OMB A-76: FULL COSTING AND ITS IMPACT AT INSTALLATION LEVEL WITHIN THE U.S. ARMY

by

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September 1980

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OMB A-76: Full Costing and Its Impact at Installation Level Within the U.S. Army

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Submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL
September 1980

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ABSTRACT

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I. INTRODUCTION

If one were to ask Army management--senior or middle managers, military or civilian, Headquarters DA or the field--"What is the hottest topic in the Army today?", the answer very likely would be "A-76." Office of Management and Budget (OMB) Circular No. A-76, Subject: Policies for Acquiring Commercial or Industrial Products Needed by the Government, has stirred up considerable controversy and activity within the federal government in recent years [61:1].

A. THESIS PROBLEM STATEMENT

Inherent to the American free enterprise system is open and competitive commercial interaction in the marketplace without unnecessary Government intervention, Government control, or Government competition. Since the Eisenhower administration, the policy of reliance on the private sector to satisfy Government needs for goods and services has been consistently reinforced and enhanced by directives from the Executive Office of the President. However, to this day, there is considerable disagreement with and controversy over the Government's implementation of its policy.

Should the Government operate a manufacturing "plant" with personnel on the Federal payroll "making" products that could otherwise be provided by the private sector? Should the Government satisfy its needs for goods and services internally through the use of civil service and military personnel, or should it buy those goods and services from private enterprise through contractual arrangements? In short, what should be the
Government's make-or-buy policy vis-a-vis supplying needed products and services to Federal agencies?

On 29 March, 1979, the Office of Management and Budget (OMB) issued Revision No. 4 to its Circular No. A-76, entitled Policies for Acquiring Commercial or Industrial Products and Services Needed by the Government, hereafter referred to as OMB A-76. This latest publication varies significantly from previous directives and represents another attempt by the Federal Government to formulate a comprehensive, balanced national policy in this very controversial and sensitive area.

Since the Government's make-or-buy decisions directly affect the jobs of contractor and Government personnel, representatives from both the private and public sectors are vocal in expressing their divergent views. OMB, as the proponent agency for A-76, attempted with its latest revision to silence criticism from a broad spectrum of very parochial organizations. With Government service jobs and billions of dollars in Federal contracts at stake, many diverse groups such as the General Accounting Office (GAO), the Government employees union, the Civil Service Commission, the Small Business Administration, and various private industry spokesmen have sought to protect or procure those jobs and/or dollars depending on their position in the arena of Government commercial/industrial contracting.

As a consequence of such great interest and concern vis-a-vis the Commercial and Industrial Type Activities (CITA) program, a revised A-76 has created considerable controversy. However, despite continued criticism, OMB believes that OMB
A-76 is a "balanced approach" to the CITA program, that it achieves "consistent policy implementation in all agencies, equitable treatment of all parties, and improved economy and efficiency in providing goods and services needed by the Government" [53:1].

Publication of OMB A-76 was the culmination of a comprehensive review initiated in 1977 and "careful consideration of all comments submitted on a draft revision published in August 1978" [53:1]. The policy builds on three equally valid policy precepts:

--The Government's business is not to be in business. Where private sources are available, they should be looked to first to provide the commercial or industrial goods and services needed by the Government to act on the public's behalf.

--Certain functions are inherently governmental in nature, being so intimately related to the public interests as to mandate performance by Federal employees.

--When private performance is feasible and no overriding factors require in-house performance, the American people deserve and expect the most economical performance and, therefore, rigorous comparison of contract costs versus in-house costs should be used, when appropriate, to decide how the work will be done [53:2].

Without closer investigation, OMB A-76 may be interpreted as only a reaffirmation of "the Government's general policy of reliance on the private sector for goods and services, while recognizing that certain functions", by their nature, should be performed with Government personnel, and that certain other functions may be more economically performed in-house [53]. At the macro-level of CITA program management in the Office
of Federal Procurement Policy (OFPP) within OMB, this is a valid diagnosis of the new requirements. However, at the implementing level, at the U.S. Army posts, camps, and depots that must function under the new requirements, OMB A-76 has had an impact.

Under OMB A-76 the installation is required, due to use of the costing method required in the Circular, to accumulate more detailed cost data and to use cost accounting techniques heretofore unnecessary at that level. OMB A-76 required a comparative cost analysis prepared in accordance with OMB A-76 and the supplementing Cost Comparison Handbook (OMB CCH) prior to in-house performance of a CITA function based on economy. In addition, OMB A-76 established some "common ground rules" [53:8] for the mandated cost comparisons requiring determination of in-house costs on a fully allocated basis and use of standard cost factors contained in the OMB CCH published concurrently with OMB A-76.

OMB A-76 also requires each Federal agency, to include the Department of Defense (DoD), to prepare a detailed five-year schedule for review of each CITA function they operate, in-house or contract. The purpose of this review is to determine if the existing method of performance, in-house or contract, is in accordance with the policy and guidelines of OMB A-76 [53]. In addition to the other tasks involved in this mandated review, a detailed cost comparison must be produced for audit and certification by an activity independent of the installation Cost Analysis Section.
Within the Department of the Army (DA) the independent review of the comparative cost analysis is conducted by the U.S. Army Audit Agency (USAAA). USAAA requires a minimum of 60 days to conduct their review; and a solicitation for commercial bids should not occur without USAAA certification of the methods used in the preparation of the in-house estimate. The new requirements precipitated by OMB A-76 place time constraints on the installation Cost Analysis Section having overall responsibility for preparation of the CITA comparative cost analysis. OMB has granted DoD and its subordinate agencies an extension to a five-year period following issuance of OMB A-76, rather than the three-year period granted all other Federal agencies, to complete a review of all DoD CITA functions. However, the consumption of time in the cost comparison alone, due to the difficulty in accumulating all relevant costs, may push the review beyond the mandated limit. Attachment B, Appendix B flowcharts the OMB A-76 review process and displays the actions required for proper implementation of OMB A-76 [53].

DA installations have experienced varying degrees of success in completing FY 1980 scheduled reviews. None of the five CITA managers contacted by the author foresees completion of every FY 1980 scheduled CITA review at his installation. Additionally, each CITA manager contacted agreed that: (1) the provisions of OMB A-76 have had a significant impact at the installation in sheer workload in implementation, e.g.,
inventorying functions and making cost studies, contract preparation and administration, possible manpower reductions, organizational realignments, and coping with the inevitable protests, (2) the required comparative cost analysis based on fully allocated costs is the key to each CITA review and one of the primary time consumers.

One of the original purposes of the CITA program was to streamline and improve the working level make-or-buy decisionmaking process including the development of more credible cost comparability methods. Evaluation of cost comparability methods by GAO in 1978 revealed "insurmountable problems of equitability" and showed that "considerable time and expense" was being incurred in conducting, auditing, and reviewing CITA cost comparisons [46].

The OMB CCH was designed to provide detailed step-by-step instructions for developing a comprehensive, valid comparative cost analysis [54]. A natural conclusion would be that "providing more precise guidance in developing cost estimates and analyzing comparative costs" would equate to more expeditious preparation of accurate and precise in-house cost estimates [54]. However, as previously noted, the comparative cost analysis continues to consume an inordinate amount of time. Since the contract cost figure is based on a binding firm bid, plus the Government cost which might be incurred in connection with contracting-out, the "considerable time and expense" vis-à-vis the cost comparison must be attributable to preparation of the in-house cost estimate. This thesis will address one
aspect of the preparation of an estimate of the Government cost to perform a CITA function.

B. SCOPE AND OBJECTIVES

A result of cost analysis aimed at full cost in accordance with OMB A-76 has been the necessity to accumulate the indirect as well as direct costs attributable to in-house performance of a particular CITA function. This study will examine the impact at the "operating level" of accumulating and allocating attributable indirect costs to a DA installation CITA function that provides needed goods or services to a post, camp, or station. For the purposes of this research and the ensuing discussion "operating level" will be defined as that entity and its associated personnel at an Army post, camp or depot held responsible for preparation of the in-house cost estimate. The discussion will focus on the impact at the operating level of determining the elements of cost outlined in the OMB CCH using the guidance published at present, the standard U.S. Army accounting system, and installation resources.

The specific objectives of this thesis include:

1. Identification of the problems and peculiarities at the operating level associated with accumulating costs attributable to the OMB CCH defined overhead pools.

2. Evaluation of the compatibility of the standard DA accounting system with the full costing requirement of OMB A-76.
3. Presentation of the procedures used at one major DA installation to accumulate the elements of cost outlined in the OMB CCH.

4. Recommendation of possible approaches to resolve the problem of consumption of an inordinate amount of time in the preparation of an in-house cost estimate.

C. METHODOLOGY

This research was initially directed at the broad area of CITA cost comparisons with emphasis on the conduct of such cost comparisons at DA installations. Conversations with personnel at the Army Logistics Management Center (ALMC) and with USAAA staff revealed that many DA installations were having difficulty collecting relevant costs and determining what costs were attributable to an in-house CITA function. Identifying, accumulating, and allocating the indirect costs to distribute to the overhead pools defined by the OMB CCH was also a problem area noted by many students at an ALMC CITA management course attended by the author in April 1980. The problem was also confirmed by CITA managers in telephone conversations with various Army installations throughout the continental United States.

A literature search was then directed toward collection of technical data on cost accounting, DoD service contracting, and commercial/industrial activities. The Defense Logistics Studies Information Exchange provided information and literature originating within DoD concerning CITA, accounting procedures
within DA, and various costing methods. However, due to the relatively recent publication of OMB A-76, most of the data proved to be outdated.

Several telephone calls to organizations such as the OFPP within OMB, ALMC, the Management Directorate of DA (CITA management office), and DA installations throughout the continental U.S. provided further information and amplification of the problems associated with the CITA program in general and cost accumulation in particular. One CITA manager contacted stated that they lived "in a world of assumptions" when they accumulated and allocated their costs for the in-house estimate. Another CITA manager indicated that they had no one "sufficiently knowledgeable" of "proper cost accounting techniques" to determine "total direct costs much less the indirect, overhead type items of cost" required by OMB A-76. Each conversation added to the author's belief that the cost comparison requirements levied by OMB A-76 were having a significant impact at the operating level.

Installations visited during the research phase of this thesis were the US AAA Western Region Office in Redwood City, California; Fort Ord, California; Fort Lewis, Washington, and Fort Carson, Colorado. By visiting these activities it was possible to investigate and to better comprehend the problems associated with accumulating reliable and accurate figures for indirect costs. The author also attended the Management of Commercial/Industrial Type Activities Program/Course (MCPC) taught by an ALMC training team. MCPC program of instruction,
which is presented over a four and one-half day time period, consists of lectures, conferences, and numerous practical exercises [43:48]. A major portion of the MCPC is devoted to a step-by-step completion of the OMB Cost Comparison Form (CCF) (Attachment, C, Appendix B). Cost categories and the requirements of full costing are addressed and explained at each step.

Lastly, the methods used by a major DA installation to accumulate and allocate indirect costs for determination of in-house costs were investigated. This installation's costing methodology was examined to gain a clear understanding of OMB A-76's impact at the operating level.

The information gathered from the above sources was used to gain an understanding of the CITA program under OMB A-76 in general and the "cost comparison" process in particular. The data was then used,

1. to present an evolutionary picture of the process leading to OMB's adoption of "fully allocated costs" for CITA cost comparisons.

2. to examine and evaluate the full cost concept vis-a-vis other costing approaches to include cost analysis in accordance with the OMB CCH.

3. to illustrate the impact of "costing" under OMB A-76 at the implementing level within the U.S. Army by discussing the cost accumulation process at a typical DA installation.

4. to identify problems and to make recommendations to improve the CITA program within DA.
D. KEY DEFINITIONS AND ABBREVIATIONS

CITA Inventory. A listing of all commercial and industrial functions whether performed in-house, by contract, or jointly.

Commercial or Industrial Type Activity (CITA). An activity operated and managed by a Federal Executive Agency that provides a product or service obtainable from a private commercial source. The activity can be identified with an organization or a type of work, but must be: (1) separable from other functions so as to be suitable for performance either in-house or by contract; and (2) a regularly needed activity of an operational nature, not a one-time activity of short duration associated with support of a particular project.

Conversion. The transfer of work from a Government commercial or industrial activity to performance by a contractor.

Cost Comparison (or Comparative Cost Analysis). An accurate determination of whether it is more economical to acquire the needed products or services from the private sector or from an existing or proposed Government commercial or industrial activity.

Cost Differentials. The cost margins established by OMB Circular A-76 that must be exceeded before performing a "new-start" in-house and before converting an in-house activity to contract performance.

Expansion. The modernization, replacement, upgrade, or enlargement of a CITA that involves adding a capital investment of $100,000 or more or increasing the annual operations costs by $200,000 or more, provided the increase exceeds 20 percent.
of the capital investment or annual operating cost. A consolidation of two or more activities is not an expansion unless the capital investment or annual operating cost exceeds the total from the individual activities by the amount of the threshold.

**In-House Performance.** The performance of a CITA by Army military or Federal civilian personnel.

**Government Function.** A Government function is one which must be performed by the Government (in-house) due to a special relationship in executing governmental responsibilities including (1) discretionary application of Government authority, (2) monetary transactions and entitlements, and (3) maintenance of in-house technical core capabilities.

**New Start.** A newly established Government commercial industrial activity, including a transfer of work from contract to in-house performance. Also included is any expansion which would increase capital investment or annual operating costs by 100 percent or more.

**Office of Management and Budget Circular No. A-76.** Executive Branch directive establishing the policies and procedures to be used to determine whether needed commercial or industrial type work will be accomplished by contract with private sources or in-house using Government facilities and personnel.

**Private, Commercial Source.** A private business, university, or other non-federal activity located in the United States, its territories and possessions, or the Commonwealth of Puerto
Rico that provides a commercial or industrial product or service required by Government agencies.

**Review Schedule.** A listing of CITA functions and the fiscal year in which each review will be completed. Each of the functions that make up a multi-function activity or are being performed by contract are separately identified in the review schedule.

E. **THESIS ORGANIZATION**

The research presentation is divided into five chapters. In this chapter the objectives of the research have been set forth, the scope and objectives of the effort identified, potential problem areas highlighted, and methodologies for data gathering presented.

Chapter II provides the background material surrounding the development and implementation of OMB A-76. This is primarily a historical and chronological development of the costing requirements of the CITA program not inclusive of the other tasks inherent to the management process. The evolvement of the CITA program in DoD is also examined, and the latest implementing guidance presented.

In Chapter III the requirement for full costing is examined relative to alternative methods of comparative cost analysis. The chapter discusses why and how the full cost concept is used for Government in-house estimates. It compares full cost methods employed by the private sector, by Government contractors in accordance with the Cost Accounting...
Standards Board (CASB), by other non-profit organizations, and by the OMB CCH.

Chapter IV discusses the accumulation of costs as performed by a major Army installation. The chapter details the methodology used by the installation to accumulate relevant costs as outlined in the OMB CCH. The source of the cost data is identified to illustrate the specific costing information available to a DA installation.

Chapter V summarizes the results of the research and provides recommendations to assist an installation cost analysis section in the preparation of an estimate of Government cost to perform a CITA function under the full costing policy of OMB A-76.
II. BACKGROUND

The development of a comprehensive policy of reliance on the private sector to satisfy Government needs can best be described as having been surrounded by confusion, controversy, and turbulence [46]. Issued originally in 1966, Bureau of the Budget Circular A-76 (BOB A-76) followed a series of temporary bulletins dating back to the Eisenhower Administration. BOB A-76 and preceding Executive Branch directives concerning Commercial and Industrial Type Activities (CITA) expressed the same basic policy of reliance by the Federal Government on the private enterprise system to provide its needed goods and services.

It was a general conclusion, in a recent study by the Department of Defense (DoD), that the military services could rely to a greater extent on private enterprise for needed goods and services. In 1978, at the time of the study, the potential for transferring additional CITAs to performance by private contractors existed in both base operations and depot maintenance [2]. This is significant as it has been conservatively estimated that for each 10,000 man-years of CITAs contracted-out, at least $30 million could be saved annually [17].

The same study also pointed out that the basic policy of DoD reliance on the private enterprise system has been subject to fluctuating emphasis flowing from political and economic
considerations [2]. Consequently, the Government's make-or-buy policy has experienced numerous changes. Congress has expressed concern about the Executive Branch's implementation of the policy, but has not enacted legislation to support published Executive guidance. As a result, timely DoD implementation efforts have been inconsistent and relatively ineffective [46].

In recent years, as the Pentagon's budget has been squeezed between rising costs and alternative demands for federal funds, it has become apparent that DoD is committed to the concept of using private enterprise resources to accomplish many of the base support functions currently performed by military and civil service personnel.

In this chapter the evolution of the current policy will be reviewed from its formal inception in 1955 up to the present time. This survey of the development and the implementation of the policy formally prescribed in the Office of Management and Budget Circular A-76 (OMB A-76) will be directed at the implications of the mandated comparative cost analysis. Specifically, the methods of determining the costs associated with Government performance of a particular CITA function will be reviewed. Executive and legislative actions and interactions will be presented. OMB A-76 will be analyzed, noting in particular those changes in the method of computation of in-house cost estimates from previous directives. Finally, the latest, published implementing guidance within DoD and the Department of the Army (DA) will be investigated as to the costing requirements at the operating level.
A. THE EISENHOWER YEARS

Executive Branch policy, as expressed in OMB A-76, is to rely on the private sector to provide needed goods and services to the Government. This concept dates back over twenty-five years. In early 1955, the Bureau of the Budget (BOB), now the Office of Management and Budget (OMB), issued BOB Executive Bulletin No. 55-4 (BULL 55-4). This Bulletin states, in part, that

It is the general policy of the administration that the Federal Government will not start or carry on any commercial activity to provide a service or product for its own use if such a product or service can be produced from private enterprise through ordinary business channels. Exceptions to this policy shall be made by the head of an agency only where it is clearly demonstrated in each case that it is not in the public interest to procure such a product or service from private enterprise [60:4].

This Executive pronouncement clearly based the policy of Government procurement from commercial sources on the desirability of supporting the free enterprise system. Guidance as to the specific methods of cost analysis was lacking. Federal agencies, including DoD, were directed to use relative costs of Government operation compared to commercial performance in those circumstances where the product or services cannot:

1. be purchased on a competitive basis, or

2. be obtained at reasonable prices from private industry [3].

Given the above conditions, the CITA manager at the operating level was simply instructed to compare costs as follows.
The costs of Government operation should be fairly computed and complete, covering both direct and indirect costs, including elements not usually chargeable to current appropriations such as depreciation, interest on the Government’s investment, the cost of self-insurance (even though it is unfunded); there shall also be added an allowance for Federal, State, and local taxes to the extent necessary to put the costs on a comparable basis. Care must also be exercised to see that costs of procuring material from private sources are fairly computed and complete, being truly representative of the lowest price the Government would pay for the quantity and quality needed, and taking account of any applicable indirect costs of the Government for such procurement [60:5].

However, the CITA manager was provided no guidance as to what constitutes a "fair and complete" computation of Government costs; and BULL 55-4 emphasized that decisions vis-a-vis in-house or contract performance should not rest on cost alone. The Bulletin directed that "cost should not usually be the deciding factor in determining whether to continue the operation as a direct Government operation" [60:6-7].

In a memorandum to the President in October 1956, BOB stated its rationale for adopting a policy with the comparative cost as only one of a number of factors to be considered by an installation in its evaluation of a particular CITA. The memorandum stated:

1. The cost of Government operations are not comparable with corresponding business costs. The Government, for example, pays no income taxes and operates its own tax-free facilities, thereby keeping costs down.
2. Government accounts are not kept in the same manner as business accounts, so that a comparison of the operating costs of Government versus business, for example, is not only difficult but often misleading.
3. Above all, the decision whether to continue or discontinue a Government activity solely
on an apparent cost basis runs counter to our concept that the Government has ordinarily no right to compete in a private enterprise economy [60:5].

The relative cost of in-house vs. contracted-out functions was de-emphasized in this early directive. Success of the fledgling CITA program was measured in terms of the number of government activities terminated or converted to civilian contract. The termination of 32 CITA functions within DoD at 246 installations was listed among the accomplishments of the program [60:5].

BULL 55-4 was followed by BOB Bulletin No. 57-7 (BULL 57-7) and 60-2 (BULL 60-2) in 1957 and 1959 respectively. These BOB Bulletins attempted to clarify and expand the original policy guidance. BULL 57-7 expressed a make-or-buy policy of reliance on private enterprise to satisfy Government needs for goods and services identical to that contained in BULL 55-4.

The Government's experience with the initial contracting-out policy under BULL 55-4 indicated that increased emphasis could be placed on the accurate comparison of in-house and industry costs. Consequently, movement toward comparison of relative costs as a major prerequisite for in-house performance of a CITA function was apparently considered in BOB's preparation of BULL 57-7. The BULL 55-4 provision that "cost should not usually be the deciding factor in determining whether to continue the operation as a direct Government operation" was conspicuously absent in BULL 57-7. BULL 57-7 was not more specific than BULL 55-4 in defining what cost differential
would support a decision favoring Government operation of a particular CITA. However, the following provision did move the policy under BULL 57-7 closer to a mandatory comparative cost analysis prior to performance of a CITA function in-house.

The relative costs of Government operation compared to purchase from private sources will be a factor in determining whether to start or carry on a commercial activity in those cases where the agency head concludes that the product or service...cannot be obtained at reasonable prices from private industry [60:15].

Although this was a step closer, comparative cost or economy, as a criteria, did not become a specific and absolute requirement until 1967.

Clearly, BULL 57-7 and the Government procurement philosophy strained toward a comparison of costs prior to continuation of in-house operation or a "new start" of a CITA. This slant was manifested in BULL 60-2. This directive specified that "the general policy of the administration" will be the following:

The Federal Government will not start or carry on any commercial-industrial activity to provide a service or product for its own use if such product or service can be procured from private enterprise through ordinary business channels [60:8].

However, the Bulletin went on to state three exceptions to this policy. One of the exceptions, or "compelling reasons" for in-house performance, was "relatively large and disproportionately higher costs" to contract the CITA function to a private firm. This "compelling reason" caveat to contracting-out was a double-edged sword. It left interpretation of "relatively large and disproportionately higher costs" to the operating level. The reference to "relatively large and
disproportionately higher costs" speaks rather clearly in favor of contract performance by private industry. However, an installation could produce "comparable cost figures" and decide, due to a substantial and disproportionately large cost differential, that the function will stay under "the direct contract" of the Government. It became a matter of definition and therefore interpretation.

B. THE KENNEDY-JOHNSON YEARS

Although comparative cost analysis of in-house vs. contracted-out activities might have received more decision-maker attention under the purview of BULL 60-2, it was stifled by a lack of clarity and a continuing Executive push for use of private enterprise to benefit the general economic system. No limits were placed on the reference to "relatively large and disproportionately higher costs", leaving interpretation or even operational rejection to the operating level. Additionally, the "compelling reasons", to include the cost exception, applied only to "new starts" of a function or the continuation of existing functions. No such restriction was placed on a strictly command decision to contract for goods or services rather than provide them in-house.

The policy as implemented by BULL 60-2 created increasing controversy ranging from concern for career development of civil service personnel to the possible illegality of some of the contracts let by the Government. A study, completed by DoD in 1965, examined the implications of the executive policy
vis-a-vis CITA goods and services. This study concluded that, while some contracts with the private sector were more costly than similar work done by Government service employees, many support services were being performed in-house, "which, on the basis of realistic cost comparisons, might be better accomplished by the use of contractor support" [2:23].

Thus, in 1963, Elmer Staats, Deputy Director of BOB, in testimony before the Joint Economic Committee, revealed that the earlier Executive policy on contracting-out of CITA functions was weakening in favor of a strict comparative cost analysis. The move to efficiency, equating to economy, in performance of necessary Government base support functions was evident in his testimony. As part of that testimony he stated

(We) have placed increased emphasis on using Government installations and staffs rather than commercial or contractual arrangements when commercial operations are clearly more costly. Most of the goods and services needed by the Government will continue to be obtained from commercial or other private sources, but when it is clear that a direct operation by the Government will save money when all pertinent factors are considered, we believe an operation by the Government is warranted [60:10].

This testimony was significant in that it signaled a shift in emphasis to effectiveness and efficiency of DoD programs rather than reliance on private enterprise. Cost-effectiveness had become an integral part of the bureaucratic language associated with Robert McNamara's tenure as Secretary of Defense. The CITA program was a prime candidate for absorption in the cost analysis system.
As a consequence, on 3 March 1966, BULL 60-2 was cancelled and replaced by the original BOB Circular No. A-76 (BOB A-76). The bulk of BOB A-76 pertains to methods of making a comparative cost analysis between in-house and contract operations of an installation CITA. BOB A-76 states that in-house operation is permissible when comparative cost analysis shows that the Government can do the job at lower cost than private enterprise [60:12-13]. However, the basic considerations in BOB A-76 concerning cost analysis are generally the same as in BULL 60-2, with one notable exception. A major difference in BOB A-76 was the exclusion of an allowance for state and local taxes from the in-house estimate. Private industry was greatly disturbed at the exclusion of these costs, asserting that such tax expenditures constitute a significant cost factor and that their exclusion seriously impairs the opportunity for equitable cost comparisons [60:13].

Of greater significance was the publication in August, 1967 of BOB Transmittal Memorandum No. 1 (TM-1) revising BOB A-76 and directing the use of incremental costing in calculating in-house costs. Incremental costing and other approaches to cost analysis will be discussed in the next chapter. This 1967 revision to BOB A-76, while not changing the basic Government "policy of relying upon the private enterprise system to supply its needs" for goods and services, did reduce the momentum towards contracting-out CITA functions. The incremental costing approach ignores a number of costs such as all previous
Government expenditures for capital assets and some overhead costs. Only additional expenses directly related to performance of the particular CITA function under study are included in the in-house cost estimate. This method of cost analysis favors continued in-house operation or a "new start." BOB A-76 and its associated incremental costing approach remained intact for the next twelve years, much to the chagrin of private enterprise.

C. THE NIXON–FORD YEARS

Although no major alterations were made to the Government policy until March 1979, two changes made in 1976 clearly established a pattern of movement back toward increased contracting-out of CITA functions. First, in compliance with an Executive Memorandum, the Office of the Secretary of Defense (OSD) and other large Federal agencies were expected to identify "at least five functions presently performed in-house" to be reviewed for possible contracting-out [2:23]. Second, Transmittal Memorandum No. 2 (TM-2) published in October revised BOB A-76 by raising the cost factor for civil service retirement to be used in cost comparisons from 7 percent to 24.7 percent of basic pay. This sizeable increase in the retirement cost factor precipitated reaction by Government employee unions who feared the loss of jobs.

The Government employee unions and their supporters in Congress were vocal in their concern and mounted a substantial attack on the implementation of CITA programs by OMB, with
particular emphasis on the new retirement cost factor. As the most active Federal agency in implementing the CITA program, DoD became the target of numerous editorial attacks in various Government employee journals such as the *Federal Register*.

D. THE CARTER ADMINISTRATION

Increasing furor concerning the higher retirement cost factor caused the new administration under President Carter to direct a comprehensive review of the CITA program and its implementation, including the controversial standard cost factor for retirement. OMB announced this review in Transmittal Memorandum No. 3 (TM-3) issued in June 1977. TM-3 deleted the Executive requirement levied on all major Federal agencies to identify "at least five functions presently performed in-house" for review and possible contracting-out. Additionally, TM-3 re-emphasized the basic policy contained in BOB A-76 and reduced the retirement cost factor from 24.7 percent to 14.1 percent of basic pay. Issuance of OMB A-76 was the culmination of this review process initiated by President Carter in 1977.

E. IN-HOUSE COST ESTIMATES AND CONGRESSIONAL IMPACT

Congressional interest in the CITA program has been relatively substantial over the years. In 1969 Congress created the Commission on Government Procurement to recommend methods for promoting economy, efficiency, and effectiveness in procurement by the Federal Government. This Commission remained
active approximately three years and, as a result of their study, produced a very comprehensive report on Government procurement policy and procedures. Since 1969, Congressional and Executive actions related to Federal acquisition of goods and services can be traced to the study by Commission on Government Procurement. In order to gain a more precise perspective of contractor profits vis-a-vis Government costs, Congress formed the Cost Accounting Standards Board (CASB). The CASB was created in 1970 by a Congressional amendment to the Defense Production Act. As a representative of the Government, the CASB became the policy-making body responsible for determining the acceptable and the mandatory methods private enterprise must use in accounting for chargeable costs to Government contracts. The CASB has produced eighteen Cost Accounting Standards (CAS) since its formation in 1970.

In an attempt to provide centralized management responsibility for all Government procurement, in 1974 Congress enacted Public Law 93-400 establishing the Office of Federal Procurement Policy (OFPP) within OMB. One of the many responsibilities given to OFPP was monitoring and revising policies, regulations, and procedures relating to reliance by the Government on the private sector to provide needed products and services [14].

Legislative Branch control over the Federal checkbook is a "big stick", enabling Congress to influence and control how the Government procurement dollar is spent. Congress
exercised this power, and displayed their concern for the CITA program, in the FY 1978 Defense Appropriation Authorization Act. This Act required OSD, in conjunction with OMB, to submit in detail, all CITA policy changes since 1967. It also prohibited any further conversions to contract unless the policies in effect prior to June 30, 1976 were followed. The net effect of this action was to negate OMB TM-2 and TM-3 causing the retirement cost factor to revert to a pre-1976 level of 7 percent of basic pay. This legislative action was perceived by many as a swing of the CITA program pendulum back toward a Government policy favoring in-house performance of CITA functions.

Since the restrictive legislation in the FY 1978 Defense Appropriation Authorization Act was directed at the higher retirement cost factors, the Congressional action was hailed as a victory for the Government employee unions. However, a study by GAO suggests that a change in the retirement cost factor from 7 percent to 24.7 percent of basic pay might have less effect than expected. GAO applied the 24.7 percent cost factor to 39 studies that had previously used 7 percent retirement accrual cost. After correcting for the higher retirement accrual rate, GAO found that "the adjusted in-house costs would not have reversed any of the services' decisions to either continue in-house performance or to contract" the functions [45:18].

In September of 1978, GAO compiled an assessment of the Executive Branch's policy and programs for obtaining needed
products and services. GAO then issued perhaps its most comprehensive report to date on the national make-or-buy policy. The report noted that Federal agencies, to include all branches of DoD, experienced difficulty first, in ascertaining when to conduct a comparative cost analysis; and second, how to determine a reliable, accurate, and justifiable estimate of in-house costs [46]. In their Report to Congress, GAO also made the following observations:

1. Complete and accurate in-house cost data is not readily available.

2. OMB Circ A-76 does not generally require cost comparisons to support contracting out decisions.

3. OMB Circ A-76 does not require cost comparisons on activities already contracted out to assure their continued cost effectiveness.


5. Uncertainty exists on whether in-house costs should be determined on an incremental or fully allocated basis.

6. Cost comparisons lack credibility in some cases because they are often prepared by personnel who are unqualified or would be affected by actions.

7. Required reviews of the commercial or industrial activities are far behind schedule. [46:39]

In late 1978, GAO, based on the above factors and other investigative data, concluded "that cost comparisons have not been fully serving the purpose intended" [46:39]. That purpose, as GAO defined it, was to determine the lower cost alternative available to the Government, in-house performance or contract, for obtaining needed goods and services.
More recently, in the FY 1980 Defense Authorization Act, OSD was required to certify to Congress that the in-house computation of costs for the CITA functions currently being reviewed for the possible conversion to contract was based on the most efficient and cost effective organization.

Despite sustained interest and scrutiny of the CITA program by Congress, there has been little support for legislative action, and Congress has not enacted legislation establishing a national policy of reliance on the private sector for needed goods and services [46].

F. OMB A-76

Based on a review of the existing policy guidelines and the "careful consideration of all comments submitted on a draft revision (of OMB A-76) published in August 1978," OFPP determined that more succinct and definitive guidance was required in the implementation of CITA program. Consequently, on March 29, 1978, OMB published TM-4 accompanied by OMB A-76. To support the increased emphasis on relative economy of Government and contract performance promulgated by OMB A-76, the OMB Cost Comparison Handbook (OMB CCH) was published concurrently. The purpose of the OMB CCH was to provide detailed instructions to all agencies involved in conducting a comparative cost analysis of contractor cost versus the estimated cost to the Government of acquiring needed goods and services through the CITA program [54].

OMB A-76 clarified and formalized the policies for justification of in-house performance based on lower cost vis-a-vis
previous directives. Prior to publication of OMB A-76, methods used to calculate and to compare contractor versus Government costs were too general to achieve desirable uniformity and equitability. With insufficient guidelines, it was difficult to make cost comparisons between the sources of possible performance— in-house or contract-out [54].

OMB A-76 established some "common ground rules" for estimation of both Government and contractor costs to perform a CITA function. The rules listed below are those that caused contracting for CITA products or services at the installation level, and in particular the method of determining in-house costs, to become a very complex task, requiring increased attention and greater expertise than was the situation under past versions of the CITA directives.

1. Standard cost factors will be used as prescribed by the Cost Comparison Handbook and as supplemented by agencies for particular operations. It will be incumbent on each agency to defend any variations in costing from one case to another.

2. Cost comparisons are to be aimed at full cost, to the maximum extent practical in all cases. All significant Government costs (including allocation of overhead and indirect costs) must be considered, both for direct Government performance and for administration of a contract. [53:8]

The above rules clarified the "uncertainty" noted in the GAO report of 1978 as to whether in-house costs should be determined on an incremental or a fully allocated basis. Concurrently, however, those same rules may have exacerbated some of the other criticisms lodged against the CITA program by GAO and other concerned groups. In particular, the shift
from an incremental costing approach under BOB A-76 to fully allocated costs in accordance with OMB A-76 necessitates cost data accumulation heretofore unheard of at the operating level of fiscal planning and control.

In their 1978 report, GAO faulted Federal agencies, to include DoD installations, for a lack of complete and accurate cost data. Cost comparisons "aimed at full cost to the maximum extent practical in all cases" may strain CITA managers at an installation to accumulate and allocate all costs attributable to a particular function [53]. Overhead costs, such as depreciation on capital assets and military labor as an indirect cost, will require cost accounting unnecessary under previous directives.

In addition to requiring fuller cost accounting for Government costs incurred both for in-house and contract performance, and more detailed guidance for cost comparisons, OMB A-76 produced some other significant changes concerning the determination of comparative costs. OMB A-76 raised the dollar limit from $50,000 to $100,000 for which a cost comparison is required. OMB A-76 also provided for the use of differentials in considering conversions of either in-house or contract performance, "new starts", and expansions. Existing in-house functions will not be converted to contract performance unless such conversion will result in savings of more than 10 percent of estimated Government personnel costs. A "new start" will not be contracted-out unless the potential savings by in-house
performance are greater than 10 percent of Government personnel costs plus 25 percent of equipment and facilities cost. These differentials are in consonance with the current Administration's commitment to an expansion in contracting out of commercial functions while not creating turmoil in existing programs [53]. OMB A-76 also established a Government employee retirement cost factor of 20.4 percent of basic pay from the 14.1 percent margin of TM-3.

G. DOD AND DA IMPLEMENTATION

DoD implements OMB A-76 through the CITA program and other Defense Department directives. The Army has formally implemented OMB A-76 policy under the title Industrial Activities and Labor Relations Commercial/Industrial-Type Activities in DA Circular 235-1 (DA Circ 235-1).

In FY 1979 and 1980 DoD planned to convert to contract in-house functions involving over 900 industrial work centers. In fiscal 1975, 96,000 DoD CITAs, or about 21 percent, were expended under contract. The remaining 79 percent was justified for in-house operation for the reasons shown in Exhibit II-1. Cost was the criterion in justifying only about 11 percent of the man-years involved. Only a fraction of eligible DA CITA functions have ever been converted to contract [2:65].

Implementation guidance for the CITA program within DoD is found in three publications: DoD Directive 4100.15 of 4 February 1980 titled Commercial and Industrial Type Activities; DoD Instruction 4100.33 of 25 February 1980 titled Operations.
<table>
<thead>
<tr>
<th>Justification for in-house and contract operation</th>
<th>Man-years (thousands)</th>
<th>Percentage of total man-years</th>
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</thead>
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<tr>
<td>In-house activities</td>
<td>368.4</td>
<td>79.3</td>
</tr>
<tr>
<td>Less disruption and delay</td>
<td>109.5</td>
<td>23.6</td>
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<tr>
<td>Military Essentiality</td>
<td>162.0</td>
<td>34.9</td>
</tr>
<tr>
<td>No alternative source</td>
<td>27.8</td>
<td>6.0</td>
</tr>
<tr>
<td>Less costly</td>
<td>16.9</td>
<td>3.6</td>
</tr>
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<td>No reason given</td>
<td>52.2</td>
<td>11.2</td>
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<tr>
<td>Contracted Activities</td>
<td>96.1</td>
<td>20.7</td>
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<td>Less costly</td>
<td>33.9</td>
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<td>3.6</td>
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<tr>
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<td>464.6</td>
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</table>


DoD Directive 4100.15 provides general information on the procedures to be used in the implementation of OMB A-76 policies within Defense Department agencies. The Directive was recently revised and reissued to accommodate the substantial changes promulgated by OMB A-76. It reiterates the national make-or-buy policy as follows:

The Department of Defense shall depend upon both Government and private, commercial sources for the provision of products and services to meet its military readiness requirements with maximum cost effectiveness. [39:2]

In conformance with OMB A-76, the Directive restricts Government performance of CITA functions within DoD to those circumstances where no satisfactory commercial source is available, the function is essential to national defense, or a comparative cost analysis indicates that the Government can provide the product or service at a lower total cost. DoD Directive 4100.15 also specifies the areas where it does not apply and assigns responsibilities within DoD.

DoD Instruction 4100.33 provides detailed guidance and requirements for implementing a review of CITA functions within DoD. A review of a CITA function is the examination of either an in-house or contracted-out function to determine whether the present method of performance should be continued; whether
a function performed in-house should be scheduled for conversion to contract; or whether the function should be designated for a cost comparison analysis for possible change in method of performance. The Instruction specifies that a complete review of all in-house and contract CITA functions inventoried in FY 1980, shall be completed during FY 1980 through FY 1984 [43]. The Instruction is in such detail that it defines functional CITA areas, codes these definitions, and provides instructions for preparing punched cards or magnetic tape for the required annual inventory. For cost comparison analysis procedures the Instruction directs the use of the methods outlined in the DoD CCH.

The stated purpose of the DoD CCH is to provide detailed instructions for developing a comprehensive and valid comparison of the estimated cost to the Government of acquiring a product or service by contract and of providing it with in-house, Government resources [41:1]. As a matter of substance the DoD CCH basically restates the requirements, steps, and procedures found in the OMB CCH. The supplemental guidance included by the DoD CCH provides specific guidelines and cost factors for costing such items as military personnel, DoD wholesale material, a significant level of premature retirements, and precise escalations in various appropriations. The DoD CCH also clarified the following areas of a cost comparison process that are "fuzzy" in the OMB CCH and subject to personal interpretation at the operating level.
1. Procedures for studying activities that are partly contracted and partly performed in-house.

2. Computing material overhead costs for material acquired from contractor-operated stores.


4. Cost differential for a conversion or new start.

5. Rounding rule in computations.

6. Costs of conducting the Comparative Cost Analysis. [41]

Prior to publication of guidance from DoD, DA issued DA Circ 235-1 on February 1, 1980. This Circular cancels previous DA guidance and brings DA policy in line with OMB A-76. DA Circ 235-1 is the working document for Army personnel at the operating level and furnishes more in-depth guidance to those involved in CITA reviews and cost comparisons than DA has heretofore provided to posts, camps, and stations [41]. The DA CITA management office in the Management Directorate within the Office of the Chief of Staff of the Army (OCSA) is presently preparing Change No. 1 to DA Circ 235-1 to reflect implementation feedback from all sectors of DA. The CITA program in general, and DA implementation in particular, is expected to be very dynamic. As OMB A-76 goes through an incubation process in all federal agencies, problems of implementation at the operating level will be resolved.

The process will entail changes in national policy, and Executive emphasis, and consequently, modifications to DA Circ 235-1. DA Circ 235-1 designates responsibilities for implementation of the CITA program within DA. It also provides
some specific figures to the installation cost analysis section on use of inflation indices and composite wage figures. Some of the entities made responsible for CITA actions within DA reflect the shift in emphasis to increased attention to cost effectiveness and efficiency of performance of CITA functions.

Current published guidance by Major Commands (MACOMs) within DA can be generally classified as non-existent. What guidance there has been filtered out of the MACOMs in the form of message traffic and letters [43:39]. Forces Command (FORSCOM) held a conference, with all subordinate units attending, to educate the responsible individuals at the operating level in the management of the CITA program. Special emphasis was paid to the full costing mandate of OMB A-76. A FORSCOM Cost Comparison Procedures Handbook (FORSCOM CCH) was distributed at the conference. The FORSCOM CCH was an attempt to consolidate the procedures and guidance supplied by OMB, DoD, and DA into a single document.

H. DA CITA PROGRAM EMPHASIS

Contracting-out has been a government objective for 25 years, "and the whole idea fits nicely into Jimmy Carter's antibureaucracy, trim-the-fat campaign rhetoric" [59:22]. There is some skepticism concerning this Administration's implementation of such a "trim-the-fat" program. Past experience in attempts to streamline the Federal bureaucracy led to inevitable confrontations with special interest groups. The
American Federation of Government Employees can be expected to work against any program equating to reductions in federal civilian manpower. Congressmen can be expected to be vocal in their support and their opposition, depending upon the impact of the CITA program on their constituency.

However, through OSD imposed ceilings on the defense civilian work force and fewer budgetary dollar resources, the Carter Administration has effectively increased emphasis on possible contracting-out of some installation CITA functions. Coupled with the OSD manpower, OMB published OMB A-76 with a specific caveat that contracting-out would not be used to meet ceilings. Additionally, OFPP became very interested in the arena of Government contracting for CITA related goods and services. OFPP required the complete review, mentioned in Chapter 1, of all DoD CITA functions to determine if the existing method of performance is in accordance with the policy and guidelines of OMB A-76. This review process includes conducting a Management Efficiency Study, writing a Statement of Work (SOW), and performing a Comparative Cost Analysis for each installation CITA function.

DA was quick to realize the implications of OMB A-76. An indication of their concern and emphasis was reflected by shifts in responsibility for CITA program management to higher levels in the DA hierarchy. At the Secretariat level, responsibility was shifted from the Deputy Assistant Secretary of the Army level to the Office of the Assistant Secretary of the Army for Installations, Logistics, and Financial Management.
The Director of Management, OCSA became the overall program manager for the CITA program within the Army. The Comptroller of the Army (COA) was tasked to:

1. Develop and manage a costing system to determine the actual Army costs and savings from management of the Army CITA program.

2. Prepare a DA Cost Comparison Handbook. Specifically, the COA is to develop standard cost factors and procedures for determination of costs through the existing accounting system.

3. Publish and supervise procedures for merging CITA budgeting actions into the normal budget cycle. [22]

This interest from the top has filtered down to the operating level. DA installations, that heretofore paid only lip service to the CITA program, are now deeply involved in refining their management of CITA functions. The shift of management responsibility to the OCSA from the Deputy Chief of Staff for Logistics (DCSLOG) was a step that took the CITA program from a responsible office among equals (Deputy Chiefs), and transferred it to one of the "front burners" in the boss' office. An appreciation of the concern and interest that has been pushed down to the MACOM level "is exemplified by General Shoemaker, the FORSCOM Commander, in the following message he sent to his subordinate commanders" [43:40].

I am concerned with the apparent lack of emphasis on implementing the CITA program. Only five of the 17 reviews scheduled for FY 1979 have been completed. No apparent progress has been reported towards meeting milestones for the 125 reviews scheduled for FY 80...We must act now to give the CITA program the impetus required to meet the FY 80 FORSCOM schedule...I expect each commander to be personally knowledgeable of the status of his installation's CITA review. [28]
I. SUMMARY

After years of fluctuating Executive and Congressional interest in the CITA program, a balanced and comprehensive approach to Government procurement of needed goods and services was attempted in OMB A-76 published in March 1979.

Prior to World War II, DoD provided most of its in-house requirements for products and services with Federal employees and Government-owned facilities. During the war, base support requirements and the demand for increased expertise expanded, necessitating greater reliance on the private sector. Additionally there was the continuing call for economy, efficiency, and effectiveness in Government. This environment resulted in the publication of BOB Bulletin No. 55-4 in 1955. This was the first general policy statement of reliance on the private sector.

BOB Bulletin No. 55-4 and subsequent bulletins carried the policy forward into the sixties. In 1967, BOB issued BOB circular A-76. At that time BOB A-76 was thought to be complete and definitive guidance to all Federal agencies. However, it too underwent several changes culminating in the issuance of OMB A-76 in 1979. OMB A-76 differs considerably from preceding directives and represents an attempt to provide more uniform and definitive guidance.

In an effort to streamline CITA program management at the operating level, and in particular, the preparation of the comparative cost analysis, OMB A-76 was supplemented with a "how to" Cost Comparison Handbook. This OMB CCH incorporated
computation of "total costs", or full costs, attributable to an installation CITA function. The OMB CCH was an attempt to make the cost comparison between private enterprise and the Government more equitable.

The Executive branch generally leads the way in CITA policy development. However, Congress has conducted numerous hearings and issued several reports regarding the CITA program. Although Congress has enacted no legislation establishing in statute a national make-or-buy policy, the legislative branch has voiced intermittent dissatisfaction with Executive implementation. Since 1972, GAO, the audit and investigative arm of Congress, has issued no less than 90 reports critical of OMB implementation of the CITA program. Although unable to develop comprehensive legislation, Congress has made its continuing interest known through input to DoD Authorization and Appropriation Acts.

DoD implements OMB A-76 policy through one directive (DoD 4100.15), one instruction (DoD 4100.33), and their own Cost Comparison Handbook (DoD 4100.33-H). All of these publications have very recently been revised to reflect the latest policy guidance from OMB. DA rescinded all previous guidance regarding commercial and industrial goods and services needed by the Army and now implements their CITA program under one document, DA Circular 235-1.

In the next chapter, the focus will shift to an explanation of the full costing concept vis-a-vis other methods of
costing. The various costs that the operating level must consider in the preparation of a comparative cost analysis will be explored and those which may present potential problems will be identified.
III. THE FULL COST CONCEPT

Determination of the "cost to buy" cannot be limited to existing costs shown on supplier invoices. All direct and indirect costs of functions and facilities which are properly allocable to the "buy" alternative, under the "full cost" concept, must be considered. Determination of the "cost to make" cannot be limited to those identified as manufacturing costs or used in the valuation of inventories. All direct and indirect costs of functions and facilities which are properly allocable to self-manufacture under the "full cost" concept must be considered. [50:807-808]

Private industry has long been using the "full cost" concept and cost accounting as a structure for managerial planning and control and as a basis for analysis of one or more alternative courses of action. In a profit-oriented organization, managerial decisions to make products rather than to buy them (or vice versa) require precise costs for both options. Invalid costs, or disregarded costs, can result in inappropriate decisions and possibly a negative financial impact on the organization. Therefore, the cost department must provide management a "full cost" computation that includes the cost of the materials, the labor, the variable as well as fixed overhead, and even a profit figure.

Much has been written to assist the profit-oriented organization in private industry vis-a-vis allocating all costs to its final product or service. Sophisticated cost accounting systems have been implemented in most contemporary manufacturing and service industries to provide the profit-seeking manager.
timely and meaningful information on revenues, costs, and profits. A cost accounting system is a system that accumulates costs and assigns them to cost objectives. A cost objective is defined as the purpose for which costs are measured. In a manufacturing enterprise, a unit of production may be a cost objective; or the manufacture and sale of a unit of production may be a cost objective. Cost objectives can also be organizational activities (machining, assembling, designing) or units (engineering, production, transportation). Determination of appropriate cost objectives and assignment of attributable costs to those cost objectives is fundamental to cost accounting; and cost accounting facilitates accumulation of "full costs" to support meaningful managerial analysis in decisionmaking.

In this chapter, the "full cost" concept mandated by the Office of Management and Budget (OMB) Circular No. A-76 (OMB A-76) will be investigated. Full costing and cost accounting in profit-oriented as well as nonprofit organizations will also be addressed in this chapter. The incremental costing method used prior to issuance of OMB A-76 will be examined; and the rationale for adoption by the Office of Management and Budget (OMB) of a full cost approach to resolve Government make-or-buy decisions will be contrasted with alternative cost analysis methods. Finally, the ten indirect cost categories outlined in the OMB Cost Comparison Handbook (OMB CCH) will be discussed vis-a-vis their accumulation and distribution to overhead pools.
A. OMB A-76

Under OMB A-76, the Federal Government has opted for a full cost approach to resolve make-or-buy alternatives. As a result, a cost accounting system to assist Commercial and Industrial Type Activities (CITA) managers has been "indirectly" instituted in all Federal agencies, to include Department of the Army (DA) installations. Because some type of cost collection system must be set up to accumulate all direct and indirect costs accruing to a particular CITA, OMB A-76 has "forced" the development of a cost accounting system for accumulating relevant costs at or below the installation or depot level.

OMB developed a Cost Comparison Form (CCF) to provide a framework to account for all costs normally attributable to any CITA function. This CCF is included in the OMB CCH and is to be used for all CITA cost comparisons. A facsimile of the CCF is contained in Attachment C, Appendix B. A step-by-step explanation of each line item on the CCF is also provided in the OMB CCH. To assist cost analysis sections at the installation level, the OMB CCH even includes some "canned" examples of methods to use in calculating each relevant cost. The accumulation of valid cost data and the subsequent appropriate allocation to final cost objectives is the responsibility of the installation Cost Analysis Section. Since DA does not have experience in conducting full cost estimates, the preparation of a valid estimate of in-house Government costs has been, and still is, a problem facing DA installations performing CITA reviews in FY 1980 [43].
The OMB CCH defines a cost objective as a function, organizational subdivision, contract, or other work center for which cost data are desired and for which provision is made to accumulate and measure the cost of processes, products, jobs, capitalized projects, etc., [54:11]. Inevitably, a number of work centers will exist at each DA installation that could be classified as cost objectives. To isolate a particular cost objective for review under OMB A-76, the OMB CCH designates that particular work center's product or service as the "final cost objective." The OMB CCH further defines a final cost objective as a cost objective which has both direct and indirect costs allocated to it, and, in the cost accumulation system, is one of the final accumulation points. For the purposes of the OMB CCH, the product or service of the CITA function under review is the final cost objective [54:11].

Full costing in accordance with OMB A-76 requires consideration of all relevant costs associated with Government performance of the CITA function, to include allocation of overhead and indirect costs. "There has been no standard policy as to how to conduct full costing" [43:99]. Consequently, with the exception of the standard cost figures and broad guidance provided by the OMB CCH, the operating level is left much to its own devices in deciding exactly what costs will be included in the in-house estimate, and how these will be accumulated and allocated. Therefore, the indirect costs that will be allocated to a final cost objective are subject to determination at the operating level until the U.S. Army
Audit Agency (USAAA) is called in for verification and certification. USAAA is responsible for ensuring that each installation's comparative cost analysis is prepared in accordance with OMB A-76 and Supplement No. 1 to OMB A-76, the OMB CCH.

Conversations with installation CITA managers and USAAA staff revealed that problems arise not only concerning costing methods, but also in the interpretation of OMB A-76. Such disagreements between installation cost analysts and USAAA are often decided in USAAA's favor. The fact that all auditors on the USAAA staff are trained accountants gives them an absolute edge over the operating level who normally have limited personnel with accounting experience [43:100].

B. FULL COSTING IN NONPROFIT ORGANIZATIONS

The "full cost" concept and cost accounting are generally considered and discussed as being applicable only to private enterprise manufacturing operations. This is not the case. Many organizations, regardless of size or activity, have adopted the principles of full costing and cost accounting in order to operate efficiently. Recently, nonprofit organizations, to include governmental units on local, state, and federal levels, have started using the concepts and techniques of collecting full costs in order to properly price the products and services they provide to the public [50]. Anthony and Herzlinger present the following rationale for full cost pricing in nonprofit organizations.
A nonprofit organization often has a monopoly position. It should not set prices that exceed its cost, for to do so would be taking unjustifiable advantage of its monopoly status. Furthermore, the organization does not need to price above cost. If it does so, it generates a profit, and by definition no person can benefit from such a profit. (Some organizations do need a small margin above costs because this is the only way they can generate funds needed for expansion.) Neither should a non-profit organization price below full cost because that would be providing service to clients at less than the services are presumably worth; this can lead to a misallocation of resources in the economy. [1:387]

Additionally, pricing below full cost by nonprofit organizations, especially agencies of or sponsored by the Federal Government, may precipitate lawsuits against such organizations on the grounds of unfair competition. In 1971 and 1972 more than 30 complaints on such grounds were filed by commercial operations against universities and their affiliated research institutes for pricing research services below total, or full cost [1:388].

Management planning and control in nonprofit organizations is enhanced through accumulation of fully-allocated costs. Such information is useful to program managers and "budgeteers" in deciding the extent to which each of several programs should "pay for itself", and in justifying periodic budget requests to higher echelons. Full costs become essential as a basis for pricing services provided by public-supported and/or government-regulated agencies such as the Tennessee Valley Authority, the U.S. Postal Service, hospitals, and universities. Full-cost information can help the public manager
when comparing government services with similar services of private sector organizations [1:200].

C. THE CITA PROGRAM UNDER INCREMENTAL COSTING

One of the criticisms of the CITA program prior to OMB A-76 was that in-house costs to the Government were determined on an incremental basis as opposed to a fully allocated basis [46]. The economic principle supporting the incremental method of cost computation was that certain types of overhead organizational units which serve many cost objectives may have to be continued in spite of contract performance of certain CITA functions. Therefore, the calculation of an allocated overhead cost to a final cost objective may, on contract performance, have to be reallocated to other installation functions resulting ultimately in a decision increasing actual out-of-pocket costs. The goal of the incremental approach was to include only the amount by which all costs, direct and indirect, to the Government would change from existing levels of activity. This principle was clearly stated in the Bureau of the Budget Circular A-76 of 3 March 1966 (BOB A-76). BOB A-76 instructions for the preparation of a cost comparison stated that:

[F]or government activities all costs should be included which would be incurred if a product or service were provided by the government and which would not be incurred if the product or service were obtained from a commercial source. [60:16]

This incremental approach was intended to provide the most realistic measure of the financial consequences of in-house
performance of a CITA function rather than performance by contractual agreement with private enterprise.

Private industry challenged the comparability and equity of a cost comparison based on economy unless costs were distributed on the same basis that a commercial firm must use when bidding for Government contracts—a fully allocated basis [46]. Commercial contractors would prefer allocation of all costs at all management levels to each and every installation cost objective. Accordingly, they would prefer a fair allocation of operating and administrative expenses at all echelons, up to and including the DA CITA program management office in the Pentagon, to final cost objectives similar to major industry's cost allocation of Home Office expenses. An incremental costing approach would acknowledge the existence of such operational overhead expenses at all echelons above the installation, and more specifically, above the CITA final cost objective. However, these "allocated" costs would not change because the upper echelon management will remain whether the function is performed in-house or under contract. Therefore, under the principles of incremental costing, the operating and administrative expenses associated with upper management levels would not be relevant to in-house/contract-out decisions.

OMB A-76 also concedes the existence of these upper echelon management costs, but ignores them by placing a discrete boundary on the hierarchical level of cost consideration. The following OMB CCH provision is an admission that in-house costs
are accumulated on a less than fully allocated basis. At the same time, however, the exception, or boundary, accounts for the OMB CCH caveat to fully allocated costs requiring full costs, only "to the maximum extent practical" [53].

A portion of the general and administrative expenses incurred above the installation level are applicable to the product or service being estimated. However, for purposes of this Handbook, only those G&A expenses which contribute directly to the actual operation of the organization will be included in the estimate. [53:46]

This provision excludes costs of upper echelon command management which provides only policy, funding, planning and other staff functions. "To the maximum extent practical", in all other aspects, the in-house cost estimate is to based on fully-allocated costs comparable to the accounting principles and cost standards used by private enterprise. Thus, for purposes of cost estimating, a DA installation is to be considered comparable to a firm in private industry providing needed commercial goods and services.

D. OMB A-76 FULL COSTING AND COSTING METHODOLOGIES

Considering that the estimated value of all outside goods and services purchased by the Department of Defense (DoD) in FY 1978 was $65.2 billion, at stake in the CITA arena is a lot of money and a lot of jobs [44:30]. As such, it is essential to assess the full costing approach of OMB A-76 in relation to different cost analysis levels and corresponding methods which may be used for comparing in-house versus contractor performance of a CITA function.
1. **Out-of-Pocket Cost Method**

Out-of-pocket costs consider only first level indirect, variable expenses. Cost factors such as depreciation, interest, insurance, and taxes are excluded. This cost concept is significant in a management decision to determine whether alternative courses of action will at least return cash expenditures. This method would obviously favor in-house performance since the aforementioned expenses are real expenses to potential contractors and must be included in their bids. This cost slant in favor of Government performance of CITA functions would not be in consonance with the spirit and purpose of OMB A-76.

2. **Incremental Cost Method**

The incremental costing method, as mentioned, only considers the additional expenses directly related to performance of the CITA function under review in the estimate of Government cost. A more appropriate name for incremental costs might be "differential costs" since they represent those costs that are different under one set of circumstances (in-house performance) than they would be under another set of conditions (contract performance). Depreciation, as an example, would be included as a Government cost for any required additional facilities and equipment, but not for existing facilities and equipment. The supervisory costs associated with installation commanders and their immediate staffs, or a "fair share" of those overhead costs, would not be allocated using the incremental cost approach. Excluding such cost
factors can result in comparative costs significantly favoring in-house performance; and this favored position contravenes the policy precepts of OMB A-76. However, the incremental cost method includes more Government cost factors than the out-of-pocket cost approach.

3. Full Cost Method

Under the full cost method an attempt is made to quantify all costs "absorbed" by the Government in providing some particular product or service for internal consumption. Thus, depreciation on existing facilities and equipment, upper echelon management costs, and the cost of support services would be included as part of estimated in-house cost [49:69].

The following example illustrates the potential difference in results depending on the elements of expense included in the cost analysis. The figures represent the cost for one year of operation providing laundry services to three installations.

<table>
<thead>
<tr>
<th>Method</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full cost method</td>
<td>$261,094</td>
</tr>
<tr>
<td>Incremental cost method</td>
<td>$182,000</td>
</tr>
</tbody>
</table>

GAO does not support use of fully allocated costs in preparation of in-house estimates in every circumstance. Their concern is that the real cost of Government might increase unnecessarily in situations where installations have already made large investments in facilities, tools, and equipment [46]. OMB, however, has adopted fully allocated
costs as a "balanced approach" to cost comparisons. The full cost approach is supported by the three "equally valid" policy precepts of OMB A-76 previously mentioned in Chapter I.

Certain costs indirectly incurred by the Government are excluded from the full cost method as being inappropriate or non-quantifiable. These are costs to the Government in the long-run. Therefore, even the full cost approach falls short of complete equitability and comparability since it does not totally consider the long-term effectiveness. The OMB A-76 cost comparison process does not attach a "cost" to, nor consider such factors as technological change, productivity, mechanization, etc. The last cost method, socio-economic costing, considers these heretofore unaddressed cost factors.

4. Socio-economic Cost Method

The socio-economic cost method would consider all costs, directly or indirectly, attributable to a product or service provided in-house. Additionally, this approach would include some non-quantifiables such as employee morale and efficiency, command control of a "responsive" bidder vs. in-house civil servants, unemployment costs, state and local taxes, and other community and installation benefits. Since most of these "costs" are difficult to accurately measure and record in dollars, this socio-economic cost method might be subject to random interpretation. Consequently, accurate
estimates of in-house versus contractor performance costs would be difficult to determine.

5. General

An in-house estimate of the cost to Government is progressively more difficult to obtain as more costs, quantifiable and non-quantifiable, are included in the analysis. An attempt is made by OMB A-76 to come as close as feasible to considering all costs relevant to a make-or-buy decision. Exhibit III-1 illustrates approximately where the OMB A-76 costing approach is located in relation to the other costing methods discussed.

E. FULL COSTING AND CITA COST ANALYSIS FACTORS.

1. The Switch to Fully Allocated Costs

OMB A-76 is the result of an extensive review of the CITA program and its implementation initiated in 1977 by the Carter Administration. A draft of OMB A-76 was published in August 1978 and consideration was given to all comments received. The aim for economy through cost comparisons was a major battleground in this full review of the CITA program. The difficulty centered on the inability to determine accurate commercial and Government costs associated with any one CITA function and to compare those costs on a fair and equitable basis [46]. During the aforementioned review of the CITA program, the Committee on Government Procurement (CGP) made the following recommendation.
COSTING METHODOLOGY

SOCIO-ECONOMIC COST

FULL COST

INCREMENTAL COST

CUT OF POCKET COST

OMB A-76 COST


EXHIBIT III-1

63
Base cost comparisons on:
(a) Fully-allocated costs if the work concerned represents a significant element in the total workload of the activity in question or if discontinuance of an ongoing operation will result in a significant decrease in indirect costs.
(b) An incremental basis if the work is not a significant portion of the total workload of an organization or if it is a significant portion in which the Government has already provided a substantial investment. [46:44]

The General Accounting Office (GAO) supported the guidelines in the CGP recommendation stating that it represented a "balanced approach" to determining Government costs. GAO argued that

while incremental costing can tilt a [cost] comparison toward Government performance in some circumstances, it can also be argued that fully allocated costing can tilt a [cost] comparison away from Government performance in other circumstances. [46:44]

The resulting OMB A-76 issued on March 29, 1979 attempted, in many respects, to be all things to all people within the context of the Government's CITA program. It reaffirmed once again that the Government should rely on the private sector as much as possible. It also adopted the "full cost approach" as a more appropriate method of computing the cost of in-house performance of a CITA function. This was, of course, gratifying to private industry.

In order to calm the inevitable clamor from federal employees concerned over the potential loss of their jobs, OMB injected certain "cost thresholds" into the cost analysis process. In effect, these cost thresholds created a cost analysis process tending to favor continued in-house performance.
of a "new start" [61:4]. These cost thresholds are contained in Appendix B (OMB A-76) as paragraphs 9.d and 9.e.

2. **The Rationale for Adoption of Full Costing**

With publication of OMB A-76 the Director of OMB and the Administrator for Federal Procurement Policy created a new Federal policy for acquiring needed commercial or industrial goods and services for the Government. In Transmittal Memorandum No. 4 the stated rationale for publication of OMB A-76 and its supplement, the OMB CCH, was "to support the increased emphasis on relative economy of Government and contract performance" [55:1]. Encompassed in this new policy was the requirement for cost estimates based on "fully allocated costs". The rationale of OMB and the Carter White House in adopting a "full cost" procurement policy for the CITA program is bolstered by the following four assumptions.

(a) That President Carter was sincere in his campaign promise "to make Government efficient" is assumed. This assumption is bolstered by a statement made by President Carter in his 1978 State of the Union address to Congress. At that time he stated that

> when the government must perform a [CITA] function, it should do it efficiently. Whenever free competition would do a better job of serving the public, the government should stay out. [44:30]

This pronouncement by President Carter is supported not only by the OMB A-76 mandated comparative cost analysis, but also by the requirement that in-house costs be computed based on a Government function "organized and staffed for the most
efficient performance" [53:9]. Since installations are re-
required to reorganize, if necessary, to this "most efficient"
structure on a decision favoring in-house performance, the
most effective and efficient operation should be the end
result of each CITA review.

(b) That a review of a CITA function for possible
contracting-out considers long-term cost effectiveness rather
than short-range savings is also assumed. The long-term
nature of most make-or-buy decisions requires that cost deter-
minations not only consider present costs but also projections
of future costs resulting from inflation and other cost factors.
The National Association of Accountants supports adoption of
a full cost approach to resolving make-or-buy decisions in the
following statement by their Committee on Management Accounting
Practices.

On a short-term basis, the incremental or marginal
cost and investment factors may be controlling; however, the Committee [on Management Accounting
Practices] strongly emphasizes that make-or-buy
evaluations must give consideration to the long-term
implications based on full cost and full investment.
[48:511]

Although "long term" is not specifically defined by OMB A-76,
nor by the OMB CCH, three subsequent years are built into the
CCF (Attachment C, Appendix B), and standard inflation factors
for four subsequent years are provided by the OMB CCH. A
provision for more than four years of cost analysis is also
included on the CCF (Note 1, Attachment C, Appendix B).
(c) The Government policy of reliance on the private sector to supply the products and services it needs is assumed tempered only by the verifiable economy of Government operations.

(d) A truly comparable set of costs to match against commercial firm-fixed price bids is assumed to be the goal of OMB A-76.

The last two assumptions (c & d) are based on the three equally valid OMB A-76 policy precepts previously mentioned in Chapter I of:

(1) reliance on the private sector for goods and services needed by Government agencies,

(2) retention of certain inherently Governmental functions in-house, and

(3) cost comparisons with the ultimate goal of economy in procurement of needed Government goods and services. [53]

F. PRIVATE INDUSTRY ACCOUNTING AND GOVERNMENT CONTRACTS

Private industry uses varied accounting techniques for reporting cash flows, liabilities, expenses, etc. While there are well-established rules of accounting, there is usually more than one acceptable method for an organization to obtain and to report financial data.

The accounting profession has established what are commonly referred to as Generally Accepted Accounting Principles (GAAP). These principles establish rather vague boundaries within which "most" accountants operate. There is no published
list of GAAPs, but most auditors, accountants, controllers, and others in the "costing" business have formed a consensus of opinion on the proper methods of accounting. GAAPs normally apply to financial accounting, but the concepts have been extended to include cost accounting and accounting in non-profit institutions [63].

Congress became concerned about the inconsistencies and the lack of uniformity in the accounting procedures used by private enterprise when doing business on a contract basis with the Federal Government. In August 1970, following a protracted study, Congress established the Cost Accounting Standards Board (CASB) by an amendment to the Defense Production Act (Public Law 91-379). The objectives of the CASB were to:

1. promulgate cost accounting standards designed to promote uniformity and consistency in the cost accounting principles followed by defense contractors and subcontractors under Federal contracts.

2. deal with allocability of cost, not allowability of cost.

3. adhere to a "full costing" concept.

The CASB's standards have the effect of laws for defense contractors and subcontractors [63].

The "full costing" concept mandated by OMB A-76 requires cost analysis sections at the installation level to use some of the same cost accounting techniques in the Cost Accounting Standards (CASs) established by the CASB. Since defense contractors and subcontractors must conform to the CASs it is
essential that the operating level be familiar with those CASs pertaining to full cost allocation and applying to operations overhead. A summary of those CASs is contained in Appendix A.

G. FULL COSTING AND THE OMB CCH OVERHEAD POOLS

The OMB CCH breaks out the indirect costs of a CITA into three overhead expense pools: Operations, Material, and General and Administrative (G&A) Expense. This thesis concentrates on the accumulation of full cost data as outlined in the OMB CCH and the distribution of such costs to these three overhead expense pools. In particular, the difficulties encountered by a DA post, camp, or station in collecting appropriate costs to charge to these overhead pools will be discussed. The Material Overhead Pool includes all those supply-related costs, other than the basic cost of the material, incurred in acquiring, handling, storing, and controlling the material, which must be identified and included in the cost of in-house performance [54:17]. The G&A Overhead Pool includes all those financial, management or other expenses which are incurred for the benefit of the organizational unit as a whole [54:44]. This definition excludes costs associated with functions which service some installation work centers, but do not directly or indirectly benefit the entire post, camp, or depot. The G&A Overhead Pool absorbs any overhead costs not already allocated to Material or Operations Overhead.

G&A Overhead expense is general enough to comprise only one cost pool with one common base, usually total dollar
expense. Operational departments of an installation, such as the Supply Division within the Directorate of Industrial Operations (DIO) or the entire Directorate of Facilities Engineering (DFAE), are not normally considered to be G&A expense centers and consequently do not contribute costs to the G&A expense pool. DIO Supply procures material for the installation. DFAE provides support by maintaining and repairing facilities and equipment. Although such organizations may serve all other installation functions, their services are specific in nature rather than general or administrative. For example, since the sub-elements of DFAE primarily provide maintenance and repair work to various facilities and equipment at an installation, a significant portion of the costs associated with DFAE should be charged to a specific element of expense (EOE) designated "maintenance and repair".

Operations Overhead costs are the indirect costs incurred by an organizational element, called a work center, that produces one or more services or products with at least one of the services or products being the function for which costs are being estimated. If the work center produces only one product or provides only one service, then all indirect costs of the work center are classified as operations overhead costs. If more than one product or service is provided by the work center, then the indirect costs of that work center must be allocated to those products or services [54].
H. OMB A-76 ELEMENTS OF COST

The OMB CCH, the DoD Cost Comparison Handbook (DoD CCH), and DA Circular 235-1 identify ten indirect costs as the more common types of operations overhead expenses. These ten indirect costs are not directly identified with a single final cost objective, but are identified with two or more final cost objectives, or with at least one intermediate cost objective. These ten indirect costs are classified as follows [54]:

1. Indirect Labor
2. Indirect Materials and Supplies
3. Depreciation
4. Rent
5. Maintenance and Repair
6. Support Costs
7. Utilities
8. Insurance
9. Overtime and Other Premium Pay
10. Other Costs

Both the OMB CCH and the DoD CCH offer a good description of and explain in detail the ten classifications of indirect costs. To further illustrate the application of these indirect costs at a DA post, camp, or depot, the Mechanical Branch within a major installation DFAE will be used as an example "final cost objective" under review for possible contracting-out. Exhibit III-2 displays a typical DFAE organizational chart at a major DA installation.
1. **Indirect Labor**

The workers assigned to the Mechanical Branch within DFAE repair and maintain facilities and equipment at the installation, incurring direct as well as indirect labor charges. Direct labor is easily separated out. However, "lost productive time" must be accounted for as indirect labor.

Lost productive time is that portion of a normal production period that is routinely classified as officially excused time, such as: official business, idle time, training sessions, safety lectures, and tardiness. The cost associated with this lost productive time must be accumulated and allocated somewhere as indirect labor. Any costs of supervision and administration within the Mechanical Branch work center would also be considered indirect labor. It should be noted that it is not a necessity that all indirect costs within the work center be pooled or allocated to a Government cost estimate.

Each echelon or management level above the final cost objective has certain costs in supervision and administrative support attributable to the final cost objective. Normally, upper echelon overhead expense is directly proportional to sub-branch direct labor hours (DLH) and consequently DLH is routinely used as the allocation base.

The next management level above the Mechanical Branch is the Utilities Division (Exhibit III-2). The costs associated with supervisory time and administrative office personnel in the Utilities Division must be distributed to the
four subordinate branches. Since supervising time and administrative support to these four branches of the Utilities Division would probably correlate well with each branch's level of activity, such costs are usually distributed to the branches on the basis of DLH.

DFAE administrative expenses as well as costs accruing to the Director, Deputy Director, and Operations Officer can normally be pooled together and allocated over the same base, total DFAE labor cost (direct and indirect). Some DFAE overhead costs such as Environmental and Energy Control would not be allocated to the Mechanical Branch, as well as some other branches of DFAE, since no benefit or contribution may be made to mechanical repair and maintenance.

2. **Indirect Material And Supplies**

Indirect material and supplies are the overhead items such as rags, lubricants, and other minor expenses which occur in a mechanical repair branch as well as a fair share of the supplies used at upper echelon management levels. This type of operations overhead expense is normally charged to the same general account as the indirect labor, and is routinely accumulated in a subsidiary ledger designated "Supplies".

The OMB CCH states a preference for a detailed list of each item of indirect material and supplies. However, when such a list proves impractical together, the OMB CCH suggests aggregating the costs into logical sub-groups such as "expendables" or "office supplies" [54].
3. **Depreciation**

The OMB defines depreciation as a "method used to spread the cost of tangible capital assets (plant, machinery, etc.), less residual value, over their estimated useful lives in a systematic and logical manner" [54:31]. This spreading of the cost of tangible assets over fiscal periods is standard practice in private enterprise. Capital assets used by manufacturing firms in their production are routinely accounted for in accordance with tax laws and GAAPs. It is generally advantageous vis-a-vis tax liability for a private enterprise, profit maximizing firm to "write off", or expense, a specific amount of depreciation for each fiscal, or accounting, period.

The Army does not routinely use or record depreciation on its tangible capital assets (plant, machinery, etc.) as a standard accounting procedure at its posts, camps, or depots; nor is this data accessible elsewhere in DA or DoD. Most major Army installations report that it is even difficult to ascertain a reliable date of acquisition or approximate acquisition cost of most DA capital assets. The Defense Property Disposal Agency maintains residual values for items with a known National Stock Number (NSN); but for older assets and those without an NSN, residual values are often unknown [43:102]. This lack of available data has presented a major obstacle at the operating level in the computation of depreciation.

DA capital assets having a value of $1000 or more must be depreciated. DA capital assets include equipment listed in the Table of Organization and Equipment (TO&E). TO&E equipment
is that equipment assigned to tactical, deployable units and consists of such items as howitzers, armored personnel carriers, trucks, tank, radios, generators, missiles, etc., [43]. The OMB CCH mandates that depreciation be computed using a straight line method of depreciation. The following formula is used in this computation.

\[
\text{Depreciation} = \frac{\text{Acquisition Cost} - \text{Residual Value}}{\text{Expense/year Estimated Useful Life}}
\]

Many of the DA assets are very old. Most private enterprise or Internal Revenue Service expected-life criteria on capital assets, to include real property, would indicate that some such assets have previously been fully depreciated. However, the OMB CCH states, "an asset that is still in use should not be reflected as being fully depreciated" [43:31]. For example, if the Mechanical Branch of DFAE works out of a building constructed in 1945 with a normal expected useful life of 25 years, a construction cost of $11,000, and a residual value (scrap value) of $1000, straight line depreciation of $400 per year ($11,000 - $1000/25 years) would yield a fully depreciated building in 1970. In 1980, if the building is not expected to be replaced until 1995, then the OMB CCH requires the annual depreciation to be calculated over the adjusted 50 years of useful life. The annual depreciation for the building would be $200 ($11,000 - $1000/50 years).

Although it is intended for the in-house and contract cost estimates to be compared on an equitable basis, there
are critical differences between Government accounting for tangible capital assets and private enterprise accounting practices within GAAP. Some notable divergencies are as follows [19:27,45-46]:

--private enterprise will revalue assets downward to reflect a permanent loss in value, while the Army always maintains historical costs.

--private enterprise makes extensive use of fair market value for donated property in accordance with GAAP. The Army acquires little property in such a manner and if so, would record the acquisition at no cost.

--GAAP would record the value of an asset received through an exchange at the fair market value of the exchanged item. The Army would record the value of the asset at the historical cost of the exchanged item.

--GAAP only recognizes land currently being used and with continuing future use. Unused land would usually be treated as an investment. The Army treats all land, in use or not, as a capital asset.

Land, as in the private sector, is not depreciated. However, all capital improvements greater than $1000 must be identified and depreciated. Accumulation and allocation of depreciation becomes a time consuming process in the cost analysis.

4. **Rent**

The rental cost of equipment, land, or other real property used by only one particular work center, should be treated as a direct cost of providing that final cost objective's product or service. Rental cost of an asset determined to benefit the work center under review should use the allocation base of the associated operations overhead cost pool.
As an example, if DFAE rents a copy machine used by all elements of DFAE, the rental cost of that machine would be distributed to divisions and branches within DFAE according to the total DFAE labor cost. If the DFAE Administration is located in a building that is rented, it is appropriate to determine their fair share of the rent based on square footage. However, the distribution of this fair share of building rental cost would still be allocated to the cost objectives on the same basis of labor cost.

5. Maintenance and Repair (M&R)

The cost associated with maintenance and repair of tangible capital assets used by installation work centers must be absorbed into an overhead pool. The normal costs incurred during a fiscal year for maintaining and repairing the final cost objective work center will be included in the Operations Overhead Pool. These M&R costs include only those M&R activities necessary to keep the buildings and equipment in operating condition. The costs of major overhauls and repairs which add value to or prolong the life of the asset should be treated as capital expenditures and depreciated over the extended or remaining useful life of the asset [41].

M&R costs are accumulated and categorized within Army Management Structure (AMS) codes and further broken down by Accounting Processing Codes (APCs) extracted from the installation APC master file. The AMS system is a DA level method of managing obligations/funds on a day-to-day basis. For each AMS code utilized by accounting, budgeting, or programming
personnel, data will be provided delineating obligated funds by month and current fiscal year. The AMS does not normally "capture" costs in a format useful to a CITA cost analysis section. The APC codes, however, capture costs that may be very useful toward determining M&R costs or rates. APCs are established by installation "budgeteers" and planners to assist their purposes. If an APC code happens to correlate with a work center under review, or a particular overhead expense center, then M&R costs associated with that APC could be accessed for use by a cost analysis section. For example, if the "Plans and Operations" section of DFAE has a unique installation-designated APC, then all M&R costs attributable to Plans and Operations can be accumulated by the APC code. This data is input to and accessible from the Army's standardized, automated system for appropriated fund accounting at installation level. This Standard Financial System (STANFINS) produces microfiche output. It can be a tedious task to extract all M&R costs for a particular work center, by element of expense within APC from a number of microfiche.

It may prove more practical to obtain engineering estimates for annual M&R costs by type of facility. At that point costs could be further allocated to cost objectives based on numbers and type facilities used by that work center.

6. **Support Costs**

These costs are incurred during the fiscal year by other installation units in support of the work center providing the final cost objective product or service [41].
These costs may not be obvious except to personnel familiar with the work center's inter-relationships. Therefore, these inter-relationships must be carefully studied to determine what support, if any, provided by another organizational unit, may be chargeable as an indirect cost to the work center under review. For example, the cost of custodial services provided by DFAE Operations to all Divisions and Branches of the organization should be distributed to those Divisions and Branches. Such custodial service cost would normally be allocated on a cost per square foot basis.

Support costs which are general or administrative in nature and which benefit the total organization are to be included in G&A expenses. The Staff Judge Advocate (SJA) and Law Enforcement Command (LEC) provide general support to the entire organization. Therefore, SJA and LEC costs are included in the G&A overhead expense pool.

7. **Utilities**

DA closely monitors and records installation utility costs on a macro basis. However, the author encountered some DA posts, camps, and depots that do not maintain historical records of utility costs by work center, or even by building. It is necessary to be consistent, and use some appropriate engineering estimate to determine the utility costs attributable to a work center. DFAE, for example, may operate out of a number of buildings due to their diverse operations. As a consequence, a means of allocating utility charges (square
footage, per capita, etc.) must be devised at each installation.

8. **Insurance**

The insurance cost is a calculated figure using a standard multiplier provided by the OMB CCH and previously determined personnel costs and depreciation/residual asset values.

9. **Overtime and Other Premium Pay**

This indirect cost category applies only to the work center being estimated. Premium pay inherent to the work center should be charged as Direct Labor. If premium pay is necessitated by the special demands of a single customer or client, the related premium costs should be considered as other Direct Costs of the product or service furnished that customer or client. If premium pay is necessitated by an overloading of the work center's normal capacity, all such premium pay is inherent to that work center and should be charged as Direct Labor. An audit trail should support the amount of overtime and other premium pay included in an indirect cost pool and indicate how the amount was computed [41].

10. **Other Costs**

Any other overhead expense unique to a particular work center and not included in one of the aforementioned categories of indirect costs may be collected under this cost element.
I. SUMMARY OF THE FULL COST CONCEPT

Under a full cost concept, all costs incurred by an organization are either for the benefit of, or are caused by, the organization. Consequently, all costs, direct or indirect, must ultimately be allocated to the appropriate final cost objective, normally a product or service provided by the organization. Private enterprise has made extensive use of full costing to resolve make-or-buy decisions, set product prices, and in general, manage and control corporate costs. Non-profit organizations use fully-allocated costs in order to set prices on their products or services that will equate to a specified level of expenditure recovery.

OMB A-76 attempts to make the cost comparison between private industry costs and Government costs to perform the identical commercial or industrial function more equitable. The primary mechanism promulgated by OMB to promote this desired equitability is an absolute requirement that "cost comparisons ...be aimed at full cost, to the maximum extent practical in all cases" [41:2]. At installation level, the cost estimate is full cost. However OMB has specifically allowed the post, camp, or depot, as a "competitor" in a make-or-buy decision, to disregard overhead expenses above the installation level.

Implementation of OMB A-76 has necessitated the institution of some type of cost accounting or cost collection system at the operating level due to the required consideration of direct costs heretofore ignored, and possibly unrecorded. The more prominent of these costs include:
-- labor fringe benefits, such as the Civil Service Retirement System, Social Security, health and life insurance, and other benefits.
-- depreciation of capital assets, to include Table of Organization & Equipment items,
-- casualty and liability insurance.

A number of indirect costs are routinely gathered and recorded by DA installations. However, these overhead costs are difficult to accumulate by work center since the accounting system does not support expeditious retrieval of data. Consequently, indirect costs have seldom been properly allocated, if at all, to final cost objectives.

In the next chapter the author will examine how one major DA installation is coping with OMB A-76 and the full cost concept. Specifically, a "walk-through" will be conducted of the methodology used by the cost analysis section to accumulate and to allocate indirect costs to the OMB defined Overhead Pools.
IV. COLLECTION AND IDENTIFICATION OF OVERHEAD COSTS

One of the major problems encountered in determining the costs of an in-house operation is the lack of accurate and complete cost data. The report of the Commission on Government Procurement noted that Government accounting records are not kept on a basis that readily permits identification and allocation of all indirect costs and depreciation. Thus, where their use is required, these types of cost elements have to be estimated. At the present time, most DoD accounting systems (exclusive of Industrial Funds) do not produce appropriate data on the cost of carrying out operations. Reliable cost data is indispensable in making sound decisions on whether to obtain needed services from in-house or commercial sources.

[46:42-43]

The above excerpt was extracted from a 1978 report produced by the General Accounting Office (GAO) concerning the progress and problems associated with the national policies and programs for obtaining commercial or industrial products and services for Government use. The advent of "full costing" in Office of Management and Budget Circular No. A-76 (OMB A-76) increased the need for "accurate and complete cost data". Despite the perceived need for more detailed and appropriate cost data identified in 1978, the Department of the Army (DA) continues to operate under virtually the same accounting system today. Therefore, if sound decisions are to be made at installation level vis-a-vis contracting-out versus Government performance, increased effort must be applied toward acquiring pertinent costs to support all levels of cost analysis, to include full costing.
Collection of relevant cost data is essential to support preparation of a valid estimate of costs to the Government to perform Commercial and Industrial Type Activities (CITA). Cost data necessary to facilitate such costing is outlined in the Cost Comparison Handbook (OMB A-76) published concurrently with OMB A-76. The purpose of this chapter is to discuss the complexities of identifying those costs chargeable to the General and Administrative (G&A) Expense, Material Overhead, and Operations Overhead Pools defined by the OMB CCH.

A. GENERAL

In order to address specific details rather than generalities to the maximum extent practical, a major U.S. Army installation, referred to hereafter as Fort Finance, was selected for examination. The chapter will focus on how and why the Fort Finance Cost Analysis Section (FCAS) identified and collected costs in relationship to the full cost concept. Specifically, the methodology used by the installation's cost estimators to accumulate the costs necessary for comparative cost analysis will be discussed vis-a-vis "other" cost collection techniques as well as the procedures outlined in the OMB CCH. The other cost collection techniques include costing approaches used at similar installations, and procedures recommended by CITA program management personnel within and outside DA.

The primary information upon which this chapter is based was obtained from three major Army installation costing
"departments" or "sections". The staff of the U.S. Army Audit Agency (USAAA) also provided input, primarily in assessing various costing approaches as cost accountants and not as DA auditors. The author also gathered information from conversations with personnel involved in the implementation of the CITA program at numerous DA installations. Additionally, the U.S. Army Forces Command (FORSCOM), the Office of the Comptroller of the Army (COA), and the DA CITA management office within the Office of the Chief of Staff of the Army (OCSA) were contacted. These upper management levels provided a different insight to the CITA program in general and costing techniques in particular. Much of the information is proprietary in nature and reference to specific installations and/or individuals will not generally be made.

B. ORGANIZATIONAL STRUCTURE

Preparation of a Government cost estimate using fully allocated costs requires a knowledge of the total organizational structure and its functional relationships. Most DA installations are structured with clear operational relationships evident in the organizational charts. However, there may be instances of functional relationships which are not apparent on organizational charts. Therefore, it is incumbent upon a CITA cost analysis section to determine which work centers, on or off the installation, provide services or benefits to other installation activities.
The installation selected for examination is a major FORSCOM post with an organizational structure typical of such installations. The installation commander is also the commanding officer of the predominant unit on the post, normally an Infantry or Armor Division. As such, control of and responsibility for all CITA functions at the installation is vested in the hands of the Division Commander and his staff. For example, at Fort Finance the Division Commander in his role as Installation Commander has ultimate responsibility for proper management and implementation of the CITA program.

As is standard practice on all major DA installations, tenant units, large and small, occupy garrison space and gain support from Fort Finance's CITA work centers. An organizational chart of an installation structure similar to Fort Finance is contained in Exhibit IV-1. These charts provide a picture of the size and complexity of the installation.

Fort Finance supports approximately 15,000 active military personnel and twice that number in military dependents. The installation employs close to 3000 civilian personnel to include the Army and Air Force Exchange (AAFES) system employees. The CITA review mandated by OMB A-76 impacts on approximately 175 of the military positions and over 550, or 18 percent, of the authorized civilian manpower.

C. AUTOMATION AT FORT FINANCE

As discussed in the previous chapter, the full costing approach to accumulating Government costs to perform a CITA
ACRONYMS TO FORSCOM INSTALLATION

ORGANIZATION CHART

CG - Commanding General
ADCM - Assistant Division Commander for Maneuver
ADCS - Assistant Division Commander for Support
DIC - Deputy Installation Commander
IG - Inspector General
PAO - Public Affairs Office
SJA - Staff Judge Advocate
CHAP - Chaplain
EEO - Equal Opportunity Office
MISO - Management Information System Office
IntR - Internal Review
G-1/DPCA - Director of Personnel Affairs and Community Activities
G-2/DSEC - Director of Security
G-3/DPT - Director of Plans and Training
G-4 - Logistical Support, Division
G-5 - Civil Affairs
DFAE - Director of Facilities Engineering
DIO - Director of Industrial Operations
DC-E - Director of Communications-Electronics
COMPT - Comptroller
CPO - Civilian Personnel Office
AG - Adjutant General
LEC - Law Enforcement Command
F&AO - Finance and Accounting Office
USAFLO - U.S. Air Force Liaison Office
DHS - Director of Health Services
DDS - Director of Dental Services
AVN - Installation Aviation Support

EXHIBIT IV-1 (CONT.)
function is new to the typical DA installation. Consequently, no automated system has been designed that facilitates directly capturing cost data paralleling the cost classifications outlined in the OMB CCH. However, Fort Finance and other DA installations contacted by the author, have used some of the existing inventory of automated systems within DA to assist in the capture of "full costs". The automated system most often mentioned as a source of information was the Army's standardized system for appropriated fund accounting at installation level, the Standard Financial System (STANFINS). This was the only system found useful by the Fort Finance cost estimators in collecting relevant cost data. STANFINS does not address all of the elements of cost outlined in the OMB CCH. While some elements of expense (EOEs) in STANFINS parallel the cost categories outlined in the OMB CCH, other cost classifications are not intrinsic to the system, e.g., depreciation expense, insurance cost, and support costs.

The preparation of an in-house estimate of Government cost to perform a CITA function is subject to audit by the USAAA, and ultimately by "interested" parties from Government employee unions and/or industry. Therefore, the in-house estimates must be based on the best cost data available. Although STANFINS was not specifically designed to provide cost data relevant to the CITA program, it is one of the primary sources of cost information at the installation level.

Those elements of cost relevant to a comparative cost analysis and accessible from STANFINS are not easily and
expeditiously extracted from its microfiche output. Cost estimators within the FCAS indicated that it takes a keen eye, a "stubby" pencil, and most of all, an inordinate number of man-hours to "pull" the available and required data off the microfiche. This phenomenon is not unique to Fort Finance since STANFINS is an Army-wide system.

The FCAS extracted pertinent cost figures by EOE from a STANFINS output known as the Detailed Cost Report (DCR). The FCAS was then able to estimate, by installation organizational activity, actual civilian labor cost, actual cost of materials and supplies, and specific maintenance/repair costs. These figures represent cumulative costs as of the date the DCR was produced. The DCR is produced on a weekly basis. This process of extracting appropriate cost data by EOE in the initial review consumed approximately eight man-months of cost estimating time. This time is expected to be reduced significantly on subsequent reviews as the FCAS becomes more aware of exactly where and how to collect such costs. The FCAS characterized STANFINS as a useful source of cost data that could assist other DA installations. However, STANFINS was not structured to support direct capture of cost data for preparation of CITA in-house cost estimates.

STANFINS is currently undergoing a redesign and the modified system is expected to contain provisions for cost accounting supporting the cost requirements of the CITA program. However, this system is not expected to be implemented in the near
future. FORSCOM's recommended interim solution would be to realign the existing installation master file of Account Processing Codes (APCs) to facilitate capturing cost data supporting the preparation of a CITA in-house cost estimate. This change would have to be initiated by the installation.

Another phenomenon by no means exclusive to Fort Finance is the structure of the installation master file of APCs. Fort Finance's master file of APCs is formulated at the discretion of installation Program Directorates with the guidance and assistance of the Comptroller Budget Office and the Installation Accountant. The APCs are structured to facilitate capturing cost data primarily useful toward meeting reporting requirements and executing the installation's budget. Realignment of the existing structure of the APC master file, or creation of a new structure to facilitate capturing cost data for CITA reviews as recommended by FORSCOM is no small task. Although restructuring the APC master file is feasible, a significant and recurring demand for data not presently, or readily, accessible under the current file would be necessary to bring about such a management decision. Fort Finance's present inventory of APCs would have to be completely purged. Cost figures presently in the account codes would have to be accounted for and stored for retrieval at a later date. It would necessitate a lengthy and well coordinated effort by the Program Director, the "Budgeteers", and the Installation Accountant to devise a "new" APC structure.
In recognition of the degree of effort necessary to restructure the installation APC master file, the general position of Fort Finance is the following. Prior to restructuring the APC master file,

1. a reliable amount of expertise has to be acquired to facilitate accurate identification of the costs relevant to producing a valid estimate of the cost to the Government to perform a CITA function,

2. the need for "identified" relevant CITA cost data must be recurring (at least semi-annually), and

3. the OMB A-76 costing approach must be perceived as a methodology that will remain in existence for the long-term.

At present not one of the above criteria has been met at Fort Finance nor is it expected in the foreseeable future. Additionally, in spite of any APC master file restructuring at the installation level, the generation of appropriate EOE[s] paralleling the cost categories outlined in the OMB CCH remains a function controlled at DA level.

The other automated systems presently in the DA inventory and encountered by the author in conversations with various DA installations are contained in Exhibit IV-2. Not one of these systems was designed, nor is it presently structured, to support expeditious retrieval of relevant costs vis-a-vis preparation of a CITA in-house cost estimate. More importantly, the cost estimators at Fort Finance did not find any of the DA automated systems, with the exception of STANFINS, useful in their approach to collection of full costs.
DA AUTOMATED SYSTEMS

STARCIPS - The Standard Army Civilian Pay System (STARCIPS) interfaces with the Army's standardized, automated system for appropriated fund accounting at fiscal station level, the Standard Financial System (STANFINS) to provide actual pay data by installation Account Processing Codes (APCs).

APACHES - The Automated Personnel Accounting Cost History Estimating System (APACHES) provides actual and estimated payroll figures by the Army Management Structure Codes (AMSCOs). AMSCOs are keyed at DA level to an Allotment Serial Level or Program Director Level. This system is very sophisticated and potentially useful to cost estimators.

SIDPERS - The Standard Installation Division Personnel System (SIDPERS) is an automated military personnel accountability system. It provides no cost data, but is an accurate and timely system for capturing "on-hand" versus authorized military personnel, enlisted and officer. It could be useful to cost estimators. With additional programming it could provide a distribution of military personnel "on-hand", enlisted and officer, by grade versus authorized slots. In standard format SIDPERS outputs no distribution of the grade structure, providing only number of officer/enlisted "on-hand" and number authorized.

ITAADS - The Installation of the Army Authorized Documentation System (ITAADS is primarily a MACOM level management tool. It maintains data on personnel and equipment authorized at each installation in accordance with the appropriate TDA or MTOE. No actual personnel and/or equipment cost data is provided by this system. Its major role is in support of personnel and equipment planning and control at the MACOM, and as a basis for personnel and/or equipment requisitions at both the installation and the MACOM.

SAILS - The Standard Army Intermediate-level Logistics System (SAILS) is primarily a logistics management information system. It enables the installation, on a daily basis if necessary, to update the status of material and supply requisitions. It notes orders rejected by an inventory control point, provides expected delivery dates, and tracks when items were issued. It is helpful to supply personnel, but provides no details as to cost.

EXHIBIT IV-2
The U.S. Army Accounting and Finance Center (USAFAC) is currently developing a change to DA Circular 235-1 titled Industrial Activities and Labor Relations Commercial/Industrial Activities, establishing a standard system for determining G&A costs and Material Overhead costs. This system will not be automated nor is it expected to utilize any of the existing systems.

Fort Finance, according to CITA program management personnel at FORSCOM, is representative of major installations throughout the continental United States. Consequently, estimation of Government costs to perform a CITA function will remain, for the near-term, a primarily manual process.

D. CITA PROGRAM IMPLEMENTATION AT FORT FINANCE

The CITA program at Fort Finance is currently the responsibility of the Director of Industrial Operations (DIO). Command support for the CITA program was demonstrated by a letter published over the signature of the Installation Commander and addressed to all units at Fort Finance. The command letter urged the fullest cooperation with the DIO in CITA program implementation. Additionally, the DIO was appointed on command orders as the installation CITA Program Manager. The latter action enables the DIO to "task" co-equal Directorates as the CITA Program Manager rather than as DIO. The Fort Finance CITA Coordinator indicated that the tone of the command letter created the proper atmosphere for program success.
Presently, three positions have been authorized for CITA program management at the installation. A GS-12 position was designated as the Deputy Program Manager. This position is also the Installation CITA Program Coordinator and the primary individual responsible for program implementation. A Program Analyst position (GS-11) was authorized four months ago and was recently filled. The third space has also been filled and is located in the contracting section of DIO. The latter space, as described by DIO personnel, was to help fill a void in CITA expertise existing in the Procurement Branch.

On May 1, 1980 the CITA program at Fort Finance was reorganized and restructured. The CITA Coordinator position was upgraded from a GS-11 to a GS-12 with a direct operational reporting link to the DIO. More importantly, for purposes of this thesis, the Comptroller was assigned full responsibility for preparation of in-house cost estimates.

Although no positions for CITA program management were authorized within the Comptroller Directorate (COMPT), one military (0-2) and two civilian personnel have essentially been devoting full time to the task of accumulating the in-house costs and developing a costing methodology. Significantly, reassigned to the FCAS within the COMPT is a Certified Public Accountant. He provided the much needed impetus to get the "costing" associated with the CITA program "off the ground". With few exceptions, CITA managers contacted by the author identified the lack of cost accounting expertise at the typical DA installation as an impediment to cost analysis in accordance
with OMB A-76. This phenomenon is evidently not unique to DA as the Air Force in an internal study of contracting-out noted that the lack of cost accounting at base level created a problem in CITA program implementation.

The FY 1980 CITA review schedule includes five functions. This constitutes a revision to Fort Finance's original plan to review seven functions in FY 1980. Exhibit IV-3 contains Fort Finance's revised five-year plan for CITA reviews. Management Efficiency Studies have been completed for each of the five functions. However, at present, none of the Statements of Work (SOWs) have been completed. This is not perceived as a problem by the CITA Coordinator. However, given the rapidly approaching end to FY 1980, the SOWs are not expected to be completed within the published revised schedule. The OMB CCH refers to "preparation of the work statement" as "a critical step". The OMB CCH emphasizes that the SOW must "serve as the basis for determining both the contract and Government cost, to insure comparability and equity in the cost analysis" [54:5-6]. In its analysis of over 200 in-house versus contract cost studies since 1976, DoD found that vague and ambiguous SOWs tend to cost the military services more money [51:51].

The CITA Coordinator at Fort Finance related that FORSCOM surveyed each installation vis-a-vis progress on CITA program implementation. At that time, the CITA Coordinator queried FORSCOM as to their perception of Fort Finance's progress relative to other MACOM installations. The response was that
REVISED CITA PLANNED REVIEWS FOR FY 80-84

FY 80
Installation Bus Services
Laundry and Dry Cleaning Services
Insect and Rodent Control
Refuse Collection and Disposal Service
Motor Vehicle Operation

FY 81
Aircraft Maintenance
Non-combat Vehicle Maintenance
Electronics and Communications Equipment Maintenance
Vessel Maintenance
Test Measurement and Diagnostic Equipment Maintenance
Armament Maintenance
Office Equipment Maintenance
Upholstery Maintenance and Repair
Furniture Repair
Containers, Textiles, and Tent Repair
Glass Replacement and Window Repair
Body Repair and Painting
Accessory Overhaul
General Repairs/Minor Maintenance
Frame and Wheel Alignment
Battery Maintenance and Repair
Tire Maintenance and Repair
Major Component Overhaul
Material Handling Equipment Maintenance
Crane Maintenance
Construction Equipment Maintenance
Other Maintenance and/or Repair of Equipment
Military Police Patrol
Law Enforcement Command Administration

EXHIBIT IV-3
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FY 82
Air Conditioning and Refrigeration Repair
Air Conditioning Maintenance
Dining Facility Equipment Repair
Appliance Repair
Rehabilitation-Tenant Change
Roofing
Tiling
Flooring
Screens, Blinds
Glazing
Exterior Painting
Interior Painting
Electrical Repair
Plumbing
Heating Maintenance
Emergency/Service Work
Preventive Maintenance
Grounds (Improved)
Grounds (Other than Improved)
Surfaced Areas
Railroad Facilities
Other Maintenance, Repairs, Alteration, and Minor Construction
  of Real Property

FY 83
Wearing Apparel
Printing and Reproduction
Audiovisual Service
Still Photography
Motion Photography
Television
Audio

EXHIBIT IV-3 (CONT.)
Graphic Art  
Audiovisual Training Aids and Devices  
Audiovisual Libraries  
Audiovisual Distribution and Depositories  

FY 84  

Custodial Services  
Food Services  
Storage and Warehousing  
Receipt  
Packing and Crating of Household Goods  
Shipping  
Care, Re-warehousing, and Support of Material  
Preservation and Packing  
Packing and Crating  
Construction Products  

Note: A number of the above CITA functions could be easily combined into one functional grouping for purposes of review. For example, in FY 81, Upholstery Maintenance and Repair, Furniture Repair, and Containers, Textiles, and Tent Repair could be combined into one activity work center.

EXHIBIT IV-3 (CONT.)
Fort Finance was in the upper 50 percent. This indicates that Fort Finance represents a median measure of progress within DA in the area of CITA management. Although Fort Finance's CITA program appears to be gaining increased command interest and is apparently moving in the right direction, the installation is not expected to complete even one CITA review for FY 1980.

E. BREAKDOWN OF OVERHEAD ACTIVITIES - FORT FINANCE

1. General and Administrative (G&A) Overhead

As defined in Chapter III, G&A expense includes "any management, financial and other expense which is incurred by or allocated to an" installation work center and "which is for the general management and administration" of the installation as a whole [41]. Therefore, as a first step, the FCAS examined the installation organizational structure to determine functions that benefit the installation as a whole. The following distribution of costs to Fort Finance's CITA G&A expense pool is the result of that study.

All costs attributable to the installation Command Group were included in the G&A cost pool with the exception of:

a. the costs associated with the Assistant Division Commander for Maneuver (ADCM), his aide-de-camp and his secretary, and

b. the costs associated with the Assistant Division Commander for Support (ADCS) and his secretary.
The costs attributable solely to the ADCM and ADCS were excluded because the functions they perform, the management they disseminate, and the support they provide is considered to be directly and indirectly of benefit only to the Division rather than the installation as a whole. It is appropriate at this time to point out a significant feature of "costing" under the OMB CCH. Although the Division, be it an Armor Division or an Infantry Division, is the largest unit at the installation, it is still considered just another organizational entity. For example, at one FORSCOM installation, close to 90 percent of the facilities, equipment, and population belong to the Division located at that post. However, unless a work center provides support to the entire Division as well as the other approximately 10 percent non-divisional units on the installation, it was not considered a G&A activity in accordance with the OMB CCH, e.g., benefiting the installation as a whole.

100 percent of the costs associated with the following activities was distributed to the total G&A cost pool based on a FCAS assessment that each of them provides support to the installation "as a whole".

a. Staff Judge Advocate (SJA)
b. Public Affairs Office (PAO)
c. Inspector General (IG)
d. Chaplin
e. Adjutant General (AG)
f. Directorate of Communications-Electronics (DCE)
g. Civilian Personnel Office (CPO)
h. Installation Aviation
i. Directorate of Personnel and Community Activities (DPCA)
j. Comptroller (COMPT)
k. Law Enforcement Command (LEC)
l. Directorate of Plans and Training (DPT)

The costs of the remaining installation staff sections were distributed in the following manner.

a. Assistant Chief of Staff (AC/S), G-1, with the exception of the Division Surgeon was charged to the total G&A cost pool. The Division Surgeon was an excepted cost because "medical expense" is absorbed in the labor cost fringe benefit rate.

b. AC/S, G-2 with the exception of the Air Force Weather Detachment (AFWx Det) was charged to the total G&A cost pool. The AFWx Det was strictly attached to the Division as a source of operational weather data. It is therefore, a support cost chargeable solely to the Division rather than to the installation as a whole.

c. AC/S, G-3--Not considered a G&A activity. The total service provided by G-3 is considered to be in direct as well as indirect support of the Division alone rather than benefiting the installation as a whole.

d. AC/S, G-4--Not considered a G&A activity. The total service provided by G-4 is considered to be in direct
as well as indirect support of the Division alone rather than benefiting the installation as a whole.

e. AC/S, G-5--Not considered a G&A activity. The total service provided by G-5 is considered to be in direct as well as indirect support of the Division alone rather than benefiting the installation as a whole.

f. DIO

(1) Procurement Division--86 percent of the costs were charged to the total G&A cost pool. This percentage was the result of an estimate provided by the Assistant Chief of the DIO Procurement Branch. He estimated that 86 percent of the Branch workload is spent on service or construction type contracts benefiting the installation as a whole.

(2) Maintenance Branch--97 percent of the costs were charged to the total G&A cost pool. This percentage was derived from a Standard Monthly Maintenance Usage report (SMMS). An average of three months data was used to arrive at the 97 percent figure. The SMMS report is only required to be on file for a 90-day period.

(3) Transportation and Services Branch--This Branch is divided into the five areas of Harborcraft, Laundry, Administration, Transportation Motor Pool, and Food Service. Food Service was an excepted cost because the "subsistence expense" is absorbed in the labor cost fringe benefit rate. The other four functions were charged to the total G&A cost pool.
(4) Administration and Plans/Operations--These branches of DIO were combined and 60 percent of their "joint" costs were charged to the total G&A cost pool. This percentage was the result of an estimate provided by the Fort Finance CITA Program Coordinator. He estimated that 60 percent of the DIO administrative workload and 60 percent of DIO Plans and Operations are spent conducting business related to commercial or industrial operations in support of the whole installation.

g. Finance and Accounting Office (F&AO)--The costs attributable to the installation F&AO with the exception of the stock fund control section's labor cost, were charged to the total G&A cost pool. The stock fund control section's labor cost will be an "add-on" to the material overhead costs.

h. Directorate of Facilities Engineering (DFAE)--The labor and supply/storage costs accruing to DFAE are extracted from total DFAE operating costs and contribute to development of "utility" rates. For example, labor costs and supply/storage costs unique to, and attributable to, operation of the DFAE Sewage Plant contribute to the development of a Sewage "utility" rate. The labor associated with water pumping operation and the electricity costs incurred contribute to the development of an Electricity "utility" rate. The remaining DFAE operating costs, to include depreciation, are used to develop an installation "maintenance and repair" rate. As such, DFAE costs disappear into specific cost categories provided by the OMB CCH, e.g., "utilities" and "maintenance and repair".

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i. Management Information System Office (MISO)--MISO costs disappear into the G&A costs of other organizational entities. Based on a monthly usage report produced by MISO, 97.9 percent of computer system usage is by a few organizations, all of which are major G&A organizations such as F&AO, DIO, and DFAE. Therefore, the MISO operating costs are prorated to such G&A organizations based on usage. The remaining 2.1 percent of the MISO cost is distributed to Material Overhead, based again on the MISO monthly usage report.

The Fort Finance installation G&A cost pool could be realigned to include only a portion of some organization's operating cost rather than a 100 percent allocation; or a larger percentage of the cost of other organizations could possibly be charged to G&A expense. However, based on the judgment and understanding of the FCAS, the installation's organizational inter-relationships equate to the above cost distribution of G&A expenses. Further separation of costs inherent to any one organization may create a situation of specious accuracy; or may require an exorbitant amount of time and effort while having very little impact on the final cost allocation to a CITA function (or group of CITA functions). Ultimately, the USAAA will examine the costing methodology and reject or certify the Fort Finance approach based on their interpretation of what OMB meant by "fully allocated costs".

2. Material Overhead (MatOvhd)

As defined in Chapter III MatOvhd consists of the indirect costs related to an activity or group of activities
for "acquiring, handling, and/or controlling required materials" [41]. These costs accrue until the materials are used or consumed in the production of goods and services. The FCAS has placed the following costs in the MatOvhd cost pool.

a. The F&AO stock fund control section's labor cost.
b. 2.1 percent of the MISO operating cost (based on a prorated share), and
c. 100 percent of the costs associated with the DIO supply function.

Similar to the G&A cost pool, the composition of the MatOvhd cost pool could take various forms. Based on interpretation by the FCAS as to exactly when materials are "acquired, handled, and/or controlled" for use by the final cost objective, total MatOvhd expense could fluctuate. As in the case of the G&A cost pool, the USAAA will ultimately decide if all pertinent costs have been included in accordance with the OMB CCH.

3. Operations Overhead (OpsOvhd)

As defined in Chapter III, OpsOvhd costs are the indirect costs incurred by an installation work center "that produces one or more services or products with at least one of the services or products being the function for which costs are being estimated" [41]. If one product or service is produced by the work center, then all indirect costs absorbed by the work center are OpsOvhd costs. If the work center produces more than one product or service, then the indirect costs absorbed by the work center must be allocated to the products
or services. Typical OpsOvhd elements of cost are contained in Exhibit IV-4.

Fort Finance has not reached the stage in the FY 80 review process to compute OpsOvhd expense attributable to a particular CITA function, or group of CITA functions. At that time, it will be the task of the cost estimators to determine how to allocate a fair share of OpsOvhd costs to the product(s) or service(s) for which costs are being estimated.

Presently, the FCAS has combined OpsOvhd into a single pool of costs with G&A expense Overhead. The FCAS will have to separate the OpsOvhd costs attributable to a particular CITA work center and enter that figure on line 5 of the OMB CCH Cost Comparison Form (CCF) contained in Attachment C to Appendix B.

If indirect costs vary directly with a single measure of expense or activity and the various products or services produced by the work center benefit proportionally from the OpsOvhd costs, that single measure may be used as an allocation base. Possible allocation bases may be dollars of OpsOvhd per direct labor hour, or per direct labor costs, or per total direct costs. If OpsOvhd costs do not vary directly and proportionately with a single measure of activity, then either

a. special OpsOvhd costs will be identified only for the product or service being costed,

b. two or more allocation bases will have to be developed to determine the fair share of a given product or service OpsOvhd costs.
TYPICAL OPERATING OVERHEAD EXPENSES

1. Supervision and administration costs within the work center, to include related nonproductive leave or training time.
2. Fringe benefits associated with indirect labor.
3. Indirect materials and supplies, to include any surcharges.
4. Depreciation covering equipment and facilities (capital assets).
5. Cost of rental property used in performing the CITA function.
6. Cost of maintenance and repair of Government property used in performing the CITA function.
7. Other support costs, to include travel, communications, motor pool support, etc.
8. Utilities.
9. Casualty and liability insurance computed on the cost of labor, material, facilities, etc.
10. Overtime or premium pay associated with the operation of the work center.
11. Other costs as might be determined.

EXHIBIT IV-4
The fair share of OpsOvhd allocated to the final product or service, e.g., the final cost objective, will be entered on line 5 of the CITA Cost Comparison Form (Attachment C, Appendix B) [41].

The FCAS has not yet determined how OpsOvhd will be allocated to work center goods and services. However, this methodology allocation decision is not critical until an acceptable SOW has been written for each CITA function, or group of functions. At that time the FCAS must choose appropriate allocation methods and the USAAA must certify that such methods are within the "full costing" guidelines of OMB A-76.

The USAAA must also certify the methodology used by the FCAS to collect the costs allocable to the OpsOvhd cost pool, and the MatOvhd cost pool. This process is tedious and as mentioned earlier, consumed approximately eight man-months of FCAS time.

F. HOW COSTS WERE COLLECTED

1. Indirect Labor--Civilian

As previously mentioned in the discussion of automated systems, it is possible to obtain civilian manpower costs from STANFINS. Although the cost category "indirect labor" is not actually provided by the automated system, the organizational labor costs obtained may be useful toward predicting indirect labor costs. The cost figures "pulled off" the microfiche output are actual accumulated payroll cost per week per organization up to a specific date. For example, the costs collected
by the FCAS from the "end of May" weekly DCR constitute total payroll costs by organizational entity from 1 Oct 1979 to 31 May 1980, or an eight month portion of FY 1980. The FCAS has annualized the data by simply multiplying the figures by 1.5.

The total payroll figures for eight months in the "front-end" of the fiscal year are recognized by the FCAS as not the "most" accurate. Since the cost figures obtained from the DCR do not separate lost productive time (e.g., idle time, training, etc.), vacation pay, sick pay, or incentive pay, the "annualized" figures should fluctuate directly with number as well as grade structure changes. For example, if a significant number of hires occur in the last four months of the fiscal year, then the "annualized" figures based on the first eight months could be lower than actuality; or if a significant number of employees are laid off in the last four months of the year the figures could be skewed to the upper end. In order to meet personnel ceilings or to remain within budgetary or fiduciary constraints, temporary hires are sometimes released toward the end of the fiscal year. Therefore, the labor costs in the latter part of the fiscal year can be expected to be lower. Of course, the standard end-of-year "bulge" in spending dollars may offset this "lost labor" with end-of-year "new labor". Consequently, the cumulative total payroll figures obtained by the FCAS can be generally classified as being "as good as most" figures available.
Another approach to obtaining labor cost from STANFINS was considered by the FCAS. FY 1979 labor costs by organizational entity could also be pulled off the microfiche. These figures could be inflated by some index to reflect FY 1980 costs. This approach was rejected as less appropriate than using the eight months of FY 1980 data. It was discarded since extreme fluctuations in civilian personnel strength occurred in some Fort Finance organizations in FY 1979 which would skew the ultimate results for extrapolation into FY 1980. Additionally, USAAA emphasizes actual up-to-date estimates of costs. This latter approach is in consonance with OMB A-76's goal of attaining in-house costs truly comparable with industry figures.

Another approach to estimating civilian labor cost would be to use the FY 1980 Budget for the appropriate elements of cost. The benefit "tack-ons" could then be applied for a total annual cost of civilian manpower. However, the FCAS discarded this approach concluding that the figures would be only as good as the Budget data and would probably be on the high side due to "incrementalism" inherent to most budgets. Also, it is unlikely that USAAA would accept a "budgeted" figure as reflecting actual costs; and private industry "competitors" for CITA contracts may object to the use of what they may consider "arbitrary" budget figures.

The FCAS data for annual civilian labor by organizational entity constitutes accurate figures for a point in time, e.g., end of May 1980. More importantly, since the data
consists of actual, current cost figures, the USAAA and competitive bidders from private industry should accept the subsequent allocation of "overhead" labor costs to work centers. Naturally, the allocation will only be as justifiable as the base used for the distribution of costs, and that is another consideration for the FCAS.

The FCAS not only broke down the civilian labor cost by organizational entity, but also into the following categories.

a. Full-time, permanent-GS
   (1) basic pay
   (2) overtime pay
b. Full-time, permanent--Wage Grade (WG)
   (1) basic pay
   (2) overtime pay
c. Intern, permanent
   (1) basic pay
   (2) overtime pay
d. Sub-total permanent labor cost
e. 26% fringe tack-on package
f. Total permanent labor cost
g. Full-time temporary--GS
   (1) basic pay
   (2) overtime pay
h. Full-time temporary--WG
   (1) basic pay
   (2) overtime pay
i. Part-time--permanent
The FCAS breakdown of labor costs by type of employee in each organization is designed to assist the allocation process. Also it breaks out the temporary employees and part-time employees from the permanent so that the different fringe benefit rates can be applied to each category.

2. **Military Labor**

Since OMB A-76 requires that all CITA functions be costed with a totally civilian work force, the cost of military labor will ultimately be considered as indirect labor to various CITA work centers. The FCAS extracted the military labor cost from a report prepared by the Force Development Branch of the COMPT. This report is known as the "end strength" report and is submitted on a weekly basis to FORSCOM. Since the report reflects actual strength figures and is forwarded to higher headquarters, it is considered a reliable source of data. However, a breakdown by grade structure by organizational entity is not part of the report. Therefore, the FCAS must telephonically contact each unit and collect the "on-board" strength by grade, enlisted and officer. This is a necessity since USAAA requires actual on-board strength by grade to the
maximum extent practical, to include "borrowed" military labor. The grade structure is also required in order to apply the standard cost factors supplied in the DoD Cost Comparison Handbook (DoD CCH). These annual composite standard rates are contained in Exhibit IV-5. The military labor cost is escalated to the first year of the contract and appropriate military benefit rates are applied.

DoD has directed that military personnel are not to be considered in estimates of direct labor costs attributable to a particular CITA function, or group of CITA functions. A civilian space will be substituted for each military position in the preparation of the in-house cost estimate. The DoD CCH also specifies that the civilian grade level be determined by the nature of the work requirement, not by linking military grades and civilian grades. This process should be part of the Management Efficiency Study.

DoD allows consideration of military personnel in estimates of indirect labor costs. For this purpose, the annual composite standard rates (Exhibit IV-5) are adjusted in accordance with the DoD CCH as follows:

Step 1. Add a factor for Permanent Change of Station (PCS) costs. This is determined by dividing the PCS budget for officers (and then for enlisted) by the total military officer (enlisted) man-years in the particular Service for the appropriate fiscal year. Each Military Service has two rates; one for officers; one for enlisted personnel. Cadets are treated separately but are not germane to costing commercial and industrial-type activities. For Fiscal Year 1980, the rates as determined by the Office of the Assistant Secretary of Defense (Comptroller) are:
## FISCAL YEAR 1980
### ANNUAL COMPOSITE STANDARD RATES
#### EFFECTIVE 1 OCTOBER 1979

**ARMY**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Basic Pay</th>
<th>Allowance for Quarters</th>
<th>Miscellaneous Expense</th>
<th>Incentive and Special Pay</th>
<th>Annual Composite Standard Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>O-10</td>
<td>$50,112</td>
<td>$7,300</td>
<td>$57,412</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-9</td>
<td>50,112</td>
<td>4,125</td>
<td>781</td>
<td>55,549</td>
<td></td>
</tr>
<tr>
<td>O-8</td>
<td>47,350</td>
<td>3,553</td>
<td>1,081</td>
<td>53,375</td>
<td></td>
</tr>
<tr>
<td>O-7</td>
<td>41,173</td>
<td>3,473</td>
<td>1,498</td>
<td>48,104</td>
<td></td>
</tr>
<tr>
<td>O-6</td>
<td>34,310</td>
<td>3,758</td>
<td>2,489</td>
<td>43,444</td>
<td></td>
</tr>
<tr>
<td>O-5</td>
<td>27,840</td>
<td>3,183</td>
<td>1,523</td>
<td>35,543</td>
<td></td>
</tr>
<tr>
<td>O-4</td>
<td>22,813</td>
<td>2,864</td>
<td>1,349</td>
<td>29,489</td>
<td></td>
</tr>
<tr>
<td>O-3</td>
<td>18,656</td>
<td>2,681</td>
<td>577</td>
<td>24,161</td>
<td></td>
</tr>
<tr>
<td>O-2</td>
<td>14,354</td>
<td>2,294</td>
<td>283</td>
<td>18,591</td>
<td></td>
</tr>
<tr>
<td>O-1</td>
<td>10,373</td>
<td>1,980</td>
<td>283</td>
<td>13,777</td>
<td></td>
</tr>
<tr>
<td>W-4</td>
<td>21,470</td>
<td>3,183</td>
<td>838</td>
<td>27,959</td>
<td></td>
</tr>
<tr>
<td>W-3</td>
<td>16,930</td>
<td>2,634</td>
<td>838</td>
<td>22,495</td>
<td></td>
</tr>
<tr>
<td>W-2</td>
<td>14,570</td>
<td>2,379</td>
<td>838</td>
<td>19,447</td>
<td></td>
</tr>
<tr>
<td>W-1</td>
<td>12,162</td>
<td>2,097</td>
<td>838</td>
<td>16,510</td>
<td></td>
</tr>
<tr>
<td>E-9</td>
<td>18,280</td>
<td>3,203</td>
<td>72</td>
<td>23,612</td>
<td></td>
</tr>
<tr>
<td>E-8</td>
<td>15,169</td>
<td>3,135</td>
<td>73</td>
<td>20,260</td>
<td></td>
</tr>
<tr>
<td>E-7</td>
<td>12,770</td>
<td>2,794</td>
<td>75</td>
<td>17,304</td>
<td></td>
</tr>
<tr>
<td>E-6</td>
<td>10,476</td>
<td>2,570</td>
<td>81</td>
<td>14,562</td>
<td></td>
</tr>
<tr>
<td>E-5</td>
<td>8,494</td>
<td>2,421</td>
<td>88</td>
<td>12,279</td>
<td></td>
</tr>
<tr>
<td>E-4</td>
<td>7,207</td>
<td>2,265</td>
<td>73</td>
<td>10,443</td>
<td></td>
</tr>
<tr>
<td>E-3</td>
<td>6,437</td>
<td>2,267</td>
<td>60</td>
<td>9,300</td>
<td></td>
</tr>
<tr>
<td>E-2</td>
<td>6,001</td>
<td>1,992</td>
<td>62</td>
<td>8,435</td>
<td></td>
</tr>
<tr>
<td>E-1</td>
<td>5,386</td>
<td>1,775</td>
<td>54</td>
<td>7,499</td>
<td></td>
</tr>
<tr>
<td>Cadets</td>
<td>4,442</td>
<td>1,344</td>
<td>5,786</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**EXHIBIT IV-5**
<table>
<thead>
<tr>
<th></th>
<th>Army</th>
<th>Navy</th>
<th>Marine Corps</th>
<th>Air Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>Officers</td>
<td>$2,082</td>
<td>$1,663</td>
<td>$1,477</td>
<td>$1,714</td>
</tr>
<tr>
<td>Enlisted</td>
<td>680</td>
<td>611</td>
<td>490</td>
<td>831</td>
</tr>
</tbody>
</table>

Step 2. Add 8% of total in the table for officers and 23% for enlisted personnel to cover operating appropriations support.

Step 3. Add 26.5% of total in the table for retirement.

Step 4. Multiply the annual composite rate in the table, plus the three above adjustments, by the inflation index:

<table>
<thead>
<tr>
<th>From Fiscal Year</th>
<th>To Fiscal Year</th>
<th>Inflation Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>1980</td>
<td>1.071 (7.1%)</td>
</tr>
<tr>
<td>1980</td>
<td>1981</td>
<td>1.058 (5.8%)</td>
</tr>
</tbody>
</table>

These rates are published from time to time by the Office of the Assistant Secretary of Defense (Comptroller) in connection with budget guidance [41:Appendix 4, p. 1].

3. *Indirect Materials and Supplies*

The cost of materials and supplies is also extracted from the STANFINS system by EOE within APC and annualized in the same manner as the civilian labor costs. Alternative approaches to estimating materials and supplies cost are similar to those that could be used for estimating civilian labor cost. The FY 1980 Budget data could be used or the FY 1979 actual figures could be used. These figures are only as good as the prepared Budget in the first case and a level of operations in FY 1980 similar to the level of operations in FY 1979 in the second case. Once again, the USAAA and private sector contractors may object to use of such "Budget" data and "outdated" figures vis-a-vis actual materials/supplies consumed.
The DoD CCH contains some standard add-on factors for materials and supplies obtained from the Defense Logistics Agency. These factors are as follows.

Wholesale Stock Fund--add 24.5 percent.

Direct Delivery, i.e., not stored by the Wholesale Fund--add 13.4 percent.

The FCAS, however, was unable to apply these standard materials usage factors to each organization as there was a great differentiation in materials and supplies used, e.g., administrative organizations used "paper, pencils, and paper clips" while industrial engineering units used "wood, steel, and pipes." Also the source of materials was difficult to trace without sifting through all of the past material requisitions, a long and tedious process. The FCAS did add the "rental costs" of material to this cost category. The biggest single item in the "rental" category was the cost of renting duplicating/copy machines.

Although the extraction of the data from STANFINS is a "stubby" pencil, manual process requiring a large amount of time, the materials and supplies cost data acquired by the FCAS is basically accurate and reliable. However, the FCAS will have to choose an appropriate base, or bases, to allocate the "overhead" materials to work center OpsOvhd cost pools.
4. Depreciation

a. Real Property

All values for structures, roads, and equipment in place were obtained from the DFAE Real Property Section. The depreciable lives contained in Exhibit IV-6 were used. These figures were worked out in conjunction with the USAAA. The portion of depreciation expense charged to the overhead activities was based on buildings, or square footage of building occupied. All other depreciation of land improvements, utilities, and buildings was put into the installation base.

Installation family housing and bachelor housing costs were excluded from depreciation since these facilities are considered part of the fringe benefit package input to labor cost. Medical facilities were also excluded as part of the fringe benefit tack-on to labor cost. All other installation real property was included to reach a total square footage for the depreciation base.

b. G&A Overhead Equipment

All values for the equipment on hand was obtained from the individual unit property books. The Headquarter's Command property book contains equipment values for the following overhead activities. Since only money items with costs greater than $1000 are required to be depreciated, the FCAS picked all such items off the Headquarters Command property book to arrive at the total amount of equipment with a value greater than $1000 for each of the following activities.
## REAL PROPERTY DEPRECIATION SCHEDULE

<table>
<thead>
<tr>
<th>Type of Structure</th>
<th>Useful Life (YRS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric System</td>
<td>25</td>
</tr>
<tr>
<td>Heating System</td>
<td>25</td>
</tr>
<tr>
<td>Sewage Treatment System</td>
<td>25</td>
</tr>
<tr>
<td>Water Pumps and Pipelines</td>
<td>25</td>
</tr>
<tr>
<td>Permanent Roads</td>
<td>15</td>
</tr>
<tr>
<td>Semi-Permanent Roads</td>
<td>5</td>
</tr>
<tr>
<td>Temporary Roads</td>
<td>3</td>
</tr>
<tr>
<td>Parking Area--Permanent</td>
<td>10</td>
</tr>
<tr>
<td>Parking Area--Temporary</td>
<td>5</td>
</tr>
<tr>
<td>Sidewalks--Permanent</td>
<td>15</td>
</tr>
<tr>
<td>Other Service Area</td>
<td>10</td>
</tr>
<tr>
<td>Other--Permanent</td>
<td>25</td>
</tr>
<tr>
<td>Airfield</td>
<td>10</td>
</tr>
<tr>
<td>Fences and Gates</td>
<td>10</td>
</tr>
<tr>
<td>Ground Fencing</td>
<td>20</td>
</tr>
<tr>
<td>Ground Drainage</td>
<td>25</td>
</tr>
<tr>
<td>Fire Alarm System</td>
<td>50</td>
</tr>
</tbody>
</table>

**EXHIBIT IV-6**
The property books of the DC-E and the Transportation/Service Branch of DIO were also personally surveyed by the FCAS. The DC-E books were personally surveyed as they contain some high value items of electronic equipment that could skew the reliability of the data if neglected. The Transportation/Services Branch property book is a "catch-all" book including equipment from the garrison motor pool, the installation laundry, and the garrison dining facility. Therefore, this property book was personally surveyed by the FCAS to sort out those depreciation costs that should be placed in the total G&A cost pool and those costs charged directly to an activity, including the Division.

The property book totals for DIO Supply, DIO Maintenance, DPT, DPCA, the LEC, and DFAE were obtained from a survey prepared by the activity's Property Book Officer (PBO). The FCAS then relied on a review of the above property books conducted by an auditor from the installation Internal Review Section to insure that reliable data was submitted. All equipment in the G&A overhead activities was given 10 percent of
acquisition cost as a residual value and a 10 year useful life. These figures are based on DoD guidance and the advice of the USAAA.

c. Division Equipment

Equipment in this category included those activities not included in the G&A Operations overhead pool. This equipment was also given 10 percent of acquisition cost as a residual value and a 10 year useful life, and included the following items.

(1) DIO Transportation/Services dining facility equipment.

(2) Equipment from the Headquarters Command property book not used by G&A overhead activities, attributable to the Division.

(3) All equipment from the automated Division Property Book which as of 15 June 1980 included $154,000,000 of equipment valued greater than $1000.

(4) Equipment values for activities located on Fort Finance, but not part of the Division Property Book must also be accumulated. These activities include such entities as the NCO Academy, the Confinement Facility, the Director of Reserve Components, etc. The activity PBO was tasked to provide such equipment values. These surveys were submitted to the FCAS and basically relied on as accurate and reliable barring a notable inconsistency.
5. **Rent**

Fort Finance did not rent any facilities or equipment other than the duplicating/copy machines which were included in the Material cost.

6. **Maintenance and Repair (M&R)**

Most labor costs associated with DFAE as extracted from the STANFINS system is input as part of the numerator to determine an M&R rate. The only excepted labor costs were those used to develop a utility rate (sewage, water, electricity, and gas).

All of the following DFAE costs went into the numerator for determination of the M&R rate.

a. All material and supplies costs.
b. All petroleum, oil, and lubrication costs.
c. Depreciation on all facilities and equipment (10 percent residual value, 10 years useful life).
d. 9 percent of MISO costs (based on usage).

The denominator for the M&R rate determination was total square footage of buildings at Fort Finance with the exception of the following structures.

a. Family Housing--fringe benefit package.
b. Bachelor Office Quarters--fringe benefit package.
c. Medical Facilities--fringe benefit package.
d. Square footage occupied by DFAE.

There was some consideration given to utilization of another measure other than square footage for the denominator.
Since some facilities at Fort Finance are two and three story structures, it was postulated that a different M&R rate should apply to each type of building. This was dismissed as ultimately not "material" to final cost allocations. The formula used by the FCAS and the collected data equated to an M&R rate of $1.69/sq. ft.

7. **Support Costs**

Fort Finance incurs no support costs from outside organizations. However, DFAE and MISO essentially lose their costs and identity due to the specific services they provide, and are considered support costs to the organizations they service. For example, 9 percent of the costs of MISO go to "support" DFAE. Therefore, these costs are support costs charged to and absorbed by DFAE.

8. **Utilities**

The various utility services at Fort Finance were separated to compute a utility rate for each service rather than one overall utility rate.

   a. **Electricity Rate**--The installation electric bill from the local utility company was used to determine the overall cost of electricity. The "big users" of electricity were excluded from the computation of the utility rate. These big users included the Sewage Plant, the Water Pumping Station, the Hospital, the Commissary, and the Post Exchange. These activities if included would skew the rate and charge an inordinate amount to other activities at the installation. As well,
the Hospital, the Commissary, and the Post Exchange are part of the labor cost fringe benefit tack-on.

A private sector firm conducted an energy audit of Fort Finance and estimated the kilowatts consumed per building. This usage factor was then used to allocate costs to each building at Fort Finance based on the total electric bill. The overall electric rate was determined on a per capita basis, including military personnel, civilians employed at Fort Finance, and residents of the installation. With the energy audit and per capita distribution, the FCAS was able to compare figures for inconsistencies.

b. Water Rate--The costs (labor and materials) to operate the water plant were accessible from STANFINS. These costs were used to determine a water rate on a per capita basis.

c. Sewage Rate--The costs (labor and materials) to operate the sewage plant on the installation were accessible from STANFINS. An additional cost was an add-on due to sewage treatment purchased from the local community by Fort Finance. The actual purchase price constituted the "add-on". The total sewage cost was then distributed on a per capita basis.

d. Gas Rate--The cost of gas used at Fort Finance was obtained from the same electric/gas bill delivered by the local utility company. This cost was then distributed to the users on the basis of square footage. The per capita basis
was dropped as this utility is not universally used by every organization at the installation. A survey of gas consumption was included in the commercial energy audit. The survey results were used to estimate the consumption of gas by organizational entity based on the equipment and facilities used.

9. Insurance

The OMB CCH provided standard cost factors to determine the Government's possible insurance liability if they purchased such coverage. Casualty insurance costs are estimated by multiplying .0005 times the value of installation work center facilities, equipment, and materials; and liability insurance costs are estimated by multiplying .0007 times personnel costs.

10. Overtime and Premium Pay

Civilian overtime pay is separated on a "spread sheet" by EOE from the STANFINS output data when labor costs are accumulated. When Fort Finance reaches the state of determining OpsOvhd for a particular work center, some management estimate may be necessary to separate out other types of premium pay if such costs are considered "material". For example, incentive pay for labor saving suggestions may become a significant factor and necessitate inclusion in the in-house estimate.

11. Other Costs

This is a "catch-all" category that should include unique costs not included in the above cost classifications. Fort Finance had no costs in this category.
G. SUMMARY

Identification and collection of costs relevant to preparation of a valid in-house cost estimate is presently primarily a manual process. The costs attributable to organizational activities at a typical U.S. Army installation can be more readily identified by understanding the organizational structure at a particular post, camp, or depot. Once these organizational relationships are established, sources of cost data must be found that produce reliable estimates of cost. Automated systems presently in the DA inventory are not designed to support CITA costing. However, some of the current systems, primarily STANFINS, may be redesigned to facilitate more expeditious automated capture of CITA cost data.

Cost data paralleling elements of cost outlined in the OMB CCH must be gathered by DA installation cost analysis sections. The major DA installation used as an illustration in this chapter experienced difficulty in accumulating relevant costs. Although it is expected that subsequent collection of CITA costs will be easier and more expeditious, the process remains mostly manual, tedious, and a major time consumer. At present the cost accounting system at installation level within the Army does not support costing in accordance with OMB A-76.
V. CONCLUSIONS AND RECOMMENDATIONS

A. SUMMARY

The evolution of the policy of reliance on the private sector to supply goods and services needed by the Government has been turbulent and controversial. Implementation efforts have been characterized as inconsistent and largely ineffective. The publication of the Office of Management and Budget Circular A-76 (OMB A-76) was an attempt to create a balanced, comprehensive policy vis-a-vis supplying needed goods and services to the Government. The apparent intention of the Commercial and Industrial Type Activities (CITA) program established by OMB A-76 was to serve the interests of the general public, private enterprise, and Government employees.

Shrinking monetary resources due to economic conditions in general, and fiscal constraints imposed by Congress in particular, has created greater emphasis on economy in acquiring goods and services needed by the Government. OMB A-76 is a reflection of this increased interest in economy. Efficiency and effectiveness in providing CITA Support Services to Federal agencies, to include the Department of Defense, is the ultimate goal of OMB A-76. The general foundation of past CITA program directives emanating from the Executive Branch has been "reliance on the private sector" for CITA Support Services when such support is not inherently a Governmental function and/or a National Defense function.
Consideration of the effectiveness or efficiency of performance by Government employees was not usually addressed prior to contracting-out of a CITA function. Full costing of the in-house estimate was not a requirement under previous directives concerning the CITA program. The current version of OMB A-76 restates the general policy of "reliance on the private sector", but caveats such reliance on the basis of cost effectiveness.

The OMB A-76 requirement that in-house cost estimates be prepared on a fully allocated basis silenced a great amount of criticism directed at the CITA program from private industry. However, since Government agencies became direct competitors in a manner similar to other commercial bidders in CITA Support Service contracting, in-house estimates will continue to be questioned vis-a-vis costing methodology. Thus, accurate estimates of cost is essential not only to preclude judicial confrontations, but also to maintain in-house those functions more efficiently and economically performed by Government employees. Therefore, under OMB A-76, Department of the Army (DA) installations are required, in consonance with OMB A-76, to accumulate all relevant costs, direct as well as indirect, allocable to a CITA function for comparison with firm bids from private enterprise. An estimate of Government cost prepared on a fully allocated basis resulting in lower cost relative to "responsible and responsive" commercial bidders will justify the installation's "right" to perform that particular organizational CITA support function.
The stated objectives of this thesis were:

1. To identify the problems and peculiarities at the installation level associated with accumulating relevant costs to input to the overhead pools defined in the OMB CCH.

2. To evaluate the compatibility of the Army installation accounting system with the full costing requirement of OMB A-76.

3. To present the methodology used at a major U.S. Army installation to accumulate the elements of cost outlined in the OMB CCH.

4. To recommend possible approaches to reduce the inordinate amount of time consumed in preparation of an in-house cost estimate.

The following conclusions and recommendations are based on the perspective gained by the author concerning the CITA program in general and full costing in accordance with the OMB CCH in particular. Recommendations are oriented toward assisting the cost estimators at installation level in the accumulation of relevant CITA costs on a timely and reliable basis.

B. CONCLUSIONS

This research has lead to the following conclusions regarding the current implementation of OMB A-76 and its impact at installation level within DA.

Conclusion 1. The overall guidance from OMB, DoD, and DA has been generally too broad and too late to facilitate
meeting FY 1980 CITA review goals. More specifically, the
guidance was too broad to assist in conducting proper manage-
ment efficiency studies or to aid in writing the Statements
of Work (SOW). The broad guidance contained in the OMB CITA
Cost Comparison Handbook (OMB CCH) was acceptable for use and
implementation by DoD and DA. However, since virtually half
of FY 1980 was consumed prior to DoD or DA guidance reaching
the "field", DA installations found themselves "behind
schedule" immediately.

Conclusion 2. The in-house experience at DA installations
in the preparation of a cost estimate based on fully allocated
costs was lacking. Additionally, an apparent institutional
reluctance to implement the program delayed the acquisition
of qualified "costing" personnel.

Conclusion 3. The DA accounting structure and the present
inventory of automated systems within DA were not designed
to support and do not fully support preparation of a CITA
in-house cost estimate.

Conclusion 4. The cost data (elements of cost) required to
compile a reliable and justifiable estimate of Government
cost to perform a CITA function is not readily available.
Accumulation of the elements of cost essential to a valid
CITA in-house cost estimate is a tedious, time consuming,
and mostly manual process.

Conclusion 5. Cost comparisons of single CITA functions are
a time consuming and detailed process vis-a-vis "cost saving".
C. RECOMMENDATIONS

In recognition of the above conclusions, the author feels that there are five steps DA can institute to improve its short and long term implementation of OMB A-76.

Recommendation 1. DA should establish a clear policy in support of OMB A-76 and vigorously pursue implementation. Headquarters DA (HQDA) should provide more specific guidance to Major Commands (MACOMs) while granting as much flexibility as possible to account for the uniqueness of each MACOM installation.

HQDA should emphasize and enforce the meeting of established CITA review schedules. Adoption of such a policy could entail shifting of DA resources in order to apply them to the CITA review task. Each MACOM should provide "lessons learned" type information vis-à-vis CITA program implementation to subordinate activities. Such information is invaluable to an installation and the MACOM is in a position to gain an overall picture of the program as the interface between HQDA and the installation.

At installation level standardized (and mechanized to the extent possible) procedures for collecting costs essential to the preparation of the in-house cost estimate should be established. Once these standardized procedures are certified by the U.S. Army Audit Agency, the methodology should be refined to facilitate expeditious retrieval of the data, to include automated capturing of the costs. A cost accounting system supportive of the CITA program should be installed.
Recommendation 2. An experienced cost accountant should be immediately hired to augment each of the installation-level CITA management teams. This expertise is necessary to facilitate implementation of the full costing approach mandated by OMB A-76.

Recommendation 3. The CITA Management Task Group should be separated from the installation Comptroller and the Director of Industrial Operations (DIO). The CITA Management Task Group should be a separate entity reporting directly to the Deputy Installation Commander (DIC). A possible organizational structure is contained in Exhibit V-1. This step will assist in overcoming the apparent institutional reluctance by creating a separate organization with a focused "mission". Such an approach would also bypass an inherent conflict of interest between the DIO and associated subordinate CITA functions and workforce. Additionally, it would remove the responsibility for "costing" from the DIO and preclude the "tasking" of the Comptroller Directorate to perform such costing in addition to its other functions.

The Comptroller Directorate performs costing functions and management analysis functions closely related to CITA program implementation. However, the CITA program entails tasks totally unrelated to normal or routine Comptroller Directorate operations. Consequently, placement of responsibility for the CITA program in the Comptroller Directorate only overburdens that organizational entity, and requires "tasking" of outside
PROPOSED DA INSTALLATION CITA MANAGEMENT ORGANIZATIONAL STRUCTURE
resource management skills similar to the DIO requirement for "costing" expertise. A separate organization, structured similarly to that contained in Exhibit V-1, would mesh the cost analysis, management analysis, and contracting personnel into a cohesive organization to manage the program.

If deemed necessary the CITA Management Task Group could be restructured upon completion of the initial five year review of an installation's inventory of CITA functions. It may be possible to eliminate some positions and to combine others due to the development of a cross section of CITA management expertise. It may be feasible to move the CITA Management Task Group under the DIO or Comptroller at that time.

Recommendation 4. HQDA should initiate an immediate review of the existing inventory of automated systems, most especially STANFINS, to determine if modifications would facilitate capturing elements of cost applicable to preparation of the in-house cost estimate. Development of a cost accounting system, possibly supported by an automated system, that captures costs by work center is necessary to reduce the time required to manually retrieve cost data.

Recommendation 5. Installations should adopt a policy of reviewing a package of CITA functions rather than single functions. Installations should review and cost compare groups of CITA functions or combine most, if not all, base operations functions. The time consumed and effort expended in the
review of a package of CITA functions would be less than or equal to that involved in reviewing all installation CITA functions individually for possible contracting-out. Additionally, large package contracts are more likely to attract large defense or aerospace firms.

D. SUGGESTIONS FOR FURTHER STUDY

It is recommended that the following areas be considered for further study:

1. Once a number of overhead rates are established by some standard methodology, an analysis between organizations should be made to establish standard overhead rates for all similar DA activities.

2. The various approaches to completing CITA cost comparisons should be investigated. One approach is to hire an experienced cost accountant and form a "cost analysis section" around that expertise. Another approach might be to hire a private consulting firm to prepare the in-house cost estimate, or even write the SOW and conduct the Management Efficiency Study. Also, a cost analysis team could be formed at MACOM or DA level, structured similarly to a mobile training team. This team of "expertise" could then spend time at each installation and be a DA point of contact for resolving problems.

3. Investigate restructuring the DA accounting system to support expeditious access to, or retrieval of, relevant CITA cost data.
4. Investigate modifications of existing automated systems to capture and output CITA cost data in a usable format.

5. Conduct a comparison of reviewing single CITA functions versus a grouping of CITA functions. Investigate the time, money, and the ultimate short and long term "savings" to the Government due to varying approaches to CITA function review.
APPENDIX A
COST ACCOUNTING STANDARDS APPLICABLE TO FULL COSTING

1. **CAS 401 Consistency in Estimating, Accumulating, and Reporting Costs.**

   This CAS addresses consistency over time, requiring that once an expense item has been identified as either direct or indirect, it should be estimated, accumulated, and reported in the same manner. Additionally, the composition of indirect cost pools and the bases used to allocate these pools must remain consistent [63]. In accord with this CAS and full costing, the operating level should be consistent by using the same operations overhead elements of expense when calculating indirect costs, or the portion thereof, allocable to subsequent contracts within the same operational department.

2. **CAS 402 Consistency in Allocating Costs Incurred for the Same Purpose.**

   Under this CAS, costs incurred for the same purpose, in like circumstances, shall be consistently charged as direct costs, or if indirect costs, shall be consistently allocated. This CAS prohibited the fraudulent practice of "double counting" that takes place when a contractor assigns a cost directly to a final cost objective, and at the same time, leaves that same cost in an indirect cost pool, from which the final cost objective is burdened with its allocated share. Expense items included as either direct or indirect costs in one CITA
estimate of in-house costs should be included as either direct or indirect costs on a similar in-house cost estimate of Government performance.

3. **CAS 405 Accounting for Unallowable Costs**

   This CAS deals with "unallowable cost". The CASB defines an unallowable cost as:

   Any cost which, under the provision of any pertinent law, regulation, or contract, cannot be included in prices, cost reimbursements, or settlements under a Government contract to which it is allocable. [63:244]

Unallowable costs for Government contracts may be unauthorized marketing expenses, such as advertising or social business expenses. Such unallowable costs are to be identified, but excluded from any billing to a Government contract. If unallowable costs would normally be part of a regular indirect cost allocation base, they shall remain in such bases [63]. For example, assume a supervisor with jurisdiction over two work centers is the CITA function under review and the other is a totally military activity. The direct cost of military labor is an "unallowable cost" to the in-house estimate in accordance with the OMB CCH. However, a fair portion of the supervisor's expense must be allocated on some base, such as direct labor hours (DLH), to each work center, civilian and military.

4. **CAS 409 Depreciation**

   This CAS addresses most of the significant variables in accounting for depreciation.

   --To determine the cost of the asset to be depreciated, the estimated residual, or salvage, value is subtracted from the asset's total cost.
--The estimation of serviceable life of an asset is required to determine the number of accounting periods to which the cost will be assigned.

--The selection of a depreciation method should reflect the pattern of consumption of services over the life of the asset.

--Upon disposition (sale or trade) of an asset, any resulting gain or loss from book value shall be allocated during the same period as the disposition and in the same manner as its depreciation would have been allocated.

--The allocation of depreciation directly to cost objectives is allowable only if such charges are made on the basis of usage, e.g., machine hours, not square footage; and such allocation must be consistent in accordance with CAS 402. The asset to be depreciated may be part of the organizational unit. If the other organizational unit costs are charged to several cost objectives, based on measurement of the services provided by the organizational unit, then the depreciation costs are included in the same cost pool as the organizational costs. [63:104-105]

This CAS is difficult for the typical cost analysis section at the installation level to adapt to the full costing requirement of OMB A-76 since the Army does not maintain depreciation schedules on its assets. Due to a lack of adequate depreciation records, the handling of gains or losses upon disposition of assets is of little consequence at the operating level. The OMB CCH specifically requires that depreciation be computed on a straight line basis, equally distributing depreciable cost to each accounting period or unit of usage covered by its useful life [54]. In other respects, the CAS amplifies the intentions of the OMB CCH.

5. CAS 418 Allocation of Direct and Indirect Costs

This CAS is a consolidation of three proposed standards and becomes effective September 20, 1980. CAS 418 requires
that costs be consistently classified as direct or indirect and establishes criteria for accumulating indirect costs in indirect cost pools. It also provides guidance relating to the selection of allocation measures based on the beneficial or causal relationship between an indirect cost pool and cost objectives.

This CAS deleted the "specific criteria" contained in a proposed CAS used to distinguish between direct and indirect costs. However, precise definitions are provided of a "direct cost", an "indirect cost", and an "indirect cost pool". The word "allocate" is even defined in the context of cost distribution according to the CASB. The specific criteria used to distinguish between indirect and direct costs were dropped in favor of "a written statement" submitted by the contractor detailing his "accounting policies and practices" for classifying costs as direct or indirect. Costs must still be addressed only in their relationship to the final product or cost objective. The OMB CCH defines the final cost objective as the product or service provided by the CITA function under review. Additionally, this "written" policy submitted by the contractor must be consistently applied and in conformity with the other CASs and GAAPs.

CAS 418 specifies the nature of a "homogeneous" indirect cost pool and the indirect costs that should be allocated to such a pool. In order to classify as a homogeneous indirect cost pool, the costs of all significant activities in the cost pool must have the same or similar beneficial or
causal relationship to cost objectives. A homogeneous indirect cost pool must include all indirect costs identified with the activity to which the pool relates.

Concerned about an unnecessary proliferation of overhead cost pools, the CASB also deleted their very specific definition of a "productive activity" and eliminated 5 percent of contract cost as a test of "materiality". CAS 418 provides for the determination of the number of cost pools based on the concept of homogeneity. One cost pool would be acceptable for an entire organization if one function was performed, and work was performed equally on all products. However, if within the organization there were several manufacturing functions, there could be separate cost pools established. If necessary, one cost pool for each function could be established; or two or more could be combined if indirect costs could still be allocated based on the concept of homogeneity.

The CASB would continue to disallow an additional cost pool unless it made a "material" difference in the final allocation of costs. In order to resolve questions of "materiality", defense contractors and subcontractors must reference and adhere to the criteria published in October 1977 by the CASB as CAS Regulation 331.71. These criteria take into consideration a variety of factors including the absolute dollar amount of costs involved, whether the costs are direct or indirect, the relationship of the costs in a particular contract, and the impact on Government funding.
Overhead cost pools consist of costs from within an organizational unit or work center, service costs allocated from other cost objectives, and some outside costs.
APPENDIX B

OFFICE OF MANAGEMENT AND BUDGET CIRCULAR NO. A-76 REVISED

Policies for Acquiring Commercial or Industrial Products and Services Needed by the Government.
EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

March 29, 1979

CIRCULAR NO. A-76
Revised
Transmittal Memorandum No. 4

TO THE HEADS OF EXECUTIVE DEPARTMENTS AND ESTABLISHMENTS

SUBJECT: Policies for Acquiring Commercial or Industrial Products and Services Needed by the Government


The revised Circular (1) reaffirms the Government's general policy of reliance on the private sector for goods and services, while recognizing that (2) certain functions are inherently governmental in nature and must be performed by Government personnel, and (3) relative cost must be given appropriate consideration in decisions between in-house performance and reliance on private commercial sources. The balanced approach in this revised Circular is designed to achieve consistent policy implementation in all agencies, equitable treatment of all parties, and improved economy and efficiency in providing goods and performing services needed by the Government.

To support the increased emphasis on relative economy of Government and contract performance, a comprehensive Cost Comparison Handbook is provided as a supplement to the Circular. This Handbook is to be used by all agencies in conducting comparative cost analyses. The Handbook provides instructions for determining the total cost to Government for each alternative and will provide a more accurate basis for cost-based decisions.

This revision of Circular A-76 is the result of an extensive review of the Circular and its implementation by executive agencies, and careful consideration of all comments submitted on the draft revision that was published in August 1978. Many of those comments were accommodated through clarification and refinement of the draft. Supplementary guidance on special subjects will be developed as needed.

Application to R&D Activities

Some concern was expressed over the potential impact of the application of this Circular to Government R&D activities. While agencies with a need for in-house R&D capability can consider a "core capability" in this area as a "governmental function," additional guidance is needed to ensure some consistency in determining and justifying the size of that core capability and applying the Circular to R&D requirements, in excess of that level of capacity.
An interagency committee jointly sponsored by the Office of Federal Procurement Policy and the Office of Science and Technology Policy, has been established under the Federal Coordinating Council for Science, Engineering, and Technology, to study these issues and recommend guidelines for appropriate and uniform agency implementation. Supplemental guidance addressing R&D activities will then be developed and, after public review and comment, be issued as an amendment to the Circular. In the interim, compliance with this Circular and the periodic review of inventoried R&D activities are to be deferred for one year pending completion of the study, except for new starts and expansions, as defined in the Circular. Additional guidance will be provided on determining justified "core capability" and applying the policy to other R&D requirements to assure that essential in-house capability is maintained, and that the Government and taxpayers' interests are properly considered in contract versus in-house decisions.

Government-Owned Contractor-Operated Activities

Government-owned, contractor-operated (GOCO) activities were excluded from prior issuances of the Circular. A comprehensive review of all GOCO activities is necessary to determine whether they can be completely treated under the terms of this Circular. In the interim, this Circular is to be applied only to new starts and expansions of Government-owned equipment and facilities.

Personnel Ceilings

The relationship between Circular A-76 and agency personnel ceilings was reviewed in some detail and clarified in the Circular. While it is clearly specified that agencies will not use the Circular to contract out solely to meet personnel ceilings, it is equally clear that agencies will contract out when justified under the Circular regardless of the relationship between personnel levels and authorized ceilings. Conversely, contracts for activities that are shown to be justified for in-house performance will be terminated as quickly as in-house capability can be established; when the additional spaces required cannot be accommodated within the agency's personnel ceiling, a request for adjustment will be submitted to OMB in conjunction with the annual budget review process.

The Office of Management and Budget will monitor agency implementation of this revised Circular, providing guidance and interpretations as required. Further revisions and supplements will be issued as necessary in the future to achieve the policy objectives.

Lester A. Fettig
Administrator for Federal Procurement Policy

James T. McIntyre, Jr.
Director

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TO THE HEADS OF EXECUTIVE DEPARTMENTS AND ESTABLISHMENTS

SUBJECT: Policies for Acquiring Commercial or Industrial Products and Services Needed by the Government

1. Purpose. This Circular establishes the policies and procedures used to determine whether needed commercial or industrial type work should be done by contract with private sources or in-house using Government facilities and personnel. This Circular replaces OMB Circular No. A-76, dated August 30, 1967, and all subsequent amendments.

2. Background. In a democratic free enterprise economic system, the Government should not compete with its citizens. The private enterprise system, characterized by individual freedom and initiative, is the primary source of national economic strength. In recognition of this principle, it has been and continues to be the general policy of the Government to rely on competitive private enterprise to supply the products and services it needs.

This policy has been expressed in Bureau of the Budget Bulletins issued in 1955, 1957, and 1960. In 1966, Circular No. A-76 was issued and, for the first time, prescribed the policy and implementing guidelines in a permanent directive. The Circular was revised in 1967, by Transmittal Memorandum No. 1, to clarify some provisions and to lessen the burden of work by the agencies in implementation. Transmittal Memorandum No. 2 was issued in 1976, providing additional guidance on cost comparisons and prescribing standard cost factors for Federal employee retirement and insurance benefits.

In 1977, a comprehensive review of the Circular and its implementation was initiated. Transmittal Memorandum No. 3 was issued on June 13, 1977, announcing the review and temporarily reducing the Government retirement cost factor. This revision is the result of that review and careful consideration of comments from all interested parties.

3. Responsibility. Each agency head has the responsibility to ensure that the provisions of this Circular are followed. This Circular provides administrative direction to heads of agencies and does not establish, and shall not be construed to create, any substantive or procedural basis for any person to challenge any agency action or inaction on the basis that such action was not in accordance with this Circular, except as specifically set forth in Section 11 below.
4. **Policy.** This policy builds on three equally valid policy precepts:

   **a. Rely on the Private Sector.** The Government's business is not to be in business. Where private sources are available, they should be looked to first to provide the commercial or industrial goods and services needed by the Government to act on the public's behalf.

   **b. Retain Certain Governmental Functions In-House.** Certain functions are inherently governmental in nature, being so intimately related to the public interest as to mandate performance by Federal employees.

   **c. Aim for Economy; Cost Comparisons.** When private performance is feasible and no overriding factors require in-house performance, the American people deserve and expect the most economical performance and, therefore, rigorous comparison of contract costs versus in-house costs should be used, when appropriate, to decide how the work will be done.

5. **Definitions.** For the purposes of this Circular:

   **a.** A "Government commercial or industrial activity" is one which is operated and managed by a Federal executive agency and which provides a product or service that could be obtained from a private source. A representative, but not comprehensive, listing of such activities is provided in Attachment A. An activity can be identified with an organization or a type of work, but must be (1) separable from other functions so as to be suitable for performance either in-house or by contract; and (2) a regularly needed activity of an operational nature, not a one-time activity of short duration associated with support of a particular project.

   **b.** An "expansion" is the modernization, replacement, upgrade, or enlargement of a Government commercial or industrial activity involving additional capital investment of $100,000 or more, or increasing annual operating costs by $200,000 or more; provided, the increase exceeds 20% of the total investment or annual operating cost. A consolidation of two or more activities is not an "expansion" unless the proposed total capital investment or operating cost exceeds the total from the individual activities by the amount of the threshold. An expansion which increases either capital investment or annual operating cost by 100% or more is a "new start."

   **c.** A "conversion" is the transfer of work from a Government commercial or industrial activity to performance by a private commercial source under contract.
d. A "new start" is a newly-established Government commercial or industrial activity, including a transfer of work from contract to in-house performance. Also included is any expansion which would increase capital investment or annual operating cost by 100% or more.

e. A "private commercial source" is a private business, university, or other non-Federal activity, located in the United States, its territories and possessions, the District of Columbia, or the Commonwealth of Puerto Rico, which provides a commercial or industrial product or service required by Government agencies.

f. A "Governmental function" is a function which must be performed in-house due to a special relationship in executing governmental responsibilities. Such governmental functions can fall into several categories:

(1) Discretionary application of Government authority, as in investigations, prosecutions and other judicial functions; in management of Government programs requiring value judgments, as in directing the national defense; management and direction of the Armed Services; conduct of foreign relations; selection of program priorities; direction of Federal employees; regulation of the use of space, oceans, navigable rivers and other natural resources; direction of intelligence and counter-intelligence operations; and regulation of industry and commerce, including food and drugs.

(2) Monetary transactions and entitlements, as in Government benefit programs; tax collection and revenue disbursements by the Government; control of the public treasury, accounts, and money supply; and the administration of public trusts.

(3) In-house core capabilities in the area of research, development, and testing, needed for technical analysis and evaluation and technology base management and maintenance. However, requirements for such services beyond the core capability which has been established and justified by the agency are not considered governmental functions.

6. **Scope.**

   a. No executive agency will engage in or contract for commercial or industrial activities except in accordance with the provisions of this Circular, or as otherwise provided by law, including, for example, Title 44 of the U.S. Code.
b. The implementation provisions of this Circular do not apply to governmental functions as defined in paragraph 5(f). These functions must be performed in-house by Government personnel.

c. This Circular applies to the need for Government ownership in any "new start" or "expansion" of a Government-owned, contractor-operated (GOCO) facility.

d. Additional provisions are as follows:

(1) This Circular does not provide authority to enter into contracts. Guidelines governing contracts for goods and services are set forth in applicable acquisition regulations.

(2) This Circular will not be used as authority to enter into contracts which establish a situation tantamount to an employer-employee relationship between the Government and individual contract personnel. Additional guidance on this subject is provided in the Federal Personnel Manual issued by the Office of Personnel Management.

(3) This Circular will not be used to justify a conversion to contract solely to meet personnel ceilings or to avoid salary limitations. When in-house performance of a "new start" is justified under this Circular but cannot be accommodated within agency personnel ceilings, an appeal for necessary adjustment to implement this Circular agency-wide should be made to OMB in connection with the annual budget review process.

(4) Major system acquisitions are governed by the provisions of OMB Circular No. A-109, "Major System Acquisitions." Reliance on the private sector is one of the general policies contained in Circular A-109 to ensure competitive consideration of all alternatives before making a decision as to the best method of satisfying an agency mission need.

(5) This Circular does not apply to consulting services of a purely advisory nature relating to the governmental functions of agency administration and program management. Assistance in the management area may be provided either by Government staff organizations or from private sources, as deemed appropriate by executive agencies, in accordance with executive branch guidance on the use of consulting services.

(6) This Circular applies to printing and binding only in those agencies or departments which are exempted by law from the provisions of Title 44 of the U.S. Code.

(7) This Circular should not be applied when it would be contrary to law or inconsistent with the terms of any treaty or international agreement.
7. **Use of Products and Services from Other Federal Agencies.**

a. Excess property and services available from other Federal agencies should be used in preference to new starts or contracts, unless the needed product or service can be obtained more economically in the private sector. This is consistent with the Federal Property and Administrative Services Act of 1949 and related regulations.

b. When a commercial or industrial activity operated by an agency primarily to meet its own needs has excess capacity, that capacity can be used to provide products or services to other agencies.

(1) If a formal program is established for managing excess capacity, such as the ADP sharing program operated by GSA, capacity that has been reported as excess can be used by other agencies with no further justification. In the absence of a formal program and report of excess capacity, another agency's use of a Government activity must be justified in accordance with paragraph 8 of this Circular. When the cost justification is used, the agency requiring the product or service will solicit competitive bids or proposals to establish commercial costs, and award a contract when more economical. The prospective providing agency will prepare the Government cost estimate, in accordance with this Circular, for comparison with the commercial cost.

(2) It is not intended that agencies create or expand capacity for the purpose of providing commercially available products or services to other agencies. When the performing agency's own requirements increase, capacity used to support other agencies is no longer excess and should be used in preference to acquisition of additional capability. Consequently, agencies should not expand a commercial or industrial activity which is providing products or services to other agencies. The user agency (or agencies) should be informed, with sufficient notice to arrange alternative sources, that the support will be terminated unless exceptional circumstances prevent that agency from finding a new source.

c. In some cases, a commercial or industrial activity is operated for the primary purpose of providing a product or service to other agencies, such as the Federal Data Processing Centers or the Office of Personnel Management training centers. All such activities must be reviewed under this Circular to determine whether continued Government operation is justified. The review should be made at the earliest possible date, but under no circumstances later than October 1, 1981. Prior to that review, agencies may use the products and services available without further justification. When continued Government operation of the activity is approved, agencies may use the products or services provided, up to the level of capability approved, with no further justification. When expansion of such an activity is proposed, the justification for approval under this Circular can be based on the entire workload, including work for other agencies.
8. Government Operation of a Commercial or Industrial Activity. Government operation of a commercial or industrial activity may be authorized under one of the following conditions.


(1) A Government commercial or industrial activity can be authorized without a comparative cost analysis when it is demonstrated that:

(a) There is no private commercial source capable of providing the product or service that is needed; or

(b) Use of a private commercial source would cause an unacceptable delay or disruption of an essential agency program.

(2) Before concluding that there is no private commercial source capable of providing the needed product or service, the agency must make all reasonable efforts to identify available sources.

(a) As a minimum, the agency must place at least three notices of the requirement in the Commerce Business Daily over a 90-day period. In the case of urgent requirements, publication in the Commerce Business Daily can be reduced to two notices over a 30-day period.

(b) Agencies' efforts to find satisfactory commercial sources, especially small and minority-owned businesses, should include obtaining assistance from the General Services Administration, Small Business Administration, and the Domestic and International Business Administration in the Department of Commerce.

(3) A conclusion that use of a commercial source would not be satisfactory because it would cause an unacceptable delay or disrupt an agency program requires a specific documented explanation.

(a) Delay or disruption must be spelled out specifically in terms of cost, time and performance measures.

(b) Disruption must be shown to be of a lasting or unacceptable nature. Transitory disruption caused by conversions are not sufficient grounds.

(c) In all cases, specific explanations must be documented. If it is known that the function has been performed by contract elsewhere or at another time, the justification must specify why circumstances are substantially different.
(d) The fact that an activity involves a classified program, or is part of an agency's basic mission, or that there is a possibility of a strike by contract employees is not an adequate justification for in-house performance of that activity. Urgency by itself is not an adequate reason for starting or continuing a Government commercial or industrial activity. It must be shown that commercial sources are not able and the Government is able to provide the product or service when needed.


(1) A Government commercial or industrial activity, operated by military personnel, may be justified when:

(a) The activity or military personnel assigned are utilized in or subject to deployment in a direct combat support role;

(b) The activity is essential for training in those skills which are exclusively military in nature; or

(c) The activity is needed to provide appropriate work assignments for career progression or a rotation base for overseas assignments.

(2) A Government commercial or industrial activity providing depot or intermediate level maintenance may be justified in accordance with criteria approved by the Secretary of Defense to ensure a ready and controlled source of technical competence and resources necessary to meet military contingencies. These criteria will limit the extent of in-house capability and capacity within the military departments for depot and intermediate maintenance support of mission-essential equipment to the minimum necessary to accomplish that objective. Justification under these criteria will require a detailed explanation, on a case-by-case basis, why the needed capability cannot be supplied by:

(a) A private commercial source; or

(b) Contract operation of Government-owned facilities.

Such justification must be approved at the military department assistant secretary level or equivalent in the defense agencies.

c. Higher Cost. A Government commercial or industrial activity may be authorized if a comparative cost analysis, prepared in accordance with paragraph 9 of this Circular, indicates that the Government can provide or is providing a product or service at a lower total cost than if it were obtained from a private commercial source.
9. **Cost Comparisons.** A decision for in-house performance based on economy must be supported by a comparative cost analysis prepared in accordance with this Circular and the supplementing Cost Comparison Handbook.

a. **Common Ground Rules.**

(1) Both Government and commercial cost figures must be based on the same scope of work and the same level of performance. This requires the preparation of a sufficiently precise work statement with performance standards that can be monitored for either mode of performance.

(2) Standard cost factors will be used as prescribed by the Cost Comparison Handbook and as supplemented by agencies for particular operations. It will be incumbent on each agency to defend any variations in costing from one case to another.

(3) Cost comparisons are to be aimed at full cost, to the maximum extent practical in all cases. All significant Government costs (including allocation of overhead and indirect costs) must be considered, both for direct Government performance and for administration of a contract.

(4) In the solicitation of bids or offers from contractors for workloads that are of a continuing nature, unless otherwise inappropriate, solicitations should provide for prepriced options or renewal options for the out-years. These measures will guard against "buy-in" pricing on the part of contractors. While recompetition also guards against "buy-ins," the use of prepriced or renewal options provides certain advantages such as continuity of operation, the possibility of lower contract prices when the contractor is required to provide equipment or facilities, and reduced turbulence and disruption.

(5) Ordinarily, agencies should not incur the delay and expense of conducting cost comparison studies to justify a Government commercial or industrial activity for products or services estimated to be less than $100,000 in annual operating costs. Activities below this threshold should be performed by contract unless in-house performance is justified in accordance with paragraph 8.a. or b. However, if there is reason to believe that inadequate competition or other factors are causing commercial prices to be unreasonable, a cost comparison study may be conducted. Reasonable efforts should first be made to obtain satisfactory prices from existing commercial sources and to develop other competitive commercial sources.

(6) The cost comparison will use a rate of 10% per annum as the opportunity cost of capital investments and of the net proceeds from the potential sale of capital assets, as prescribed in the Cost Comparison Handbook.
b. **Calculating Contract Costs.**

(1) The contract cost figure must be based on a binding firm bid or proposal, solicited in accordance with pertinent acquisition regulations. Bidders or offerors must be told that an in-house cost estimate is being developed and that a contract may or may not result, depending on the comparative cost of the alternatives.

(2) The factor to be used for the Government's cost of administering contracts, in addition to other costs of using contract performance as specified in the Handbook, is 4% of the contract price or expected cost.

c. **Calculating Costs of Government Operation.**

(1) Each agency should assure that Government operations are organized and staffed for the most efficient performance. To the extent practicable and in accordance with agency manpower and personnel regulations, agencies should precede reviews under this Circular with internal management reviews and reorganizations for accomplishing the work more efficiently, when feasible.

(2) The Government cost factor to be used for Federal employee retirement benefits, based on a dynamic normal cost projection for the Civil Service Retirement Fund, is 20.4%.

(3) The Government cost factor to be used for Federal employee insurance (life and health) benefits, based on actual cost, is 3.7%.

(4) The Government cost factor to be used for Federal employee workmen's compensation, bonuses and awards, and unemployment programs is 1.9%.

d. An existing in-house activity will not be converted to contract performance on the basis of economy unless it will result in savings of at least 10% of the estimated Government personnel costs for the period of the comparative analysis.

e. A "new start" will not be approved on the basis of economy unless it will result in savings compared to contract performance at least equal to 10% of Government personnel costs, plus 25% of the cost of ownership of equipment and facilities, for the period of the comparative analysis.

f. All cost comparisons must be reviewed by an activity independent of the cost analysis preparation to ensure conformance to the instructions in the Cost Comparison Handbook.
10. Administering the Policy.

a. Implementation.

(1) Each agency will designate an official at the assistant secretary or equivalent level, and officials at subordinate contact points for major components, to have overall responsibility for implementation of this Circular within the agency.

(2) Each agency will establish one or more offices as central points of contact to maintain cognizance of specific implementation actions. These offices will have access to all decision documents and data pertinent to actions taken under the Circular and will respond, in a timely manner, to all requests concerning inventories, schedules, reviews, and results of reviews. In considering requests which include information supplied by contractors or prospective contractors, agencies will be guided by OFPP Policy Letter No. 78-3, "Requests for Disclosure of Contractor-Supplied Information Obtained in the Course of a Procurement."

(3) Within 90 days after the date of issuance, each agency will promulgate this Circular, with the minimum necessary internal instructions, identifying the designated official and the central and subordinate contact points. When issued, copies of the internal instructions will be forwarded to OMB's Office of Federal Procurement Policy for review. Copies of subsequent changes will also be forwarded for review.

(4) Each agency will recognize that work for the Federal Government may be performed by use of military personnel, civilian employees, and contract services, and that past experience demonstrates that all three methods have been responsive and dependable in performing sensitive and important work.

(5) Each agency will ensure that contracts awarded as a result of reviews under Circular A-76:

(a) Contain all applicable clauses and provisions related to equal employment opportunities, veterans' preference, and minimum wages and fringe benefits, including implementation of OFPP Policy Letter No. 78-2, dated March 29, 1978, relating to "wage busting;"

(b) Include a provision, consistent with Government post employment conflict of interest standards, that the contractor will give Federal employees, displaced as a result of the conversion to contract performance, the right of first refusal for employment openings on the contract in positions for which they are qualified;

(c) Are awarded to a responsible and responsive bidder or offeror, as required by applicable acquisition regulations; and
(d) Are administered and monitored to achieve proper performance, using appropriate contractual remedies any time performance is less than satisfactory.

(6) Each agency will exert maximum effort to find suitable employment for any displaced Federal employees, including:

(a) Giving them priority consideration for suitable positions with the Government;

(b) Paying reasonable costs for training and relocation when these will contribute directly to placement;

(c) Arranging for gradual transition when conversions are made to provide greater opportunity for attrition and placement; and

(d) Coordinating with the Department of Labor and other agencies to obtain private sector employment for separated workers.

(7) Each agency will provide for alterations to the mode of performance to be timed in consonance with, and adjusted for, the budget process to the extent required and consistent with the firm bid cost study approach.

b. Inventories. Each agency will immediately compile a complete inventory of all commercial and industrial activities subject to this Circular.

(1) Agencies will prepare and maintain a complete inventory of all individual commercial or industrial activities (as defined in paragraph 5.a.), which they operate. In addition to general descriptive information, the inventory should include for each activity: the amount of the Government's capital investment, the annual cost of operation, the date the activity was last reviewed, and the basis on which the activity is being continued under this Circular. The inventory will be updated at least annually to reflect the results of reviews as conducted.

(2) Agencies will also prepare and maintain an inventory of all contracts in excess of $100,000 annually, except those awarded under a duly authorized set aside program, for services which the agency determines could reasonably be performed in-house, including any activities that have been converted from in-house to contract performance. In addition to general descriptive information, the inventory will include: the contract number, name of the contractor, contract period, period of any options, and the total contract price or estimated cost. Inventory updates will reflect exercise of options and the termination and award of contracts.
c. Reviews. Agencies will prepare a detailed schedule for the review of each commercial or industrial activity and contract in the inventory to determine if the existing performance, in-house or contract, continues to be in accordance with the policy and guidelines of this Circular. The flow chart provided as Attachment B demonstrates the sequence of actions required for proper implementation of the Circular.

(1) The schedule for review of in-house commercial and industrial activities will provide for review of all activities during the three-year period following issuance of this revised Circular. Consideration should be given first to criteria that do not concern cost. Unless continuation is justified under paragraphs 5.a. or b., a cost comparison must be conducted to determine the relative cost of Government and private performance.

(2) The schedule for review of contracts will show the date that each contract (including options) will expire, and the date that the requirement will be reviewed to determine if contract performance is to be continued. The agency will review the contract cost and determine whether it is likely that the work can be performed in-house at a cost that is less than contract performance by 10% of Government personnel costs plus 25% of the cost of ownership of equipment and facilities. When this is determined to be likely, a cost comparison will be conducted.

(3) Both schedules will be completed and provided to the Office of Federal Procurement Policy, OMB, within 120 days of the date of issuance of this Circular. These schedules will be made available by the agency to all potentially affected employees and their representatives, and published for the information of contractors.

(4) Reviews will be conducted in accordance with the schedules, unless it is determined that a change in the schedule will be in the best interest of the Government. In such cases, after approval by the agency head or his designee, the schedule can be revised with 60 days notice to all affected parties.

(5) After the initial review, activities approved for continuation will be reviewed again at least once every five years. When it is determined by the agency head or his designee that the circumstances which supported the initial approval are not subject to change, subsequent reviews may be waived. These activities will be retained in the inventory, however, and so identified. A copy of the justification and the waiver will be made available to all interested parties upon request to the agency contact point.

(7) When the number of commercial and industrial activities and the number of covered contracts is so great that reviews cannot be completed in the prescribed time period, the agency may request approval from the Office of Federal Procurement Policy, OMB, to schedule the reviews over a longer period.
d. **New Starts.**

(I) A new start should not be initiated by an executive agency unless the justification for establishing the activity under the provisions of this Circular has been reviewed and approved by a senior official of the agency. A new start which involves a capital investment or annual costs of $500,000 or more must be approved by the agency head or by an official at the assistant secretary or equivalent level.

(2) The actions to be taken under this Circular should normally be completed before the agency's budget request is submitted to OMB. Data in support of such budget requests will be submitted in accordance with OMB Circular No. A-11. In the case of a proposed new start involving a major capital investment where the item to be acquired requires a long lead time (e.g., ADP system, building), approval of budget resources will not constitute OMB approval of that method of meeting the agency need. A final determination to initiate the new start or to rely on a private commercial source, within the resources approved, will be made in accordance with this Circular and other applicable policies, prior to any commitment to a particular acquisition strategy.

(3) When Government ownership of facilities is necessary, the possibility of contract operation must be considered before in-house performance is approved as a new start. If justification for Government operation is dependent on relative cost, the comparative cost analysis may be delayed to accommodate the lead time necessary for acquiring the facilities.

(4) When in-house performance to meet a new requirement is not feasible, or when contract performance would be under an authorized set-aside program, a contract can be awarded without conducting a comparative cost analysis.

e. **Set-Aside Programs**

(I) It is the general policy of the Government, as expressed in the Small Business Act, to ensure that small businesses, including those owned and managed by disadvantaged persons, receive a fair share of Government contract awards.

(2) Consequently, contracts awarded under authorized set-aside programs will not be reviewed for possible in-house performance. Additionally, new requirements which would be suitable for award under a set-aside program should be satisfied by such a contract without a comparative cost analysis.

(3) On the other hand, in-house activities (in excess of $100,000 annually) will not be considered for performance under a set-aside contract except when the conversion is justified by a comparative cost analysis.
11. Appeals.
   a. Each agency will establish a procedure for an informal administrative review of determinations made under this Circular. This procedure will only be used to resolve questions of the determination between contract and in-house performance, and will not apply to questions concerning award to one contractor in preference to another contractor. Upon written request from a directly affected party raising a specific objection, the appeals procedure will provide for:
      (1) An independent, objective review of the initial determination and the rationale upon which the decision was based.
      (2) An expeditious determination, within 30 days, made by an official at the same or higher level than the official who approved the original decision.
   b. The appeals procedure is to provide an administrative safeguard to assure that agency decisions are fair, equitable, and in accordance with established policy. This procedure does not authorize an appeal outside the agency or a judicial review.
   c. Since the appeal procedure is intended to protect the rights of all affected parties — Federal employees and their representative organizations, contractors and potential contractors, and contract employees and their representatives — the procedure and agency determinations may not be subject to negotiation, arbitration, or agreements with any one of those parties. Agency decisions are final.
   d. Agency appeal procedures, when issued, will be submitted to OFPP for review pursuant to paragraph 10.a.(3).

12. Effective Date.

This Circular is effective May 1, 1979, but need not be applied to studies in process where a solicitation for contract bids or proposals was issued prior to the effective date.

Questions or inquiries about this Circular or its implementation should be addressed to the Office of Federal Procurement Policy, OMB, telephone number (202) 395-7207.

Lester A. Fettig
Administrator for Federal Procurement Policy

James T. McIntyre, Jr.
Director
EXAMPLES OF COMMERCIAL AND INDUSTRIAL ACTIVITIES

Audiovisual Products and Services

Photography (still, movie, aerial, etc.)
Photographic processing (developing, printing, enlarging, etc.)
Film and videotape production (script writing, direction, animation, editing, acting, etc.)
Microfilming and other microforms
Art and graphics services
Distribution of audiovisual materials
Reproduction and duplication of audiovisual products

Automatic Data Processing

ADP services — batch processing, time-sharing, etc.
Programming and systems analysis, design, development, and simulation
Key punching and data entry services
Systems engineering and installation
Equipment installation, operation, and maintenance

Maintenance, Overhaul, and Repair

Aircraft and aircraft components
Ships, boats, and components
Motor vehicles
Combat vehicles
Railway systems
Electronic equipment and systems
Weapons and weapon systems
Medical and dental equipment
Office furniture and equipment
Industrial plant equipment
Photographic equipment
Space systems

Systems Engineering, Installation, Operation, and Maintenance

Communications systems — voice, message, data; radio, wire, microwave, and satellite
Missile ranges
Satellite tracking and data acquisition
Radar detection and tracking
Television systems — studio and transmission equipment, distribution systems, receivers, antennas, etc.
Recreational areas
Bulk storage facilities
Manufacturing, Fabrication, Processing, and Packaging

- Ordnance equipment
- Clothing and fabric products
- Liquid, gaseous, and chemical products
- Logging and lumber products
- Communications and electronics equipment
- Rubber and plastic products
- Optical and related products
- Sheet metal and foundry products
- Machined products
- Construction materials
- Test and instrumentation equipment

Real Property

- Design, engineering, construction, modification, repair, and maintenance of buildings and structures
- Construction, alteration, repair, and maintenance of roads and other surfaced areas
- Landscaping, drainage, mowing and care of grounds

Industrial Shops and Services

- Machine, carpentry, electrical and other shops
- Industrial gas production and recharging
- Equipment and instrument fabrication, repair and calibration
- Plumbing, heating, electrical, and air conditioning services, including repair
- Fire protection and prevention services
- Custodial and janitorial services
- Refuse collection and processing

Health Services

- Surgical, medical, dental, and psychiatric care
- Hospitalization, outpatient, and nursing care
- Physical examinations
- Eye and hearing examinations -- manufacturing and fitting glasses and hearing aids
- Medical and dental laboratories
- Dispensaries
- Preventive medicine
- Dietary services
- Veterinary services
Transportation

Operation of motor pools
Bus service
Vehicle operation
Air transportation
Water transportation
Trucking and hauling

Printing and Reproduction

Printing and binding — where the agency or department is exempted from the provisions of Title 44 of the U.S. Code
Reproduction, copying, and duplication
Blue-printing

Research and Development

Basic research
Applied research
Development
Concept formulation and demonstration
R&D studies
R&D testing
R&D support services

Office Services

Stenographic recording and transcribing
Word processing/data entry
Mail/messenger
Translation
Information systems and distribution
Financial auditing and services
Management auditing

Security

Guard and protective services
Systems engineering, installation, and maintenance of security systems and individual privacy systems
Forensic laboratories
Food Services

Operation of cafeterias, mess halls, kitchens, bakeries, dairies, and commissaries
Vending machines
Ice and water

Other Services

Laundry and dry cleaning
Library operation
Mapping and charting
Architect and engineer services
Geological surveys
Cataloging
Training — academic, technical, vocational, and specialized (within the limitations of P.L. 85-507, unless waived by the Office of Personnel Management)
Operation of utility systems (power, gas, water, steam, and sewage)
IMPLEMENTATION OF OMB CIRCULAR A-76

EXISTING GOVERNMENT ACTIVITY

- IN HOUSE
- GOVERNMENTAL FUNCTION
- ANNUAL COST LESS THAN $10,000
- INVENTORY SCHEDULE FOR REVIEW
- IN HOUSE PERFORMANCE REQUESED FOR MILITARY READINESS
- SATISFACTORY PRIVATE SOURCE AVAILABLE
- WOULD CONTRACT COST BE LESS THAN $10,000
- COMPARATIVE COST ANALYSIS
- CONTRACT COST LESS THAN IN HOUSE BY SPECIFIED MARGIN

EXISTING CONTRACT

- IN-HOUSE PERFORMANCE FEASIBLE
- NO CONTRACT
- IN-HOUSE
- ANNUAL COST LESS THAN $100,000
- IN-HOUSE PERFORMANCE REQUESED FOR MILITARY READINESS
- WOULD CONTRACT BE LESS THAN $100,000
- IN-HOUSE
- SATISFACTORY PRIVATE SOURCE AVAILABLE
- WOULD CONTRACT COST BE LESS THAN $100,000
- COMPARATIVE COST ANALYSIS
- CONTRACT COST LESS THAN IN HOUSE BY SPECIFIED MARGIN

PROPOSED NEW START

- IN HOUSE
- GOVERNMENTAL FUNCTION
- ANNUAL COST LESS THAN $100,000
- INVENTORY SCHEDULE FOR REVIEW
- IN HOUSE PERFORMANCE REQUESED FOR MILITARY READINESS
- SATISFACTORY PRIVATE SOURCE AVAILABLE
- WOULD CONTRACT BE LESS THAN $100,000
- COMPARATIVE COST ANALYSIS
- CONTRACT COST LESS THAN IN HOUSE BY SPECIFIED MARGIN
## Comparative Cost of In-House and Contracting-Out Performance of [Product/Service]

**Line Item** | **Cost Element** | **First Year** | **Second Year** | **Third Year** | **Additional Years As Appropriate** | **Total** | **Reference**
--- | --- | --- | --- | --- | --- | --- | ---
**In-House Performance (Chapter III)** |  |  |  |  |  |  |  
1. Direct Material |  |  |  |  |  |  | **A**
2. Material Overhead |  |  |  |  |  |  | **B**
3. Direct Labor |  |  |  |  |  |  | **C**
4. Fringe Benefits on Direct Labor |  |  |  |  |  |  | **D**
5. Operations Overhead |  |  |  |  |  |  | **E**
6. Other Direct Costs |  |  |  |  |  |  | **F**
7. General and Administrative Expense |  |  |  |  |  |  | **G**
8. Inflation |  |  |  |  |  | **Not applicable** | **H**
9. Total |  |  |  |  |  |  |  
**Performance by Contracting Out (Chapter IV)** |  |  |  |  |  |  |  
10. Contract Price |  |  |  |  |  |  | **I**
11. Transportation |  |  |  |  |  |  | **J**
12. Contract Administration |  |  |  |  |  |  | **K**
13. Government-Furnished Property |  |  |  |  |  |  | **L**

(Enter Amounts Rounded to Nearest Dollar)
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<th>LINE ITEM</th>
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NOTES

1. If more than 6 years are involved, use another form to detail the annual cost of each year and enter the total here.

2. Attach supporting documentation as prescribed for each element of cost for which an entry is made and identify it with the established reference. Pages should be separately numbered with the prescribed alphabetic reference and in numbered sequence; e.g., A-1, A-2, A-3. The entry in this column should indicate the total number of pages submitted; e.g., A-14 means reference "A" consists of 14 pages.

**OTHER CONSIDERATIONS (CHAPTER V)**

**ADDITIONS AND (DEDUCTIONS) TO IN-HOUSE PERFORMANCE**

ADD:

18. COST OF CAPITAL

19. ONE-TIME NEW-START COSTS

20. OTHER COSTS

DEDUCT:

21. OTHER COSTS

22. TOTAL

\[ \begin{array}{cccccc}
\text{LINE ITEM} & \text{COST ELEMENT} & \text{FIRST YEAR} & \text{SECOND YEAR} & \text{THIRD YEAR} & \text{TOTAL} \\
14. STANDBY MAINTENANCE & & & & & \\
15. OTHER COSTS & & & & & \\
16. GENERAL AND ADMINISTRATIVE EXPENSE & & & & & \\
17. TOTAL & & & & & \\
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**MINIMUM COST DIFFERENTIAL (CHAPTER 41)**

| 31. NEW-START                                                            |              |            |             |            |                                 |       | AA       |
| 32. CONVERSION                                                           |              |            |             |            |                                 |       | BB       |

**SUMMARY**

<p>| 33. ADJUSTED COST OF IN-HOUSE PERFORMANCE (LINE 92, LINE 22 + 31)        |              |            |             |            |                                 |       |           |
| 34. ADJUSTED COST OF CONTRACTING-OUT PERFORMANCE (LINE 17 + LINE 30 + 32)|              |            |             |            |                                 |       |           |</p>
<table>
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<tr>
<th>LINE ITEM</th>
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<tr>
<td>35. COST OF IN-HOUSE (UNDER) COST OF CONTRACTING-OUT PERFORMANCE (LINES 33 and 34)</td>
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**IN-HOUSE ESTIMATE PREPARED BY**

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**FIRST YEAR** | **SECOND YEAR** | **THIRD YEAR** | **ADDITIONAL YEARS AS APPROPRIATE** | **TOTAL** | **REFERENCE**

|     |     |     |     |     |     |

**COST COMPARISON PREPARED BY:**

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**AUDIT OPINION**

We have reviewed the above form and substantiate the currency, reasonableness, completeness, of the data entries made prior to bid opening. We further substantiate that those entries are in compliance with OMB Circular A-76, the related cost comparison handbook, and other applicable guidance with the exception, if any, of those highlighted in the attached United States Army Audit Agency Report.

<table>
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</table>
INSTALLATION/ACTIVITY VERIFICATION

I have reviewed the entries and mathematical calculations made subsequent to the opening of contractor proposals or bids (lines 10, 12, 16, 17, 27, 30, 34, and 35) and verify their correctness. I further verify that those entries and calculations have been made according to the procedures in DMR Circular A-76, related cost comparison handbook, and DOD and Army supplements.

PERFORMANCE RECOMMENDATION (IN-HOUSE OR CONTRACT) APPROVED BY:

_________________________  ______________________
(NAME)                     (DATE)

_________________________  ______________________
(TITLE)                    (TELEPHONE)
LIST OF REFERENCES


15. Congress. Testimony of Mr. Elmer Staats, Deputy Director of the Bureau of the Budget, before the subcommittee of the Senate Select Committee on Small Business, May 1960.

16. Congress. Testimony of Mr. Elmer Staats, Deputy Director of the Bureau of the Budget, before the Joint Economic Committee, 1963.


22. Department of the Army Circular No. 235-1. Industrial Activities and Labor Relations--Commercial/Industrial Type Activities (CITA), 1 February 1980.


27. Department of the Army, Headquarters, United States Army Forces Command, UNCLASSIFIED Message to AIG 7433, Subject: Civilian Manpower Spaces for CITA Program Management, 281055Z November 1979.


33. Department of the Army, Headquarters, United States Army Training and Doctrine Command, UNCLASSIFIED Message to AIG 7426, Subject: Budget Data for AR 5-10 Documentation, 271500Z August 1979.

34. Department of the Army Logistics Management Center ALM-37-4567-RB(C), Installation Purchasing and Contracting Information Text, August 1978.


38. Department of the Army, United States Army Institute of Administration, Comptroller Department, Key STANFINS Outputs: A Managerial Approach to Their Use, Fort Benjamin Harrison, Indiana, July 1976.


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<tr>
<th>No.</th>
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</tr>
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| 1.  | Defense Technical Information Center  
Cameron Station  
Alexandria, Virginia 22314                                                   | 2      |
| 2.  | Defense Logistics Studies Information Exchange  
U.S. Army Logistics Management Center  
Fort Lee, Virginia 23801                                                      | 1      |
| 3.  | Library, Code 0142  
Naval Postgraduate School  
Monterey, California 93940                                                    | 2      |
| 4.  | Department Chairman, Code 54  
Department of Administrative Sciences  
Naval Postgraduate School  
Monterey, California 93940                                                    | 1      |
| 5.  | LCDR Robert A. Bobulinski, Code 54Bb  
Department of Administrative Sciences  
Naval Postgraduate School  
Monterey, California 93940                                                    | 4      |
| 6.  | Professor Shu S. Liao, Code 54Lc  
Department of Administrative Sciences  
Naval Postgraduate School  
Monterey, California 93940                                                    | 1      |
| 7.  | HEADQUARTERS  
U.S. Army Logistics Management Center  
ATTN: Course Director-CITA Program Management Course  
Fort Lee, Virginia 23801                                                      | 2      |
| 8.  | Department of the Army  
Office of the Chief of Staff  
ATTN: Director of Management  
Washington, D.C. 20301                                                         | 1      |
| 9.  | Commander  
7th Infantry Division and Fort Ord  
ATTN: AFZW-CM-CA (ILT Gryska)  
Fort Ord, California 93940                                                     | 1      |
10. 8th Infantry Division (RMO)
ATTN: CPT. Hintze
APO NY 09111

11. Captain Grant G. Hintze
560 E. Rowland #F-1
Covina, California 91723