closeout rate is greater than the final overhead rate as in example 2. In this example the contracts which were closed early would receive a larger proportionate overhead burden than those contracts closed at the time of final settlement. Again the over allocation of overhead on the contracts closed early and the under allocation on those contracts closed at final settlement would be equal and would provide an automatic adjustment for the rate difference between the early and final overhead rates.

NASA Policy

The NASA also had a quick closeout procedure for closing contracts which were awaiting final negotiation of overhead rates. This clause (NASA Procurement Regulation 3.704-1(g)) dated June 1972 stated:

Nothing in this clause shall preclude the Contracting Officer from negotiating final overhead rates applicable to this contract, for any period, for the purpose of contract closeout, provided that (i) the negotiated amount of overhead costs applicable hereto does not exceed \$200,000 for any one fiscal year, and (ii) the results of the negotiation are set forth in a written agreement executed by both parties, in accordance with the provisions of paragraph (d) above. In addition, such agreement shall specify that there will be no adjustment against other government contracts for over or under recovery under this contract disclosed through a subsequent, regular final overhead rate negotiation or determination [19:Section 3.704.1G].

There were three major differences between the NASA procedure and the Air Force procedure. These were:

1. The ceiling placed on the amount of overhead which cannot be exceeded in any one fiscal year (for any single contract). For NASA, this is set at \$200,000 and for the Air Force, the ceiling is \$100,000.
2. The limitation on the total amount of indirect cost in closing the contracts. While NASA has no limitation, the Air Force limits the total amount to 10 to 15 per cent of total indirect costs allocable to cost contracts for the contractor's fiscal year.
3. Air Force practice in regard to the annual finalization of overhead is to reduce both the base and pool for amounts included in contracts where the early closure procedure is used. NASA, on the other hand, requires the use of the gross base and pool in determining the final overhead rate for the year [1].

Although these differences between the Air Force procedure and the NASA clause existed, the major procedural

difference was in the NASA interpretation that the base and pool may not be adjusted because this method would be in conflict with the portion of the clause which states that:

. . . there will be no adjustment against other government contracts for over or under recovery under this contract disclosed through a subsequent, regular final overhead rate negotiation or determination [2].

Two examples follow of how the allocation process would be affected by the use of this clause. The only difference between the examples below and those presented earlier is that the base and pool are not adjusted in those that follow:

	<u>Example 1</u>	<u>Example 2</u>
Direct Labor Dollars	\$ 5,000	\$ 5,000
Early Closeout Rate	200%	600%
Early Overhead Allocation	\$ 10,000	\$ 30,000
Overhead Pool	\$100,000	\$100,000
Overhead Base	÷ 25,000	÷ 25,000
Final Overhead Rate	400%	400%
Unallocated Base	\$ 20,000	\$ 20,000
Final Overhead Rate	400%	400%
Allocation at Final Negotiation	\$ 80,000	\$ 80,000
Early Overhead Allocation	10,000	30,000
Total Overhead Allocation	\$ 90,000	\$110,000

It is apparent that this procedure results in an under or over allocation of overhead when the early closeout rate is different than the final overhead rate. This procedure therefore appears to introduce a risk into the early closeout process for both the contractor and the government. The extent of this risk is based upon the variance between

the early closeout and final overhead rates. If the early rate is lower than the final rate, as in example 1, an under allocation of overhead would result for contracts closed early and such under allocation would not be automatically adjusted at the time of final overhead rate negotiation. Therefore, the contractor would not be able to recover this initial under allocation, and it would result in a loss in revenue. Conversely, if the early closeout rate is higher than the final overhead rate, as in example 2, the contractor will retain the over allocation of overhead applied to the contracts subject to the early closeout procedure. This would result in the contractor receiving additional revenue based upon his ability to negotiate an early rate higher than the final overhead rate (17).

DCAS Implementation Procedure

In addition to the AFSC and NASA regulations, DCAS also has a procedure for the quick closeout of cost-type contracts. Defense Logistics Agency Manual 3-700.14 states in part:

- a. Of necessity, the closing of physically completed cost-type contracts may be delayed pending annual settlement of final overhead rates. When it is apparent that contract closeout will be delayed for that reason, the ACO will determine the approximate total of indirect costs allocated to affected contracts. If the approximate total of such indirect costs does not appear to have a significant impact on the annual settlement of final overhead rates, or does not exceed 15 per cent of the total indirect costs allocable to cost-type contracts for the contractor's fiscal year, the ACO and the contractor may negotiate final overhead rates in accordance with ASPR 1-406(c) (v) for contract closeout purposes.

This procedure should be limited to contracts with small dollar balances or to instances where indirect costs applicable to any one DOD contract in one fiscal year do not exceed \$100,000 (\$200,000 under NASA contracts).

b. In using these closeout procedures, the ACO should ensure that the contractor understands that the rates negotiated for closeout purposes are final, are not precedent-setting, and are not subject to adjustment at the time of annual rate settlement [27:Section 3-700.14].

This procedure provides a distinction between the overhead ceilings pertaining to the early closeout of DOD and NASA contracts. As stated, the DOD ceiling is limited to \$100,000 per contract while NASA contracts are limited to \$200,000. These limitations correspond with the ceilings in the regulations of these separate agencies. The DCAS clause does not address the procedure to be used to accomplish the closeout, i.e., whether to adjust the base and pool.

In August 1978, the Defense Acquisition Circular 76-16 established a DOD early closeout procedure. This procedure was established, reviewed, and approved by the ASPR committee under ASPR Case 74-99 and was modeled after the then-existing NASA procedure. The procedure was subsequently included in the DAR as paragraph 3-708 which follows:

When indirect costs allocated to a contract are relatively insignificant and agreement can be reached on a reasonable estimate of allocable dollars, a physically completed contract may be closed in advance of the final overhead rate determination. The determination shall be considered final for the affected contract closed prior to the final overhead settlement. No adjustment shall be made against, or the affect of any

quick closeout allowed to impact, other contracts for any over or under recovery disclosed at the time of final overhead rate determination [27:Section 3-708].

This clause contains the basic elements of the previously mentioned NASA clause.

Although the DAR had no restriction on the treatment of overhead prior to 1978, in relation to the quick closeout procedure, the Armed Service Procurement Regulation Manual Number 1, "Contract Pricing", dating back to 1975 did address the subject. In that manual is the rationale for closing contracts and guidance for the method to be used. Specifically, it states that where a contract is closed ahead of final overhead settlement, the Air Force negotiator must reach agreement without compromising his position or setting a precedent, and that such overhead settlement agreed upon for early closeout must be considered final. The same reference concludes by stating that:

No adjustment should be made against other government contracts for any over or under recovery disclosed through the subsequent, regular final overhead rate negotiation or determination [23:9c3].

If this manual is a reflection of DOD's intentions, the apparent policy was to close contracts with an interim overhead rate without adjusting the overhead base and pool as is currently required by the DAR.

This chapter has addressed the closeout procedures used by various government agencies. The following chapter will

review and discuss the status of overage contracts to determine the degree to which pending overhead rate negotiations contributed to the overage status of these contracts.

Chapter 3

STATUS OF OVERAGE CONTRACTS

The first research question was: *What is the current status of overage contracts compared to the 1975 data when the prior research was performed?*

To determine the current status of Air Force overage contracts, a computer listing of overage contracts administered by AFCMD was obtained from AMIS. This listing reflects the current administration office, unliquidated obligations, and reason code for each overage contract. The reason code indicates why the contract is overage.

Analysis of these data indicated that, as of April 23, 1979, AFCMD was administering 661 Air Force Logistics Command and AFSC contracts (other than Firm Fixed Price (FFP)) which were overage. Table 1 further identifies these contracts by the reasons they were overage.

At that time, 41 per cent of the contracts were overage due to negotiation of overhead rates. The two other major categories of overage contracts were due to final audit in process and litigation. These accounted for 14 per cent and 12 per cent respectively of the total overage contracts. It is apparent that overhead negotiation was by far the largest single reason given for a contract being overage.

TABLE 1
CURRENT REASONS FOR CONTRACTS
BEING OVERAGE

Reason Code	Explanation	Number of Contracts		
		AFCMD ¹ 1975	AFCMD ² 1979	DCAS ³ 1979
A	Contractor has not submitted final invoice/voucher	108	57	346
B	Final acceptance not received	5	0	4
C	Contractor has not submitted patent/royalty report	0	2	0
D	Patent/royalty clearance required	8	2	6
E	Awaiting contractor proposal for final repricing action-incentive/redetermination	38	6	4
F	Awaiting supplemental agreement covering final repricing action-incentives/redetermination	27	11	15
G	Settlement of subcontracts pending	1	2	3
H	Final audits in process	17	90	99
J	Disallowed cost pending	4	1	9
K	Final audit of Government property pending	23	11	7
L	Independent research and development rates pending	0	1	0
M	Negotiation of overhead rates pending	286	269	241
N	Additional funds requested, but not yet received	7	7	20

CURRENT REASONS FOR CONTRACTS
BEING OVERAGE (continued)

Reason Code	Explanation	Number of Contracts		
		AFCMD 1975	AFCMD 1979	DCAS 1979
P	Reconciliation with Paying Office and contractor being accomplished	27	2	33
Q	Armed Services Board of Contract Appeals case	97	66	1
S	Litigation/investigation pending	102	77	1
T	Termination in process	0	4	5
U	Warranty clause action pending	24	0	1
V	Disposition of Government property pending	12	6	33
W	Contract modification pending	1	2	32
X	Contract release and assignment pending	10	17	3
Y	Awaiting notice of final payment	0	22	0
Z	Disposition of classified material pending	0	3	0
6	Fee withheld	0	3	0
TOTAL		797	661	863

¹Data obtained from a previous master's thesis (9:94).

²Acquisition Management Information System, Category C contracts.

³DCAS Contract Administration Report, Category A, ACO-assigned contracts. This information was not available for all contracts administered by DCAS; however, these figures represent 58 per cent of the total overage contracts.

In addition to these current data, data from the 1975 research by Galante et al. were also analyzed. Although this research did not specifically address the issue of why contracts were overage, the data are useful because they show the reasons for contracts being overage at an earlier point in time. The data listed in Table 1 again indicate that negotiation of overhead was the primary reason for contracts being in an overage status at that time. Of the total overage contracts (other than FFP) administered by AFCMD, 36 per cent were overage due to overhead negotiation while the next highest reason, contractor has not submitted final invoice, accounted for 14 per cent. It therefore appears that the negotiation of overhead was, and continues to be, the primary reason why a contract cannot be closed and subsequently becomes overage.

In addition to contracts administered by Air Force agencies, the Air Force also awards many contracts which are actually administered by other services. The primary non-Air Force agency which administers Air Force contracts is DCAS, which also administers contracts for other government agencies. Data similar to that obtained from AMIS were also obtained from each of the nine DCAS regions and spanned the period from January to April 1979. Although these DCAS data contained contracts awarded by several other government agencies, the data contained a sufficient number of Air Force contracts to make the analysis pertinent to the objectives

of this study. The primary problem encountered in analyzing these data was that while there were 1486 overage contract, only 863 were assigned a reason code. Therefore, those contracts which were not assigned a reason code were not included in the analysis. Of those overage contracts which reflected a reason code (Table 1), 40 per cent were attributed to the non-submission of the contractor's invoice, and 28 per cent were due to pending overhead negotiations.

Failure of the contractor to submit a final invoice accounts for the largest portion of the overage contracts. Since the reason for the overage condition can be attributed to the contractor, the influence of the ACO would appear to be quite limited in these instances.

The area which appeared to merit the most attention was that of overhead negotiation. This was a problem area with not only Air Force-administered contracts but was shown to also be a problem with those contracts administered by DCAS.

The preceding data analysis further verifies the validity of the justification for quick closeout of contracts presented in Chapter 1. There are currently a large number of overage Air Force contracts, and more of these contracts are overage due to pending overhead negotiations than any other single reason. Procedures which would result in the more efficient closeout of contracts remaining open due to

overhead negotiation should help reduce the number of contracts which ultimately go into an overage status.

The following chapter addresses the factors which led to the adoption of a quick closeout procedure in the DAR.

Chapter 4

POLICY AND PROCEDURES FOR EARLY CONTRACT CLOSEOUT

The second research question was: *What were the differences among the quick (contract) closeout procedures used by the Air Force and other agencies which prompted coverage of the subject in the DAR?*

The primary source of data which was used to answer this second research question was correspondence among an ACO, a defense contractor, AFCMD, and NASA. NASA had awarded contracts to this specific contractor, and the administration of these contracts consequently became the responsibility of the ACO. The correspondence reflects the problem encountered by the ACO, the contractor, and NASA in using the NASA early closeout procedure and the subsequent problems encountered by the ACO and the contractor when this same procedure was ultimately published in the DAR.

The initial problem that the ACO encountered in administering NASA contracts was attributed to the fact that the ACO considered the difference between the Air Force and the NASA early closeout procedures to be of sufficient magnitude to cause unacceptable deviations in the early closeout process. Specifically the ACO stated:

As a result of these differences in treatment of the early closure overhead procedure, we are currently unable to approve early closure settlements of your contracts without serious and, in our view, unwarranted disturbances in our normal systems and practices in the area [2].

The ACO also stated that he would withhold approval of future early closeout settlements which required substantial deviation from standard procedures. This position appears to have effectively negated the early closeout of NASA contracts at this particular AFPRO because in the ACO's opinion all NASA contracts closed using the NASA (non-adjustment) method required substantial deviation. The ACO also noted that approximately 95 per cent of the NASA contracts administered by that AFPRO would, at some time in the future, be eligible for closeout using the early closeout procedure. This percentage figure reflects the impact that the non-use of the procedure would have upon the efficient administration of NASA contracts at this particular AFPRO (2).

The ACO also expressed his concerns to AFCMD concerning the NASA early closeout procedure (3:5). At this time he said:

We are convinced that the long-standing DOD procedures in this area are totally effective in producing prompt settlements of small dollar value contracts in advance of final overhead negotiations and we feel that any substantial departure from those procedures in the interest of inter-agency standardization would operate to the detriment of Air Force procurement objectives. The obvious risks and administrative costs associated with the adoption of the current NASA provision would substantially reduce contractor motivation to participate in the early closure process at all On

the basis of these concerns we recommend that the matter be examined and referred through appropriate channels to the ASPR Committee with a recommendation that current DOD practice be continued and described in a more definitive manner in a subsequent revision to ASPR 3-701 [3].

This letter, in addition to introducing the problem of procedural deviation, also addressed the aspect of risk to both the contractor and the government. This was the risk of there being an over or under allocation of overhead costs between the parties based upon the relationship between the early and final closeout rates (3).

The fear expressed by the ACO that the NASA procedure would preclude, rather than aid the early closeout of eligible contracts appeared to be verified by subsequent correspondence received from the contractor. In this correspondence the contractor stated that, since implementation of the NASA early closeout clause, they had preferred not to apply this clause because it introduced an aberration into their accounting system. They also preferred not to assume the risk of losing allowable overhead costs reimbursement for cost-type contracts. A total of 90 NASA contracts were at that time remaining open because the contractor preferred not to assume the risk associated with the NASA clause (20).

NASA subsequently requested of the ACO that their early closeout method continue to be used for those contracts which fell within the criteria of the clause. NASA also mentioned the fact that the ASPR (now the DAR) Committee was then considering whether to adopt the NASA or Air Force

procedure into the ASPR. It was indicated that NASA would probably use whichever method was adopted by the Committee (10).

As a result of the problems encountered with the NASA procedure, AFCMD forwarded a letter to HQ AFSC. This letter basically reiterated the problems that the ACOs were having in closing NASA contracts using the NASA procedure and stated what were believed to be the advantages of the Air Force procedure. The primary advantage listed was the absence of an over or under allocation of overhead between the government and the contractor (1).

Attempts were made to determine what prompted the subject of early closeout procedures to be considered by the ASPR Committee. A search of the history of the ASPR case, in addition to discussions with persons who had some knowledge of the case, yielded very little additional information as to the reason for the review of early closeout procedures.

One possible reason for the consideration by the ASPR Committee may have been the previously mentioned problem that NASA was encountering in having their procedure applied to contracts administered by Air Force ACOs. The current DAR procedure has basically the same wording as the NASA procedure, and according to a NASA official, they may have been the primary impetus behind the current wording in the DAR procedure.

A draft of the DAR was subsequently released to the applicable services for comment. This proposal contained the procedure used by NASA. Subsequently, the proposal was adopted and published in Defense Acquisition Circular 76-16 in August 1978 (26:Section 3-708). This circular superseded previous procedures in use and effectively standardized the DOD early closeout procedures to agree with the existing NASA procedure.

In summary, then, it would appear that NASA significantly influenced the implementation of the DAR procedure as a result of their dissatisfaction with Air Force contract closeout practices.

In the following chapter the effectiveness of the DAR early closeout procedure is examined.

Chapter 5

THE EFFECT OF THE CURRENT EARLY CLOSEOUT PROCEDURE ON THE AIR FORCE

UNIFORMITY OF APPLICATION

The third research question was: *Has the quick closeout procedure, as stated in the August 1978 DAR, been effective in closing small cost-type contracts?*

Part a of the above question goes on to ask: *Is the procedure uniformly applied in the Air Force and DCAS by contract administration personnel?*

The research indicated that, prior to the DAR 3-708 procedure, the various AFPROs were not consistent in their application of the quick closeout procedure. Although all of the AFPROs contacted did indicate a prior usage of a quick closeout procedure, the applications were different. There were two primary results identified from the various applications and these were described in the examples in Chapter 2. That is, some AFPROs adjusted the base and pool following the closeout of small contracts while others did not. However, when the regulation was initially published in the Defense Acquisition Circular in 1978, all contract administration personnel complied with the general interpretation that the base and pool could no longer be adjusted.

Subsequent to the application of the new DAR language, it was found that, of eight major contractors under Air Force cognizance, three refused to negotiate an interim rate for closing small contracts because they were unwilling to accept the risk involved in applying the new procedure. On the other hand, two of the remaining five had so few contracts meeting the early closeout criteria that they encountered no problem in changing the procedure, and the other three had always used the non-adjustment method. For those AFPROs where the contractors were willing to accept the new policy no problem was experienced. However, for those contractors who would not accept it, the government has no way of requiring compliance or forcing a contractor to negotiate. Consequently, the contracts must remain open pending final settlement of overhead rates, which could involve several years.

In answer to the question, it can be seen that an attempt was being made within the AFPROs to give uniform application to the required procedure. The procedure could not be implemented in some cases due to unwillingness on the part of contractors to accept what they considered to be an inherent risk in the procedure.

Data from the DCAS regions were too inconclusive to determine the effectiveness of the procedure. Although all regions indicated the use of the DAR procedure even prior

to its issuance, none were conclusive about the extent to which the procedure assisted in closing small cost-type contracts. There was no adamant opposition to the non-adjustment procedure required by the DAR.

ALTERNATIVES FOR TREATING OVERHEAD

Part b of the third research question asks: *What are the possible alternatives for treating overhead under an early closeout procedure, and what are the pros and cons of each of these alternatives?*

In determining the effectiveness of the new procedure, an evaluation was made of the two alternative methods of treating overhead under an early closeout procedure. Alternatives were described in the examples set forth in Chapter 2 and are elaborated upon below. Table 2 is a more detailed illustration of those examples.

Option 1 is the method of adjusting the overhead base and pool as a result of early closeout of contracts. As the model indicates, it makes no difference whether the early closeout rate is greater than or less than the actual final rate since the netting of the base and pool will always result in the total overhead allocation equaling the actual allowable overhead incurred. Although the ultimate allocation between the government and the contractor is correct, this procedure does not necessarily result in the correct allocation of overhead to each specific contract.

TABLE 2

MODELS FOR TREATMENT OF OVERHEAD IN THE
EARLY CLOSEOUT OF CONTRACTS

	SITUATION 1		SITUATION 2	
	Option 1	Option 2	Option 1	Option 2
DIRECT LABOR DOLLARS	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000
EARLY CLOSEOUT RATE	<u>1.5</u>	<u>1.5</u>	<u>1.3</u>	<u>1.3</u>
EARLY SETTLEMENT ALLOCATION	\$ 12,000	\$ 12,000	\$ 10,400	\$ 10,400
AT TIME OF FINAL SETTLEMENT:				
OVERHEAD BASE (DLD)	100,000	100,000	100,000	100,000
LESS: EARLY BASE	<u>8,000</u>	<u>-0-</u>	<u>8,000</u>	<u>-0-</u>
ADJUSTED BASE	\$ 92,000	\$100,000	\$ 92,000	\$100,000
OVERHEAD POOL	140,000	140,000	140,000	140,000
LESS: EARLY ALLOCATION	<u>12,000</u>	<u>-0-</u>	<u>10,400</u>	<u>-0-</u>
ADJUSTED POOL	\$128,000	\$140,000	\$129,600	\$140,000
FINAL RATE	139.13%	140%	140.87%	140%
ADJUSTED BASE	92,000	92,000	92,000	92,000
TIMES: FINAL O.H. RATE	X1.3913	X 1.4	X1.4087	X 1.4
ALLOCATION AT FINAL NEGOTIATION	128,000	128,800	129,600	128,800
ADD: EARLY ALLOCATION	<u>12,000</u>	<u>12,000</u>	<u>10,400</u>	<u>10,400</u>
TOTAL OVH. ALLOCATION	140,000	140,800	140,000	139,200
ACTUAL OVERHEAD	<u>140,000</u>	<u>140,000</u>	<u>140,000</u>	<u>140,000</u>
OVER (UNDER) ALLOCATION	\$ -0-	\$ 800	\$ -0-	\$ (800)

SITUATION 1 = 150% early negotiated overhead rate
 SITUATION 2 = 130% early negotiated overhead rate
 OPTION 1 = overhead base and pool adjusted after early settlement
 OPTION 2 = overhead base and pool not adjusted

If the early closeout rate is different from the final rate, this procedure will result in some contracts being allocated more and other contracts less than what would normally be considered their fair share of overhead costs.

Option 2 equitably distributes overhead costs to the contracts that are closed at the time of final settlement, but allows for an inequity between the contractor and the government "taken as a whole." The early closeout rate is considered to be final, and since no adjustment is permitted to the overhead base and pool, any inequity is also final.

Consequently, any buying activity whose contracts are closed early will bear the over or under allocation negotiated at that time.

PROS AND CONS OF ALTERNATE METHODS OF CLOSEOUT

Adjustment Method (Option 1)

The primary benefit of the adjustment process appears to be the reduction to both the contractor and the government of the cost risk inherent when contracts are closed before the actual overhead costs are determined. The offsetting effect of this adjustment process is that there will ultimately be full reimbursement for the total allowable overhead costs regardless of whether the negotiated early closeout rate is less than or greater than the final

settlement rate. This absence of risk has been identified as one of the prime motivations for contractors to agree to the early closeout of contracts before final overhead settlement.

The primary drawback to the use of the adjustment procedure is the fact that, if the early closeout rate is different from the final, some contracts will bear a proportionately different share of the overhead burden than they would have if the early closeout procedure had not been used. This will result in a distortion of the true cost of each contract.

The following example is presented to illustrate how the adjustment of the overhead base and pool may affect the distribution of the final overhead burden between the contracts of services that have made awards to the same contractor. This example assumes that the contractor performed work for Service A that required \$7,000 labor and for Service B that required \$3,000 labor. The total overhead pool attributed to this work was \$50,000. Following are the computations for overhead cost distributions among the contracts assuming that Service A used the adjustment method to close a contract which required \$2,000 DLD and used an early closeout rate of 300 per cent:

SERVICE A OVERHEAD BASE	\$ 7,000	
SERVICE B OVERHEAD BASE	<u>3,000</u>	
TOTAL OVERHEAD BASE	\$10,000	
SERVICE A EARLY CLOSEOUT BASE	\$ 2,000	
EARLY CLOSEOUT RATE	<u>300%</u>	
APPLIED OVERHEAD	\$ 6,000	
TOTAL BASE	\$10,000	
APPLIED BASE	<u>2,000</u>	
ADJUSTED BASE	\$ 8,000	
TOTAL POOL	\$50,000	
APPLIED POOL	<u>6,000</u>	
ADJUSTED POOL	\$44,000	
FINAL OVERHEAD RATE		550%
ADJUSTED BASE SERVICE A	\$ 5,000	
FINAL O.H. RATE	<u>550%</u>	
FINAL APPLIED OVERHEAD	\$27,500	
EARLY CLOSEOUT OVERHEAD APPLIED	<u>6,000</u>	
TOTAL OVERHEAD APPLIED TO SERVICE A CONTRACTS		\$33,500
ADJUSTED BASE SERVICE B	\$ 3,000	
FINAL O.H. RATE	<u>550%</u>	
O.H. APPLIED TO SERVICE B CONTRACTS		\$16,500
TOTAL OVERHEAD APPLIED		\$50,000

In the above example, the contracts for Service B assumed \$16,500 of the overhead burden. If there had not been any early contract closeout, the contracts for Service B would have been allocated overhead of \$15,000 (3,000 x 500%). This additional \$1,500 of applied overhead is due to the fact that the early closeout rate for those contracts closed early by Service A was less than the final rate. Therefore, at the time of final settlement, Service B assumed a portion of the overhead burden not borne by Service A at the time of early closeout.

Consequently, if the contractor is producing goods for a government agency or service other than the one which is using the early closeout procedure and if the overhead costs incurred for different purchasers are in the same overhead pool, these other purchasers' overhead costs would be affected by the early closeout procedures. Whether the other contracts would be allocated more or less overhead costs than normal would depend entirely upon the relationship between the early and final rates. If the early rate is higher than the final overhead rate, other customers would pay less because of the over allocation of overhead costs to the contracts closed early. These same customers would pay more if the overhead was under allocated due to the early closeout rate being less than the final overhead rate.

Another problem may arise if the contractor is manufacturing products under more than one type of contract, e.g., cost plus incentive fee (CPIF) or FFP. Again, if the overhead pool contains the cost of production under both cost and FFP contracts, a difference between the negotiated overhead rates could result in the contractor experiencing an over or under recovery of costs. For instance, if the early closeout rate was less than the final, the contractor would be unable to recover the total overhead attributable to his FFP contracts because of his inability to apply for reimbursement for the actual costs under this type of

contract. Therefore, the contractor would lose, in this case, the difference between the actual final rate and what the rate would have been if there had not been an early closeout. The degree of this loss would depend upon the magnitude of the base of his fixed priced contracts. In contrast, if the early closeout rate was greater than the final rate in the above situation, the contractor would receive a greater reimbursement for his costs than he normally would be entitled to. Therefore, the adjustment method does not entirely eliminate the cost risk to either the government or the contractor.

Non-Adjustment Method (Option 2)

The primary benefit of the non-adjustment method of treating overhead is the fact that the overhead costs allocated to contracts closed at the time of the final rate settlement is not dependent upon the extent of the under or over allocation of overhead on the contracts which were closed early. Therefore, the contracts closed at the time of final rate settlement do not bear a disproportionate share of the overhead costs. Also, this procedure would not result in different agencies or services receiving the benefit or paying the penalty resulting from an under or over allocation of overhead on another organization's contracts. Finally, this procedure would not result in any income gain or loss to the contractor due to the fact

that the overhead pool contained the overhead costs of both cost- and fixed-type contracts.

The risk associated with the variance between the early closeout rate and the final overhead rate is considered to be the primary disadvantage of using this procedure. One Air Force ACO who administered NASA contracts believed that the risks and administrative costs associated with the adoption of the non-adjustment procedure would substantially reduce contractor motivation to participate in the early closeout process:

In short, adoption of the NASA clause would appear to preclude terminal settlement of contracts prior to final overhead negotiation, the sole purpose of the early closeout provision [3].

This theory gained validity in the case of three major Air Force contractors that indicated, since the adoption of the non-adjustment procedure, that they preferred not to close small cost-type contracts since it would introduce a risk that they were unwilling to accept.

In summary, it was found that (1) the Air Force was attempting to uniformly implement the DAR 3-708 procedure, but was hampered by the reluctance on the part of some contractors to accept the new policy; (2) DCAS had always used the procedure promulgated by the DAR and had no difficulties in accepting it; and (3) there were two primary alternatives for the treatment of overhead costs in closing small cost-type contracts, each of which had its apparent

advantages and disadvantages. One alternative was the one currently required by the DAR; the other alternative was the one used by the Air Force prior to the DAR 3-708 publication.

Depending upon one's viewpoint, one procedure may be preferred over another. Therefore, to arrive at an objective answer to question 3, additional data are presented in Chapter 6 which addresses the criteria used to select the more acceptable alternative.

CHAPTER 6

ARE CHANGES NEEDED TO THE PRESENT PROCEDURE?

IMPACTS OF ALTERNATE METHODS OF CLOSEOUT

The fourth research question was: *Should the DAR 3-708 procedure remain unchanged?*

To demonstrate the impact of the two alternate methods of applying overhead described earlier, Table 2 was constructed as a model. The two key variables in the model are the early closeout rate and the final overhead rate as they apply to the adjustment method (option 1) and the non-adjustment method (option 2) of treating the overhead base and pool. The dollar figures presented in the model are not based upon actual early closeout rates. The only rates available were (1) the forward pricing rates (FPR) for eight contractors for a three-year period and (2) the final overhead rates for the same contractors during that period (13). Therefore, we used the FPRs to illustrate the effects upon overhead allocation as if the FPRs were early closeout rates (reference Appendix A).

When the reader reviews the data, he should do so with the knowledge that the primary purpose of these computations is to illustrate the effect of various

relationships between early and final rates upon the allocation of overhead. The illustrations are not intended to show actual early closeout data. Again, consideration should be given to the fact that FPRs are not used as interim rates in actual practice and could be either higher or lower than the early closeout/interim rate. For purposes of this evaluation, the term "early closeout rate" is used in reference to the FPR to demonstrate the various impacts when differences occur between the two rates.

The primary factor to consider in each example is the direction of the difference between the two rates. The amount of the early overhead base times the difference between the rates will determine the magnitude of the over or under allocation for option 2. The direction of that difference between rates determines whether an over or under allocation will result.

APPLICATION OF CRITERIA FOR ACCEPTANCE OF EARLY CLOSEOUT OPTIONS

In determining whether a procedure for early closeout of contracts was adequate, criteria were developed by which to evaluate the acceptability of any procedure for the early closeout of contracts. These criteria are subjective in nature but critical to the goal of closing contracts:

1. The procedure must be in accordance with generally accepted accounting principles.

2. The procedure should not result in a significant over or under allocation of total overhead costs.

3. The procedure should not result in a significant over or under allocation of overhead to any one contract.

4. The procedure should be one that encourages the contractor to negotiate early closeout rates.

5. The procedure must result in the early closeout of contracts.

6. The procedure should allow the early release of funds (for other requirements).

7. The procedure should minimize the manpower requirements in the administration of contracts.

8. The procedure should minimize risk to both the contractor and the government.

Each alternative was evaluated against the criteria to determine whether option 1, option 2, either one, or neither one is acceptable:

1. The procedure must be in accordance with generally accepted accounting principles.

In the strictest sense, option 1 would not meet this criterion whereas option 2 would. In accounting, costs should be associated with the activity creating those costs (18:94). Therefore, each contract should bear its

proportionate share of the indirect costs, and option 2 distributes those costs more appropriately to the individual contracts.

From prior discussion, however, it should be evident that overhead determination is not an exact science, and consequently the application of such costs should not require "absolute" precision.

2. The procedure should not result in a significant over or under allocation of total overhead costs.

A logical way to determine whether an amount is significant is to view it from the standpoint of materiality. The Cost Accounting Standards Board (CASB) defined materiality in the following terms:

(a) In determining whether amounts of cost are material or immaterial, the following criteria shall be considered where appropriate; no one criterion is necessarily determinative.

(1) The absolute dollar amount involved. The larger the dollar amount, the more likely that it will be material.

(2) The amount of contract cost compared with the amount under consideration. The larger the proportion of the amount under consideration to contract cost the more likely it is to be material.

(3) The relationship between a cost item and a cost objective. Direct cost items, especially if the amounts are themselves part of a base for allocation of indirect cost, will normally have more impact than the same amount of indirect costs.

(4) The impact on government funding. Changes in accounting treatment will have more impact if they influence the distribution of costs between government and non-government cost objectives than if all cost objectives have government financial support.

(5) The cumulative impact of individually immaterial items. It is appropriate to consider whether such impacts (a) tend to offset one another, or (b) tend to be in the same direction and hence to accumulate into a material amount.

(6) The cost of administrative processing of the price adjustment modification shall be considered. If the cost to process exceeds the amount to be recovered, it is less likely the amount will be material [11:E-1].

Although the CASB established criteria, it also indicated that quantitative limits should not be established for the determination of materiality. Allowing for judgement was considered the essence of the criteria for materiality. ". . . an absolute dollar amount in one case may be material while in another case the same amount may be immaterial [11:E-1]."

The computations in Appendix A demonstrate the relative insignificance of the amounts either over or under allocated. For contractors E and G, which had the largest total discrepancies of the eight contractors, the under allocation was less than $\frac{1}{4}$ of 1 per cent of the overhead pool being distributed. The amounts are considered insignificant and either procedure would therefore pass the criterion, although option 1 would more appropriately pass the criterion because there would be no over or under allocation.

3. The procedure should not result in a significant over or under allocation of overhead to any one contract.

It must be recognized that judgement is involved in analyzing the situation. Option 1 would result in a

disproportionate share of overhead being distributed to contracts at the time of final settlement although both options create an under or over allocation at the time of early closeout. The only time a disproportionate distribution of overhead costs to specific contracts would not occur under option 1 is when the early and final rates are identical. There is no way to determine whether or not the amounts are material except on a case-by-case basis. The materiality would depend upon the amount of the overhead base used for early closeout, the difference between the early and final rate, and the number of contracts to which such costs will be distributed at final settlement.

In discussions with ACOs and personnel at AFSC, Air Staff, and NASA, there was a consensus that the amounts under consideration were relatively insignificant when compared to the contractors' total indirect cost. It is therefore concluded that neither procedure would result in a material over or under allocation to any one contract.

4. The procedure should be one that encourages the contractor to negotiate early closeout rates.

As was stated earlier, three of eight contractors refused to negotiate early closeout rates under option 2 (DAR 3-708) although they were willing to do so under option 1. As a result, the following criteria became moot points in considering the DAR procedure for those three contractors:

5. The procedure must result in the early closeout of contracts.

6. The procedure should allow the early release of funds (for other requirements).

7. The procedure should minimize the manpower requirements in the administration of contracts.

Obviously, if the procedure does not encourage the negotiation of early closeout rates, contracts will not be closed, funds cannot be released through closeout, and administrative costs associated with open contracts cannot be minimized. Option 2, then, which is the DAR 3-708 procedure, fails to meet these four criteria for three of eight contractors.

Conversely, the other five contractors and the DCAS regions were successfully implementing option 2, and these four criteria would thus pass for those contractors. The determination as to whether each option passes or fails the above four criteria is based upon the willingness of the contractor or administrative agency to accept that option.

8. The procedure should minimize risk to both the contractor and the government.

Any evaluation of alternatives relative to this criterion depends upon what one defines "the government" to be. If the government is defined as each individual service or agency, then option 2 passes the criterion because of the equity of overhead distribution to each contract, and

option 1 fails. If the government is defined as all government agencies, then the reverse is true because overhead costs will be equitably distributed between the total government and the contractor if option 1 is used.

It is the opinion of the researchers that the government should be viewed as a single entity since that definition would benefit the public at large whose dollars are ultimately being spent. Consequently, option 1 would be the preferred method.

In light of the results of the evaluation of alternatives relative to the eight criteria discussed above, it is concluded that the DAR 3-708 procedure fails to totally accomplish its intended goal, i.e., to close small cost-type contracts on an early basis.

COROLLARY FINDINGS

During the course of the research, several pertinent observations were made which could not be fully substantiated but which could possibly impact the early closeout process. These findings are as follows:

1. While conducting the study, a recent change to Federal income tax regulation 1.451-3 was discovered which could have a potentially significant impact upon the contract closeout process. Although this factor was not considered to be within the scope of the research, it was felt that it should be mentioned because of its potential significance.

Briefly, this change allows a contractor to defer the reporting of income and expense attributable to a long term contract until such time as the contract is completed and accepted. Therefore, the total revenue and expense for such contracts would be reported in the year of completion rather than over the life of the contract as previously done. Assuming a profit is being made on the contract, the use of the completed contract method will result in a deferral of tax liabilities until the contract is completed and accepted. Therefore, the company retains use of the funds, which would normally have been paid to the Internal Revenue Service, until the contract is completed. The use of interest-free funds could result in a contractor delaying completion, acceptance, or closeout of a contract in order to delay the reporting of the contract income and expense and any resulting tax liability. Although we do not have any data which indicate that the above situation is occurring, the economic incentive for the above procedure is evident (7:197).

2. During the data gathering for the research, a statement was made that Cost Accounting Standard (CAS) 406 explicitly prohibited fragmenting* an overhead base used to establish an overhead rate. As a result, an unofficial

* Fragmenting was defined as adjusting an overhead base to account for anything less than a full cost accounting period, i.e., one year.

interpretation was made that, at the time of final overhead rate settlement, the overhead base and pool could not be adjusted for the contracts closed earlier. This interpretation was made because adjustment of the base would technically constitute a fragmented base. The discussion centered around CAS 406.50c which states:

Indirect cost allocation rates, based on estimates, which are used for the purpose of expediting the closing of contracts . . . shall, however, be developed to represent a full cost accounting period, . . . [11:266].

A representative of the CASB explained, however, that in regard to the adjustment method, CAS 406 does not prohibit such a procedure because materiality would be the deciding factor. He indicated, in fact, that this situation was considered when the standard was written.

3. One AFPRO cited a special arrangement with the contractor for the early closeout of Air Force contracts. The AFPRO would develop a government overhead rate while the contractor submitted a proposed rate. All applicable Air Force contracts would be closed at the government rate, and the difference between the two rates (disputed amount) would be recognized on another open Air Force contract. All amounts would then be considered in the final overhead settlement.

This method incorporated the positive aspects of both options discussed previously. Similar to option 1, this method distributed all overhead even though not to the specific contracts. As in option 2, this method insured

that other services did not absorb the overhead of the Air Force, even though the method was applied only to Air Force contracts. Consequently, there was an integrity of overhead cost by service if not by contract. This particular procedure also eliminated the risk to both parties of over or under allocation of overhead costs.

The DAR 3-708 procedure now prevents the use of this method in that it states in part that:

. . . no adjustment shall be made against, or the affect of any quick closeout allowed to impact, other contracts for any over or under recovery disclosed at the time of final overhead rate determination [26:p.3:108].

Since the disputed amounts placed on other contracts constitute an impact, the AFPRO procedure is no longer being employed.

SUMMARY OF FINDINGS

In summary, the researchers found that the number of Air Force-administered contracts remaining overage due to overhead constitutes a problem area as it did in 1975, and that DCAS has similar statistics indicating relatively large numbers of overage contracts awaiting overhead settlement. It was then found that NASA problems with the Air Force practice for closing contracts apparently provided the stimulus for an ASPR case to change the procedure.

The procedure was changed, and uniformity of application was attempted, but three major Air Force contractors rejected the approach. Consequently, contracts at those locations could not be closed early. Since the new procedure had been in effect such a short time (August 1978), adequate data were not available to determine the impact of the contractors' actions, but it can be expected that the number of overage contracts due to pending overhead negotiations will increase.

The study further illustrated two primary alternatives for treating overhead costs and discussed the pros and cons of each. Finally, it was concluded that the DAR procedure is in need of change. Based upon these conclusions, recommendations are presented in Chapter 7.

Chapter 7

SUMMARY OF RECOMMENDATIONS

RECOMMENDATIONS FROM RESEARCH

Based upon the findings of the research, one overall recommendation is offered: the DAR 3-708 procedure should be changed. Alternative ideas for recommended changes are presented in order of priority.

1. Since the primary purpose of the DAR procedure is to close contracts, any revision should be flexible enough to allow the purpose to be accomplished. One high level Air Force source stated that each ACO should have the flexibility to use whatever method best suits the circumstances as long as the method is equitable. Although this individual preferred a consistent method, in his opinion, accomplishing the goal should not be sacrificed solely for consistency. One source within the DCAS organization also agreed with the need for flexibility.

2. If one particular method had to be implemented for the sake of consistency, the researchers believe the method described in the corollary findings would be the most equitable. This procedure for closing contracts by placing disputed amounts on another open contract would

accomplish the objectives of most of the criteria for accepting an alternative:

a. Significant over or under allocation of total overhead costs would not occur.

b. The contractor would be encouraged to negotiate early rates because of the reduced risk.

c. As a result of negotiated early rates, contracts could be closed.

d. Manpower for administering contracts would be minimized since contracts would be closed.

3. The adjustment method, option 1 of the model, is the preferred method of the two options demonstrated in Chapter 5. Since contractors would assume minimum risk under this procedure, they should be willing to negotiate interim closeout rates. Additionally, the government, as an entity, would bear little risk. The major drawback to this recommendation is that some agencies may be concerned about sharing the risk of over and under allocation among contracts. It is the opinion of the researchers that the amounts of over or under allocation are insignificant. Therefore, any disproportionate amounts allocated among the various contracts would also be insignificant. Consequently, any argument centered around the unwillingness of an agency to accept a disproportionate share of overhead costs should be considered in this light.

RECOMMENDATIONS FOR FURTHER RESEARCH

The area of early contract closeout is a relatively new one in which very little formal research has been conducted. The present study focused only on one aspect of the area, i.e., where a contract was overage due to overhead rates pending. There are additional topics which seem to warrant further research. A summary of each of these topics follows:

1. An expansion of the current study could be accomplished concentrating on other DOD services as primary data sources. Such a study should determine whether these services have situations for which similar recommendations are appropriate.

2. Although this study identified overhead negotiation as the major reason for contracts becoming overage, the data indicated that a large number of contracts were overage due to reasons other than overhead negotiation. A study should be conducted to determine whether procedures could be developed to facilitate the closeout of contracts which are overage due to reasons other than negotiation of overhead.

3. This study referred to cost savings as the major justification for the early closeout of contracts, however, no attempt was made to determine the true magnitude of

these savings. A study should be conducted to determine the administrative cost impact of contracts remaining open subsequent to the time of required closeout.

APPENDICES

APPENDIX A
DATA

MODELS FOR TREATMENT OF OVERHEAD IN THE
EARLY CLOSEOUT OF CONTRACTS

CONTRACTOR A

	Calendar Year 1974		Calendar Year 1975		Calendar Year 1976	
	Option 1	Option 2	Option 1	Option 2	Option 1	Option 2
DIRECT LABOR DOLLARS	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000
EARLY CLOSEOUT RATE*	2.61	2.61	2.65	2.65	2.79	2.79
EARLY SETTLEMENT ALLOCATION	20,880	20,880	21,200	21,200	22,320	22,320
AT TIME OF FINAL SETTLEMENT:						
OVERHEAD BASE (DLD)	100,000	100,000	100,000	100,000	100,000	100,000
LESS: EARLY BASE	8,000	-0-	8,000	-0-	8,000	-0-
ADJUSTED BASE	92,000	100,000	92,000	100,000	92,000	100,000
OVERHEAD POOL	249,700	249,700	276,800	276,800	303,700	303,700
LESS: EARLY ALLOCATION	20,880	-0-	21,200	-0-	22,320	-0-
ADJUSTED POOL	228,820	249,700	255,600	276,800	281,380	303,700
FINAL RATE	2.48717	2.497 *	2.77826	2.768 *	3.05848	3.037 *
ADJUSTED BASE	92,000	92,000	92,000	92,000	92,000	92,000
TIMES: FINAL O.H. RATE	X 2.48717	X 2.497	X 2.77826	X 2.768	X 3.05848	X 3.037
ALLOCATION AT FINAL NEG.	228,820	229,724	255,600	254,656	281,380	279,404
ADD: EARLY ALLOCATION	20,880	20,880	21,200	21,200	22,320	22,320
TOTAL OVH. ALLOCATION	249,700	250,604	276,800	275,856	303,700	301,724
ACTUAL OVERHEAD	249,700	249,700	276,800	276,800	303,700	303,700
OVER (UNDER) ALLOCATED	-0-	904	-0-	(944)	-0-	(1,976)

*Source of data prior thesis (13:56).

MODELS FOR TREATMENT OF OVERHEAD IN THE
EARLY CLOSEOUT OF CONTRACTS

CONTRACTOR B

	Calendar Year 1974		Calendar Year 1975		Calendar Year 1976	
	Option 1	Option 2	Option 1	Option 2	Option 1	Option 2
DIRECT LABOR DOLLARS	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000
EARLY CLOSEOUT RATE*	1.49	1.49	1.78	1.78	1.70	1.70
EARLY SETTLEMENT ALLOCATION	11,920	11,920	14,240	14,240	13,600	13,600
AT TIME OF FINAL SETTLEMENT:						
OVERHEAD BASE (DLD)	100,000	100,000	100,000	100,000	100,000	100,000
LESS: EARLY BASE	8,000	-0-	8,000	-0-	8,000	-0-
ADJUSTED BASE	92,000	100,000	92,000	100,000	92,000	100,000
OVERHEAD POOL	153,100	153,100	187,900	187,900	167,800	167,800
LESS: EARLY ALLOCATION	11,920	-0-	14,240	-0-	13,600	-0-
ADJUSTED POOL	141,180	153,100	173,660	187,900	154,200	167,800
FINAL RATE	1.5346	1.531*	1.8876	1.879*	1.6761	1.678*
ADJUSTED BASE	92,000	92,000	92,000	92,000	92,000	92,000
TIMES: FINAL O.H. RATE	X 1.5346	X 1.531	X 1.8876	X 1.879	X 1.6761	X 1.678
ALLOCATION AT FINAL NEG.	141,180	140,852	173,659	172,868	154,200	154,376
ADD: EARLY ALLOCATION	11,920	11,920	14,240	14,240	13,600	13,600
TOTAL OVH. ALLOCATION	153,100	152,772	187,900	187,108	167,800	167,976
ACTUAL OVERHEAD	153,100	153,100	187,900	187,900	167,800	167,800
OVER (UNDER) ALLOCATED	-0-	(328)	-0-	(792)	-0-	176

*Source of data prior thesis (13:56).

MODELS FOR TREATMENT OF OVERHEAD IN THE
EARLY CLOSEOUT OF CONTRACTS

CONTRACTOR C

	Calendar Year 1974		Calendar Year 1975		Calendar Year 1976	
	Option 1	Option 2	Option 1	Option 2	Option 1	Option 2
DIRECT LABOR DOLLARS	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000	\$	\$
EARLY CLOSEOUT RATE*	1.25	1.25	1.25	1.25	**	**
EARLY SETTLEMENT ALLOCATION	<u>10,000</u>	<u>10,000</u>	<u>10,000</u>	<u>10,000</u>		
AT TIME OF FINAL SETTLEMENT:						
OVERHEAD BASE (DLD)	100,000	100,000	100,000	100,000	100,000	100,000
LESS: EARLY BASE	8,000	-0-	8,000	-0-	-0-	-0-
ADJUSTED BASE	<u>92,000</u>	<u>100,000</u>	<u>92,000</u>	<u>92,000</u>	<u>100,000</u>	<u>100,000</u>
OVERHEAD POOL	124,620	124,620	126,640	126,640	126,640	126,640
LESS: EARLY ALLOCATION	10,000	-0-	10,000	-0-	-0-	-0-
ADJUSTED POOL	<u>114,620</u>	<u>124,620</u>	<u>116,640</u>	<u>116,640</u>	<u>126,640</u>	<u>126,640</u>
FINAL RATE	1.24587	1.2462 *	1.26783	1.2664 *	**	**
ADJUSTED BASE	92,000	92,000	92,000	92,000	92,000	92,000
TIMES: FINAL O.H. RATE	X 1.24587	X 1.2462	X 1.26783	X 1.2664		
ALLOCATION AT FINAL NEG.	<u>114,620</u>	<u>114,650</u>	<u>116,640</u>	<u>116,508</u>		
ADD: EARLY ALLOCATION	10,000	10,000	10,000	10,000	10,000	10,000
TOTAL OVH. ALLOCATION	<u>124,620</u>	<u>124,650</u>	<u>126,640</u>	<u>126,508</u>	<u>126,508</u>	<u>126,508</u>
ACTUAL OVERHEAD	124,620	124,620	126,640	126,640	126,640	126,640
OVER (UNDER) ALLOCATED	-0-	30	-0-	(132)		

* Source of data prior thesis (13:56).

** Data not available.

MODELS FOR TREATMENT OF OVERHEAD IN THE
EARLY CLOSEOUT OF CONTRACTS

CONTRACTOR D

	Calendar Year 1974		Calendar Year 1975		Calendar Year 1976	
	Option 1	Option 2	Option 1	Option 2	Option 1	Option 2
DIRECT LABOR DOLLARS	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000
EARLY CLOSEOUT RATE *	1.707	1.707	1.392	1.392	1.234	1.234
EARLY SETTLEMENT ALLOCATION	<u>13,656</u>	<u>13,656</u>	<u>11,136</u>	<u>11,136</u>	<u>9,872</u>	<u>9,872</u>
AT TIME OF FINAL SETTLEMENT:						
OVERHEAD BASE (DLD)	100,000	100,000	100,000	100,000	100,000	100,000
LESS: EARLY BASE	8,000	-0-	8,000	-0-	8,000	-0-
ADJUSTED BASE	<u>92,000</u>	<u>100,000</u>	<u>92,000</u>	<u>100,000</u>	<u>92,000</u>	<u>100,000</u>
OVERHEAD POOL	179,000	179,000	140,900	140,900	127,300	127,300
LESS: EARLY ALLOCATION	13,656	-0-	11,136	-0-	9,872	-0-
ADJUSTED POOL	<u>165,344</u>	<u>179,000</u>	<u>129,764</u>	<u>140,900</u>	<u>117,428</u>	<u>127,300</u>
FINAL RATE	1.7972	1.79*	1.4105	1.409*	1.2764	1.273*
ADJUSTED BASE	92,000	92,000	92,000	92,000	92,000	92,000
TIMES: FINAL O.H. RATE	X 1.7972	X 1.79	X 1.4105	X 1.409	X 1.2764	X 1.273
ALLOCATION AT FINAL NEG.	<u>165,344</u>	<u>164,680</u>	<u>129,764</u>	<u>129,628</u>	<u>117,428</u>	<u>117,116</u>
ADD: EARLY ALLOCATION	13,656	13,656	11,136	11,136	9,872	9,872
TOTAL OVH. ALLOCATION	<u>179,000</u>	<u>178,336</u>	<u>140,900</u>	<u>140,764</u>	<u>127,300</u>	<u>126,988</u>
ACTUAL OVERHEAD	179,000	179,000	140,900	140,900	127,300	127,300
OVER (UNDER) ALLOCATED	-0-	(664)	-0-	(136)	-0-	(312)

*Source of data prior thesis (13:56).

MODELS FOR TREATMENT OF OVERHEAD IN THE
EARLY CLOSEOUT OF CONTRACTS

CONTRACTOR E

	Calendar Year 1974		Calendar Year 1975		Calendar Year 1976	
	Option 1	Option 2	Option 1	Option 2	Option 1	Option 2
DIRECT LABOR DOLLARS	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000
EARLY CLOSEOUT RATE *	1.521	1.521	1.6592	1.6592	1.626	1.626
EARLY SETTLEMENT ALLOCATION	12,168	12,168	13,274	13,274	13,008	13,008
AT TIME OF FINAL SETTLEMENT:						
OVERHEAD BASE (DLD)	100,000	100,000	100,000	100,000	100,000	100,000
LESS: EARLY BASE	8,000	-0-	8,000	-0-	8,000	-0-
ADJUSTED BASE	92,000	100,000	92,000	100,000	92,000	100,000
OVERHEAD POOL	166,950	166,950	172,480	172,480	170,570	170,570
LESS: EARLY ALLOCATION	12,168	-0-	13,274	-0-	13,008	-0-
ADJUSTED POOL	154,782	166,950	159,206	172,480	157,562	170,570
FINAL RATE	1.6824	1.6675*	1.7305	1.7248*	1.71263	1.7057*
ADJUSTED BASE	92,000	92,000	92,000	92,000	92,000	92,000
TIMES: FINAL O.H. RATE	X 1.6824	X 1.6675	X 1.7395	X 1.7248	X 1.71263	X 1.7057
ALLOCATION AT FINAL NEG.	154,782	153,594	159,206	158,682	157,562	156,924
ADD: EARLY ALLOCATION	12,168	12,168	13,274	13,274	13,008	13,008
TOTAL OVH. ALLOCATION	166,950	165,762	172,480	171,956	170,570	169,932
ACTUAL OVERHEAD	166,950	166,950	172,480	172,480	170,570	170,570
OVER (UNDER) ALLOCATED	-0-	(1,188)	-0-	(524)	-0-	(638)

*Source of data prior thesis (13:56).

MODELS FOR TREATMENT OF OVERHEAD IN THE
EARLY CLOSEOUT OF CONTRACTS

CONTRACTOR F

	Calendar Year 1974		Calendar Year 1975		Calendar Year 1976	
	Option 1	Option 2	Option 1	Option 2	Option 1	Option 2
DIRECT LABOR DOLLARS	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000
EARLY CLOSEOUT RATE*	1.63	1.63	1.74	1.74	1.77	1.77
EARLY SETTLEMENT ALLOCATION	13,040	13,040	13,920	13,920	14,160	14,160
AT TIME OF FINAL SETTLEMENT:						
OVERHEAD BASE (DLD)	100,000	100,000	100,000	100,000	100,000	100,000
LESS: EARLY BASE	8,000	-0-	8,000	-0-	8,000	-0-
ADJUSTED BASE	92,000	100,000	92,000	100,000	92,000	100,000
OVERHEAD POOL	167,200	167,200	170,100	170,100	171,800	171,800
LESS: EARLY ALLOCATION	13,040	-0-	13,920	-0-	14,160	-0-
ADJUSTED POOL	154,160	167,200	156,180	170,100	157,640	171,800
FINAL RATE	1.6757	1.672*	1.6976	1.701*	1.71348	1.718*
ADJUSTED BASE	92,000	92,000	92,000	92,000	92,000	92,000
TIMES: FINAL O.H. RATE	X 1.6757	X 1.672	X 1.6976	X 1.701	X 1.71348	X 1.718
ALLOCATION AT FINAL NEG.	154,160	153,824	156,179	156,492	157,640	158,056
ADD: EARLY ALLOCATION	13,040	13,040	13,920	13,920	14,160	14,160
TOTAL OVH. ALLOCATION	167,200	166,864	170,100	170,412	171,800	172,216
ACTUAL OVERHEAD	167,200	167,200	170,100	170,100	171,800	171,800
OVER (UNDER) ALLOCATED	-0-	(336)	-0-	312	-0-	416

*Source of data prior thesis (13:56).

MODELS FOR TREATMENT OF OVERHEAD IN THE
EARLY CLOSEOUT OF CONTRACTS

CONTRACTOR G

	Calendar Year 1974		Calendar Year 1975		Calendar Year 1976	
	Option 1	Option 2	Option 1	Option 2	Option 1	Option 2
DIRECT LABOR DOLLARS	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000
EARLY CLOSEOUT RATE*	2.05	2.05	1.95	1.95	1.972	1.972
EARLY SETTLEMENT ALLOCATION	16,400	16,400	15,600	15,600	15,776	15,776
AT TIME OF FINAL SETTLEMENT:						
OVERHEAD BASE (DLD)	100,000	100,000	100,000	100,000	100,000	100,000
LESS: EARLY BASE	8,000	-0-	8,000	-0-	8,000	-0-
ADJUSTED BASE	92,000	100,000	92,000	100,000	92,000	100,000
OVERHEAD POOL	211,000	211,000	208,600	208,600	207,000	207,000
LESS: EARLY ALLOCATION	16,400	-0-	15,600	-0-	15,776	-0-
ADJUSTED POOL	194,600	211,000	193,000	208,600	191,224	207,000
FINAL RATE	2.11522	2.11*	2.0978	2.086*	2.0785	2.07*
ADJUSTED BASE	92,000	92,000	92,000	92,000	92,000	92,000
TIMES: FINAL O.H. RATE	X 2.11522	X 2.11	X 2.0978	X 2.086	X 2.0785	X 2.07
ALLOCATION AT FINAL NEG.	194,600	194,120	193,000	191,912	191,224	190,440
ADD: EARLY ALLOCATION	16,400	16,400	15,600	15,600	15,776	15,776
TOTAL OVH. ALLOCATION	211,000	210,520	208,600	207,512	207,000	206,216
ACTUAL OVERHEAD	211,000	211,000	208,600	208,600	207,000	207,000
OVER (UNDER) ALLOCATED	-0-	(480)	-0-	(1,088)	-0-	(784)

*Source of data prior thesis (13:56).

MODELS FOR TREATMENT OF OVERHEAD IN THE
EARLY CLOSEOUT OF CONTRACTS

CONTRACTOR H

	Calendar Year 1974		Calendar Year 1975		Calendar Year 1976	
	Option 1	Option 2	Option 1	Option 2	Option 1	Option 2
DIRECT LABOR DOLLARS	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000
EARLY CLOSEOUT RATE*	1.56	1.56	1.35	1.35	1.31	1.31
EARLY SETTLEMENT ALLOCATION	12,480	12,480	10,800	10,800	10,480	10,480
AT TIME OF FINAL SETTLEMENT:						
OVERHEAD BASE (DLD)	100,000	100,000	100,000	100,000	100,000	100,000
LESS: EARLY BASE	8,000	-0-	8,000	-0-	8,000	-0-
ADJUSTED BASE	92,000	100,000	92,000	100,000	92,000	100,000
OVERHEAD POOL	149,240	149,240	128,000	128,000	135,200	135,200
LESS: EARLY ALLOCATION	12,480	-0-	10,800	-0-	10,480	-0-
ADJUSTED POOL	136,760	149,240	117,200	128,000	124,720	135,200
FINAL RATE	1.4865	1.4924*	1.2739	1.28*	1.3557	1.352*
ADJUSTED BASE	92,000	92,000	92,000	92,000	92,000	92,000
TIMES: FINAL O.H. RATE	X 1.4865	X 1.4924	X 1.2739	X 1.28	X 1.3557	X 1.352
ALLOCATION AT FINAL NEG.	136,760	137,300	117,200	117,760	124,720	124,384
ADD: EARLY ALLOCATION	12,480	12,480	10,800	10,800	10,480	10,480
TOTAL OVH. ALLOCATION	149,240	149,780	128,000	128,560	135,200	134,864
ACTUAL OVERHEAD	149,240	148,240	128,000	128,000	135,200	135,200
OVER (UNDER) ALLOCATED	-0-	1,540	-0-	560	-0-	(336)

*Source of data prior thesis (13:56).

APPENDIX B
INTERVIEW GUIDE

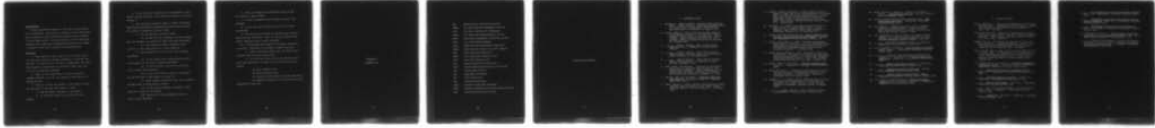
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AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH SCHOOL--ETC F/G 5/1
AN ANALYTICAL EVALUATION OF PROCEDURES FOR CLOSING COST-TYPE CO--ETC(U)
JUN 79 M B BRISTOW, J E MOAD
AFIT-LSSR-15-79A

UNCLASSIFIED

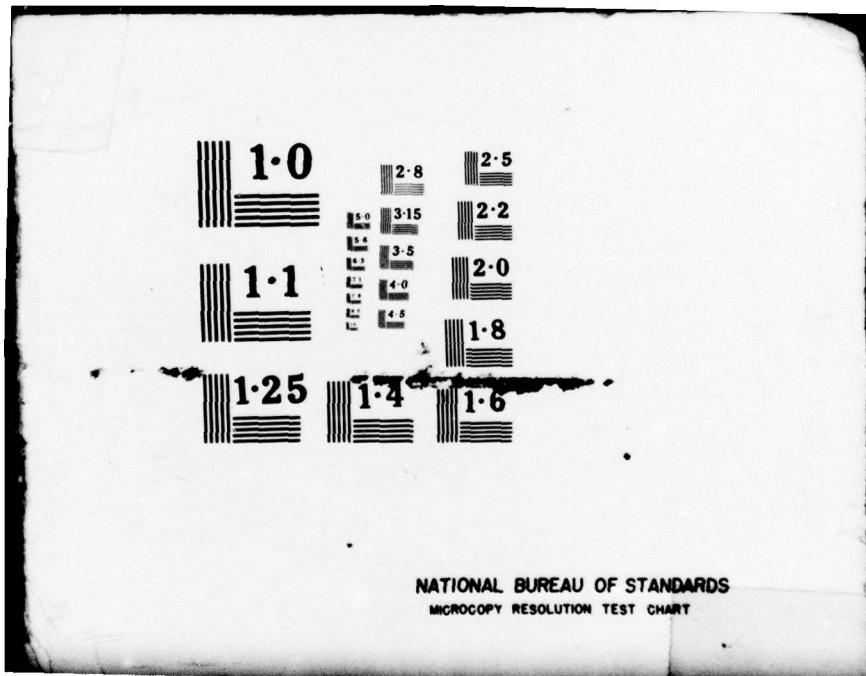
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NATIONAL BUREAU OF STANDARDS
MICROCOPY RESOLUTION TEST CHART

Introduction

We are performing research in the area of early close-out of contracts. Of particular interest is data concerning early closeout of small cost-type contracts where overhead is the primary factor. We are referring to DAR 3-708 which specifies when physically completed contracts may be closed in advance of the final overhead rate determination.

Questions

1. What specific reason code do you cite most often for contracts remaining overage subsequent to physical completion? Can you give us, in order of importance, the three most commonly cited reasons for contracts other than firm fixed price, remaining overage?

2. What is your organization's current status of overage contracts, that is, the number of contracts in an overage status?

3. Have you noticed any change in the number of overage contracts in the past four years? If yes;

a. Has the number increased or decreased?

b. Is there any reason you can cite for the change?

4. Do you have any suggestions for improvement of the overall system, policies, and procedures relative to contract closeout?

5. The following questions apply to those individuals administering physically completed contracts which are open for reasons of overhead (indirect cost):

a. Are you familiar with DAR 3-708?

(1) Do you use that procedure for early settlement and closeout of overhead on small cost-type contracts?

(2) Has there ever been a problem at your location in the interpretation of that procedure?

b. What procedure do you use for early overhead settlement?

(1) Do you adjust your overhead base and pool by the amount of the early overhead negotiated?

(2) If you do adjust, do you see a conflict with the DAR 3-708 procedure?

(3) If you do not adjust, what is the method you use and what is the reason for using it?

(4) What closeout rates are used, e.g., forward pricing rates, billing rates or other?

(5) Do you close contracts in groups or each time one is ready to be closed?

(6) How do you treat unallowable costs at time of early closeout?

6. Have you changed your procedure since the DAR was issued in August 1978?

7. If your procedures have changed, how have they changed?

8. Do you see any difficulties with your current procedures?

9. How has the new procedure impacted your relationship with the contractor? That is, has he insisted upon higher overhead rates at early closeout?

10. We also need some specific information regarding your early settlement of overhead on small contracts:

a. What is the most recent year for which final overhead rates have been negotiated?

b. For the last three years that overhead rates have been negotiated, we would like the following information:

- (1) Early closure rates.
- (2) Final overhead rates.
- (3) Forward pricing rates for those same years.
- (4) Negotiated dollars for both early and final overhead for each year.

APPENDIX C
ACRONYM LIST

ACO Administrative Contracting Officer
AFCMD Air Force Contract Management Division
AFIT Air Force Institute of Technology
AFPRO Air Force Plant Representative Office
AMIS Acquisition Management Information System
AFSC Air Force Systems Command
ASPR Armed Services Procurement Regulation
ASBCA Armed Services Board of Contract Appeals
CAS Cost Accounting Standards
CASB Cost Accounting Standards Board
CPIF Cost Plus Incentive Fee
DAR Defense Acquisition Regulation
DCAS Defense Contract Administration Services
DLD Direct Labor Dollars
DOD Department of Defense
FFP Firm Fixed Price
FPR Forward Pricing Rate
FPRA Forward Pricing Rate Agreement
NASA National Aeronautics and Space Administration
PCO Procuring Contracting Officer

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