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## Synopsis

### Allocation of Home Office Expenses to Segments and Business Unit General and Administrative Expenses to Final Cost Objectives

by

Major Stephen T. Lynch

The allocation of indirect costs to federal government contracts is based on principles of cost accounting contained in the cost principles, the Cost Accounting Standards (CAS), and Generally Accepted Accounting Principles (GAAP). This thesis discusses the application of these rules to the allocation of two types of indirect cost: home office expenses, and general and administrative (G&A) expenses. It also addresses relevant decisions in the federal courts and boards of contract appeal.

Allocation of Home Office Expenses to  
Segments and Business Unit General and  
Administrative Expenses to Final Cost Objectives

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## TABLE OF CONTENTS

INTRODUCTION.....	1
 <u>CHAPTER ONE</u>	
COST ACCOUNTING CONCEPTS .....	7
I. Basic Concepts .....	7
A. Cost Accounting and Financial Accounting .....	7
B. Cost Regulations .....	9
1. Cost Accounting Standards (CAS).....	9
2. Cost Principles.....	10
3. Interaction of Cost Principles and CAS.....	11
4. Generally Accepted Accounting Principles .....	11
C. Allowability.....	12
D. Allocation.....	13
1. Definition - Allocation and Allocable Cost.....	13
2. Cost Objectives.....	14
E. Types of Cost - Direct and Indirect.....	16
F. Indirect Cost Pools.....	17
1. Criteria.....	17
2. Cost Principles - Examples.....	17
a. Manufacturing Overhead.....	18
b. Selling Expenses .....	18
c. General and Administrative (G&A) Costs .....	18
3. Cost Accounting Standards - Examples.....	19
G. Distribution Bases.....	20
1. Basic Requirement .....	20
2. Example - Service-related Indirect Cost Pools.....	20
H. Cost Accounting Period.....	20
II. Direct Cost Requirements .....	21
A. Identifying Direct Costs.....	21
1. Definitions.....	21
a. Overview .....	21
b. Cost Principles.....	22
c. Cost Accounting Standards.....	22
d. Comparison of the CAS Definition and the Cost Principle Definition .....	23

2. Identification of Direct Costs .....	23
B. Cost Principles.....	25
C. Cost Accounting Standard 418.....	25
III. Indirect Cost Requirements.....	26
A. Cost Principles .....	26
1. Identifying Indirect Costs.....	26
2. Indirect Cost Pools .....	27
3. Distribution to Cost Objectives.....	28
a. Selection of a Base .....	28
b. Fragmentation of a Base .....	30
B. Cost Accounting Standard 418.....	31
1. Definitions.....	31
2. Indirect Cost Pools .....	32
a. Basic Framework.....	32
b. Homogeneity.....	32
c. Illustrations .....	33
3. Allocation.....	34
a. General Criteria.....	34
b. Pools with Material Amounts of Direct Labor or Direct Material Management or Supervision Costs.....	35
c. Pools Without Material Amounts of Direct Labor or Direct Material Management or Supervision Costs.....	36
4. Special Allocations and Pre-established Rates .....	39

## CHAPTER TWO

ALLOCATION OF HOME OFFICE EXPENSES TO SEGMENTS .....	40
I. Introduction.....	40
II. Cost Accounting Standard 403.....	40
A. Purpose .....	40
B. Basic Requirements .....	41
C. Definitions.....	42
D. Background.....	44
1. Overview .....	44
2. History.....	44

3. Effective Date .....	46
E. Business Organizations .....	46
1. Home Offices and Segments .....	46
2. Business Units .....	47
3. Illustration .....	48
F. Home Office Expenses .....	49
1. Overview .....	49
2. Cost Objectives .....	49
a. Definition .....	49
b. Output and Organizational Cost Objectives .....	50
c. Final and Intermediate Cost Objectives .....	50
3. Indirect Cost Pools .....	51
a. Definition .....	51
b. Direct vs. Indirect Costs .....	51
c. Homogeneous Indirect Cost Pools .....	52
(1). Definition .....	52
(2). Illustrations .....	53
d. Heterogeneous Indirect Cost Pool .....	54
G. Allocation Bases .....	55
1. Definitions .....	55
2. Segments in Allocation Bases .....	55
3. Illustrations .....	56
a. Centralized Service Functions .....	56
b. Staff Management .....	57
c. Central Payments or Accruals .....	58
H. Allocation Techniques .....	59
1. Overview .....	59
2. Techniques .....	59
3. Typical Home Office Costs .....	60
4. Example .....	61
5. Direct Allocation to Segments .....	62
a. Overview .....	62
b. Significant Cases .....	62
6. Indirect Allocation to Segments .....	67
a. Overview .....	67
b. Base Composition .....	68
c. Indirect Cost Pools .....	68
d. Significant Cases .....	72
(1). Allocation of Taxes .....	72
(2). Non-tax Cases .....	81
7. Allocation of Residual Expenses .....	82
8. Special Allocations .....	84

III. COST PRINCIPLES.....	84
---------------------------	----

### CHAPTER THREE

ALLOCATION OF BUSINESS UNIT GENERAL AND ADMINISTRATIVE (G&A) EXPENSES TO FINAL COST OBJECTIVES.....	87
---	----

I. INTRODUCTION.....	87
----------------------	----

II. COST PRINCIPLES.....	87
--------------------------	----

A. Basic Requirements.....	87
B. Cost Pools.....	89
1. Pool Groupings.....	89
2. Types of Costs in the Pool.....	90
a. Overview.....	90
b. Direct Costs.....	90
c. Allocation Methods.....	92
d. Cost Pool Components.....	93
C. Allocation Base.....	94
1. Standards for Selecting a Base.....	94
2. Types of Bases.....	95
a. Guidance.....	95
b. Overview.....	98
3. Cost of Sales Base vs. Cost Input Base.....	99
4. Total Cost Base.....	101
5. Single Element Base.....	102

III. COST ACCOUNTING STANDARD 410.....	103
--	-----

A. Purpose.....	103
B. Definitions.....	104
1. Allocate.....	104
2. Business unit.....	104
3. Cost input.....	104
4. Cost objective.....	104
5. Final cost objective.....	105
6. General and Administrative (G&A) expense.....	105
7. Segment.....	105
C. Background.....	106

1. Relationship to Cost Principles.....	106
2. Effective Date.....	107
3. Cost of Sales vs. Cost Input Base.....	107
4. Allocation Process.....	109
5. Allocation v. Allowability.....	110
D. Cost Pools.....	111
1. Generally.....	111
2. Composite Pools.....	112
3. Selling Costs.....	112
4. Home Office Expenses.....	113
E. Allocation.....	114
1. Basic Requirements.....	114
2. Allocation Bases.....	115
a. Types of Bases.....	115
b. Selection of a Base.....	116
(1). Basic Requirements.....	116
(2). Examples.....	117
(3). Significant Litigation.....	118
c. Transition to a Cost Input Base.....	123
(1). Overview.....	123
(2). Two Options.....	123
(a). Immediate Change Option.....	124
(b). Transition Option.....	124
(c). Significant Litigation.....	126
3. Allocation to Final Cost Objective.....	128
a. Allocation to Inventory.....	128
b. Allocation of Home Office Expenses.....	128
(1). Segments Without Home Office Functions.....	128
(2). Segments With Home Office Functions.....	129
c. Special Allocations.....	130
d. Errors in Allocation.....	131
 CONCLUSION.....	 133
 FOOTNOTES.....	 134
 APPENDIX A - Cost Accounting Standard 400 (Definitions).....	 171
 APPENDIX B - Illustration - Allocation of Home Office Expenses to Segments under Cost Accounting Standard 403.....	 186



APPENDIX C - Illustration - Allocation of Business  
Unit G&A Expenses to Final Cost Objectives under  
Cost Accounting Standard 410 .....192

BIBLIOGRAPHY.....197

## INTRODUCTION

This thesis examines the allocation of two types of indirect costs: home office expenses to business segments, and business unit general and administrative (G&A) expenses to final cost objectives. The subject is covered in three chapters. The first chapter is an introduction to key cost accounting concepts. Chapter Two covers the regulatory scheme and significant litigation involving home office expenses, while Chapter Three does the same for G&A.

This thesis provides an introduction to a complex area of government cost accounting. The complexity is due in part to the fact that the topic involves two separate professional disciplines: government cost accounting and government contract law. An understanding of this topic requires an understanding of both disciplines, yet newcomers to the field are often knowledgeable in only one of the two.

For attorneys and other legal professionals without an extensive accounting background, the problem is compounded by two mistaken assumptions those of us new to the field typically bring along. The first mistaken assumption is that the basic principles of accounting are objectively and uniformly applied in some mechanistic mathematical way. In fact, the application of these principles can involve a great deal of personal judgement on the part of accountants.

Greater professional differences of opinion exist within the field than one new to the field often expects.

Another mistaken assumption is that accounting is a monolithic system. In fact, accounting, like the law and other bodies of knowledge, consists of many related categories and subcategories.

Confusion arises because a broad category of accounting - called financial accounting - with which many novices are at least minimally familiar is not directly applicable to the category of accounting covering home office and G&A expenses - called cost accounting. Not only must newcomers learn a new language and set of rules, but they must learn to distinguish these new rules of cost accounting from their skeletal understanding of financial accounting, including what little they may remember from "Accounting 101."

Typically, introductory accounting courses and texts focus on financial accounting, and provide little or no coverage of government cost accounting. Many basic accounting text books which cover the area of financial accounting refer to their subject by the generic term "Accounting." Novices who look to such texts for an introduction to government cost accounting will find them lacking.

When compared with the field of financial accounting, government cost accounting is still an emerging field, influenced in large measure by government requirements imposed over the last twenty years, such as the Cost Accounting Standards. This helps to

explain why there is a scarcity of introductory material on the subject.<sup>1</sup> The few cost accounting guides which provide an introduction are not always widely available, nor are they always current. Rarely, if ever, do these works reference one another, or even acknowledge the existence of other works in the field of cost accounting. Further, most are written by accountants and assume a level of accounting knowledge that newcomers to the field often lack. Those published by the government frequently exhibit, to quote Ellery Sedgwick, an "obscurity which on a third reading deepens to opacity."

The picture is further complicated by strong differences of opinion between contractors, commentators and government agencies, over the interpretation and implementation of various cost accounting regulations.<sup>2</sup> Thus, one cannot always rely on a single source for a balanced presentation of the law or even the relevant accounting principles.

All of which leads to two conclusions: (1) that the field of government cost accounting is in need of a current and comprehensive introductory text; and (2) until its publication, newcomers to the field must rely on a combination of sources. This thesis is merely one of them.

Chapter One explains the basic differences between financial and cost accounting, and provides an overview of key cost accounting concepts. In addition, the chapter offers a general introduction to the

regulations which govern cost allocation, the Cost Accounting Standards (CAS) and cost principles, and a discussion of CAS 418, Allocation of Direct and Indirect Costs. Chapter One provides the background for a more detailed discussion of home office expenses and G&A expenses in Chapters Two and Three.

Home office expenses are indirect costs which, until the advent of CAS 403, were usually grouped together with G&A costs. CAS 403 provides detailed guidance for the separate allocation of home office expenses from the upper echelons of a company, e.g., the corporate home office, to an intermediate level, e.g., a division. Once the home office expenses are allocated to an intermediate level, CAS 410 governs their allocation to the lowest levels of the company, such as a contract or project. In turn, CAS 410 places some restraints on the allocation of G&A costs, notably in terms of the types of bases a contractor can use.

CAS 403 and CAS 410 did not eliminate entirely alternate ways of allocating home office or G&A expenses. Both standards only pertain to contracts subject to what is known as full-CAS coverage. These contracts must be of high dollar value and meet other criteria discussed in Chapter 1. For contracts not subject to CAS, allocation of home office and G&A expenses are covered by the cost principles - which may permit alternative allocation methods.

The cost principles establish rules which govern the way contracts are priced, and the way in which contract costs are paid and

accounted for. These rules do not specifically address the issue of home office expense allocation, but have been interpreted as permitting flexibility in a contractor's treatment of home office and G&A expenses. Thus, home office expenses and G&A expenses are often grouped together for contracts subject only to the cost principles.

Chapter Two discusses in detail the allocation of home office expenses to business segments. A home office typically performs managerial, supervisory or administrative functions which generate costs. The allocation of these costs is governed by CAS 403. The chapter's primary focus is CAS 403, since the cost principles provide little express guidance. After a discussion of the purpose and background, Chapter Two explains key sections of the Standard and relevant board and court cases. The major cases involving the Standard, including the recent decision of Hercules, Inc. v. U.S.<sup>3</sup>, concern the proper allocation of state or local taxes.

Chapter Three discusses in detail the allocation of business unit G&A expenses to final cost objectives. The chapter covers in detail CAS 410 and relevant cost principles, since both have broad applicability and both have generated some controversy. CAS 410 restricts a contractor to one of three cost input bases, and prohibits use of a cost of sales base. Conversely, the cost principles give contractors more flexibility and a greater selection of bases with which to allocate their G&A costs. Chapter Three explains the significance of these and other distinctions. Implementation of CAS

410 has generated significant differences of opinion between the Defense Contract Audit Agency (DCAA)<sup>4</sup> and contractors. Chapter Three highlights perhaps the most notable disagreement which concerned the discretionary use of cost bases seemingly authorized by the Standard. The DCAA opposed their use, but was eventually overruled in Ford Aerospace.<sup>5</sup>

This thesis offers an introduction to the allocation of two categories of indirect cost which, like other areas of government cost accounting, will receive increasing attention in coming years. With dollars available for defense contracts and many other federal contracts shrinking, government auditors and contracting officers will pay ever greater attention to contractors' cost accounting systems. Hopefully, this thesis will help the contracting community, particularly those who are new to the field of cost accounting, better understand the issues which surround the allocation of home office expenses to segments and business unit G&A expenses to final cost objectives.

## CHAPTER 1

### COST ACCOUNTING CONCEPTS

This chapter provides an introduction to key cost accounting concepts as related to federal government contracts. Although cost accounting has a long history,<sup>6</sup> the concepts which relate to government cost accounting are not widely known and still evolving. Even within the field of cost accounting, controversies persist over such fundamental issues as the definition of the term "direct cost."<sup>7</sup> This chapter highlights such controversies, while introducing concepts essential to an understanding of the allocation of home office and G&A expense.

#### I. Basic Concepts

##### A. Cost Accounting and Financial Accounting

Cost accounting systems and financial accounting systems perform two complementary but essentially different functions. Financial accounting governs the "measurement and assignment of revenues and expenses to the accounting period for financial reporting purposes."<sup>8</sup> Financial accounting systems are used by accountants for the preparation and reporting of a company's entire balance sheet and income statement.<sup>9</sup> The operation of financial accounting systems is governed in large measure by generally



accepted accounting principles (GAAPs - discussed in more detail infra).

Cost accounting controls the measurement and assignment of expenses within a company. A cost accounting system has at least three functions. It provides:

- (1) a mechanism for recording the total cost of transactions,
- (2) a basis for distributing costs to cost objectives, and
- (3) data for the financial accounting system.<sup>10</sup>

Thus, a cost accounting system controls the assignment of expenses and revenues to accounting objectives - such as a contract or a production line. It also meets management needs for cost information. This information provides a basis for estimating future contract costs, and for costing and measuring contract performance.<sup>11</sup>

While a financial accounting system aggregates costs of different products together for an accounting period, a cost accounting system aggregates costs on a more precise basis and can provide reports on product costs at various times during the accounting period, ideally as close to the time of production as possible.<sup>12</sup>

By way of example, a company's financial reporting system controls how a company's profit and loss for the year is to be computed. That same company's cost accounting system provides managers with data on the costs associated with various business units within the company which would be used not only to determine

profit or loss, but also to give managers a measure with which to gauge efficiency.

The exact data provided by any single cost accounting system and the timeliness of that data varies from company to company since each system is designed to meet a company's specific needs. For government contractors, the cost accounting system often must be able to account for costs down to the level of each government contract.

As pointed out in the Armed Services Pricing Manual, cost accounting is a complex and difficult subject. Cost accounting systems vary widely among contractors. Variables affecting system design and make-up include the complexity of operations, the products or services sold, and the types of contracts involved.<sup>13</sup>

## B. Cost Regulations

Two major bodies of government regulations directly address cost accounting systems and cost allocation for government contracts: the Cost Accounting Standards and the cost principles.

### 1. Cost Accounting Standards (CAS)<sup>14</sup>

The CAS provide criteria for improvement in the quality and uniformity of cost accounting data.<sup>15</sup> They apply solely to high cost negotiated contracts.<sup>16</sup>

There are two types of CAS coverage: full and modified. Full-coverage requires that a contractor's business unit comply with all of the CAS in effect on the date of contract award.<sup>17</sup> Modified coverage requires that the contractor's business unit only comply with two CAS standards: Standard 401, Consistency in Estimating, Accumulating, and Reporting Costs; and Standard 402, Consistency in Allocating Costs Incurred for the Same Purpose.<sup>18</sup>

It is important to keep in mind that the CAS apply to contracts and subcontracts, not contractors per se. Indeed, the CAS may only apply to contracts or subcontracts for a particular division or business unit of a company. Thus, a contractor's military aircraft division may be required to comply with cost accounting standards on some contracts and not others. Some contracts and subcontracts may require full coverage, others modified coverage and others no coverage at all.<sup>19</sup>

## 2. Cost Principles

The cost principles establish rules for:

[T]he allowance of costs in negotiating cost-reimbursement contracts and making payments thereunder, and in pricing all contracts and modifications whenever cost analysis is performed.<sup>20</sup>

The cost principles are "essentially compatible with the criteria contained in the cost accounting standards for measuring, assigning, and allocating costs to government contracts."<sup>21</sup> In contrast to the CAS, cost principles apply to virtually all Government contracts.<sup>22</sup> Not only do the cost principles provide general rules and guidance, but they also give guidance on many specific cost types.<sup>23</sup>

### 3. Interaction of Cost Principles and CAS

The cost principles and the CAS interact in several ways. For example, cost criteria and prescriptions contained in certain CAS have been incorporated into various sections of the cost principles.<sup>24</sup> In addition, even when not directly applicable to a contract, the CAS is used as guidance (particularly by the DCAA) on issues that the cost principles may not cover in detail.<sup>25</sup>

### 4. Generally Accepted Accounting Principles (GAAPs)

The cost principles and CAS do not cover every issue of cost accounting. In cases where either does not address a specific element of cost, generally accepted accounting principles (GAAPs) can be used as a source for determining proper accounting treatment.<sup>26</sup> GAAP is defined as:

. . . a technical accounting term which encompasses the conventions, rules and procedures necessary to define accepted accounting practice at a particular time. It includes not only broad guidelines of

application but also detailed practices and procedures . . . <sup>27</sup>

Most GAAPs can be found in the American Institute of Certified Public Accountants (AICPA) Codification of Statements on Auditing Standards. Other authoritative sources include the Financial Accounting Standards Board, Accounting Principles Board opinions, and AICPA accounting research bulletins.<sup>28</sup>

GAAPs "are established for financial accounting purposes and provide little guidance for cost accounting purposes in the government contract industry."<sup>29</sup> In particular, few GAAPs address the allocability of costs to specific final cost objectives, particularly as they relate to government contracts.<sup>30</sup>

### C. Allowability

The cost principles divide costs broadly into allowable and unallowable costs. These are costs which "the parties agree will or will not be considered in establishing the amount of compensation."<sup>31</sup> The cost principles list a number of factors for determining allowability:

- (1) Reasonableness;
- (2) Allocability;
- (3) Standards promulgated by the CAS Board, if applicable; otherwise, generally accepted accounting principles and practices appropriate to the particular circumstances;

(4) Terms of the contract;

(5) Any other limitations contained in FAR  
Subpart 31.<sup>32</sup>

Unallowable costs must be "identified and excluded from any billing, claim or proposal."<sup>33</sup> A contractor's cost accounting system must be able to adequately establish and maintain visibility of identified unallowable costs.<sup>34</sup>

#### D. Allocation

##### 1. Definition - Allocation and Allocable Cost

Allocability is an important basic element for cost allowability under the cost principles. It is also a major focus of the CAS. The term "allocate" is defined in the cost principles as follows:

[Allocate] means to assign an item of cost or a group of items of cost, to one or more cost objectives. This term includes both direct assignment of cost and the reassignment of a share from an indirect cost pool.<sup>35</sup>

This definition is identical to the one used in the CAS.<sup>36</sup>

In order to allocate a cost to a government contract, the cost must meet certain criteria under the cost principles. An "allocable" cost is defined as:

. . . assignable or chargeable to one or more cost objectives on the basis of relative benefits

received or other equitable relationship. Subject to the foregoing, a cost is allocable to a Government contract if it -

- (a) Is incurred specifically for the contract;
- (b) Benefits both the contract and other work, and can be distributed to them in reasonable proportion to the benefits received; or
- (c) Is necessary to the overall operations of the business, although a direct relationship to any particular cost objective cannot be shown.<sup>37</sup>

Thus, in order to allocate a cost to a government contract, the contractor must ensure that the cost in question complies with the definition of "allocable" cost.

It is important to keep in mind the difference between allocability and allowability. As Professor Cibinic states:

"Allocability" is one of the factors which determine whether a particular cost is allowable. . . . Allowability is not a synonym for allocability or vice versa.<sup>38</sup>

## 2. Cost Objectives

Cost accounting seeks to determine the actual costs of particular internal operations of a business.<sup>39</sup> To do so, costs must be allocated or distributed among cost objectives. At least in theory, a cost objective can be any work unit. In practice, a cost objective is a unit

for which a contractor wishes to determine the costs of operation, such as business products, business departments, or even particular contracts.

The cost principles define "cost objectives" as:

. . . . a function, organizational subdivision, contract or other work unit 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.<sup>40</sup>

Cost objectives are established by a business in light of management's needs for information. Two common categories of cost objectives are output and organizational. In the first, cost objectives focus on manufacturing costs. In the other, cost objectives are based on a company's organizational structure. Thus, two firms which manufacture the same product might have the same output cost objectives, but different organizational ones.<sup>41</sup> Usually a company will use a combination of organizational and product cost objectives.<sup>42</sup>

Cost objectives are also categorized as either final or intermediate. A final cost objective by definition is one that has both direct and indirect cost allocated to it and is one of the final cost accumulation points in a contractor's cost accounting system.<sup>43</sup> A final cost objective is often a particular contract or product, whereas an intermediate cost objective can be an organizational department or project.<sup>44</sup>



### E. Types of Cost - Direct and Indirect

Costs which are allocated to cost objectives are categorized as either direct costs or indirect costs. In general, direct costs are those specifically incurred for a single cost objective, while indirect costs are incurred for two or more cost objectives.<sup>45</sup> The cost principles and CAS provide detailed guidance for both types of costs, as discussed below.<sup>46</sup>

As Bedingfield and Rosen point out, the nature of a cost, such as labor or material, does not determine whether it is direct or indirect. Instead, the key factor is the relationship between cost and benefit. "Where only one cost objective benefits from the goods or services consumed, it alone should bear the expense."<sup>47</sup> Another commentator puts it this way:

Because no cost is inherently direct or indirect, the circumstances under which a cost is incurred determine the proper classification of the cost. Generally speaking, if the cost of an activity is supportive, it should be classified as an indirect cost. If the cost of an activity is productive, it should be considered a direct cost.<sup>48</sup>

Generalizations in this area are not necessarily helpful, however, since the determination of direct and indirect costs is based on a multiplicity of factors which often vary from company to company.

## F. Indirect Cost Pools

### 1. Criteria

Under the cost principles, indirect cost pools must meet the following criteria:

Indirect costs shall be accumulated by logical cost groupings with due consideration of the reasons for incurring such costs. Each grouping should be determined so as to permit distribution of the grouping on the basis of the benefits accruing to the several cost objectives.<sup>49</sup>

Greater precision in cost allocation can be achieved by increasing the number of cost pools. "This is because additional cost pools will permit the making of finer distinctions in grouping indirect costs."<sup>50</sup> However, the cost principles recognize that practical considerations limit the number of pools a contractor should use.<sup>51</sup> At some point, the administrative expense and inconvenience of multiple pools outweighs the increase in accuracy they provide. Additional pools also are unnecessary when they would not significantly alter the allocation of costs.

### 2. Cost Principles - Examples

The cost principles offer three examples of common indirect cost pools: manufacturing overhead, selling expenses, and G&A.<sup>52</sup>

a. Manufacturing Overhead

Manufacturing overhead is defined as:

Those costs involved in owning and maintaining [a company's] manufacturing plant (buildings and machinery), such as taxes, depreciation, fire insurance, and maintenance. It also includes indirect expenses related to manufacturing labor, such as payroll taxes, and insurance, vacations, welfare, pensions and other fringe benefits.<sup>53</sup>

b. Selling Expenses

Selling expenses as defined in the cost principles is a broad category which includes all efforts to market products or services. It includes costs of advertising corporate image enhancement, bid and proposal costs, market planning and direct selling.<sup>54</sup>

c. General and Administrative (G&A) Costs

G&A costs are defined under the cost principles as:

Any management, financial, and other expense which is incurred by or allocated to a business unit and which is for the general management and administration of the business unit as a whole. G&A expense does not include those management expenses whose beneficial or causal relationship or cost objectives can be more directly measured by a base other than a cost input base representing the total activity of a business unit during a cost accounting period.<sup>55</sup>

G&A costs have also been defined as:

. . . the expense of the general operations of the business which cannot be related to any costs objective through showing of a cause and effect relationship, but which must nevertheless, be incurred if the business is to be run.<sup>56</sup>

The cost principles recognize that subdivisions of these groupings may be necessary.<sup>57</sup>

### 3. Cost Accounting Standards - Examples

The CAS distinguishes between G&A, home office expense, and overhead. Overhead refers to a group of indirect costs which support general product lines, organizational groups and groups of contracts.<sup>58</sup> By comparison, G&A expenses are incurred by or allocated to a business unit for the general management and administration of the business unit. It is governed by CAS 410 for contracts with full-CAS coverage. Home office expense is the cost of managing the overall operations of a multi-segment company.<sup>59</sup> It is governed by CAS 403 for contracts with full-CAS coverage. Other types of indirect costs are typically covered by CAS 418, Allocation of Direct and Indirect Costs (discussed later in this chapter).

## G. Distribution Bases

### 1. Basic Requirement

A fundamental requirement for allocation of indirect costs is the selection of "a distribution base common to all cost objectives to which the grouping is to be allocated."<sup>60</sup> The base should permit allocation of the costs in the group based on the benefits each cost objective receives.<sup>61</sup>

### 2. Example - Service-related Indirect Cost Pools

As an example, service-related indirect cost pools could be allocated to production-related cost objectives using the bases suggested below.<sup>62</sup>

<u>SERVICE DEPARTMENT</u>	<u>BASE</u>
1. Personnel	1. Number of employees, labor dollars
2. Repairs and maintenance	2. Number of service calls
3. Building and grounds	3. Square feet of floor space
4. Production planning & control	4. Labor hours, labor dollars, machine hours

Depending on the circumstances, a company could use other distribution bases, so long as they distributed cost in relation to the benefit received by the cost objectives.

## H. Cost Accounting Period

Under the cost principles and CAS, the base period for allocating indirect costs is normally "the cost accounting period during which such costs are incurred and accumulated for distribution to work

performed in that period."<sup>63</sup> Under CAS 406, a cost accounting period must normally be a year in length.<sup>64</sup> The cost principles also normally require an accounting period of a year, but permit use of a shorter period: (1) for contracts which only entail a small portion of the year, or (2) when shorter periods are the industry practice.<sup>65</sup>

## II. Direct Cost Requirements

Both the cost principles and the CAS contain a preference for direct costing.<sup>66</sup> One advantage of direct costing lies in its simplicity. Once a cost is categorized as direct, there is no need to choose a cost pool, allocation base or allocation method.<sup>67</sup>

### A. Identifying Direct Costs

#### 1. Definitions

##### a. Overview

The definitions of direct cost contained in the cost principles and CAS differs from those typically used in commercial cost accounting.<sup>68</sup> The commercial definition describes direct cost in terms of costs incurred for labor, material or other item that becomes part of the end product or service.<sup>69</sup> These types of direct cost are also referred to as prime costs.<sup>70</sup>

Under the cost principles and CAS, the definition of direct cost has a broader scope, not limited to prime costs. Instead, direct costs can be any type of cost that can be specifically identified with a final cost objective.

b. Cost Principles

The definitions in the cost principles and CAS are not identical.

The cost principles define a direct cost as:

. . . any cost that can be identified specifically with a particular final cost objective. No final cost objective shall have allocated to it as a direct cost any cost, if other costs incurred for the same purpose in like circumstances have been included in any indirect cost pool to be allocated to that or any other final cost objective. Costs identified specifically with the contract are direct costs of the contract and are to be charged directly to the contract. All costs specifically identified with other cost objectives . . . are not to be charged to the contract directly or indirectly.<sup>71</sup>

c. Cost Accounting Standards

The CAS defines direct cost as those costs which are

. . . identified specifically with a particular cost objective. Direct costs are not limited to items which are incorporated in the end product as material or labor. Costs identified specifically with the contract are direct costs of that contract. All costs identified specifically with other final cost objectives of the contractor are direct costs of those cost objectives.<sup>72</sup>

d. Comparison of the CAS Definition and the Cost Principle Definition

A key difference between the two definitions is that the cost principles define a direct cost as any cost that "can be" identified specifically to a final cost objective, while the CAS defines a direct cost in terms of costs which "is" identified specifically with a final cost objective.

The two definitions can result in significant differences. As Shapiro explains:

The wording of the [Cost Principles] suggests that any cost that is capable of being identified specifically with a final cost objective is a direct cost. In contrast, the CAS definition could be interpreted to mean that although a contractor's cost accounting system has the capability to specifically identify a cost with a final cost objective, the cost is a direct cost only where such identification is actually made by the system.<sup>73</sup>

Should a conflict arise, the CAS would override conflicting cost principles under the ASBCA decision in Boeing.<sup>74</sup>

2. Identification of Direct Costs

In many cases, direct costs are easy to identify. For example, as a rule the main direct costs for a manufacturing or construction



contract will be labor and materials. For a service contract, the main direct cost component is labor. Direct costs of a final cost objective, such as a contract, are typically kept separate from other costs and recorded in accounts identifying the costs with the particular contract. This can be done by means of a job order or specific order accounting method.<sup>75</sup>

Controversy over the allocation of direct costs has primarily concerned "distinguishing direct costs from indirect costs and in determining the cost objective to which the direct costs will be allocated."<sup>76</sup> As Goodrich points out, disputes can arise in this area over the identification of and costing to final cost objectives.<sup>77</sup> The government often favors the choice of a contract as a final cost objective with a strong preference for direct costing to the contract. On the other hand, a contractor's cost accounting system may utilize another work unit, such as a project or job, which results in a greater amount of indirect charges to a contract.

The matter can become even further complicated because:

[d]epending on the overall effect of direct versus indirect treatment in dollars and cents, the Government may take inconsistent positions. In some cases, it may contend that a cost should be a direct charge (invariably chargeable to someone else) and in others an indirect charge (the Government thereby paying only a portion of the cost).<sup>78</sup>

While the courts and boards give some deference to a contractor's accounting system on the selection of final cost objectives and cost allocations to them, decisions in this area are very fact specific and based on a case by case examination.<sup>79</sup>

### B. Cost Principles

Under the cost principles, a direct cost is one that can be specifically identified with a final cost objective.<sup>80</sup> A direct cost should only be charged to the final cost objective it benefits. If the direct cost can be identified with another final cost objective, then it should be charged to that final cost objective. Contractors must be consistent in their treatment of direct costs. A cost cannot be charged directly to one final cost objective, such as a contract, and indirectly to another.<sup>81</sup> However, direct costs of minor dollar amounts can be charged as an indirect cost.<sup>82</sup>

### C. Cost Accounting Standard 418

Contracts subject to full CAS-coverage must comply with CAS 418. The purpose of the Standard is to provide:

- (1) For consistent determination of direct and indirect costs;
- (2) Criteria for the accumulation of indirect costs including service center and overhead costs, in indirect cost pools; and

(3) Guidance relating to the selection of allocation measures based on the beneficial or causal relationship between an indirect cost pool and cost objectives.<sup>83</sup>

Contractors must establish written accounting policies for classifying costs as direct or indirect and apply the policies consistently.<sup>84</sup> Measurement of direct costs must be based on actual costs, except where standard costs, average costs or pre-established rates are authorized under the Standard.<sup>85</sup>

The Standard does not apply to cost allocations governed by other cost accounting standards.<sup>86</sup> Thus, it does not govern the allocation of home office expense to segments covered by CAS 403, nor does it cover the allocation of business unit G&A expense covered by CAS 410. These two areas of cost allocation are covered in more detail in the following chapters.

### III. Indirect Cost Requirements

#### A. Cost Principles

##### 1. Identifying Indirect Costs

The cost principles define an indirect cost as:

[A]ny cost not directly identified with a single, final cost objective, but identified with two or more final cost objectives or at least one intermediate cost objective.<sup>87</sup>

The CAS use the same basic definition.<sup>88</sup> The cost principles clarify this definition:

[An indirect cost] is not subject to treatment as a direct cost. After direct costs have been determined and charged directly to the contract or other work, indirect costs are those remaining to be allocated to the several cost objectives.<sup>89</sup>

Both the cost principles and the CAS require consistent identification and treatment of indirect costs.<sup>90</sup>

## 2. Indirect Cost Pools

Once identified, indirect costs must be accumulated into cost pools. The only common characteristic of indirect costs is that they are not direct.<sup>91</sup> The cost principles state:

Indirect costs shall be accumulated by logical cost groupings with due consideration of the reasons for incurring such costs. Each grouping should be determined so as to permit distribution of the grouping on the basis of the benefits accruing to the several cost objectives. Commonly, manufacturing overhead, selling expenses, and general and administrative (G&A) expenses are separately grouped. . . .<sup>92</sup>

In addition, the common indirect pools highlighted by the cost principles, as well as other indirect cost pools, can be further subdivided in an effort to more accurately group like items.<sup>93</sup>

However, the cost principles recognize practical limits on the subdivision of cost pools. Subdivisions should not "unduly complicate the allocation."<sup>94</sup>

### 3. Distribution to Cost Objectives

#### a. Selection of a Base

The cost principles provide the following guidance on selection of a distribution base. It should be

. . . common to all cost objectives to which the grouping is to be allocated. The base should be selected so as to permit allocation of the grouping on the basis of the benefits accruing to the several cost objectives.<sup>95</sup>

Once an appropriate base for distribution has been accepted, it shall not be fragmented by removing individual cost items. All items properly includable should bear a pro rata share of indirect costs irrespective of their acceptance as Government contract costs.<sup>96</sup>

Under the cost principles, the contractor can select from a range of distribution bases. The controlling factor is that the components of the base must vary proportionately with the benefits provided by the indirect costs to the cost objectives.

The following simple example demonstrates the principle. Assume that a contractor has two contracts to which it wants to

allocate the indirect costs of managing its personnel. The contractor's cost accounting system has established a separate indirect cost pool for these personnel costs, and treats each contract as a final cost objective. Now it needs to choose a base.

A logical choice is direct labor dollars. Such a base assumes that the personnel costs chargeable to each contract vary directly and proportionately with labor costs. This may be true, but it may not.

It is true, if both contracts consume the same amount of labor, use workforces that are similarly composed, and have the same relative pay structure. Thus, a direct labor dollar base would work ideally if, for example, the contracts have the same labor mix and labor costs. That is, if Contract A uses 10 engineers and 1 manager, and Contract B uses 10 engineers and 1 manager, and all personnel receive the same wage or salary.

Change this scenario and a direct labor dollar base can create serious distortions. Assume, for example, that the 10 engineers and 1 manager on Contract A are replaced with a Nobel Laureate whose pay equals that of the eleven employees he replaced. The Nobel Laureate accomplishes the work of the Contract B team; therefore, direct labor dollars (in the form of salary) are ostensibly equal, but personnel costs are not. Assuming that personnel costs associated with a Nobel Laureate are equal to those of one member of the Contract B team, the use of a direct labor dollar base would overcharge Contract A by a factor of eleven. A better measure might be direct labor hours.

The oversimplified example illustrates that the choice of a base is dependent on a number of factors. The cost principles permit the contractor to make certain discretionary judgements on how best to measure and account for the benefits provided by indirect costs within the limits of reasonableness and GAAPs.

b. Fragmentation of a Base

The cost principles prohibit fragmentation of a base.<sup>97</sup> This essentially requires the contractor to include allowable as well as unallowable costs in the cost base. This is generally to the government's advantage because it increases the size of the distribution base which in turn reduces the rate at which indirect costs are charged to a contract or other final cost objective.

Bedingfield and Rosen offer an illustration of this point using the following data:

Pool Costs	\$1,100,000
Base Costs	
Unallowable	1,000,000
Allowable-Government Work	5,000,000
Commercial work	\$ 5,000,000
Total Base Cost	<u>\$11,000,000</u>

With the unallowable costs in the \$11 million base, the allocation rate is 10% (1.1 /11 million). Applying the 10% allocation rate to the government work, \$500,000 of the indirect cost pool is recoverable.

However, if the unallowable costs were excluded, the allocation rate becomes 11% (1.1 million/10 million) and the recoverable amount increases to \$550,000 through the price on government work.<sup>98</sup>

## B. Cost Accounting Standard 418

### 1. Definitions

The standard contains a number of key definitions, some of which have already been mentioned, but bear repetition.

a. Indirect costs. Those not directly identified with a single final cost objective, but identified with at least two or more final cost objectives or with at least one intermediate cost objective.<sup>99</sup>

b. Indirect cost pools. Groupings of incurred costs identified with two or more cost objectives but not identified specifically with any final cost objective.<sup>100</sup>

c. Homogeneous indirect cost pools. Those where each significant activity whose costs are included therein has the same or similar beneficial or causal relationship to cost objectives as the other activities whose costs are included in the cost pool.<sup>101</sup>



## 2. Indirect Cost Pools

### a. Basic Framework

The CAS Board (CASB) suggested a basic framework for indirect cost pools, as depicted in the next table.<sup>102</sup>

Basic Framework - Indirect Cost Pools<sup>103</sup>

<u>Indirect Cost Pool</u>	<u>Purpose of the Pool</u>
Service Center	Accumulates indirect costs relating to provision of services
Overhead Pool	Accumulates indirect costs relating to measurement of production-related functional activity
Business Unit G&A	Accumulates indirect costs relating to overall management activities
Other	Accumulates those indirect costs not covered by any other specific CAS.

However, the Standard permits contractors to design an allocation scheme that uses any number of cost pools.<sup>104</sup> For example, the CASB 1980 Aggregated Disclosure Statement reflects a variety of indirect cost pools in use by contractors: manufacturing, engineering, field service, departmental/shop, fringe benefits, quality control, off-site, et al.<sup>105</sup>

### b. Homogeneity

The Standard requires that indirect cost pools be homogeneous. Homogeneity as it relates to indirect cost pools is a relative concept. At one end of the spectrum, absolute precision and homogeneity could be achieved by using a separate indirect cost pool and allocation

base for each indirect cost. At the other end of the spectrum, all indirect costs could be collected into one pool using a single allocation base. The typical cost accounting system falls somewhere in between, limited by practical considerations of cost and flexibility.<sup>106</sup>

c. Illustrations

The Standard uses two illustrations of the concept of homogeneity:

1. Business Unit C accumulates costs relating to building ownership, maintenance and utility into one indirect cost pool designated "Occupancy Costs" for allocation to cost objectives. Each of these activities has the same or a similar beneficial or causal relationship to the cost objectives occupying a space. Business Unit C's practice is in conformance with [the Standard].<sup>107</sup>

2. Business Unit D includes the indirect costs of machining and assembling activities in a single manufacturing overhead pool. The machining activity does not have the same or similar beneficial or causal relationship to cost objectives as the assembling activity. Also, the allocation of the cost of the machining activity to cost objectives would be significantly different if allocated separately from the costs of the assembling activity. Business Unit D's single manufacturing overhead pool is not homogeneous . . . and separate pools must be established. . . .<sup>108</sup>

### 3. Allocation

#### a. General Criteria

The Standard provides criteria for the selection and use of allocation bases. One basic distinction it makes is between cost pools which include a significant amount of direct labor or material management costs and those which do not.

1. When a material amount of direct labor or direct material management or supervision costs are included in a cost pool, resource consumption cannot be identified specifically with cost objectives. In such a circumstance, a contractor shall use an allocation base which is representative of the activity being managed or supervised.<sup>109</sup>

2. When a cost pool does not contain a material amount of direct labor or direct material management or supervision costs, resource consumption can be identified with cost objectives. In such a case, the pooled costs shall be allocated using an appropriate measure of resource consumption, output, or a surrogate that is representative of resource consumption.<sup>110</sup>

The Standard establishes sets of acceptable bases and cost objectives for each of the two categories just mentioned. The contractor can choose from among these sets based on his particular business circumstances.

b. Pools with Material Amounts of Direct Labor or Direct Material Management or Supervision Costs

The Standard identifies four possible bases for this group of indirect costs.

1. A direct labor hour base or direct labor cost base shall be used, whichever in the aggregate is more likely to vary in proportion to the costs included in the cost pool being allocated, except that,
2. A machine-hour base is appropriate if the cost in the cost pool are comprised predominantly of facility-related costs, such as depreciation, maintenance, and utilities, or
3. A units-of-production base is appropriate if there is common production of comparable units, or
4. A material cost base is appropriate if the activity managed or supervised is a material-related activity.<sup>111</sup>

The Standard then identifies the set of cost objectives to which the indirect costs can be allocated:

1. Final cost objectives;
2. Goods produced for stock or product inventory;
3. Independent research and development and bid and proposal projects;

4. Cost centers used to accumulate costs identified with a process cost system (i.e., process cost centers);
5. Goods or services produced or acquired for other segments of the contractor and for other cost objectives of a business unit; and
6. Self-construction, fabrication, betterment, improvement, or installation of tangible capital assets.<sup>112</sup>

c. Pools Without Material Amounts of Direct Labor or Direct Material Management or Supervision Costs.

For indirect cost pools that do not include material amounts of direct labor or direct material management or supervision costs, the Standard provides a different set of guidelines. These pools shall be allocated using "an appropriate measure of resource consumption."<sup>113</sup> This portion of the Standard is aimed at data processing or other service centers.<sup>114</sup>

The Standard sets direct measurement of resource consumption as the preferred allocation base.<sup>115</sup> For example, if a data processing center relies heavily on computers, computer time would be an obvious base for allocation of resource consumption.<sup>116</sup>

However, if direct measures are unavailable or too impractical, the next best base is one which measures the output of the activities of the indirect cost pool. For example, if a contractor accounts for its technical typing services as a service center, it might use as an output measure the number of pages typed.<sup>117</sup>

The last and least preferred measurement option provided by the Standard is the use of a "surrogate" measure. The Standard offers the following illustration:

Business Unit F has an indirect cost pool containing a significant amount of material-related costs. The contractor allocates these costs between his machining overhead cost pool and his assembly overhead cost pool. The business unit finds it impractical to use an allocation measure based on either consumption or output. The business unit selects a dollars of material-issued base which varies in proportion to the services rendered. The dollars of material-issued base is a surrogate base which conforms to [the Standard].<sup>118</sup>

The Defense Contract Audit Manual offers an illustration using each of the three base types:

Problem. Contractor A proposes to establish an allocation method for the central reproduction cost center. The contractor wants to use the number of personnel in each department as the base for allocation of the cost center.

Solution. A central reproduction cost center does not contain a material amount of management and supervision of activities involving direct labor and direct material. . . . Number of personnel is a surrogate for resource consumption which may be representative of the beneficial or causal relationship between the cost center and the benefitting cost objective.

However, acceptability of this base requires an analysis of the availability of more preferred bases:

(1) The best measure of resource consumption related to central reproduction costs may be equipment usage (hours). However, if the reproduction equipment does not have time meters and installation is not cost-effective, the use of such a base would be impractical.

(2) The next best representation of beneficial or causal relationship is output. A base consisting of the number of reproduced pages might be selected as an appropriate measure of the output of the activities of the central reproduction cost center. However, if it is not practical to measure the number of pages reproduced for each requesting activity, a surrogate that varies in proportion to the services rendered may be used to measure the resources consumed.

(3) Such a surrogate could be the number of personnel in each department if past experience demonstrates that the number of requisitions varies in reasonable proportion to departmental population, thereby constituting a reasonable measure of the activity of the cost objectives receiving the service. Accordingly, the method adopted by the contractor would

constitute an acceptable allocation basis, depending on the circumstances.<sup>119</sup>

#### 4. Special Allocations and Pre-established Rates

The Standard also permits the use of special allocations of indirect costs and the use of pre-established rates. Special allocations are used when a final cost objective receives significantly more or less benefit than reflected by use of a particular base. The special allocation must be excluded from the indirect cost pool.<sup>120</sup>

Pre-established rates can also be used for allocating indirect costs. The rates can be based on either forecasted, actual or standard costs, but the rates must reasonably reflect the anticipated costs and activities for the cost accounting period. They must be reviewed at least annually and revised, if necessary.<sup>121</sup>



## CHAPTER 2

### ALLOCATION OF HOME OFFICE EXPENSES TO SEGMENTS

#### I. Introduction

Home office expense is the cost of managing the overall operations of a multi-segment company.<sup>122</sup> A home office typically performs managerial, supervisory and administrative functions, as well as certain centralized service functions. The allocation of home office expense to segments is governed by Cost Accounting Standard (CAS) 403 for CAS-covered contracts, and the cost principles for all others. Even when CAS 403 does not directly apply to a contract, it can be used as guidance along with the cost principles to evaluate a contractor's allocation of home office expense.<sup>123</sup>

#### II. Cost Accounting Standard 403

##### A. Purpose

CAS 403 prescribes rules for the allocation of home office costs to organizational segments. The Standard's stated purpose is to establish ". . . criteria for allocation of the expenses of a home office to the segments of the organization based on the beneficial or causal relationship between such expenses and the receiving segments."<sup>124</sup> Proper allocation is premised on identifying the beneficial or causal relationship between home office costs and organizational segments.

## B. Basic Requirements

The Standard mandates that contractors:

- (1) identify expenses for direct allocation to segments to the maximum extent practical;
- (2) accumulate other significant expenses into cost pools for indirect allocation based on the relationship of the expenses to the segments concerned; and
- (3) allocate the remaining or residual home office expenses to all segments.<sup>125</sup>

In other words, the Standard divides home office expenses into three broad categories and establishes allocation rules for each of the three. The categories are (1) expenses directly charged to segments, (2) expenses indirectly charged to two or more segments, and (3) those remaining indirect expenses (called residual expenses) allocated to all segments.

The underlying philosophy of the Standard, as Anderson points out, is that many home office expenses either benefit or are caused by particular segments and ideally those expenses should be allocated to the benefiting or causing segment.<sup>126</sup> The presumption is that home office expenses are more than just "an amorphous mass of cost to be allocated over a single base."<sup>127</sup>

### C. Definitions

An effective understanding of the Standard is premised on knowledge of certain basic accounting concepts. The Standard specifically defines a number of the more important ones:

(1) **Allocate.** To assign an item of cost, or a group of items of cost, to one or more cost objectives. This term includes both direct assignment of cost and the reassignment of a share from an indirect cost pool.

(2) **Home office.** An office responsible for directing or managing two or more, but not necessarily all, segments of an organization. It typically establishes policy for, and provides guidance to the segments in their operations. It usually performs management, supervisory, or administrative functions, and may also perform service functions in support of the operations of the various segments. An organization which has intermediate levels, such as groups, may have several home offices which report to a common home office. An intermediate organization may be both a segment and a home office.

(3) **Segment.** One of two or more divisions, product departments, plants, or other subdivisions of an organization reporting directly to a home office, usually identified with responsibility for profit and/or producing a product or service. The term includes Government-owned contractor-operated (GOCO)

facilities, and joint ventures and subsidiaries (domestic and foreign) in which the organization has a majority ownership. The term also includes those joint ventures and subsidiaries (domestic and foreign) in which the organization has less than a majority of ownership, but over which it exercises control.<sup>128</sup>

Although the term "home office" has a precise meaning under the Standard, it is common to find a variety of terms used "synonymously with it in the accounting literature and government procurement environment."<sup>129</sup> Such terms include: 'central office', 'headquarters', 'corporate headquarters', and 'corporate offices.'<sup>130</sup> In addition, the geographic proximity or remoteness of a supervisory office to the segments under it has no bearing, from an accounting perspective, on whether a unit is named as a home office. Instead, the key criteria are the functions which the office performs.

As the CAS definition suggests, a home office typically performs some management, supervisory, administrative or service functions for its segments.<sup>131</sup> How much or how little a home office performs depends on the contractor's organization. As Anderson states:

The home office of a strongly centralized organization, for example, will usually include extensive managerial and supervisory functions, as well as service functions. Alternatively, the home office of a decentralized organization may include little more than the office of the chief executive and a limited amount of staff functions to support the chief executive. Group offices

ordinarily will be highly limited in the number of functions they perform.<sup>132</sup>

The key point is not the number of functions performed, but the fact that the functions are performed for two or more segments.

#### D. Background

##### 1. Overview

CAS 403 is one of three Cost Accounting Standards which deals specifically with allocation.<sup>133</sup> The Standard has a rather narrow focus: the allocation of costs by the home office to the segments (such as divisions) that it directs or manages.<sup>134</sup> Bedingfield and Rosen characterize the Standard as ". . . the first true "cost accounting" Standard promulgated by the CASB - it deals solely with the allocation of a period's cost to the period's cost objectives."<sup>135</sup> It was the first Standard to "establish general criteria for the allocation of costs to contracts, dealing with such topics as cost objectives, cost pools and allocation bases."<sup>136</sup>

##### 2. History

The Standard was devised to eliminate a variety of problems between contractors and the Government. Preamble A to the Standard highlights three of these problems: (1) the propriety of using allocation bases, such as cost of sales or direct labor, for allocating home office expenses to segments; (2) whether and to what

extent certain kinds of segments such as Government Owned Contractor Operated facilities (GOCO's), foreign subsidiaries and partially owned subsidiaries should be included in the allocation base; and (3) the homogeneity of expense pools.<sup>137</sup>

Prior to the Standard, most multi-divisional companies used the same method for allocation of home office expense as for allocation of corporate G&A expense.<sup>138</sup> Typically, home office expense was allocated through use of a single G&A rate.<sup>139</sup> Professors Cibinic and Nash point out that this approach permitted allocation to business segments and cost objectives by any method which achieved an "equitable" result.<sup>140</sup>

The Standard aimed to provide a greater degree of uniformity and, in the Board's own term, a greater degree of "equity" in the determination of costs.<sup>141</sup> The Standard also aimed to reduce residual expenses to a relatively minor amount, thereby also reducing "controversy" and "inequity" in cost determinations.<sup>142</sup> As a result, contractors subject to CAS 403 typically must use several cost pools where before only one may have been needed.<sup>143</sup>

Whether the Standard has successfully met its avowed aims is open to debate.<sup>144</sup> However, the relative lack of litigation involving the Standard suggests that, with one exception, its aims have been achieved. The notable exception is in the area of state and local taxes. This area, discussed in more detail below, is the subject of most

litigation involving the Standard, including the latest case of note, Hercules, Inc. v. U.S.<sup>145</sup>

### 3. Effective Date

The effective date of the Standard is July 1, 1973.<sup>146</sup> Prior to March 10, 1978, it did not apply to any company that did not receive negotiated defense contracts awards during FY 1971 totaling more than \$30 million.<sup>147</sup> Now it applies to all CAS-covered contracts.<sup>148</sup> However, it still does not apply to contractors subject to Federal Management Circular 74-4, Principles for Determining Cost Applicable to Grants and Contracts with State and Local Governments.<sup>149</sup>

### E. Business Organizations

#### 1. Home Offices and Segments

To understand the Standard, one must have a basic understanding of business organizational units and their interrelationship. The following illustration gives a general scheme for business organizations and home offices:<sup>150</sup>

[A]ssume that a company is organized into groups which are, in turn, organized into divisions, which are, in turn, organized into plants. [The company] would have the following hierarchy of home offices and segments:

<u>Home Office</u>	<u>Segments</u>
Corporate Headquarters	Groups
Group	Divisions
Division	Plants

The example illustrates several key points. First, a company can have more than one "home office" for cost accounting purposes. Second, an organizational "segment" (e.g., a division) can be simultaneously classified as a "home office" for those organizational units under its direction (e.g., several plants). Third, only multi-divisional companies can have a "home office" for cost accounting purposes. This last point seems obvious, but it is occasionally litigated.<sup>151</sup>

## 2. Business Unit

Another key concept is that of "business unit." As defined by the Cost Accounting Standards Board, it is "[a]ny segment of an organization, or an entire organization, which is not divided into segments."<sup>152</sup> By definition, therefore, a business unit cannot be a home office. The term "business unit" applies to organizational units below the home office level.<sup>153</sup>

A key accounting trait of a "business unit" is that it often "coincides with a profit center or investment center."<sup>154</sup> That is, it often maintains accountability for its own costs and revenues.<sup>155</sup> These costs are then allocated to "final cost objectives," such as a contract or production line.<sup>156</sup>



### 3. Illustration

The organizational schematic of Gadfly Manufacturing Corporation in Figure 2-1 illustrates some of these points.<sup>157</sup>

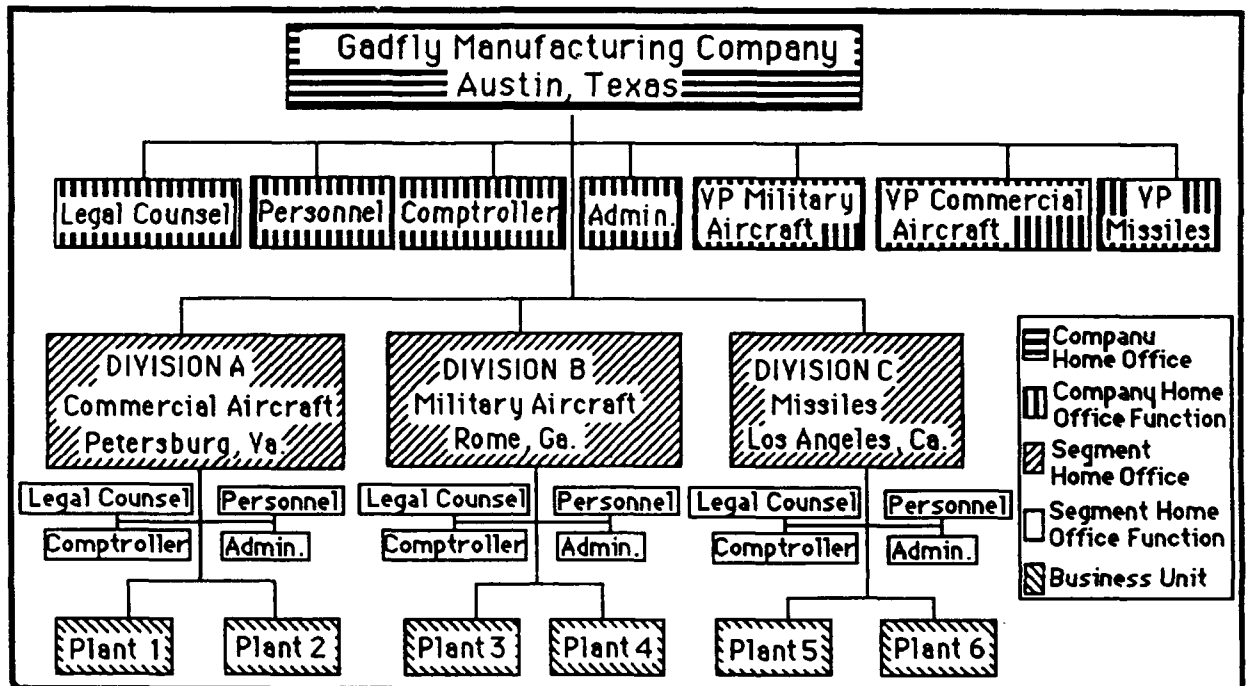


Figure 2-1

#### Organization with Company and Intermediate Home Offices

The company "home office" is in Austin, Texas. In terms of cost accounting, the various corporate offices in Austin, such as those of personnel and legal counsel, are considered "business units." The plants around the country are "segments" (they might also be classified as "business units," if not further subdivided for accounting purposes). The divisions themselves are dual-hatted. They are treated as "segments" in terms of their cost accounting relationship with the

corporate home office, and they are treated as "home offices" by their subordinate plants.

## F. Home Office Expenses

### 1. Overview

As a general rule, home office expense is "the cost of administering the overall operations of a multi-plant or multi-segment company."<sup>158</sup> The expense is often identified with a particular function performed by the home office. A home office typically performs managerial, supervisory or administrative functions. However, it can also perform service functions, such as the provision of computer and data processing services, in support of one or more of the segments.<sup>159</sup>

Some examples of home office expense include: telephone service, company aircraft service, consultant services, personnel management, state and local income taxes, state and local franchise taxes, legal services and company aircraft service.<sup>160</sup> These and others will be discussed in more detail below.

### 2. Cost Objectives

#### a. Definition

CAS 400 defines a cost objective as a "function, organizational subdivision, contract or other work unit 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."<sup>161</sup> This is similar to the definition in the FAR.<sup>162</sup>

Anderson describes it thusly:

In accounting terminology, a cost objective means a pool, a center, or an area established for the accumulation of costs. Such areas include organizational units, functions or items of expense, as well as ultimate cost objectives, such as specific grants, projects, contracts or other activities.<sup>163</sup>

b. Output and Organizational Cost Objectives

Conceptually, it may be easiest to envision a cost objective as a particular contract. Often, however, cost objectives are organized based on particular elements or functions. As mentioned in the last chapter, two common categories of cost objectives are "output" cost objectives and "organizational" cost objectives. An output cost objective can be a particular product or project. By contrast, an organizational cost objective is defined by the organizational structure of the corporation - such as a plant or work center.<sup>164</sup>

c. Final and Intermediate Cost Objectives

Another basic distinction is between so-called "final" cost objectives and "intermediate" cost objectives. CAS 400 defines a final cost objective as a "cost objective which has allocated to it both direct

and indirect costs, and, in the contractor's accumulation system is one of the final accumulation points."<sup>165</sup> An example of a final cost objective is a contract or product. However, as Anderson points out, the "focal point of cost accumulation [for government contracts] is by contract rather than by product."<sup>166</sup>

Intermediate cost objectives are not explicitly defined by the Standard. Typically, intermediate cost objectives are large organizational ones, such as divisions or plants, which reallocate their costs to lower level (and more precise) objectives - eventually reaching a final cost objective.<sup>167</sup>

### 3. Indirect Cost Pools

#### a. Definition

CAS and the cost principles define an indirect cost pool as "A grouping of incurred costs identified with two or more objectives but not identified specifically with any final cost objective."<sup>168</sup>

#### b. Direct vs. Indirect Costs

Costs can be assigned or allocated to a cost objective either directly or indirectly. By definition, direct costs are assigned to a single final cost objective; indirect costs are assigned to more than one final cost objective.<sup>169</sup>

As discussed in more detail below, home office expense can be allocated either directly or indirectly. This may lead to confusion

since some commentators refer to home office expense as an indirect cost.

This also can be confusing because the explicit language of CAS 403 focuses on the direct allocation of home office expense to a particular organizational unit of a company - a segment, not to a cost objective per se.<sup>170</sup> This implies that a company must treat its segments as final cost objectives, at least for the purposes of allocating home office expense.

The implication is misleading. As Bedingfield and Rosen point out, a segment is not a final cost objective. Home office expenses directly allocated to segments can subsequently be allocated as direct or indirect costs to final cost objectives based on allocation techniques discussed below.<sup>171</sup>

### c. Homogeneous Indirect Cost Pools

#### 1). Definition

The term "homogeneous indirect cost pool" is not explicitly defined in the Standard. Indirectly, it is defined by means of illustrations contained in FAR 30.403-60. However, CAS 418 provides more direct guidance:

- (1) An indirect cost pool is homogeneous if each significant activity whose costs are included therein has the same or a similar beneficial or casual relationship to cost objectives as the other

activities whose costs are included in the cost pool. It is also homogeneous if the allocation of the costs of the activities included in the cost pool result in an allocation to cost objectives which is not materially different from the allocation that would result if the costs of the activities were allocated separately.

(2) An indirect cost pool is not homogeneous if the costs of all significant activities in the cost pool do not have the same or a similar beneficial or causal relationship to cost objectives and, if the costs were allocated separately, the resulting allocation would be materially different.

(3) A homogeneous indirect cost pool shall include all indirect costs identified with the activity to which the pool relates.<sup>172</sup>

The definition emphasizes the "similarity of relationship between the cost of various functions and the benefiting cost objectives."<sup>173</sup>

## 2). Illustrations

As shown in the following table, CAS 403 provides illustrative examples of homogeneous indirect cost pools for three categories of service functions: centralized service functions,<sup>174</sup> staff management,<sup>175</sup> and central payments or accruals.<sup>176</sup>

Sample Homogeneous Indirect Cost Pools

Centralized Service Pools	Staff Management Pools	Central Pay or Accruals Pools
Data processing services Personnel administration Centralized purchasing Centralized warehousing Company aircraft service Central telephone service	Manufacturing policies Personnel management (QC, inspection & testing) Engineering policies Material/purchasing policies Marketing policies	Group insurance Pension costs State & local income & franchise taxes

The Standard also provides guidance on pools for line management,<sup>177</sup>B&P and IR&D,<sup>178</sup>and unidentifiable staff management.<sup>179</sup> This guidance will be discussed in more detail below.

d. Heterogeneous Indirect Cost Pool

By contrast, a heterogeneous indirect cost pool contains a diverse group of costs. An example is a residual home office pool which may contain such diverse costs as legal costs, the cost of board of directors' and stockholders meetings, and salaries of corporate executives. Such heterogeneous costs share two characteristics: they are generated by the home office for the benefit of the corporation as a whole; and they are allocated using the same base.<sup>180</sup>

## G. Allocation Bases

### 1. Definitions

An allocation base provides a systematic way to assign costs from an indirect cost pool to one or more cost objectives.<sup>181</sup> The base is typically a numerical measure of business activity, such as number of hours worked, amount of materials consumed, amount of items produced, marketing costs and the like.

The cost principles and CAS define an allocation base in terms of what it must achieve. CAS 403 states that a base must permit allocation of home office expenses on the basis of the beneficial or causal relationship between supporting and receiving activities, and provides a series of rules for various categories of indirect cost pools.<sup>182</sup> The cost principles state that the base should permit allocation on the basis of the "benefits accruing to the several cost objectives."<sup>183</sup>

### 2. Segments in Allocation Bases

The Standard specifies that all segments should be included in the base for allocation of expenses of a particular function, such as central service function.<sup>184</sup> However, a segment may be excluded from the base, if: (1) the segment did not receive significant benefits from the expense; or (2) the segment did not contribute significantly to the cause of the expense.<sup>185</sup>



### 3. Illustrations

As stated earlier, the Standard provides examples of bases for use with specific indirect cost pools in three broad categories: centralized service functions,<sup>186</sup> staff management,<sup>187</sup> and central payments or accruals.<sup>188</sup>

#### a. Centralized Service Functions

Centralized service functions are those activities, such as centralized personnel administration and centralized data processing, which would be performed or acquired by segments were there no home office.<sup>189</sup> Typically, the services are performed by the home office as a convenience to the segments.<sup>190</sup>

#### Allocation Base for Centralized Service Functions<sup>191</sup>

<u>Cost Pool Function</u>	<u>Allocation Base</u>
Personnel administration	Headcount, labor hours, no. of hires, payroll
Data processing services	Machine hours, number of reports
Centralized purchasing & subcontracting	Number of purchase orders, no. of items, value of purchases
Centralized warehousing	Square footage, volume, value of material
Company aircraft service	Rate per hour or mile, or passenger miles
Central telephone service	Usage costs, number of instruments

Even if a particular cost can be categorized as a central service function, it still must be directly charged to a segment, if possible. Thus, if one segment generates a significantly disproportionate share of telephone service expenses, the Standard requires segregation of those expenses and direct allocation to the benefiting segment.

For example, a corporate segment exclusively handling foreign military sales (FMS) might incur significantly greater telephone charges than its corporate counterparts which handled only domestic accounts. Under such circumstances, the corporation should directly allocate these foreign telephone costs to the FMS segment - even though the telephone service was handled centrally.<sup>192</sup>

b. Staff Management

The Standard also provides illustrative bases for staff management or policy guidance which can be identified with specific segment activities.<sup>193</sup> Typically, management or policy guidance is provided to discrete segment activities, such as manufacturing, accounting and engineering.<sup>194</sup>

Allocation Bases for Staff Management and Policy Guidance<sup>195</sup>

<u>Cost Pool/ Management Activity</u>	<u>Allocation Base</u>
Pension Expenses Manufacturing Policies (QC, tooling, inspections, testing) Engineering Policies Material/Purchasing Policies Marketing Policies	Headcount, labor hours, no. of hires, payroll Manufacturing cost input, manufacturing direct labor Total engineering costs, engineering direct labor, no. of drawings. No. of purchasing orders, value of purchases Sales, segment marketing costs

c. Central Payments or Accruals

When a home office makes payments or accruals for its segments, the costs must be allocated directly to the benefiting segment - if it can be identified. The Standard offers a set of illustrative bases for this service.

Allocation Bases for Central Payments or Accruals<sup>196</sup>

<u>Cost Pool/Function</u>	<u>Allocation Base</u>
Pension Expenses Group Insurance Expenses State & Local Income & Franchise Taxes	Payroll or other factor on which total pymnt is based. Payroll or other factor on which total pymnt is based. Any base or method which results in an allocation that equals or approximates a segment's proportionate share of the tax imposed by the jurisdiction in which the segment does business, as measured by the same factors used to determine taxable income.

The Standard is clear in emphasizing that these bases are merely illustrative. The choice to use one of the bases illustrated above or a substitute base is governed by criteria discussed in the next section.

## H. Allocation Techniques<sup>197</sup>

### 1. Overview

Under CAS 403, the primary consideration is that the allocation of home office expense should best reflect the beneficial or causal relationship between the costs and the organizational segment.<sup>198</sup> In other words, the allocation should reflect the benefit a segment received from the allocated cost, or it should reflect the amount of cost caused by the segment. The strongest preference is for direct allocation of home office expenses to segments, followed by indirect allocation to specific segments, and, finally, allocation of remaining or residual expenses to all segments.<sup>199</sup>

### 2. Techniques

As summarized below, the Standard prescribes three allocation techniques to achieve these aims:<sup>200</sup>

- Direct Allocation to A Segment. A technique whereby home office expenses specifically identified to a segment are directly allocated to that segment.
  
- Indirect Allocation to Segments through Homogeneous Expense Pools. A technique for

allocating home office costs which clearly benefit more than one segment. These costs are accumulated in expense pools (also referred to as cost pools). Pools are required to be "homogeneous and logical."<sup>201</sup> Costs within the pools are then allocated using a base which accurately reflects the benefit received by each segment or the causal relationship between the home office and each segment.

- Indirect Allocation to All Segments through Residual Expense Pool. A catchall category under which home office costs which have no clearly measurable relationship to segments, generally called residual expenses, are allocated to all segments in accordance with a base representative of the organization's total activity.

### 3. Typical Home Office Costs

The total home office expense for a large, multi-segmented corporation may come from three broad categories of cost: direct, indirect and residual. Some examples of typical costs within each category follow.<sup>202</sup>

#### Typical Home Office Costs

<u>Direct</u>	<u>Indirect</u>	<u>Residual</u>
Line Management State & Local Taxes Consulting Legal Services	Personnel Office Data Processing Central Warehousing State & Local Taxes Consulting	Salary & Expenses of President Chairman V.P. Finance Legal Services

This list is not exhaustive, nor is every cost type required for every company or every accounting period. Note too that several cost types, such as consulting and taxes, appear in more than one category. This can be explained by way of example.

#### 4. Example

Using Gadfly Manufacturing (see Figure 2-1) as the model, assume that the company paid for the use of consultants on three projects, each of which aimed at identifying ways to improve managerial efficiency. Based on the Standard's prescription that costs are to be allocated on the basis of benefit or causal relationship, consultant costs could be allocated as direct, indirect or residual costs. The following table illustrates this point at its simplest.

Allocation of Consultant Costs

Consultant Focus	Segments Benefited	Type of Allocation	Cost Allocated to
Missile Division	Division C	Direct	Division C
Aircraft Divisions	Divisions A & B	Indirect	Divisions A & B
Company President	All (i.e., entire company)	Residual	All Segments of Company

## 5. Direct Allocation to Segments

### a. Overview

The Standard requires direct allocation to the maximum extent possible.<sup>203</sup> Expenses that can be identified with a particular segment must be allocated to that segment. As Rishe states: "The fact that the costs have been incurred by or accumulated in a home office may not be used to disguise the identifiability of the costs with the work of the particular segment."<sup>204</sup>

### b. Significant Cases

Direct allocation has been an issue in a number of cases. Most of the significant cases concern allocation of state and local taxes, such as the latest case of note, Hercules, Inc. v. U.S.<sup>205</sup> As a general rule, courts and boards will sustain direct (or indirect) allocation of taxes to segments only when such allocation is consistent with allocation factors imposed by the state or local jurisdiction. The Claims Court in Hercules accepted the contractor's indirect allocation of state income tax to its in-state segments, despite the government's claim that the tax should be directly allocated elsewhere.<sup>206</sup>

Hercules is a multistate contractor which operates several facilities in Virginia, including a Government-owned contractor-operated (GOCO) plant in Radford, Virginia (Radford facility). At issue was Hercules' indirect allocation of Virginia state income taxes to the

Radford facility for tax year 1987. The taxes in question were due on income realized from the sale of stock by Hercules.

Hercules had included the gain from the stock along with other gains, losses, operating income, and deductions in determination of its federal taxable income for tax year 1987. From the resulting total (approximately \$1.4 billion), Hercules calculated the amount of total corporate income that was subject to Virginia state income tax.<sup>207</sup>

The calculation used a ratio (based on factors prescribed by state law) which measured the percentage of the company's Virginia-based payroll, property and sales against the corporate-wide total of these factors. Hercules determined that \$213 million dollars of corporate earnings were subject to Virginia income tax under this formula. This figure, when multiplied by the applicable tax rate, yielded a Virginia income tax liability of \$12.7 million. Of this amount, \$6.9 million was allocated to the Radford facility.<sup>208</sup>

The tax allocation to the Radford facility was accomplished by use of the same apportionment factors - payroll, property, and sales - as were used in the initial determination of the state-wide income amount. That is, the Radford facility was assigned a share of the total state income tax proportionate to its contribution to Hercules total Virginia-based payroll, property and sales.<sup>209</sup>

Prior to 1987, Hercules and the government had consistently recognized Hercules' Virginia state income taxes as an allowable cost under the cost reimbursement contract providing for operation of the



Radford facility.<sup>210</sup> However, in this case the government disallowed \$5.7 million of the \$6.9 million allocated to Radford. The government claimed, *inter alia*, that allocation to Radford was not proper because the plant neither generated the taxes owed on the stock sale, nor benefited from their payment.<sup>211</sup>

The government argued unsuccessfully that the taxes should be directly allocated elsewhere. It contended that the allocation to segments of the taxes attributable to capital gain was inappropriate because of the direct relationship between those taxes and the source of the gain, namely the stock sale. It asserted that any beneficial or causal relationship between the taxes attributable to the capital gain and the segments was overshadowed by this direct relationship.<sup>212</sup>

In the court's opinion, the taxes were not capable of direct assignment and the allocation had a reasonable basis. The court looked directly to the Standard in rejecting the government's argument. It noted that CAS 403 provides that if central payments such as income tax expenses cannot be identified with individual segments, then they should be allocated to segments using an *allocation base representative of the factors on which the total payment was based.*<sup>213</sup>

The court was satisfied that Hercules properly followed this approach by allocating state income taxes to its government contract using the same base by which the state's share of total corporate

income tax was initially derived. This met the need to allocate home office expense on the basis of beneficial or causal relationship.<sup>214</sup>

The court dismissed the argument that the direct relationship between the capital gain and the tax overshadowed any beneficial or causal relationship with the segments. The court pointed out that by relating the capital gain to the taxes, the government identified an item of income with a related expense, but failed to assign the tax cost. This approach failed to accomplish the objective of a cost accounting system to identify business costs and distribute those costs among various business components.<sup>215</sup>

Hercules is the latest in a line of court and board decisions regarding allocation of state and local taxes under CAS 403. Perhaps the first major decision in this area is the Armed Services Board of Contract Appeals (ASBCA) decision of The Boeing Co., in which the government unsuccessfully challenged the allocation of state and local taxes to segments on a "headcount" basis.<sup>216</sup> The contractor accumulated state and local taxes, such as sales, property and use taxes, in a single corporate home office expense pool. The contractor then allocated these costs to segments on the basis of the number of personnel in each segment. That is, a segment's tax allocation was determined by dividing the total tax liability of the company by the number of employees in a segment.

The ASBCA agreed with the government's argument that each segment should be directly charged with its share of taxes on an

assessment basis. In this case, it meant that the share should be based on the assessment factors used to generate the tax liability. The board reasoned that CAS 403 prescribes allocation according to "beneficial or causal relationship." The causal relationship represented by the assessment base was identifiable and therefore should be used to determine the allocation to segments.

The board did not reject the headcount method per se. This method was acceptable if it reflected the causal relationship between the segment and its tax liability. Thus, the board accepted it for allocation of a business activity tax, since this tax was assessed upon a base of the number of employees doing business within a tax district.

The case illustrates a difference between the Standard and the cost principles. As Bedingfield and Rosen point out, under the cost principles allocation was based on benefits accruing to cost objectives. CAS 403 added the element of causality as an allocation criterion.<sup>217</sup>

In U.S. v. Lockheed Corporation and Lockheed Missiles and Space Co.,<sup>218</sup> the Court of Appeals for the Federal Circuit endorsed the analysis of the ASBCA that the complicated relationship between Lockheed's California franchise tax and its individual segments precluded direct allocation of the franchise tax to segments doing business in California. The tax was neither exclusively incurred by any one segment, nor directly and mechanically traceable to a segment, because of numerous interactions among segment net income and apportionment percentage factors used in computing the tax costs.<sup>219</sup> The government argued unsuccessfully for direct

allocation of state taxes to the segments doing business in the state without consideration of segment income.<sup>220</sup>

The court acknowledged that under CAS 403.40(b)(4), if the tax expense could be specifically identified with individual segments, it had to be directly allocated to those segments. However, the court decided that the franchise tax could not be directly allocated to segments because a segment's contribution to the cause of the tax could not be specifically identified under the California statute.<sup>221</sup>

These cases illustrate that both the boards and courts require a clear causal or beneficial link between a particular home office expense and a segment or group of segments in order to sustain direct allocation of the expense. The cases also demonstrate the deference these fora give to state and local allocation factors in determining direct allocation of state and local taxes. Attempts by the government or contractors to justify allocation bases that significantly deviate from the statutory factors are disfavored and appear subject to strict scrutiny.

## 6. Indirect Allocation to Segments

### a. Overview

When costs cannot be specifically identified with a particular segment, the costs must be accumulated in homogeneous groupings and allocated to segments based upon beneficial or causal relationships.<sup>222</sup> Thus, the Standard requires use of separate cost

groupings for each service or management function of the home office - with one chief exception. The exception is that a composite pool can be used when different activities are allocable using the same base.<sup>223</sup>

b. Base Composition

As a first step, all segments should be included in the allocation base.<sup>224</sup> A segment may be excluded from the base, however, (1) if it did not significantly benefit from or contribute significantly to the cause of the expense, and (2) if segments remaining in the base did significantly benefit from or contribute to the cost.<sup>225</sup>

c. Indirect Cost Pools

The Standard establishes specific criteria for matching allocation bases with six groups of costs: centralized service functions, identifiable staff management, line management, central payments or accruals, bid and proposal (B&P) and independent research and development (IR&D), and unidentifiable staff management.<sup>226</sup> Specific examples of allocation bases are provided for three of the six categories (discussed earlier in this chapter) - identifiable staff management, centralized service functions, and central payments or accruals.

1). Centralized Service Functions

Centralized service functions represent the cost of services performed by the home office as a convenience to its segments. Examples of this activity include centrally performed personnel

administration and centralized data processing. The Standard outlines a three-level hierarchy of allocation techniques. The preferred method of allocation is by some measure of the activity performing the function.<sup>227</sup>

First Priority - Sample Activity Measurement/Base

Activity	Measure	Allocation Base
Labor-oriented	Labor Hours	Rate per Labor Hour
Machine-oriented	Machine Hours	Rate per Machine Hour
Space-oriented	Square Footing	Cost per Square Foot

The next preference is for some measurement of the output of the supporting function, usually in terms of unit of end product produced.<sup>228</sup>

Second Priority- Sample Output Measurement/Base

Activity	Output Base
Print Shop	Number of Printed Pages
Purchasing Dept.	Number of Purchase Orders Processed
Employment Office	Number of Hires

If neither activity nor output can be practically measured, then a surrogate measure for the beneficial or causal relationship must be chosen. These are usually measures of the segment receiving the service and must vary in proportion to the services received.<sup>229</sup>

Third Priority- Surrogate Measurement/Base

Activity	Surrogate Base - Receiving Segment
Personnel Services	Number of Personnel Number of Labor Hours Number of Labor Dollars

Examples of allocation bases for various centralized service functions were discussed earlier in this chapter.

## 2). Identifiable Staff Management

When staff management services can be identified with specific activities of a segment, costs must be allocated to the segment using a base that reflects the activity managed.<sup>230</sup> Activities which often permit identification include (a) manufacturing, (b) accounting, and (c) engineering. Costs are allocated by the amount of the total specific activity undertaken by the organization. Examples of illustrative allocation bases for several types of staff management services were discussed earlier in the chapter.

## 3). Line Management

When a home office manages operations of a segment, the costs incurred for that management effort must be allocated to the benefited segment.<sup>231</sup> As Rische points out, some segments served by a home office will be self-managed. Self-managed segments will receive less benefits from the home office, or cause less expense, and therefore should receive a reduced allocation of home office expense. Costs must be allocated directly if only one segment is self-managed, or allocated upon a base which reflects the total activity of the receiving segments when more than one is self-managed.<sup>232</sup>

#### 4). Unidentifiable Staff Management

When management services performed by a home office cannot be identified with specific activities of segments, costs are allocated to all segments as a residual expense.<sup>233</sup>

#### 5). Central Payments or Accruals

When a home office makes payments or accruals on behalf of its segments, the costs must be allocated directly to the segments for which the payments or accruals are made, if practical. However, if direct allocation is not practical, the costs must be allocated to segments using an allocation base representative of the factors on which the total payment is based.<sup>234</sup> Costs commonly paid or accrued by a home office for the benefit of its segments were discussed earlier in the chapter.

#### 6). Independent Research & Development and Bid & Proposal Costs

Independent Research & Development and Bid & Proposal (IR&D and B&P) costs must be allocated according to CAS 420. Generally, the Standard requires direct allocation of such costs to segments when possible. Otherwise, project costs normally are allocated to all segments of a home office using the same base for allocation of residual expenses.<sup>235</sup>



d. Significant Cases

1). Allocation of Taxes

a. Background

As with direct allocation to segments, most litigation on the issue of allocation by homogeneous groupings has concerned the proper allocation of state and local taxes. The issue has also generated the CASB's noted "Interpretation 1" to CAS 403 which, as will be explained below, the ASBCA and courts summarily discounted.

When issues arise regarding allocation of state and local taxes, courts and boards review competing allocation methods in light of the formula imposed by the state or local tax in question. A typical formula (known as the "Massachusetts" formula) works as follows:

Where a State levies an income-based tax (e.g., an income tax or a franchise tax based on income) on companies that operate in more than one State, it must provide for the determination of the amount of income attributable to operations in the State in question. Typically, a portion of a company's total income (also known as "unitary income") is allocated to the State based on a formula.

The "three factor formula" or "Massachusetts formula" is most commonly used. The first step in its computation is the determination of a formula percentage as follows:

First Step - "Massachusetts Formula"

$$\left( \frac{s}{S} + \frac{pr}{PR} + \frac{p}{P} \right) \div 3 = \text{Formula \%}$$

s = sales in State levying tax

S = total company sales

pr = payroll in State levying tax

PR = total company payroll

p = property in State levying tax

P = total company property

The computation of the tax is then performed in two steps:

- (1) Unitary Income x Formula % = Intrastate Income
- (2) Intrastate Income x Tax Rate = Tax<sup>236</sup>

This explanation provides useful background for understanding many of the cases in this area.

Decisions in this area typically involve disputes over the application of formulae for state or local tax assessment. The boards and courts generally defer to state and local standards of assessment in determining what is reasonable and thereby permissible under the Standard. Thus, contractor allocation formulae are normally upheld so long as they closely match the formulae by which relevant state and local taxes are assessed. Allocation formulae which stray too far from statutory guidelines are clearly disfavored. Two common formulae are the "Massachusetts" formula (which was just summarized) and the "Lockheed" formula (summarized in the next section.)

b. Litigation

One of the most significant cases in this area is Lockheed Corp. & Lockheed Missiles & Space Co., Inc.<sup>237</sup> In Lockheed the ASBCA accepted Lockheed's indirect allocation of California state franchise tax to its segments based on the so-called Lockheed Method. The board acknowledged that the complicated relationship between Lockheed's California franchise tax and its individual segments precluded direct allocation of the franchise tax to segments doing business in California.<sup>238</sup>

The dispute concerned the proper allocation of the state's franchise tax paid by the home office in California. In-state net income, for tax purposes, was calculated as a portion of total corporate income through the application of a three-factor ("Massachusetts") formula based on (1) payroll, (2) sales, and (3) property. Additionally, Lockheed allocated the tax only to those segments within the state which showed a profit. The tax entailed a minimum charge per corporation, plus an additional charge calculated upon corporate net income within the state.<sup>239</sup>

The government proposed, and the board rejected, allocation methods whereby segments which suffered losses for the year would be allocated a portion of the taxes, if they had a significant share of in-state corporate payroll, sales and property. The board rejected the government's position because it failed to recognize segment income. Without such recognition, the Government's methods (which

considered the three statutory factors) did not approximate a segment's proportionate share of corporate income.<sup>240</sup>

The board endorsed the allocation method actually used by Lockheed. The so-called "Four Factor Method" or "Lockheed Method."<sup>241</sup> As explained by Bedingfield and Rosen, the method involves three steps:<sup>242</sup>

Lockheed Method of Allocation

- (1) each segment computes its income allocable to California as if it were a free-standing company;
- (2) any segment experiencing a loss is excluded from the allocation; and
- (3) the remaining segments (i.e., those not excluded) are allocated a portion of the California franchise tax in proportion to income attributable to California (as computed in step 1).

The four factors are made up of the three statutory factors - sales, payroll and property, as well as a fourth - segment income. By endorsing Lockheed's method, the board in essence decided that segment income is a factor for allocation of state and local franchise taxes under CAS 403.

The case is significant for several reasons. First, once the board determined that the taxes could not be directly allocated to segments, it went beyond a blind application of the state's allocation method ("Massachusetts formula") to find an allocation base representative of the factors on which the total tax payment was based - one which

included segment income. In doing so, the board followed the language in CAS 403.40(b)(4).

The case is also significant because the board rejected allowance of credits to segments with losses. The board noted that:

California has no provision for a refund of its franchise tax in a loss year by carry-back or carry-forward to a profitable year. To the contrary, it provides for a minimum tax of \$200 per corporation under such circumstances. The corporation has already benefited since the loss by any particular segment reduces the unitary income and therefore decreases the corporate franchise tax. To allow a credit under such circumstances to a loss segment would result in a franchise tax allowance to the profitable segments in excess of the amount actually paid and a negative allocation (credit) to the loss segments even though their business activity factors contributed to the tax.<sup>243</sup>

In McDonnell Douglas Corp.,<sup>244</sup> a companion case to Lockheed, the contractor placed in a single pool its California franchise tax and the Missouri income tax. The California franchise tax was assessed using the statutory formula in Lockheed. The Missouri income tax permitted alternate assessment bases, and the contractor chose a base of in-state sales to total sales. McDonnell Douglas then allocated both taxes on the basis of gross payroll.<sup>245</sup>

The government argued unsuccessfully for a separate allocation of the two taxes. Following its line of reasoning in Lockheed, the government asserted that segment income should not be considered for either tax.<sup>246</sup>

The board rejected both the government's and contractor's proposed allocation methods, and remanded the disputes for the parties to negotiate an acceptable method. While it agreed that these taxes could not be directly allocated to a specific segment, the use of a gross payroll base by the contractor was too imprecise to meet the requirement in CAS 403.40(b)(4) for a method to be "representative of the factors upon which the total payment is based."<sup>247</sup> It also failed to comply with the illustrative bases in CAS 403.60(b).<sup>248</sup>

The board acknowledged that gross payroll was a factor in the assessment base, and therefore a causal relationship existed between the base and the taxes in question; however, that was not enough. Use of gross payroll did not equal or approximate a segment's proportionate tax share of tax, since the contractor's allocation differed substantially from one based on the statutory factors.<sup>249</sup>

The early Lockheed and McDonnell Douglas decisions generated a response from the Cost Accounting Standards Board in the form of "Interpretation No. 1" of CAS 403.<sup>250</sup> The Interpretation clearly rejected the board's acceptance in Lockheed and McDonnell Douglas of allocation methods which included factors (such as segment income) other than those explicitly enumerated in the applicable statutes.

On reconsideration of both cases, the board refused to be bound by the Interpretation because of procedural errors in its issuance.<sup>251</sup> In addition, as Rishe points out, the board noted errors in the CASB's reasoning.<sup>252</sup> For example, if segment net income could not be used as an allocation factor, this would create an anomalous situation for companies which had all segments doing business in the taxing jurisdiction. Under such circumstances, most income and franchise taxes could only be allocated as residual expenses - a result at odds with preferences contained in CAS 403.

In Grumman Aerospace Corp.,<sup>253</sup> the ASBCA again rejected the government's allocation method which, as in Lockheed and McDonnell Douglas, ignored segment income.<sup>254</sup> At issue was the allocation of a New York franchise tax to a segment. As in the cases discussed earlier, the board found that there was not a sufficiently clear and direct causal link between the segment and the tax to permit direct charging. Instead, allocation by a representative base was required.

The board accepted the contractor's proposal to use a modification of the "Four Factor Method." The modification allowed the contractor to charge as a cost to profitable segments, credits given to loss segments. Credits for losses were permitted because the applicable New York tax provision, unlike California's, contained a carryback provision which only permitted the full value of a net operating loss to be recognized by allocation of the credit.

The propriety of allocating state taxes to a loss segment was at issue in R&D Associates.<sup>255</sup> Relying on Grumman,<sup>256</sup> the plaintiff unsuccessfully sought to recover accrued tax costs, which included a tax savings credit allocated to a subsidiary pursuant to an agreement to use the subsidiary's tax losses to offset the parent's income.

In denying the allocation, the board noted that the corporation's subsidiary was wholly commercial and the parent never actually incurred state tax costs for amounts credited to the subsidiary. Under DAR 15-205.41,<sup>257</sup> tax saving credits allocated by the parent to the subsidiary were not costs properly allocable to government contracts the parent was performing.

The board easily distinguished Grumman since, unlike R&D Associates, all of Grumman's corporate segments performed most of their business with the government. Thus, the tax-related credits apportioned to Grumman's segments could properly be considered part of total government contract costs. By contrast, R&D's subsidiary's business was wholly commercial, and the amounts credited by the parent to the subsidiary were not costs properly chargeable to government contracts.

A recent significant decision concerning the indirect allocation of state and local taxes under CAS 403 is Hercules (discussed earlier in the context of direct allocation).<sup>258</sup> In Hercules, the Claims Court accepted the contractor's method of determining the amount of state income tax allocable to individual segments even though Hercules



failed to include segment income in the allocation base. The court did not consider this failure significant because income was not a factor on which the total tax payment had been based under the Virginia statute.

The court discounted the government's reliance on U.S. v. Lockheed Corp.<sup>259</sup> The government contended that in addition to property, payroll and sales, the allocation formula should also have measured the ratio of the GOCO's (Radford's) income to the total Virginia-based income of Hercules' segments. The court stated:

Contrary to the reasoning now attributed to it, the court of appeals [in Lockheed] did not say that income was a required element of the allocation base. What it said was that income "can" be included.

The court noted that under CAS 403 payments such as income tax expenses should be allocated to segments using an allocation base representative of the factors on which the total payment was based. In the instant case, this meant using the same base by which the state's share of total corporate income was initially derived.

The court also found that Hercules was in compliance with the requirement in CAS 403 for homogeneous expense pools, even though it combined taxes attributable to capital gain and taxes attributable to operating income into a single pool. The government contended that homogeneity could be achieved only by segregating the single pool

into two separate pools. The court rejected this because the separation would not have changed the result of the allocation.

2). Non-tax Cases

Two final cases deal with non-tax issues pertaining to home office expense. These cases illustrate a rule also evident in the tax cases: a clear preference for allocation based (with reasonable precision and directness) on benefit's received by or costs caused by a segment.

In General Dynamics Corp.,<sup>260</sup> the ASBCA held that allocation of costs incurred by segments for the processing of data at an average rather than the actual cost of the services violated CAS 403. The contractor maintained three regional centers which handled the automated data processing (ADP) requests of his facilities throughout the U.S. In billing the government for his costs, the contractor allocated the average rather than the actual cost of performing the services to the facilities requesting the ADP work from the regional centers. Under CAS 403, the indirect allocation of centralized service function costs performed by a home office (here the regional centers) for segments must be on the basis of the services furnished to each segment. Averaging the costs did not allow for the allocation of the actual costs ADP services incurred by each facility on specific government contracts.

In Teledyne Continental Motors, General Products Division,<sup>261</sup> the ASBCA reviewed the propriety of an allocation base of active

employee headcount. The board determined that for the years prior to the applicability date of CAS 413,<sup>262</sup> the contractor had improperly allocated certain pension costs to two of its divisions using a base consisting only of its active employee head count. This violated CAS 403 which required an allocation base representative of the factors on which the pension costs were based. In this case the base should have consisted of both the earned service credits of retirees and the active employee head count, since that is on what the pension costs were based.

#### 7. Allocation of Residual Expenses

The Standard defines residual home office costs as those which can neither be directly allocated to a segment, nor indirectly allocated to a segment or group of segments through use of homogeneous cost pools.<sup>263</sup> In other words, there is no readily measurable relationship to segments for these costs. A primary aim of the Standard is to keep residual costs to a minimum.<sup>264</sup>

Residual expenses are allocated to all segments under a home office by means of a base representative of the total activity of such segments. Typical residual expenses are those for the chief executive, the chief financial officer and any staff which are not identified with specific activities of segments.<sup>265</sup>

Normally, any base representative of total activity may be used to allocate residual expenses. However, when residual expenses

become material, the Standard mandates allocation according to a three-factor formula based on segment payroll, operating revenue, and the average net book value of tangible capital assets (plus inventories).<sup>266</sup>

Materiality exists when the total amount of residual income as a portion of aggregate operating revenue of all segments for the previous fiscal year exceeds the following percentages:

<u>Material Amounts of Residual Expense</u> <sup>267</sup>
<ul style="list-style-type: none"><li>- 3.35 % of the first \$100 million</li><li>- 0.95% of the next \$200 million</li><li>- 0.30% of the next \$2.7 million</li><li>- 0.20% of all amounts over \$3 billion</li></ul>

If a segment has a material amount of residual home office expense then it must base its share of home office residual expense on the average of the following three ratios:

<u>Three Factor Formula for Residual Home Office Costs</u> <sup>268</sup>
<ol style="list-style-type: none"><li>(1) Segment payroll dollars to total payroll dollars of all segments.</li><li>(2) Segment operating revenue to total operating revenue of all segments (adjusted to reflect interorganizational transfers).</li><li>(3) Average segment net book value of tangible capital assets, plus inventory, to total average net book value of tangible capital assets, plus inventory, of all segments.</li></ol>

Finally, when one segment receives significantly more or less benefit from residual expenses then is reflected by the allocation provisions, the government and contractor may agree to a special allocation. Once agreed upon, the special allocation is excluded from the pool of residual expense allocated to the remaining segments.

#### 8. Special Allocations

The Standard makes no explicit provisions for the use of a special allocation to handle circumstances where a particular segment receives either significantly more or significantly less benefit from the expenses grouped in the indirect cost pool. However, under CAS 418 a contractor and the government can agree to a special allocation from an indirect cost pool to a cost objective on the basis of benefit received.<sup>269</sup>

### III. COST PRINCIPLES

Unlike the CAS, the cost principles do not provide specific guidance on the allocation of home office expense to segments. Instead, home office expense is allocated proportionately to all segments of the business on the basis of the relative benefit received or other equitable relationship.<sup>270</sup> The contractor's method of allocation is evaluated based on relevant cost principles, such as those for determining allocability,<sup>271</sup> direct costs,<sup>272</sup> and indirect costs.<sup>273</sup>

As Bedingfield and Rosen point out, under the cost principles allocation was based on benefits accruing to cost objectives. CAS 403 added the element of causality as an allocation criterion.<sup>274</sup> A comparison of two ASBCA decisions on home office expense illustrates the difference.

Both cases had as plaintiff the Boeing Company. The first case, Boeing One,<sup>275</sup> was decided prior to the effective date of CAS 403.<sup>276</sup> The second case, Boeing Two,<sup>277</sup> was decided under CAS 403. At issue in both cases was the propriety of allocating home office expense for state and local taxes to segments on the basis of the number of personnel in each segment.

In Boeing One, the ASBCA accepted the "broad benefit" theory wherein the contractor argued that community services provided by the taxes were of benefit to the contractor's entire operation within the state and thus could not be identified to particular in-state segments. The board accepted the contractor's "broad benefit" allocation method. Under the cost principles, the requirement of distribution according to benefit was satisfied by any reasonable method of allocating indirect costs to government work.

In Boeing Two the same parties, issues and arguments were present. The primary difference was that the contract at issue was subject to CAS 403. As a result, the ASBCA rejected the "broad benefit" test. The test was too imprecise to achieve the more precise method of cost allocation required by CAS 403. Instead, the board

adopted the government's position that the taxes had to be allocated directly to segments if at all possible, according to "beneficial or causal relationship."

Even when CAS 403 does not apply, it can be used as guidance along with the cost principles to evaluate a contractor's allocation of home office expense.<sup>278</sup>

CHAPTER 3  
ALLOCATION OF BUSINESS UNIT GENERAL AND  
ADMINISTRATIVE EXPENSES TO FINAL COST OBJECTIVES

I. INTRODUCTION

Expenses incurred by or allocated to a business unit for the general management and administration of a business unit are called General and Administrative (G&A) expenses.<sup>279</sup> The allocation of business unit G&A is governed by CAS 410 for CAS-covered contracts, and the cost principles for all others. Even when CAS 410 does not directly apply to a contract, it is often used as guidance (by the DCAA *et al.*) along with the cost principles to evaluate a contractor's allocation of G&A.<sup>280</sup>

II. COST PRINCIPLES

A. Basic Requirements

In contrast with the detailed guidance of the CAS, the cost principles provide two basic rules for the allocation of indirect costs, including G&A expense. These rules are contained in FAR 31.201-4 and FAR 31.203. The first specifically governs allocability and states that a cost is allocable if:

. . . it is assignable or chargeable to one or more cost objectives on the basis of relative benefits



received or other equitable relationship. Subject to the foregoing, a cost is allocable to a Government contract if it -

- (a) Is incurred specifically for the contract;
- (b) Benefits both the contract and other work, and can be distributed to them in reasonable proportion to the benefits received; or
- (c) Is necessary to the overall operation of the business, although a direct relationship to any particular cost objective cannot be shown.<sup>281</sup>

The second establishes rules for the accumulation and allocation of indirect costs. It requires:

- (1) Accumulation of indirect costs into logical cost groupings, such as G&A. The groupings should permit distribution on the basis of benefits which accrue to cost objectives.<sup>282</sup>
- (2) Selection of a distribution base common to all cost objectives to which the grouping is to be allocated.<sup>283</sup>
- (3) No fragmentation of bases. Once an appropriate base has been selected, all items in the base should bear a pro rata share of indirect costs irrespective of their acceptance as a Government contract cost.<sup>284</sup>

## B. Cost Pools

### 1. Pool Groupings

G&A pool groupings should only include those activities that are necessary to the overall operation of the business, but for which a direct relationship to any particular cost grouping cannot be shown.<sup>285</sup> The DCAA Manual goes on to state:

The cost of those activities incurred specifically for a contract or that can be distributed to both government and other work in reasonable proportion to the benefit received should be removed from the G&A pool and distributed to the final cost objectives on a more appropriate basis. Expenses which are not G&A expenses but are insignificant in amount may be included in the G&A expense pool.<sup>286</sup>

Normally, a single overhead pool is used for G&A.<sup>287</sup> A single pool is used because of "the similarity of the items in the pool and the lesser dollar amount of G&A expenses in relation to their distribution base."<sup>288</sup> Distortions which might result from use of a single pool are typically minor.<sup>289</sup>

## 2. Types of Costs in the Pool

### a. Overview

The types of cost placed in the G&A cost pool include: officers' salaries,<sup>290</sup> selling costs,<sup>291</sup> and IR&D and B&P costs.<sup>292</sup> Other costs include internal audit costs,<sup>293</sup> off-season equipment costs,<sup>294</sup> legal fees.<sup>295</sup> As Professors Nash and Cibinic point out, these costs are placed in the G&A cost pool because such costs are allocated to all of the contractor's business.<sup>296</sup>

### b. Direct Costs

#### 1). Legal Costs

Direct costs cannot be included in the G&A cost pool. This point was litigated in FMC Corporation, Northern Ordnance Division.<sup>297</sup> The government successfully challenged a contractor's practice of allocating legal fees as a G&A expense. The legal fees at issue resulted from the prosecution of a subcontract claim against the prime. The ASBCA and the federal circuit court upheld the government's position that both the cost principles and the Cost Accounting Standards required direct allocation of these costs to the contract involved in the claim.

FMC argued that its legal costs should be allocable to other contracts because such costs met the requirements of the cost principles under ASPR 15-201.4(iii). Specifically, FMC asserted that

the legal fees were a cost necessary to the overall operation of the its business. The litigation expenses were "necessary" to its business and achieved a settlement financially beneficial to the company. This, in turn, provided benefits to the government. The proceeds of the financial settlement were distributed among a division of FMC which was able to then charge lower prices to the government, effectively its only customer. Additionally, as a consequence of the legal dispute, FMC purportedly improved internal procedures which made it a more competitive contractor, able to give the government the benefit of cost savings.

Not surprisingly, the board and court disagreed with this analysis. Relying on Dynalectron Corp. v. U.S. (cited by the board),<sup>298</sup> the court held that the legal fees in question provided benefits too remote and insubstantial to meet the requirement of a government benefit.<sup>299</sup>

## 2). Salaries

The board also will reject the direct allocation of costs normally included in the G&A pool, such as the salaries of senior corporate or company officers, without evidence that the costs deserve disparate treatment. In Worsham Construction Company, Inc.,<sup>300</sup> a contractor was prohibited from directly allocating the principal officer's salary to a government contract, rather than including it in home office overhead. The contractor was unable to provide sufficient proof that the salary in question was actual compensation for time spent on the

government contract, rather than normal supervisory and managerial functions which warranted indirect allocation.<sup>301</sup>

### 3). Insurance Costs

This principle was also evident in Brooklyn Navy Yard Development Corporation.<sup>302</sup> The ASBCA denied a contractor's direct allocation of insurance costs to the cost of providing steam to the government. The board concluded that the costs were more properly included in the contractor's G&A cost pool in the absence of evidence that it was indeed a direct cost.

#### c. Allocation Methods

The boards will carefully scrutinize methods used by contractors to determine costs included in the G&A pool, such as facility depreciation. In Hercules, Inc. v. U.S.,<sup>303</sup> the ASBCA denied a contractor's change in accounting method from use of straight-line method to usage method for depreciation on an idle facility. The change created an impermissible distortion by increasing the G&A rate on its cost reimbursable contracts, while at the same time decreasing the prices it could offer in bidding on fixed price contracts. The board noted that the change was a significant one which violated the cost principles (e.g., ASPR 15-201.1) because it was not in accord with GAAP.

The practice also reflected an impermissible lack of accounting consistency by the contractor. On his books, the contractor took straight-line depreciation on the facility, but in computing the G&A expense rate he excluded from his cost of sales base the difference between the straight-line depreciation method and the usage rate depreciation method.

d. Cost Pool Components

In determining what are appropriate components of the G&A cost pool, the boards look at a contractor's business circumstances and accounting practices. For example, in American International Manufacturing Corporation, Successor-In-Interest to American Manufacturing Company of Texas,<sup>304</sup> the ASBCA rejected the government's contention that a contractor's personnel, safety and security department costs should be included in the G&A expense pool, as opposed to the contractor's choice of a service department overhead pool.

The board noted that the contractor's allocation was proper given his method of accounting and the fact that his personnel, safety and security department's costs were directly related to the manufacturing plant. The personnel, safety and security department was one of the service department's that supported the contractor's manufacturing plant and that identified and accumulated its own costs. The activities of this department clearly related to the manufacturing plant. For example, personnel costs directly related to

the hiring and firing of plant employees, while safety and security costs related to inspection and protection of the manufacturing plant and not the administrative area which was physically separate from the plant.

### C. Allocation Base

#### 1. Standards for Selecting a Base

FAR 31.203 (b) contains the following guidance concerning selection of a base:

The base should be selected so as to permit allocation of the [cost] grouping on the basis of the benefits accruing to the several cost objectives. When substantially the same result can be achieved through less precise methods, the number and composition of cost groupings should be governed by practical considerations and should not unduly complicate the allocation.

The DCAA Audit Manual provides additional guidance stating, inter alia, that the distribution base should be common to all cost objectives to which the G&A pool will be allocated.<sup>305</sup> In Martin Marietta Corp.,<sup>306</sup> the board stated that:

A proper G&A allocation base must be representative of the year's business activity so as to cause the pool of G&A expense to be equitably apportioned over the year's business activities.

. . . The G&A allocation base is not selected because it generates the G&A expense but because it provides an equitable method of allocating the G&A pool proportionately to the contracts, jobs, departments, products, services, and types of customers that make up the firm's business activities. Whether and the extent to which the cost elements in the G&A allocation base generate G&A costs has no direct bearing on whether the G&A allocation base will serve its purpose of equitably apportioning the G&A expense to the contractor's business activities for the year.<sup>307</sup>

In summary, the base should be appropriate for the particular business circumstances of an individual contractor and must equitably apportion G&A on the basis of benefits accruing to the cost objectives.<sup>308</sup>

## 2. Types of Bases

### a. Guidance

The allocation base must ensure distribution of G&A costs to cost objectives based on the benefits received by the cost objectives.<sup>309</sup> The DCAA Manual contains the following guidance on five common bases: cost input, cost of goods sold, cost of sales, cost of goods manufactured and total sales. Although the guidance suggests that certain bases, such as cost of sales, are fundamentally inequitable, it is important to note that DCAA permits use of such a base if the contractor can demonstrate that indeed its use is equitable.<sup>310</sup>



1). Cost Input. Cost input is the cost, except G&A, which for contract cost purposes is allocable to the production of goods and services during the cost accounting period. The most often used bases are: total cost input (TCI), all costs excluding G&A; value-added cost input, all costs excluding material, subcontracts and G&A; and single-element cost input. Cost input bases are generally acceptable for government contracts because they express the causal and beneficial relationship between G&A expenses and all of the final cost objectives of a cost accounting period (matching principle).

2). Cost of Goods Sold. The cost of goods sold base is often identical to TCI, and when identical it is acceptable. Its advantage is that the amount is generally available from the accounting records and does not require separate computation. Cost of goods sold bases may be unsatisfactory when the G&A expense allowable under government contracts is more closely related to production for the periods than to products distributed and sold. Distortions are most likely to result when some of the contractor's products require a long manufacturing cycle, or when commercial items are produced for stock or leasing, rather than to fill sales commitments. G&A expenses which are not clearly a part of production may not be applied to inventory because to do so would violate generally accepted accounting principles. Distortion may also result if a contractor classifies all costs incurred under cost-type contracts as sales when the costs are incurred, but does not record sales under fixed-price contracts and

other work until shipment of the completed product.

3). Cost of Sales. Cost of sales includes selling costs whereas cost of goods sold does not. The cost of sales base is inequitable because the contractor is precluded from recovering allowable selling costs and must allocate G&A to all selling costs. All other considerations affecting cost of goods sold apply to cost of sales.

4). Cost of Goods Manufactured. Cost of goods manufactured differs from cost of goods sold in that it includes ending inventories and excludes beginning inventories. Cost of goods manufactured is generally not an acceptable allocation base for G&A expense under government contracts because it does not adequately represent the cost of production for the accounting period. Cost of goods manufactured includes prior period costs applicable to goods in process at the beginning of the accounting period and excludes current period costs applicable to goods remaining in process at the end of the accounting period. Distortions are most likely to result when the contractor's products require varying manufacturing cycles, some longer than others, or inventories of raw materials and work in process vary significantly between the beginning and end of the accounting periods.

5). Total Sales. Total sales as a basis for allocating G&A expense is generally not acceptable for government contracts because:

- (1) the concurrence of sales with production usually varies between the items produced for the government and those produced commercially,
- (2) the margin of profit may vary appreciably among contracts and between government and other work, and
- (3) the final selling price of incentive type contracts or other contracts which contain price revision terms is not known until the work has been completed and the price negotiated.<sup>311</sup>

b. Overview

According to Bedingfield and Rosen, perhaps the most common allocation base for contracts not subject to CAS is cost of sales.<sup>312</sup> The reason is that a cost of sales base is relatively simple to use and often readily available.<sup>313</sup> Use of a total sales base may also be common, but it can generate distortions due to differences in "gross profit margins on different products, product lines, classes of work, etc."<sup>314</sup>

Bedingfield and Rosen also list some other less common G&A bases: conversion costs (direct labor and manufacturing overhead for a period), prime cost (direct material and direct labor for a period), and direct labor.<sup>315</sup>

In certain limited circumstances, G&A costs associated with a specific cost item may be charged directly to that cost item. In John

Bransby Productions, Ltd.,<sup>316</sup> the ASBCA permitted a contractor to add G&A expenses related to travel directly to itemized travel expenses. The firm fixed price contract included a provision which treated travel as a reimbursable item. The board held that the contractor's expectation that these expenses would be added directly to travel costs rather than fixed price line items was reasonable and justified in part because of his previous dealings with other contracting officers in the same governmental division. In addition, neither the contract nor any oral representations of the government excluded these expenses.

Similarly, in Aerospatiale Helicopter Corporation,<sup>317</sup> the Department of Transportation Board of Contract Appeals (DOTBCA), held that a contractor was entitled to indirect costs comprised of the G&A costs of providing for travel directly allocated to the contract. The fixed price contract treated travel costs as reimbursable on a cost basis over and above the fixed price. Relying on John Bransby Production,<sup>318</sup> the board noted that the contractor had not included any G&A for travel in the fixed price proposed, and that the contract was silent on the issue. In addition, the government did not refute expert testimony that such G&A billing is a customary practice for government contractors.

### 3. Cost of Sales Base vs. Cost Input Base

Although prohibited for CAS-covered contracts, a cost of sales base may be used for other contracts under the cost principles.

However, distortions can arise from the use of cost of sales base which would not arise through the use of a cost input base.

For example, when inventories change little from the start until the end of a cost accounting period, allocation of G&A will be substantially the same with either a sales base, cost of sales base, cost of goods manufactured base, or cost input base.<sup>319</sup> However, substantial distortions may result from the use of a cost of sales base (or sales, cost of goods and manufactured base) when:

(1) inventories of work in process and finished goods change significantly from the start until the end of an accounting period, and

(2) if the bulk of G&A expenses are related to plant operations.<sup>320</sup>

Under such circumstances, use of a cost input base provides a more accurate base.<sup>321</sup>

The lead case on this is Litton Systems<sup>322</sup> wherein the government successfully opposed the use of cost of sales base for allocation of G&A by a contractor performing both fixed price and cost reimbursement contracts. The Court of Claims explained how the cost of sales base under these conditions was inequitable by:

. . . loading all G&A expense for a given period on an unfinished cost-plus contract even though in the same period the contractor was concurrently performing a second contract, that was, except

for its fixed price format, identical in all respects, including the type and quantity of costs incurred and the degree of actual performance achieved. Such distortion would not occur . . . only in the most unlikely event that the contractor's volume of fixed price work remained absolutely constant so that the balance of uncompleted work under such contracts was the same at both the beginning and end of each period for which G&A costs were to be allocated. Any variation between opening and closing balance would automatically create distortion - a net increase for the period resulting in too much G&A expense being attributed to the cost-plus contracts and a decrease resulting in too little.<sup>323</sup>

As McBride points out, when a contractor's commercial business increases to the point that allocation of G&A on a cost of sales basis causes a disproportionate G&A charge to government cost contracts, the government can change the method of cost incurred.<sup>324</sup>

#### 4. Total Cost Base

A total cost base includes all costs that are not G&A expenses. For example, in Lionsgate Corporation,<sup>325</sup> the board upheld a contractor's use of a total cost input base which consisted of all non-G&A expenses, including direct labor, materials, subcontracts and equipment. The G&A expense pool was the contractor's sole indirect cost pool and properly included administrative salaries.

In G.E. Boggs & Associates, Inc.,<sup>326</sup> the ASBCA permitted the contractor to include in the distribution base for G&A expense collateral lost to the issuer of a performance bond. The contractor used a total cost base for allocation of G&A and the lost collateral was an allowable cost. The government offered no evidence to support the exclusion and fragmentation of the allocation base in contravention of the cost principles (FPR 1-15.203(c)).

#### 5. Single Element Base

A contractor may use a single element base, such as direct labor, for allocation of G&A under the cost principles. This issue was litigated in General Dynamics Corp., Convair Division.<sup>327</sup> The contractor successfully argued for continued use of a direct labor base for allocation of G&A costs. The ASBCA found that such an allocation base was not presumptively improper. Instead, the board examined the individual business circumstances of the contractor. It noted that the contractor had consistently used this method for almost a decade and that it resulted in a more equitable allocation of G&A costs over government and commercial work than occurred with a total cost input base.<sup>328</sup>

The use of a single element direct labor base has been upheld in other decisions where the government could show it to be neither unreasonable nor inequitable.<sup>329</sup> In Onyx Corp.,<sup>330</sup> the salaries of the president and vice president were included in the G&A pool and allocated on the basis of direct labor. The contractor had originally

used total billings as the base, but the contracting officer and the board rejected this as not reasonable since the contractor had used outside consultants on the contract and there was no evidence of how much supervision the corporate officers exercised over the consultant's work. The Interior Board of Contract Appeals (IBCA) considered the direct labor base reasonable in that it allowed for the allocation of the officer's salaries on the basis of the percentage of hours performed on the government contract. Direct labor for the government contract comprised 34 percent of the total direct labor for the accounting period in question. Thus, the IBCA permitted allocation of 34 percent of the corporate officer's salaries to the government contract.

### III. COST ACCOUNTING STANDARD 410

#### A. Purpose

CAS 410, "Allocation of Business Unit General & Administrative Expenses to Final Cost Objectives," prescribes criteria for (1) allocating G&A expenses to final cost objectives, and (2) determining the type of expenses that should be included in the G&A expense pool.<sup>331</sup>

Allocation to final cost objectives is based on the beneficial or causal relationship between the G&A expense and the final cost objective.

In addition, the Standard provides guidance on allocation of segment home office expense distributed in accordance with CAS 403,

Allocation of Home Office Expenses to Segments. It also prescribes rules for allocation of segment indirect costs lacking a representative



base under CAS 418, Allocation of Direct and Indirect Costs. The Standard is meant to "increase the likelihood of achieving objectivity in the allocation of expenses to final cost objectives and comparability of cost data among contractors in similar circumstances."<sup>332</sup>

## B. Definitions

An effective understanding of the Standard is premised on certain basic accounting concepts. The Standard defines a number of the more important ones:

1. **Allocate.** To assign an item of cost or a group of items of cost, to one or more cost objectives. This term includes both direct assignment of cost and the reassignment of a share from an indirect cost pool.
2. **Business unit.** Any segment of an organization, or an entire business organization which is not divided into segments.
3. **Cost input.** The cost, except G&A expenses, which for contract costing purposes is allocable to the production of goods and services during a cost accounting period.
4. **Cost objective.** A function, organizational subdivision, contract or other work unit 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.

5. **Final cost objective.** A cost objective which has allocated to it both direct and indirect costs, and, in the contractor's accumulation systems, is one of the final accumulation points.

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

7. **Segment.** One of two or more divisions, product departments, plants, or other subdivisions of an organization reporting directly to a home office, usually identified with responsibility for profit and/or producing a product or service. The term includes Government-owned contractor-operated (GOCO) facilities, and joint ventures and subsidiaries (domestic and foreign) in which the organization has a majority ownership. The term also includes those joint ventures and subsidiaries (domestic and foreign) in which the organization has less than a majority of ownership, but over which it exercises control.<sup>333</sup>

G&A costs have also been defined as:

. . . the expense of the general operations of the business which cannot be related to any costs objective through showing of a cause and effect relationship, but which must nevertheless, be incurred if the business is to be run.<sup>334</sup>

Other key definitions are contained in Part 400 of the Cost Accounting Standards.<sup>335</sup>

### C. Background

#### 1. Relationship to Cost Principles

Prior to issuance of the Standard, the cost principles governed the allocation of G&A and other indirect costs.<sup>336</sup> However, the cost principles gave only general guidance and there was an absence of specific requirements in procurement agency regulations dealing directly with allocation of business unit G&A expenses.<sup>337</sup> The Standard was devised, in part, because allocation of G&A expenses was one of the most frequently encountered problems in the area of allocation of indirect cost.<sup>338</sup>

An evident difference between the cost principles and CAS 410 is in the types of bases that can be used to allocate G&A expense. CAS 410 requires use of a cost input base. The cost principles permit the use of a variety of bases, including cost of sales. When CAS 410 does not apply, it may still be used as guidance along with the cost principles and other sources, such as the Defense Cost Accounting Manual.<sup>339</sup>

Another difference between the cost principles and CAS 410 is the stark contrast in detail. The cost principles as they apply to G&A costs, as well as other types of indirect cost, often lack specificity. As Trueger points out, the cost principle concept of allocation in relation to benefits accruing to cost objects seems "logical and valid", but the lack of specific guidance has allowed the government and contractors to reach antithetical conclusions as to allocation methods.<sup>340</sup> Although CAS 410 clearly does not eliminate differences of opinion as to G&A allocation, it certainly provides a significantly greater level of detailed guidance.

## 2. Effective Date

The effective date of the Standard is October 1, 1976. It must be followed by each contractor after the start of the next fiscal year beginning after January 1, 1977.<sup>341</sup> It applies to all CAS-covered contracts, but does not apply to contractors subject to Federal Management Circular 74-4, Principles for Determining Cost Applicable to Grants and Contracts with State and Local Governments.<sup>342</sup> As discussed in more detail below, the Standard provides for a transition from cost of sales or sales base to cost input base.<sup>343</sup>

## 3. Cost of Sales vs. Cost Input Base

Before promulgation of the Standard, the Cost Accounting Standards Board (CASB) solicited and reviewed commentary from

interested parties. A number of commentators argued in favor of continued use of cost of sales base, instead of the cost input base adopted by the CASB. They reasoned that cost of sales base had a long history of satisfactory use and was consistent with generally accepted accounting principles and the concept of period costs.<sup>344</sup>

The CASB rejected this position, finding that a cost of sales base is representative not only of current period costs, but in part of the productive activities of prior periods. Therefore, it is subject to "fluctuations which can distort the allocation of G&A expenses to activities of the current period."<sup>345</sup> In choosing a cost input base, the CASB relied on four conclusions:

1. Expenses in the G&A expense pool are the expenses of the general management and administration of a business unit as a whole;
2. There is a beneficial or causal relationship between G&A expenses and all of the final cost objectives of a cost accounting period;
3. The allocation base chosen should be one which measures the total activity of the business unit during a cost accounting period and not just some part of total activity; and
4. A cost input base accomplishes this objective (and a cost of sales base does not).<sup>346</sup>

In addition to arguing for the use of a cost of sales base, some commentators argued against the use of cost input base. One objection was that a cost input base would violate GAAPs. They argued that G&A expenses are most commonly viewed as a period cost and not allocated to production nor inventoried. Thus, the use of a cost input base would result in inventorying G&A expenses for contract costing purposes.<sup>347</sup>

The CASB also rejected this argument, noting that while the Standard does not require that G&A expense be inventoried, inventorying of G&A expenses on government contracts has been an acceptable accounting procedure under SEC and IRS regulations. In addition, the CASB stated that the Standard is based on the concept of full-costing of final cost objectives. This means that for contract costing purposes, the concept of period expense is inapplicable.<sup>348</sup>

#### 4. Allocation Process

Allocation of G&A expenses can be controversial. As Trueger points out, in part this is because such expenses are frequently far removed from the manufacture of a product. This makes it extremely difficult to equitably apportion them to an individual product.<sup>349</sup>

Controversy was also generated by the DCAA's rigid insistence on the use of a total cost input base under CAS 410, to the exclusion of a value-added base and single element base authorized by the Standard.<sup>350</sup> Many contractors and commentators viewed the DCAA's

position as unjustified in view of the CASB endorsement of all three bases. As discussed in further detail below, the DCAA position on this issue was eventually rejected by the ASBCA in Ford Aerospace and Communications Corps., Aeronutronic Division.<sup>351</sup>

##### 5. Allocation v. Allowability

In addition to being controversial, allocation in theory and practice can be confusing. An example of this is the recurrent confusion over the meanings of allocability and allowability.<sup>352</sup> Although this thesis concerns allocability, it is important to clearly understand the difference between the two concepts.

Professor Cibinic states the difference clearly:

Allowability is the ultimate decision to be made in reimbursement decisions. If the cost is allowable, the contractor is entitled to reimbursement. If not, reimbursement is denied. "Allocability" is one of the factors which determine whether a particular cost is allowable. . . . Allowability is not a synonym for allocability or vice versa.<sup>353</sup>

The confusion between allocability and allowability was evident in General Electric Co., Aerospace Group v. U.S.<sup>354</sup> where the Claims Court upheld the government's decision that certain foreign selling costs were not allowable under the cost principle dealing with selling costs.<sup>355</sup> The contractor unsuccessfully argued that the DAR provision was invalid because it conflicted with CAS 410 on an issue of

allocability. In fact, the DAR provision declared such costs to be not "allocable" to government contracts. However, the Claims Court ruled that the specific language itself was not controlling. Reviewing the overall language of the provision and the foreign policy history of the provision's origin, the Claims Court concluded that the DAR provision was a policy provision making foreign selling costs unallowable.

In its discussion of the issue of allocability, the Court of Appeals "confuse[d] allocability - an accounting concept within the province of the Cost Accounting Standards Board - and the ultimate determination of allowability."<sup>356</sup> This is one of a number of lingering cost issues that could be resolved by the new CAS Board.<sup>357</sup> Until then, it requires a very careful and precise understanding of the CAS and the cost principles.

#### D. Cost Pools<sup>358</sup>

##### 1. Generally

The Standard requires grouping of G&A business unit expenses in a separate indirect cost pool. These expenses are then allocated only to final cost objectives.<sup>359</sup> Management expenses which can be more directly measured by a base other than cost input must be allocated to all benefiting or causing segments according to the relationship between costs and segments, using a base common to them all.<sup>360</sup>

Contractors may combine the G&A expense pool with other expenses for allocation to final cost objectives so long as:



(1) The allocation base used for the combined pool is appropriate both for the allocation of the G&A expense pool under this Standard and for the allocation of the other expenses; and

(2) Provision is made to identify the components and total of the G&A expense pool separately from the other expenses in the combined pool.<sup>361</sup>

## 2. Composite Pools

The G&A expense pool may include expenses which are not G&A expenses, so long as they are insignificant in amount.<sup>362</sup> In addition, the G&A expense pool may be included in a composite pool with other costs when allocation of each utilizes a common base. However, the G&A portion of the pool must be identified separately.<sup>363</sup> As Rishe points out, the issue of composite pools arises in the allocation of B&P and IR&D costs. Under CAS 420, these costs must be allocated using the same base as used for allocation of segment G&A.<sup>364</sup>

## 3. Selling Costs

Selling costs may be included in the G&A expense pool. However, Goldsman points out that the Standard permits a company to develop a separate pool for selling costs, and allocate such costs on a cost of sales basis based on beneficial or causal relationship. In such cases, the selling costs would become part of the total cost input base over which G&A expenses are allocated.<sup>365</sup>

The DCAA Audit Manual (DCAM) states that selling costs must be removed from the G&A expense pool when a significant and disproportionate amount of the selling activity relates to either foreign or domestic sales. In such cases, the DCAM requires that selling costs to be allocated separately to business unit cost objectives.<sup>366</sup> DCAA's justification for this position is not clearly stated. Instead it relies on CAS 410.40(d) and 410.50(b)(1), neither of which directly deals with selling costs. Perhaps implicit in the DCAM position is the assumption that under such circumstances a cost input base would not be the best measurement of the beneficial or causal relationship between the selling costs and cost objectives.<sup>367</sup>

In Emerson Electric Co.,<sup>368</sup> the ASBCA rejected the contractor's claim that the DAR cost principle for selling costs<sup>369</sup> improperly conflicted with CAS 410. The DAR prohibited allocation of foreign selling costs to domestic government contracts while CAS 410 did not. The contractor unsuccessfully argued that the DAR and CAS were in conflict over how to allocate foreign selling costs because CAS 410 required use of a single cost-input base while the DAR required allocation over a fragmented cost input base. The board found the apparent conflict permissible because the DAR did not instruct the contractor on how to allocate foreign selling costs and CAS 410 did not require use of a specific allocation method.

#### 4. Home Office Expenses

Under certain circumstances, the G&A expense pool will include home office expense allocated to a segment. The Standard requires

inclusion of the following types of home office expense in the G&A expense pool: line management expenses, residual expenses, and directly allocated expenses related to managing and administering the receiving segment.<sup>370</sup> The Standard prescribes separate treatment of home office expense as follows:

Any separate allocation of the expenses of home office (i) centralized service functions, (ii) staff management of specific activities of segments, and (iii) central payments or accruals, which is received by a segment shall be allocated to the segment cost objectives in proportion to the beneficial or causal relationship between the cost objectives and the expense if such allocation is significant in amount.<sup>371</sup>

However, the Standard does allow inclusion of these expenses in the G&A expense pool where a beneficial or causal relationship for the expense is not identifiable with segment cost objectives.<sup>372</sup>

## E. Allocation

### 1. Basic Requirements

The Standard imposes several basic requirements. First, the base must represent the total activity of the business unit. Thus, it must include all significant elements of the cost input.<sup>373</sup> Second, the base must be one of three prescribed cost input bases: total cost input,

value-added input, or single-element input.<sup>374</sup> In principle, G&A expenses benefit segment business as a whole, therefore total activity is the only proper measure of the benefit conferred.<sup>375</sup>

## 2. Allocation Bases

### a. Types of Bases

Although the Standard limits contractors to a cost input base for allocation of business unit G&A, it offers a choice of three. As mentioned above, these are total cost input, value-added input and single-element input.

(1) A total cost input base consists of all significant costs other than the costs included in the G&A expense pool. This includes the costs of all activities, functions, materials, services, allocable to final cost objectives during a cost accounting period.<sup>376</sup> Other examples include: cost of goods produced for inventory, any unallowable costs, any B&P costs, and IR&D costs not included in the G&A expense pool.<sup>377</sup>

(2) A value-added cost input base is total cost input less material and subcontract costs.<sup>378</sup>

(3) A single element cost input base consists of a single element, such as direct labor hours or direct labor dollars.<sup>379</sup>

When G&A expenses are included in a composite pool, all costs included in the composite pool should be excluded from the base.<sup>380</sup>

b. Selection of a Base

1). Basic Requirements

The contractor should choose the base which best represents the total activity of the business unit during a typical cost accounting period.<sup>381</sup> The emphasis is on choosing the base which will achieve the least distortion of cost allocation.<sup>382</sup> In other words, the aim is to allocate G&A expenses to contracts based on a causal or beneficial relationship. The DCAA Manual states: "What is being pursued for the base is a flow of costs bearing a reasonable relationship with the production of goods and services."<sup>383</sup>

The Standard does not state an ironclad preference for any one of the three cost input bases, so long as the one chosen best represents the business unit's total activity. The DCAA now basically follows this approach, although at one point it strongly insisted that the preferred base was total cost.<sup>384</sup>

In a letter dated March 17, 1987, to the National Security Industrial Association on CAS 410 Implementation, the DCAA Director affirmed that there is no preference for total cost input.<sup>385</sup> However, the Director emphasized that the lack of preference does not equate to total freedom of choice for contractors. Instead, contractors are required to perform a detailed analysis of the causal or beneficial

relationships of the pool items to the allocation base.<sup>386</sup> This position has been incorporated into the DCAM.<sup>387</sup>

The Standard and the DCAM offer some guidelines for choosing among the three cost input bases. Under the Standard, a value-added cost input base may be appropriate when inclusion of material and subcontract costs would significantly distort the allocation of the G&A expense pool in relation to the benefits received, and where costs other than direct labor are significant measures of total activity.<sup>388</sup>

Use of a single-element base is permitted where it might produce "equitable" results. Without clearly defining such results, the Standard states that a single element base may not produce equitable results where other measures of activity are also significant in relation to total activity. A single element base is inappropriate where it is an insignificant part of the total cost of some of the final cost objectives.<sup>389</sup>

## 2). Examples

The DCAA Manual offers several examples of where the value-added or single-element base might be appropriate.

1. Large subcontracts of the type that clearly contrast with arrangements which require close supervision and participation on the part of the prime contractor, for example, drop shipments. These subcontracts generally do not bear the

same relationship to G&A as other cost elements. The existence of these types of contracts as a stable part of the business may be evidence that total cost not be an appropriate measure of total activity as it may cause an inequitable amount of G&A to be allocated to the contract with the large subcontracts. Consideration should be given to changing to a value-added base.

2. Large amounts of government furnished material on some contracts with the same type of material purchased on other contracts. This may cause an inequitable shift of G&A to the contract with purchased materials. Consideration should be given to changing to a value-added base.

3. Contractors whose business activity is clearly more labor intensive, but have contracts that include major purchasing and subcontracting responsibility on a "pass-through" basis which causes significant distortions in allocated G&A. Consideration should be given to value-added or single element base.<sup>390</sup>

### 3). Significant Litigation

As Trueger and others point out, a seminal decision in this area is Ford Aerospace and Communications Corps., Aeronutronic Division.<sup>391</sup> Prior to the effective date of CAS 410 (January 1, 1978) Aeronutronic allocated its G&A expenses by means of a value-added base consisting of direct labor dollars plus direct labor overhead. Under protest, it

changed to a total cost input base upon the effective date of the Standard.

Aeronutronic favored a value-added base because its material and subcontract content was much higher in its production contracts than in its R&D contracts. As a result, general management expenses related much more significantly to in-house activity than to material and subcontract activity. General management expenses also provided substantially more benefit to its labor intensive development contracts.

Aeronutronic asserted that inclusion of material and subcontract costs (in a total cost input base) would seriously distort benefits received from G&A expenses. Its government contracts were for labor intensive development and engineering projects, rather than material intensive production contracts. Inclusion of material costs associated with production contracts in the allocation base of development contracts was inappropriate and gave a skewed result.

In a letter to the DCAA resident auditor, Aeronutronic explained how use of a total cost input base would distort allocation of G&A:

1. Using a total cost input base penalizes contractors whose "administrative" costs related to material and subcontracts (purchasing and production control) are identified and charged directly to contracts. Since purchasing and production control have already been charged to



the contract, a further allocation of general management expenses constitutes a double charge of administration costs to the material and subcontract portion of the contract.

2. Using the present G&A allocation base, non-DoD contracts are allocated new business expenses which exceed the amount of new business expenses actually spent on non-DoD business. Using a total cost input base would result in significantly more new business expenses being allocated to non-DoD work orders. . . .<sup>392</sup>

Aeronutronic acknowledged that use of only direct labor dollars and direct labor overhead was not strictly within the CAS 410 definition of a value-added cost input base (total cost input less material and subcontract costs). However, the contractor argued that this modified base qualified as a minor variation and adequately represented total activity as required by the Standard.<sup>393</sup>

The DCAA rejected Aeronutronic's modified value-added base as not representative of total activity. The DCAA audit report stated that Aeronutronic's "argument relating to the effort expended by general management personnel is not subject to audit verification." It went on to state that:

The CAS 410 prefatory comments state "where a beneficial or causal relationship between certain management expenses and final cost objectives can be determined using an allocation base other than the base used for the

expense pool, then by definition, these management expenses are not G&A expenses, and should be excluded from the G&A pool." Therefore, if adequate accounting records are maintained and the contractor can demonstrate a beneficial or causal relationship then these expenses should be in a pool other than G&A.<sup>394</sup>

The ASBCA decided on Aeronutronic's behalf, granting an equitable adjustment in excess of \$600,000. The board held that the Standard does not require the use of or establish a preference for a total cost input base. Instead, consideration must be given to which type of base (total cost input or value-based) best represents a contractor's total activity. The base chosen should allocate G&A expenses to contracts based on their causal or beneficial relationship, consistent with the full costing concept of the Standard. The choice of a base requires an examination of a contractor's individual business circumstances. Where, as in Aeronutronic's case, fluctuations in the labor and material content of contracts are encountered, application of a value-added base is permitted.<sup>395</sup>

Although Ford Aerospace is perhaps the most significant case to deal specifically with the selection of an appropriate allocation base pursuant to CAS 410, it is certainly not the only case. Two others which support the contractor's choice of an allocation base other than total cost are General Dynamics, Convair Division<sup>396</sup> and TRW, Inc.<sup>397</sup>

In General Dynamics, the contractor successfully retained the right to use a single element allocation base consisting of direct labor dollars. The government had alleged that this base was not equitable primarily because labor costs represented about only 30% of total costs. In addition, the ratio of direct labor to total cost was higher on the contractor's cost type contracts than on its fixed price contracts. The board concluded that such an allocation base was not presumptively improper. Instead, the board examined the individual business circumstances of the contractor. It noted that the contractor had consistently used this method for almost a decade and that it resulted in a more equitable allocation of G&A costs over government and commercial work than occurred with a total cost input base.

Although CAS 410 was not directly applicable to this decision, the ASBCA noted that:

. . . Section 410.50(d)(3) provides that a single element base such as direct labor cost is inappropriate where it is an insignificant part of the total cost of some of the final cost objectives. Twenty-eight to thirty-two percent could hardly be considered to be insignificant.<sup>398</sup>

In TRW, Inc., the contractor successfully argued that it was entitled to use a value-added base because it most closely paralleled the allocation base it used prior to the applicability of CAS 410. The pre-CAS base, which both the DCAA and contract officer had approved, resulted in a reduced G&A rate for subcontracts and material purchases where the initial orders exceeded \$300,000. The

contractor argued that its old allocation base excluded subcontract and material costs to avoid impermissible distortions which would reappear if a total cost input base (advocated by the government) was used. The case was eventually settled with the government's acceptance of a value-added base as compliant with the Standard.<sup>399</sup>

### c. Transition to a Cost Input Base

#### 1). Overview

As already noted, the Standard does not permit the use of sales or cost of sales bases. Prior to the effective date of the Standard, the use of sales or cost of sales bases was a frequent subject of litigation.<sup>400</sup> The Standard proscribes their use in part to avoid allocation distortions which could arise from a change in a contractor's mix of cost reimbursement and fixed price contracts.<sup>401</sup> As Rische notes, a cost input base allocates period costs during a contract's performance regardless of contract type. By contrast, a cost of sales or sales base allocates period costs to a cost reimbursement contract during performance and to a fixed price contract only upon completion of the contract.<sup>402</sup>

#### 2). Two Options

The Standard provides two transition options for conversion to a cost input base. A contractor may choose to (a) make an immediate change (which requires negotiation of an equitable adjustment),<sup>403</sup> or

(b) use a special transition method.<sup>404</sup> There are advantages and disadvantages to both.

a). Immediate Change Option

An immediate change has the advantage of getting the transition to the Standard "over and done with."<sup>405</sup> This option also minimizes problems with the flow of progress payments.<sup>406</sup> Conversely, Rische points out that this approach is generally not used because "it requires negotiation of an equitable adjustment as a change in accounting practice for those contractors subject to CAS 410 at the time the standard first became effective."<sup>407</sup>

b). Transition Option

The transition method avoids the need for any adjustment since it costs on-going contracts at the same cost-of-sale or sales rate.<sup>408</sup> However, it requires tracking a suspense account through future accounting periods and can create problems with the flow of progress payments.<sup>409</sup>

The transition method requires contractors to create two different bases for allocating G&A expenses, one for contracts current at the time of the change and one for new and future contracts.<sup>410</sup> It also requires that separate treatment be given to contracts which are covered by the CAS and contracts not covered.<sup>411</sup>

The Standard lists eight steps for implementation of the transition method:

(1) Calculate the cost of sales or sales base in accordance with the cost accounting practice used before the contractor became subject to the Standard.

(2) Using this base, calculate the G&A expense allocation rate and use it to allocate G&A expense to final cost objectives which were in existence prior to applicability of the Standard.

(3) Calculate a cost input base in compliance with the Standard (either a total cost input, value-added input, or single-element base).

(4) Calculate the G&A expense rate using the base from paragraph three and use that rate to allocate G&A expense to final cost objectives for contracts now subject to the Standard.

(5) Continue to calculate the old G&A expense rates for contracts which arose prior to applicability of the Standard.

(6) Create an inventory suspense account. The amount of the inventory suspense account should equal the beginning inventory of contracts covered by the Standard during the first cost accounting period of Standard applicability.

(7) Adjust the G&A expense pool in any cost accounting period after the pre-existing contracts are completed, if the ending inventory of contracts subject to the Standard is less than the balance of the inventory suspense account.<sup>412</sup>

(8) When a reduction is made, the balance of the inventory suspense account must be reduced to equal the ending inventory of contracts subject to the CAS clause of that cost accounting period.<sup>413</sup>

c). Significant Litigation

A dispute over progress payments as they applied to the transition method led to Westinghouse Electric Corp.<sup>414</sup> Westinghouse unsuccessfully challenged the constitutionality of a government regulation which prohibited inclusion of G&A in costs eligible for progress payments for contractors using the optional transition method just discussed. The ASBCA found a rational basis for the regulation which aimed to offset the increase in cash flow that could result from using the transition method for allocating G&A expenses.

Without the regulation, there was a potential for over recovery of G&A under cost type and flexibly priced contracts performed or completed during transition periods, particularly when work-in-progress inventories were rising. The board found that this policy of reducing financing by eliminating G&A from costs used to compute progress payments for contractors using the transition method contractors had a rational relation to the government's legitimate purpose of controlling contract financing. Thus, the contractor was not entitled to interest for payments withheld under a progress payment clause implementing this policy.

The board also rejected the contractor's argument that the new clause encroached on authority in CAS 410 for contractors to use the transition method. The board noted that CAS 410 solely concerns contract pricing, while the progress payment clause concerns financing for which the government has independent legal authority.

Transition to a cost input base can affect overhead rates. In Falcon Research and Development,<sup>415</sup> the contractor unsuccessfully claimed an equitable adjustment for increased costs associated with implementation of CAS 410. The contractor claimed that cost increases on government contracts resulted from an accounting change imposed by compliance with CAS 410. Prior to implementation of the Standard, the contractor did not have separate G&A pools; instead it combined G&A with other overhead costs. When two rates were calculated and applied to their government contracts, the overhead rate was in excess of the negotiated rate. In denying the contractor's claim, the board found no evidence of increased G&A expenses per se; rather, merely a non-reimbursable change in procedure.

On its face, the transition method may appear to have little relevance more than a decade after the effective date of the Standard. However, the transition method is still relevant for those contractors who are not yet subject to CAS-coverage and either anticipate or contemplate its coverage.



### 3. Allocation to Final Cost Objective

Rishe highlights three notable provisions in the Standard that relate to final cost objectives.<sup>416</sup> These concern allocations to stock or product inventory, allocations of segment shares of home office expense, and special allocations.

#### a. Allocation to Inventory

Items produced or worked on for stock or product inventory are treated as final cost objectives under the Standard.<sup>417</sup> In calculating the appropriate amount of G&A expense to be allocated to inventory, the Standard offers two options. One option is to allocate a portion of the G&A expense pool to stock items during the accounting period when these items are produced.<sup>418</sup> The other option is to allocate a portion of the G&A cost pool to stock items when the items are issued to contracts.<sup>419</sup> In either case, costs are included in the G&A allocation base when the items are produced. What may vary is the allocation rate: either the rate of the period when produced, or the rate of the period when issued.<sup>420</sup>

#### b. Allocation of Home Office Expenses

##### 1). Segments Without Home Office Functions

A business segment receives its share of home office costs based on CAS 403. However, once home office costs are received by a

business segment, they must be allocated to final cost objectives (such as a contract) within the segment based on CAS 410.<sup>421</sup> CAS 410 divides home office costs into two groups and provides separate methods of allocation for each.

The first group consists of (1) line management of particular segments or groups of segments, (2) residual expenses, and (3) directly allocated expenses related to the management and administration of the receiving segment as a whole. These expenses are included in the receiving segments G&A expense pool.<sup>422</sup>

The second group consists of (1) centralized service functions, (2) staff management of specific activities, and (3) central payments or accruals. When significant, these expenses are allocated to segment cost objectives in proportion to their beneficial or causal relationship with the cost objectives. When a beneficial or causal relationship with segment cost objectives cannot be established, the expenses are included in the G&A expense pool.<sup>423</sup>

## 2). Segments With Home Office Functions

Business segments which perform as both a home office and an operating segment must segregate home office costs from other costs.<sup>424</sup> Home office costs must then be allocated only to those segments with a causal or beneficial relationship to the home office, including the segment performing the home office function, pursuant to the provisions of CAS 403.

c. Special Allocations

The Standard requires a special allocation of whenever a final cost objective would receive significantly more or less benefit from segment G&A expense than is reflected by a normal allocation using cost input bases. In such cases, the contractor makes a special allocation which reflects the actual benefit received. Allocations to other contracts are adjusted to account for this special allocation.<sup>425</sup>

DoD has issued policy guidance on special allocation of segment G&A expense to facilities acquisition costs under facilities contracts.<sup>426</sup> The policy requires a special allocation when facilities acquisitions receive less benefit from G&A expense than do other contracts.<sup>427</sup>

As Trueger points out, the special allocation is only for the costs of contractor-acquired Government-funded (GOCO) facilities. A contractor's normal G&A allocation would still apply to maintenance of facilities. The following example illustrates the point.

SAMPLE OF CORPORATE EXPENSE RATES - GOCO ACTIVITIES<sup>428</sup>

	<u>Totals</u>	<u>Basic</u>	<u>Additional</u>
<u>Residual Corporate Expenses</u>			
Basic (applicable to all segment activities)	\$ 20,000	\$ 20,000	-----
Balance (applicable to non-GOCO segment activities)	<u>\$ 40,000</u>	-----	<u>\$ 40,000</u>
Total	<u>\$ 60,000</u>	<u>\$ 20,000</u>	<u>\$ 40,000</u>
 <u>Base of Allocation:</u>			
GOCO segment activities	\$ 200,000	200,000	-----
All other segment activities	<u>\$ 800,000</u>	<u>\$ 800,000</u>	<u>\$ 800,000</u>
Total	<u>\$1,000,000</u>	<u>\$1,000,000</u>	<u>\$1,000,000</u>
<u>Rates</u>	-----	2%	2%

GOCO plants require special care in the allocation of G&A expenses. Often, these plants operate with little or no dependence on corporate administrative activities. Thus, distribution of corporate, division or branch office G&A expenses to them often requires more precise cost groupings, as well as more carefully developed distribution bases.<sup>429</sup>

d. Errors in Allocation

It is the contractor's responsibility to accurately implement and comply with CAS 410. Errors made by the contractor in allocation of G&A under the Standard are ultimately errors that the contractor will pay for. This point was made convincingly in PACCAR, Inc<sup>430</sup> in which the contractor had underallocated pension, profit sharing and bonus costs to its government contracts when it changed its accounting method to properly allocate the costs. The underallocation was due to the contractor's failure to comply with CAS 410.

In holding that the contractor was not entitled to a retroactive price increase, the ASBCA relied on the principle that it was the contractor's responsibility to comply with the Standard. The board noted that the change did not result from any unusual circumstances in the contractor's operations, instead it resulted from the contractor's failure to recognize the accounting treatment that would properly implement the Standard. The contractor was responsible for the error even though the DCAA had reviewed its disclosure statement for adequacy and compliance and had not discovered the

noncompliance. The DCAA's obligation to review the adequacy and compliance of disclosure statements did not amount to a guaranty that it would discover all areas of noncompliance or bear the consequences on behalf of the government.

## CONCLUSION

The allocation of home office and G&A expenses can only be understood within the framework of cost accounting principles. For that reason, this thesis has aimed to introduce and explain key cost accounting concepts. The primary focus of this thesis has been to provide a useful introduction to home office and G&A expense allocation under CAS 403 & 410, as well as allocation under the cost principles. In addition to statutory and regulatory guidance, the thesis covered significant litigation concerning both categories of indirect cost. Hopefully, this thesis has made the subject more accessible and comprehensible for the government contract legal community.

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1. A listing of reference material recommended by the American Institute of Certified Public Accountants is contained in the Bibliography.

2. See P. Trueger, Accounting Guide for Government Contracts 460-472 (1988). The author discusses the controversy between the Defense Contract Audit Agency (DCAA) and the contracting community over the interpretation of Cost Accounting Standard (CAS) 410.

3. 22 Cl. Ct. 301 (1991).

4. The DCAA is a separate agency of the Department of Defense under the direction of the Assistant Secretary of Defense (Comptroller). Its primary purpose is to provide all contract auditing for the Department of Defense (DoD), and to provide accounting and financial advisory services in connection with the negotiation, administration and settlement of DoD contracts and subcontracts. See Defense Contract Audit Manual (DCAM) ¶1-102 & 1-103 (January 1991).

5. ASBCA No. 23833, 83-2 BCA ¶16813 (1983).

6. See F. Alston, F. Johnson, M. Worthington, L. Goldsman & F. DeVito, Contracting With the Federal Government at 151 (1984). The authors point out that:

The origins of cost accounting can be traced back five thousand years to the Egyptian pharaohs. However, modern double entry bookkeeping and cost accounting are believed to have emerged from a more recent period - the Renaissance. . . . Elementary efforts to develop cost accounting principles for the [U.S.] government date back to the Revolutionary War.

7. See, e.g., J. Bedingfield and L. Rosen, Government Contract Accounting at 8-8 et seq. (1985). The authors criticize the FAR's definition of direct cost when compared with the commonly accepted definition. This point is discussed in more detail infra.

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8. Id. at 5-2.

9. Id.

10. Id. at 5-6.

11. Shapiro, Direct vs. Indirect Costs - A Choice, 89-2 Government Contract Costs, Pricing & Accounting Report 3 (February 1989); see J. Bedingfield & L. Rosen, supra note 7, at 5-2.

12. Id.

13. Armed Services Pricing Manual (ASPM) 3-9 (1986).

14. The Standards are issued by the Cost Accounting Standards Board (CASB). The first board was established by Pub. L. No. 91-379, see 50 U.S.C. App. 2168 (1982). The original CASB began operating in 1971. It issued CAS 401-418 & 420 then became defunct when Congress failed to appropriate funds for it after September 30, 1980. A new CASB was created within the Office of Federal Procurement Policy by The Office of Federal Procurement Policy Act Amendments of 1988, P.L. 100-679 §26(f).

After numerous delays, the new CASB began the task of CAS recodification in the summer of 1991. It appears that the CASB plans to recodify existing standards and regulations. Among other things, the CASB would move what is now FAR Part 30 to a new FAR Part 99, increase the threshold for CAS coverage from \$100,000 to \$500,000, and extend CAS coverage to non-defense contracts. See 56 FR 26968, June 12, 1991; Shapiro, CAS Recodification - A Critique of the Promulgation Process, 91-8 Government Contract Costs, Pricing & Accounting Report 9 (August 1991). See also, DCAM, supra note 4, at ¶8-102.

Note that the FAR contains several significant deviations from original CAS promulgations. Commentators have argued that these deviations could be successfully challenged because the changes were made without adequate statutory authority and failed to follow established administrative procedures for regulatory changes.

15. GAO, Report B-39995(1), January 19, 1970.



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16. See FAR 30.201-1 for an explanation of CAS applicability criteria. Significant portions of the CAS are contained in FAR Part 30. Explanatory preambles to the CAS and related rules and regulations are contained in Appendix A to FAR Part 30. See FAR 30.307. However, certain portions of the CAS are not contained in the FAR, such as sections of each CAS which pertain to definitions. E.g., 4 CFR 400 & 4 CFR 403.30. For purposes of this thesis, I have cited to the FAR when possible, otherwise CAS citations are to the Code of Federal Regulations (CFR).

17. FAR 30.201-2(a) which states:

Full coverage applies to contractor business units that -

- (1) Receive a single national defense CAS-covered contract award of \$10 million or more;
- (2) Received \$10 million or more in national defense CAS-covered contract awards during its preceding cost accounting period; or
- (3) Received less than \$10 million in national defense CAS-covered contract awards during its preceding cost accounting period but such awards were 10 percent or more of total sales.

Note that the Office of Federal Procurement Policy Act Amendments of 1988 established a \$500,000 threshold and extended application of CAS to civilian agency contracts.

18. FAR 30.201-2(b).

19. FAR 30.302. See 4 CFR 331.30 and FAR 30.301 for a list of contracts exempted from CAS coverage.

20. FAR 31.000. The Cost Principles are contained in FAR Part 31.

21. F. Alston et al., supra note 6, at 160 (1984).

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22. Typically, they will only affect fixed price contracts whenever cost analysis is performed or in the event of termination or modification which affects contract costs. See FAR Subpart 31.1.

23. See FAR 31.205. For an overview and history of the Cost Principles see J. Bedingfield & L. Rosen, supra note 7, at 6-2 et seq.; and F. Alston et al., supra note 6, at 151-153.

24. See, e.g., FAR 31.205-6 which complies with the provisions of CAS 412 (Composition and Measurement of Pension Costs), CAS 413 (Adjustment and Allocation of Pension Costs), and CAS 415 (Cost of Deferred Compensation). As Professors Nash and Cibinic have noted, confusion exists over the application of the CAS and cost principles because both deal with the same general area. "Either or both regulations will apply to [a] contract, depending on the circumstances." R. Nash & J. Cibinic, Federal Procurement Law, Volume II 1431 (1980).

25. See, e.g., DCAM, supra note 4, at ¶6-606.4.

26. See, e.g., FAR 31.201-2(a)(3) & FAR 31.203(d); American Institute of Certified Public Accountants (AICPA), Audits of Federal Government Contractors ¶58 (1990).

27. American Institute of Certified Public Accountants (AICPA), Codification of Statements on Auditing Standards, no. 1-39, AU sec. 411, ¶.02 (1982), cited in, F. Alston et al., supra note 6 at 160.

28. Note that many of these sources can be accessed via LEXIS.

29. Audits of Federal Government Contractors, supra note 26, at ¶120.

30. See F. Alston et al., supra note 6, at 161, citing court and board decisions which caution against using GAAP to determine the allocability of costs to government contracts. Lockheed Aircraft Corp. v. U.S., 179 Ct. Cl. 545 (1967); Celesco Industries, ASBCA No. 22402, 80-1 BCA ¶14271. See also M. Rishe, Government Contract Costs 11-4 (1984).

31. R. Nash & J. Cibinic, Federal Procurement Law, Volume II 1430 (1980).

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32. FAR 31.201-2.
  33. FAR 31.201-6 (a).
  34. FAR 31.201-6 (c).
  35. FAR 31.001.
  36. 4 CFR 400.1.
  37. FAR 31.204-1.
  38. Cibinic, More Confusion Between Allocability and Allowability, 5 Nash & Cibinic Report ¶47 (1991). The distinction between allowability and allocability is discussed in more detail in Chapter 3 of this thesis.
  39. For example, where a contractor produces a number of different products, cost accounting techniques can be used to distribute the costs of total production among the products in reasonable relation to how the costs were generated by each product. This serves several useful purposes. Notably, it allows the contractor to price products according to their costs. Based upon this information, the contractor can then make management decisions and evaluate their effectiveness in increasing the efficiency and profitability of the contractor's total operations.
  40. FAR 31.001.
  41. J. Bedingfield & L. Rosen, supra note 7, at 5-3 & 5-4.
  42. Id. at 5-4.
  43. FAR 31.001.
  44. See M. Rishe, supra note 30, at 11-6.
  45. Id.
  46. FAR 31.203.

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47. J. Bedingfield & L. Rosen, supra note 7, at 5-6
48. S. Knight, "Fundamental Requirements/Overhead and IR&D/B&P", Working with the Cost Accounting Standards at B-43 (Federal Publications 1990).
49. FAR 31.203(b).
50. M. Rische, supra note 30, at 11-15.
51. FAR 31.203(b).
52. Id.
53. Elliot Machine Works, Inc., ASBCA No. 16135, 72-2 BCA ¶9501 (1972). See also FAR 31.205-24 & 31.205-25.
54. FAR 31.205-38.
55. FAR 31.001. See also 4 CFR 410.30.
56. Martin Marietta Corp., ASBCA No. 14185, 71-1 BCA ¶8783 (1971), cited in, R. Nash & J. Cibinic, supra note 31, at 1469.
57. FAR 31.203(b).
58. See Touche Ross and Co., Government Cost Recovery at 36-A (1986), cited in, D. Anderson, Recovery of Indirect Costs in the Pricing of Equitable Adjustments and Terminations for Convenience, at 179 (LL.M. Thesis, May 1988) (Available in George Washington University Government Contract Law Library). Anderson also points out that the term overhead is also used as synonym for indirect costs. Note that Anderson's thesis provides an excellent introduction to indirect costs.
59. P. Trueger, supra note 2, at 424.
60. FAR 31.203(b).
61. Id.
62. J. Bedingfield & L. Rosen, supra note 7, at 5-25.

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63. FAR 31.203(e).
64. FAR 30.406-40.
65. FAR 31.203(e).
66. J. Cibinic & R. Nash, supra note 31, at 1464.
67. M. Rishe, supra note 30, at 11-9.
68. Shapiro, supra note 11, at 4. See also M. Rishe, supra note 30, at 11-5 et seq.
69. Id.
70. Id.
71. FAR 31.202.
72. 4 CFR 418.30(a)(2).
73. Shapiro, supra note 11, at 4-5. See also, J. Bedingfield & L. Rosen, supra note 7, at 8-8 et seq. (for a discussion of direct costs), and 8-21 (for a discussion of indirect costs).
74. ASBCA No. 28342, 85-3 BCA ¶ 18435 (1985). Shapiro suggests that one could argue that the Cost Principles' definition should control since FAR 31.201-2(c) "states that where accounting practices are inconsistent with the cost principles, any excess costs resulting from such inconsistency will be unallowable." Shapiro, supra note 11, at 5.
75. G. Ginsburg & B. Bannon, Government Contract Cost Manual 2 (National Contract Management Association 1986).
76. J. Cibinic & R. Nash, supra note 31, at 1464.
77. W. Goodrich, Identifying Final Cost Objectives & Classifying Direct Costs, 91-7 Government Contract Costs, Pricing & Accounting Report 3 (July 1991).

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78. Id. at 7.

79. See, e.g., Boeing Co. v. U.S., 862 F. 2d 290 (Fed. Cir. 1988), and FMC Corp. v. U.S., 853 F. 2d 882 (Fed. Cir. 1988), affg., FMC Corp., ASBCA No. 30130, 87-2 BCA ¶19791 (1987). As Goodrich points out, in Boeing the court respected the contractor's established policies for treating direct versus indirect costs, while in FMC Corp., it did not. Id.

80. FAR 31.202.

81. FAR 31.203(a).

82. FAR 31.202. This is often done "for reasons of bookkeeping simplicity and practicality. For example, the costs of nuts, bolts, fasteners, paint, etc., although measurable as direct costs of units of the product (the cost objective), are more frequently treated as indirect costs because the expense of a more precise measurement would far outweigh the advantages of additional accuracy." J. Bedingfield & L. Rosen, supra note 7, at 5-6.

83. FAR 30.418-20.

84. FAR 30.418-40(a).

85. FAR 30.418-50(a).

86. FAR 30.418-40.

87. FAR 31.203(a).

88. 4 CFR 418.30(a)(3).

89. FAR 31.203(a).

90. 4 CFR 418.30(a)(3); FAR 31.203(a).

91. J. Bedingfield & L. Rosen, supra note 7, at 8-22.

92. FAR 31.203(b).

93. J. Bedingfield and L. Rosen, supra note 7, at 8-22.

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94. FAR 31.203(b).
  95. FAR 31.203(b).
  96. FAR 31.203(c).
  97. Id.
  98. J. Bedingfield & L. Rosen, supra note 7, at 8-30.
  99. 4 CFR 418.30 (a)(3).
  100. 4 CFR 418.30 (a)(4).
  101. FAR 30.418-50 (b)(1).
  102. "Indirect Cost Allocation," 43 Fed. Reg. 52 (March 16, 1978).
  103. Id.
  104. L. Anderson, Accounting for Government Contracts, Cost Accounting Standards §27.08[1] (1989).
  105. Cost Accounting Standards Board, Aggregated Disclosure Statement Responses at 18-19 (1980).
  106. See L. Anderson supra note 104, at §27.08[2].
  107. FAR 30.418-60(c).
  108. FAR 30.418-60(d).
  109. FAR 30.418-40(c)(1).
  110. FAR 30.418-40(c)(2).
  111. FAR 30.418-40(d)(2). Emphasis added.
  112. FAR 30.418-40(d)(3).
  113. FAR 30.418-40(e).

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114. See S. Knight, supra note 48, at B-47.
115. FAR 30.418-40(e)(1).
116. See S. Knight, supra note 48, at B-47.
117. See L. Anderson supra note 104, at 27.08[4].
118. FAR 30.418-60(f).
119. DCAM, supra note 4, at ¶8-418.3(a).
120. FAR 30.418-50(f).
121. FAR 30.418-50(g).
122. P. Trueger, supra note 2, at 424.
123. See DCAM, supra note 4, at ¶6-606.5.
124. FAR 30.403-20 (a).
125. Id.
126. L. Anderson, supra note 104, at §12.02.
127. Id.
128. 4 CFR 403.30. Other key definitions are explained in Part 400 of the Cost Accounting Standards (4 CFR 400). It is reproduced in Appendix A.
129. Anderson, supra note 104, §12.03(1).
130. Id.
131. Id.
132. Id.



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133. The other two are CAS 418, which governs allocation of indirect costs to contracts within a segment where specific identifiable relationships between costs and contracts exist; and CAS 410, which governs allocation of indirect costs not covered by the other two standards. CAS 418 is discussed in Chapter I of this thesis, CAS 410 in Chapter III.

134. See J. Bedingfield & L. Rosen, supra note 7, at 8-35.

135. Id.

136. E. Harry, Overhead and IR&D/B&P (continued)/ Labor & Material, in WORKING WITH THE COST ACCOUNTING STANDARDS at C-1 (Federal Publications, Inc., 1990).

137. Preamble A, 4 CFR Part 403, at 38 FR 26680, Dec. 14, 1972.

138. R. Nash & J. Cibinic, supra note 31, at 1493.

139. J. Bedingfield & L. Rosen, supra note 7, at 8-41.

138. R. Nash & J. Cibinic, supra note 31, at 1493, which cites as an example, Univac Div., Sperry Rand Corp., ASBCA No. 13588, 70-2 BCA ¶ 8555 (1970), wherein allocation of state and local franchise taxes to only profitable divisions was upheld despite the government's assertion that the taxes should be allocated to profitable and unprofitable divisions alike. The board considered contractor's position "equitable" since taxes were based on profit centers' net income.

141. Preamble A, 4 CFR 403, supra note 137.

142. Id. Residual home office expense is allocated to all segments of an organization. It consists of expenses which cannot be directly allocated to a segment or indirectly allocated through homogeneous cost pools to more than one segment. The concept is discussed in more detail infra.

143. J. Bedingfield and L. Rosen, supra note 7, at 8-41.

144. See P. Trueger, supra note 2, at 424. Trueger states: "Despite undoubted good intentions, however, history was to show that the

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cost accounting standards [CAS 403, 410 & 418] . . . may have caused as many controversies as they resolved."

145. 22 Cl. Ct. 301 (1991).

146. 4 CFR 403.80. According to the Standard, it must be followed "by each contractor as of the beginning of his next fiscal year after September 30, 1973."

147. 4 CFR 403.70(a) states:

(a) Any contractor or subcontractor which together with its subsidiaries did not receive net awards of negotiated national defense prime contracts during Federal fiscal year 1971 (July 1, 1970, through June 30, 1971) totaling more than \$30 million is exempt from this Standard. This exemption expires on March 10, 1978. Any contractor, unless otherwise exempt, who receives a negotiated national defense contract after March 10, 1978, shall be required to comply at the start of his first cost accounting period following receipt of that award.

148. See 4 CFR 403.70(a).

149. 4 CFR 403.70(b).

150. J. Bedingfield & L. Rosen, supra note 7, at 8-35 & 8-36. They point out that General Dynamics Corporation had the following segments under their corporate headquarters as of 31 December 1981: American Telecommunications Corporation, Convair Division, Datagraphix, Inc., Electric Boat Division, Electronics Division, Fort Worth Division, Freeman United Coal Mining Company, General Dynamics Communications Company, Marblehead Lime Company, Material Services Corporation, Pomona Division, Quincy Shipbuilding Division, Stromberg-Carlson Corporation. Each of these segments could serve as "home offices" for costs associated with management of lower-subdivisions.

151. See, e.g., Giuliani Contracting Co., Inc., AGBCA No. 86-174-1, 91-2 BCA ¶23,827 (1991) (citing, LaDuke Construction, Inc., AGBCA No. 83-177-1, 90-1 BCA ¶22,302 (1990).) In Giuliani

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(involving a contract not covered by CAS), a contractor was denied recovery of home office expense because it failed to show that it had ". . . two divisions, groups, or segments, or indeed that it had a home office."

152. 4 CFR 400.1 (Reproduced at Appendix A).

153. Anderson, supra note 104, at §19.03[1].

154. J. Bedingfield & L. Rosen, supra note 7, at 8-36.

155. Id.

156. Id.

157. Figure 2-1 is based on a chart contained on page 39 of the Student Workbook (ALM 36-0217-WB(C), October 1989) for the "Defense Cost Accounting Standards Workshop," published by the United States Army Logistics Management College, Fort Lee, Va.

158. P. Trueger, supra note 2 at 414.

159. See id.

160. See, e.g., FAR 30.403-60.

161. 4 CFR 400.1 (Reproduced in Appendix A).

162. FAR 31.001 defines a "cost objective" as a "function, contract, or other work unit for which cost data are desired and for which provision is made to accumulate and measure the cost of processes, jobs, capitalized projects, etc." Horngren defines a "cost objective" as an activity for which a separate measurement of cost is desired. C. Horngren, Cost Accounting, A Managerial Emphasis 21 (5th ed. 1982), quoted by D. Anderson, supra note 58, at 179.

163. L. Anderson, supra note 104, at §11.03[2].

164. See J. Bedingfield & L. Rosen, supra note 7, at 5-3.

165. 4 CFR 400.1 (Reproduced at Appendix A.)

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166. D. Anderson, supra note 58, at 182 n.61.
167. See J. Bedingfield & L. Rosen, supra note 7, at 5-3 - 5-4.
168. 4 CFR 400.1; FAR 31.001. Bedingfield and Rosen define an indirect cost pool as "a grouping of related expenses to be allocated to more than one cost objective by use of the same distribution base." J. Bedingfield & L. Rosen, supra note 7, at 5-21.
169. See FAR 31.203(a).
170. See, e.g., FAR 30.403-40.
171. See J. Bedingfield & L. Rosen, supra note 7, at 8-10 & 8-11.
172. FAR 30.418-50(b).
173. Anderson, supra note 104, at §12.03[3].
174. FAR 30.403-60.
175. Id.
176. Id.
177. Id.
178. Id.
179. Id.
180. These points are based on Bedingfield and Rosen's discussion of G&A cost pools. J. Bedingfield & L. Rosen, supra note 7, at 5-21.
181. See C. Horngren, supra note 162, at 478-479.
182. FAR 30.403-50.
183. FAR 31.203(b).
184. FAR 31.403-50(a)(2).

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185. Id.

186. FAR 30.403.60.

187. Id.

188. Id.

189. FAR 30.403-40(b)(1).

190. M. Rische, supra note 30, at 12-7.

191. This table is modeled after one appearing in M. Rische, supra note 30, at 12-8; and FAR 30.403-60.

192. See, e.g., U.S. v. Lockheed Corporation and Lockheed Missiles and Space Co., 817 F. 2d 1565 (CAFC 1987), aff'g ASBCA No. 27921, 86-1 BCA ¶18,614 (1986). The court stated that direct allocation of a cost (tax) to a segment required a "direct link or mechanical calculation" that traced the cost to its source - the segment.

193. FAR 30.403-40(b)(2).

194. Id.

195. This table is modeled after one appearing in M. Rische, supra note 30, at 12-9; and FAR 30.403-60.

196. Id. at 12-10.

197. A detailed illustration of allocation techniques is contained in Appendix B.

198. FAR 30.403-40 (a)(1).

199. Id. The Standard states that:

(a)(1) Home office expenses shall be allocated on the basis of the beneficial or causal relationship between supporting and receiving activities. Such expenses shall be allocated directly to segments

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to the maximum extent practical. Expenses not directly allocated, if significant in amount and in relation to total home office expenses, shall be grouped in logical and homogeneous expense pools and allocated pursuant to paragraph (b) of this section. Such allocations shall minimize to the extent practical the amount of expenses which may be categorized as residual (those of managing the organization as a whole). These residual expenses shall be allocated pursuant to paragraph (c) of this section.

(2) No segment shall have allocated to it as an indirect cost, either through a homogeneous expense pool, or the residual expense pool, any cost, if other costs incurred for the same purpose have been allocated directly to that or any other segment.

200. FAR 30.403-40 and FAR 30.403-50. See M. Rishe, supra note 30, at 12-3.

201. See FAR 30.403-40(a)(1).

202. See Student Workbook, supra note 157, at 35.

203. FAR 30.403-60 states:

Home office expenses shall be allocated on the basis of the beneficial or causal relationship between supporting and receiving activities. Such expenses shall be allocated directly to segments to the maximum extent practical.

204. M. Rishe, supra note 30, at 12-4.

205. 22 Cl. Ct. 301 (1991). Note that this case also deals with the issue of indirect allocation of taxes to segments, covered later in this chapter.

206. The court did not accept all aspects of Hercules' allocation method, and remanded on that issue. Id. at 310.

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207. Id. at 303.

208. Id.

209. Id.

210. Id.

211. Id.

212. Id. at 305. The government also unsuccessfully challenged on the grounds of unallowability under 31.205-41. See id. at 304.

213. See FAR 30.403-40(b)(4).

214. Supra note 205, at 307-310.

215. Id. at 306.

216. ASBCA No. 19224, 77-1 BCA ¶12371 (1977), aff'd on reconsid., 79-1 BCA ¶13708 (1979), aff'd, 680 F. 2d 132 (Ct. Cl. 1982), cert. denied, 460 U.S. 1081 (1983). This case is sometimes referred to as Boeing Two. Boeing One (The Boeing Co., ASBCA No. 11866, 69-2 BCA ¶7898 (1969)) was decided prior to the 1 July 1973 effective date of CAS 403 and involved the same issues as Boeing Two, however the outcome was different. In Boeing One, the Board accepted the contractor's headcount method under the theory that community services provided by the taxes benefited the contractor's operations statewide. The Board in Boeing One found that the requirement of distribution according to benefit under the Cost Principles was satisfied by any reasonable method of allocating indirect costs to commercial and Government contracts. This so-called "broad benefit" test was rejected in Boeing Two based on the Board's determination that CAS 403 required more precise allocation of home office expenses. See M. Rische, supra note 30, at 12-4.

217. See J. Bedingfield & L. Rosen, supra note 7, at 8-42.

218. 817 F. 2d 1565 (CAFC 1987), aff'g, ASBCA No. 27921, 86-1 BCA ¶18,614 (1986). This decision followed two earlier decisions,

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Lockheed Corporation and Lockheed Missiles & Space Company, Inc., ASBCA No. 22,451, 80-1 BCA ¶14,222 (1979) and 80-2 BCA ¶14,509 (1980), involving the same parties and issues. The government was unable to perfect an appeal of those decisions because the contract was not subject to the Contract Disputes Act of 1978, 41 USC §601 et seq. (1982). The parties stipulated that collateral estoppel and res judicata were not applicable to the present dispute - in which the BCA and CAFC reaffirmed the earlier decisions favoring the contractor.

219. The board in Lockheed discussed in detail the so-called "Lockheed Method" for apportionment of California franchise tax. This two-step four-factor method is discussed in more detail in the next section infra. See id., Lockheed, 86-1 BCA ¶18,614 at 93,521 et seq. The board also provided useful background on CAS 403. See id., Lockheed, 86-1 BCA ¶18,614 at 93,516.

220. Id. at 93,524 et seq.

221. Id. at 93,534.

222. FAR 30.403-40(a)(1).

223. FAR 30.403-50(a)(1).

224. FAR 30.403-50(a)(2).

225. Id.

226. FAR 30.403-40(b).

227. FAR 30.403-50(b)

228. Id.

229. Id.

230. FAR 30.403-40(b).

231. Id.

232. M. Rische, supra note 30, at 12-9.



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233. FAR 30.403-40(b).
234. Id.
235. FAR 30.420-50.
236. J. Bedingfield & L. Rosen, supra note 7, at 8-44 and 8-45.
237. Supra note 218.
238. Supra note 218, at 93,534.
239. Supra note 218, at 93,525.
240. Supra note 218, at 93,539.
241. The method is also called the "Two-Step, Four Factor Method." As explained by the board in Lockheed, ASBCA No. 22451, 80-1 BCA ¶14,222 at 70,031 (1979):

In the first step, [Lockheed] computes each segment's taxable income by separate accounting rather than formula apportionment. The California Franchise Tax actually paid is the allocated to each segment, in step 2, based on its proportionate share of the total of California net income so computed. Segments doing business in California, that is, having property, payroll or sales in California, which show a net loss are not allocated any portion of the California Franchise Tax.

242. J. Bedingfield & L. Rosen, supra note 7, at 8-47.
243. Lockheed, supra note 238, at 70,031.
244. ASBCA No. 19842, 80-1 BCA ¶14,223 (1979), mot. for reconsid. denied, 80-2 BCA ¶14,508 (1980).
245. Id. at 70,050.

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246. Id. at 70,049.

247. Id. at 70,059.

248. Id. at 70,058.

249. The California state franchise tax determined the portion of total corporate income attributable to business within the state by a three factor formula representing an average rate of (1) property within the state to total property, (2) payroll within the state to total payroll, and (3) sales within the state to total sales. The Missouri state income tax used a ratio of in-state and out-of-state income to determine the portion of total corporate income subject to the tax. Id. at 70,048.

250. 45 Fed. Reg. 13721 (1980). Interpretation No. 1 states:

Questions have arisen as to the requirements of Part 403, Cost Accounting Standard, Allocation of Home Office Expenses to Segments, for the purpose of allocating State and local income taxes and franchise taxes based on income (hereinafter collectively referred to as income taxes) from a home office of an organization to its segments.

By means of an illustrative allocation base in Section 403.60, the Standard provides that income taxes are to be allocated by "any base or method which results in an allocation that equals or approximates a segment's proportionate share of the tax imposed by the jurisdiction in which the segment does business, as measured by the same factors used to determine taxable income for that jurisdiction." This provision contains two essential criteria for the allocation of income taxes from a home office to segments. First, the taxes of any particular jurisdiction are to be allocated only to those segments that do business in the taxing jurisdiction. Second, where there is more than one

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segment in a taxing jurisdiction, the taxes are to be allocated among those segments on the basis of "the same factors used to determine the taxable income for that jurisdiction." The questions that have arisen relate primarily to whether segment book income or loss is a "factor" for this purpose.

Most States tax a fraction of total organization income, rather than the book income of segments that do business within the State. The fraction is calculated pursuant to a formula prescribed by State statute. In these situations the book income or loss of individual segments is not a factor used to determine taxable income for that jurisdiction. Accordingly, in States that tax a fraction of total organization income, rather than the book income of segments within the State, such book income is irrelevant for tax allocation purposes. Therefore, segment book income is to be used as a factor in allocating income tax expenses from a home office to segments only where this amount is expressly used by the taxing jurisdiction in computing the income tax.

251. McDonnell Douglas Corp., 80-2 BCA ¶14508 (1980); Lockheed Corp., 80-2 BCA ¶14509 (1980).

252. M. Rische, supra note 30, at 12-14.

253. ASBCA No. 23219, 82-1 BCA ¶15661 (1982), aff'd on reconsid., 82-2 BCA ¶15933 (1982).

254. Grumman was heard by the ASBCA before rulings had been issued in Lockheed and McDonnell Douglas. See J. Bedingfield & L. Rosen, supra note 7, at 8-50.

255. ASBCA Nos. 30738, 30750, 86-2 BCA ¶19062 (1986).

256. ASBCA No. 23219, 82-1 BCA ¶15661 (1982), aff'd on recon. 82-2 BCA ¶15933 (1982).

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257. DAR 15-205.41 provides that state tax costs are allowable providing a contractor is required to pay the costs and does actually pay or accrue them. The FAR provides similar treatment at FAR 31.205-41.

258. Supra note 205. A brief restatement of the facts may be of use here. Hercules is a multistate contractor which operates several facilities in Virginia, including a Government-owned contractor-operated (GOCO) plant in Radford, Virginia (Radford facility). At issue was Hercules' indirect allocation of Virginia state income taxes to the Radford facility for tax year 1987. The taxes in question were due on income realized from the sale of stock by Hercules.

Hercules had included the gain from the stock along with other gains, losses, operating income, and deductions in determination of its federal taxable income for tax year 1987. From the resulting total (approximately \$1.4 billion), Hercules calculated the amount of its total corporate income that was subject to Virginia state income tax.

The calculation used a ratio (based on factors prescribed by state law) which measured the percentage of the company's Virginia-based payroll, property and sales against the corporate-wide total of these factors. Hercules determined that \$213 million dollars of corporate earnings were subject to Virginia income tax under this formula. This figure, when multiplied by the applicable tax rate, yielded a Virginia income tax liability of \$12.7 million. Of this amount, \$6.9 million was allocated to the Radford facility.

The tax allocation to the Radford facility was accomplished by use of the same apportionment factors - payroll, property, and sales - as were used in the initial determination of the state-wide income amount. That is, the Radford facility was assigned a share of the total state income tax proportionate to its contribution to Hercules total Virginia-based payroll, property and sales.

Prior to 1987, Hercules and the government had consistently recognized Hercules' Virginia state income taxes as an allowable cost under the cost-reimbursement contract providing for operation of the Radford facility.

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However, in this case the government disallowed \$5.7 million of the \$6.9 million allocated to Radford. The government claimed unsuccessfully, inter alia, that allocation to Radford was not proper because the plant neither generated the taxes owed on the stock sale, nor benefited from their payment.

259. 817 F. 2d 1565 (Fed. Cir. 1987), aff'g, Lockheed Corp. and Lockheed Missiles and Space Co., Inc., ASBCA No. 27921, 86-1 BCA ¶18,614 (1986).

260. ASBCA No. 25919, 85-2 BCA ¶18074 (1985).

261. ASBCA No. 24758, 89-2 BCA ¶21780 (1989).

262. "Adjustment and Allocation of Pension Cost," 1 January 1979; FAR 30.413.

263. See FAR 30.403-40(a)(1), & (c).

264. FAR 30.403-40(c)(1).

265. Id.

266. FAR 30.403-40(c)(2); FAR 30.403-50(c)(1).

267. 30.403-40(c)(2).

268. Id.

269. FAR 30.418-50(f). See Anderson, supra note 104, at §12.05(8).

270. Id., see, e.g., McDonnell Douglas Corp., ASBCA No. 18835, 80-1 BCA ¶14327 (1980).

271. FAR 31.201-4.

272. FAR 31-202.

273. FAR 31-203.

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274. See J. Bedingfield & L. Rosen, supra note 7, at 8-42.
275. The Boeing Co., ASBCA No. 11866, 69-2 BCA ¶7898 (1969).  
See supra note 216.
276. 1 July 1973, 4 CFR 403.80.
277. The Boeing Co., ASBCA No. 19224, 77-1 BCA ¶12371 (1977).
278. See DCAM, supra note 4, at ¶6-606.5.
279. FAR 31.001; CAS 400.1.
280. See DCAM, supra note 4, at ¶6-606.4.
281. FAR 31.201-4.
282. FAR 31.203(b).
283. Id.
284. FAR 31.203(c).
285. DCAM, supra note 4, at ¶6-606.4 (a)(1).
286. Id.
287. J. Bedingfield & L. Rosen, supra note 7, at 5-28.
288. Id. at 5-29.
289. Id.
290. See J.M.T. Machine Co., Inc., ASBCA Nos. 23928, 24298, 24536, 85-1 BCA ¶17820 (1985); Onyx Corp., IBCA No. 1350-4-80, 82-1 BCA ¶15,719 (1982); Vare Industries, Inc., ASBCA No. 12126, 68-2 BCA ¶7120 (1968).
291. See Lockheed-Georgia Co., A Division of Lockheed Corp., ASBCA No. 27660, 90-3 BCA ¶22957 (1990) (selling expenses consisting of commercial demonstration flights and other related aircraft costs for a company-owned aircraft were properly

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included in G&A pool); Cubic Corp., ASBCA No. 8125, 1963 BCA 3775 (1963).

292. See Texas Instruments, Inc., ASBCA No. 23678, 87-3 BCA ¶20195 (1987); Stanley Aviation Corp., ASBCA No. 12292, 68-2 BCA 7081 (1968).

293. See Newport News Shipbuilding and Dry Dock Co., ASBCA No. 32289 *et al.*, 90-2 BCA ¶22859 (1990) (the audits were not conducted with regard to particular contracts, but concentrated on overall department performance on a variety of projects.)

294. Salisbury & Dietz, Inc., IBCA No. 2090, 87-3 BCA ¶20107 (1987).

295. See Data-Design Laboratories, ASBCA No. 27535, 85-3 BCA ¶18400 (1985) (legal fees associated with defense of government defective pricing claim); Grumman Aerospace Corp., NASABCA No. 873-11, 76-1 BCA ¶11763 (1976) (legal fees associated with claim before the Renegotiation Board).

296. See R. Nash & J. Cibinic, *supra* note 31, at 1468.

297. ASBCA No. 30130, 87-2 BCA ¶19791, *aff'd*, 853 F. 2d 882 (Fed. Cir. 1988). Compare Data-Design Laboratories, ASBCA No. 27535, 85-3 BCA ¶18400 (1985). The ASBCA sustained the contractor's placement of certain legal fees associated with three administrative appeals in G&A expense pool for allocation to cost-reimbursable government contracts. The appeals were related to cost disapprovals of "token" amounts. The board recognized that legal fees normally cannot be recovered for claims against the government. However, recovery through G&A was permitted because the claims were in effect claims by the government against the contractor (for defective pricing) and not vice versa.

298. 545 F. 2d 736, 738, 212 Ct. Cl. 118 (1976). FMC argued that Dynalectron was inapposite because the litigation expenses incurred by the contractor in that case were not associated with its government business, and could not be allocated to all government work.

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299. See, e.g., Lockheed Aircraft, 179 Ct. Cl. 545 (1967), 375 F. 2d 796 (1967) ("allocation may be denied because the necessity and benefit are too remote.")

300. ASBCA No. 25907, 85-2 BCA ¶18016 (1985).

301. See also Fiesta Leasing and Sales, Inc., ASBCA No. 29311, 88-1 BCA ¶20499 (1988). The board rejected a computation method that would have effectively allowed G&A on settlement expenses. The board also disallowed as direct settlement expenses certain costs, such as office rental and supplies, because those costs already had been recovered through G&A.

Similarly, in J.M.T. Machine Company, Inc., ASBCA Nos. 23928, 24298 and 24536, 84-1 BCA ¶17118 (1984), the ASBCA held that the salary of corporate officer (chief engineer) was properly included in G&A expense pool and rejected contractor's direct allocation of the officer's salary costs for purpose of a price adjustment based on defective specifications. The board noted that the corporate officer continued to perform his normal duties while ostensibly devoting time to the defective specifications and received no extra pay for the extra duty.

302. ASBCA No. 33690 et al., 91-1 BCA ¶23516 (1990).

303. 224 Ct. Cl. 465 (1980).

304. ASBCA No. 25816, 84-3 BCA ¶17698 (1984).

305. DCAM, supra note 4, at ¶606.4(a)(1).

306. ASBCA No. 14159, 71-1 BCA ¶8783 (1971).

307. Id.

308. See P. Trueger, supra note 2, at 417-419 (discussion of Litton Systems, 196 Ct. Cl. 133, 449 F. 2d 392 (1971)).

309. FAR 31.203(b).

310. DCAM, supra note 4, at ¶6-606.4 (a)(2).



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311. Id.

312. J. Bedingfield & L. Rosen, supra note 7, at 5-28.

313. Id.

314. Id.

315. Id.

316. ASBCA No. 26913, 82-2 BCA ¶16050 (1982). On reconsideration, the board denied that the decision placed an unfair burden on contracting officers, but emphasized that the decision was limited to the facts in the case. ASBCA No. 87364, 83-1 BCA ¶16375 (1983).

317. DOT BCA No. 1766, 86-3 BCA ¶19327 (1986).

318. Supra, note 316.

319. Id.

320. Id.

321. Id.

322. 196 Ct. Cl. 133, 449 F. 2d 392 (1971).

323. See also Westinghouse Electric Corp., ASBCA No. 25787, 85-1 BCA ¶17910 (1985), aff'd, 782 F. 2d 1017 (CAFC 1986); and Appeal of Daystrom Instrument Division of Daystrom, Inc., ASBCA No. 3438, 58-1 BCA 1588 (1958).

324. J. McBride, Government Contracts, §23.50[7] at 23-93 (1991) citing AC Electronics Division, ASBCA No. 14388, 72-2 BCA 9558 (1972).

325. ENG BCA No. 5393, 88-2 BCA ¶20770 (1988).

326. ASBCA No. 34841, 91-1 BCA ¶23515 (1990).

327. ASBCA No. 22461, 78-2 BCA ¶13270 (1978).

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328. See also Data-Design Laboratories, ASBCA No. 27245, 86-2 BCA ¶18830 (1986).

329. E.g., Abeles, Schwartz, Haeckel and Silverblatt, Inc., HUD BCA No. 81-625-C31, 84-3 BCA ¶17605 (1984).

330. IBCA No. 1350-4-80, 82-1 BCA ¶15,719 (1982).

331. DCAM, supra note 4, at ¶8-410(a).

332. FAR 30.410-20.

333. 4 CFR 410.30.

334. Martin Marietta Corp., ASBCA No. 14185, 71-1 BCA ¶8783 (1971), cited in, R. Nash & J. Cibinic, supra note 31, at 1469.

335. 4 CFR 400 (Reproduced in Appendix A). Note also that in some cases G&A may be referred to by other names. See, e.g., G.S. and L. Mechanical and Construction, Inc., DOT BCA No.1640, 86-3 BCA 19026 (1986) (Board refers to G&A as home office overhead).

336. DAR 15-201.4 and 15-203; FPR 1-15.201-4 & 1-15.203. These provisions have been incorporated into FAR 31.201-4 (Allocability) & FAR 31.203 (Indirect Costs).

337. See 4 CFR Part 410, Preamble A, at 41 FR 16141, Apr. 16, 1976, as corrected at 41 FR 22241, June 2, 1976.

338. Id.

339. See DCAM, supra note 4, at ¶6-606.4 (a).

340. See P. Trueger, supra note 2, at 417.

341. 4 CFR 410.80.

342. 4 CFR 410.70.

343. 4 CFR 410, Appendix A & Preamble A.

344. Id.

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345. Id.

346. Id. The Board went on to explain their rejection of cost of sales base:

Under current regulations as interpreted by the Armed Services Board of Contract Appeals, the use of a cost of sales base will not result in an equitable allocation of G&A expenses where there are significant changes in the mix of business or significant changes in the beginning and ending inventory balances. The Board has considered the existence of these past disputes and cases involving the use of a cost of sales allocation base. In given circumstances, due to the definition and accounting for sales under various types of contracts, the cost of similar types of productive activities may be treated differently in terms of the measurement of a cost of sales allocation base. The use of a cost of sales base can result in unwarranted shifting of costs between different types of final cost objectives. Therefore, the Board has concluded that the use of a cost of sales base is inappropriate for establishing the proper cost of final cost objectives within a cost accounting period.

347. Id.

348. Id.

349. P. Trueger, supra note 2, at 410.

350. Id. at 454 et seq.

351. ASBCA No. 23833, 83-2 BCA ¶16813 (1983).

352. See J. Cibinic, More Confusion Between Allocability and Allowability, 5 Nash & Cibinic Report No. 8, ¶47 (1991); J. Cibinic,

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Confusion Between Allocability and Allowability, 5 Nash & Cibinic Report No. 3, ¶14 (1991).

353. J. Cibinic, More Confusion Between Allocability and Allowability, *id.* at ¶47.

354. 929 F.2d 679 (CAFC 1991); aff'g 21 Cl. Ct. 72 (Cl Ct 1990).

355. DAR 15-205.37.

356. J. Cibinic, supra note 353.

357. Id.

358. G&A cost pools and their composition are also discussed earlier in this chapter. Refer to the section on cost principles (Section IIB).

359. DCAM, supra note 4, at ¶8-410.1(a)(1).

360. Id. FAR 30.410-50(a).

361. FAR 30.410-50(a).

362. Id.

363. FAR 30.410-50(b).

364. M. Rische, supra note 30, at 12-25, citing 4 CFR 420.50(f)(2), and Stanley Aviation Corp., ASBCA No. 12292, 68-2 BCA ¶7081 (1968).

365. L. Goldsman, Basic Cost Considerations in Government Contracting Under the Federal Acquisition Regulation (FAR), in GOVERNMENT CONTRACT COSTS at A-112 (Federal Publications, Inc., 1988). See also FAR 30.410-60(c)(2)&(5), and 30.410-60(d)(1).

366. DCAM, supra note 4, at ¶8-410.1(a)(3), citing CAS 410.40(d) and 410.50(b)(1).

367. See FAR 30.410-40(d) which states:

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Any costs which do not satisfy the definition of G&A expense but which have been classified by a business unit as G&A expenses, can remain in the G&A expense pool unless they can be allocated to business unit cost objectives on a beneficial or causal relationship which is best measured by a base other than a cost input base.

368. ASBCA No. 30090, 87-1 BCA ¶19,478 (1986).

369. DAR 15-205.37.

370. FAR 30.410-50(g)(1).

371. FAR 30.410-50(g)(2).

372. Id.

373. FAR 30.410-40(b)(1).

374. FAR 30.410-50(d).

375. See M. Rishe, supra note 30, at 12-25.

376. 4 CFR Part 410, Preamble A.

377. J. Bedingfield & L. Rosen, supra note 7, at 8-66.

378. FAR 30.410-50(d).

379. Id.

380. Id.

381. Id.

382. See DCAM, supra note 4, at ¶8-410.1(b)(1).

383. Id.

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384. In a letter dated March 17, 1987, to the National Security Industrial Association on CAS 410 Implementation, the DCAA Director affirmed that there is no preference for total cost input. See P. Trueger, supra note 2, at 453 et seq. Trueger describes the resistance of DCAA to the use of a value-added or single-element cost input base. Included in his discussion is a review of the controversial interpretations of the Standard by the DoD CAS Steering Committee's Working Group contained in Guidance Paper W.G. 78-21 (January 16, 1978) and Amendment 1 to W.G. 78-21 (April 10, 1981). In essence, the Steering Committee stated in W.G. 78-21 that a total cost input base is the preferred base and limited the circumstances under which a value-added base or single-element base could be used. Amendment 1 to W.G. 78-21 stated that there is no preference for a total cost input base in the Standard.

According to Trueger, DCAA resisted faithful implementation of Amendment 1. This led to Ford Aerospace & Communications Corporation, Aeronutronic Division, ASBCA No. 23833, 83-2 BCA ¶16813 (1983), wherein the Board of Contract Appeals rejected the DCAA's position which favored total cost input base. The Ford Aerospace decision contains a detailed explanation of the history and development of CAS 410.

385. Cost Accounting Standards Guide (CCH) ¶20,040.

386. Id.

387. See DCAM, supra note 4, at ¶8-410.1(b)(1).

388. FAR 30.410-50(d).

389. Id.

390. See DCAM, supra note 4, at ¶8-410.1(b)(1). Note that the May 1979 edition of the DCAM endorsed use of the value-added input base where contracts using Government-furnished property or precious metals are being performed. M. Rische, supra note 30, at 12-26, citing, DCAM ¶L-410.1(b) (May 1979).

391. ASBCA No. 23833, 83-2 BCA ¶16813 (1983).

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392. Ford Aerospace, supra note 384, at 83,592.

393. The contractor compared allocation of G&A expenses, using a value-added base, as defined in the Standard, and its modified version which included only a labor and overhead base. Allocated expenses varied less than 2% between types of bases. See Ford Aerospace, supra note 384, at 83,593.

394. Id. at 83,596.

395. Id. at 83,626.

396. ASBCA No. 22461, 78-2 BCA ¶13270 (1978).

397. ASBCA Docket No. 23470.

398. ASBCA No. 22461, 78-2 BCA ¶13270 (1978).

399. See P. Trueger, supra note 2, at 461.

400. M. Rishe, supra note 30, at 12-26, citing, Litton Systems, Inc. v. U.S., 449 F. 2d 392 (Ct. Cl. 1971); A.C. Electronics Div., General Motors Corp., ASBCA No. 14388 et al., 72-2 BCA ¶9558 (1972).

401. Id.

402. Id.

403. 4 CFR 331.50.

404. 4 CFR 410, Appendix A.

405. J. Bedingfield & L. Rosen, supra note 7, at 8-67.

406. Id.

407. M. Rishe, supra note 30, at 12-26. Note that there is a difference of opinion on the relative popularity of either option. Rishe states that the transition method is more popular, while Bedingfield and Rosen state that "very few contractors have employed the transition method exclusively in accommodating CAS 410." J. Bedingfield & L. Rosen, supra note 7, at 8-67.

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408. 4 CFR 410, Appendix A.

409. J. Bedingfield & L. Rosen, supra note 7, at 8-67. They suggest that one reason contractors are reluctant to use the transition method is DoD policy restricting progress payments. This policy, quoted below, is now contained in FAR 32.503-7 (formerly DAR App. E-509.5(b)):

If the contractor established an inventory suspense account under Appendix A of Cost Accounting Standard (CAS) 410 . . . and the account is \$5,000,000 or more, the following limitations shall apply to progress payments:

(a) G&A shall not be eligible for progress payments until the value of work in process inventories under new contracts exceeds that under the old. For this purpose, new contracts shall be considered to be those awarded after CAS 410 became applicable to the work of the contractor. Old contracts are those included in the suspense account prescribed in CAS 410.

(b) The amount of G&A eligible for progress payments under the contract shall be the contractor's pro rata share of G&A allocable to the excess under paragraph (a) above.

See also Westinghouse Electric Corp., infra note 414, where a contractor unsuccessfully challenged the constitutionality of the DoD progress payment policy restricting G&A expense.

410. 4 CFR 410, Appendix A.

411. Id.

412. Id. In such a case the business unit shall calculate two G&A expense allocation rates, one to allocate G&A expenses to contracts subject to the CAS clause and one applicable to other work.



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(a) The G&A expense pool shall be divided in the proportion which the cost input of the G&A expense allocation base of the contracts subject to the CAS clause bears to the total of the cost input allocation base, selected in accordance with Section 410.50(d), for the cost accounting period.

(b) The G&A expenses applicable to contracts subject to the CAS clause shall be reduced by an amount determined by multiplying the difference between the balance of the inventory suspense account and the ending inventory of contracts subject to the CAS clause by the cost of sales rate, as determined under (1) above, of the cost accounting period in which a business unit must first allocate costs in accordance with the requirements of this Cost Accounting Standard.

413. *Id.* For a useful example of the transition method, see J. Bedingfield & L. Rosen, supra note 7, at 8-68.

414. ASBCA No. 25787, 85-1 BCA 17910 (1985), aff'd, 782 F. 2d 1017 (CAFC 1986).

415. ASBCA No. 26678, 83-1 BCA ¶16437 (1983).

416. M. Rishe supra note 30, at 12-28.

417. FAR 30.410-50(i).

418. FAR 30.410-50(i)(2). As Rishe points out:

This method entails adding the cost of stock items to the G&A base at the time the products are produced. The rate of this cost accounting period is then used to burden the inventory items with their share of G&A expense. When the items are drawn from inventory, item cost plus allocated G&A is included in the contract cost, but no further G&A burdening of those costs is made. [M. Rishe, supra note 30, at 12-29.]

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419. FAR 30.410-50(i)(3). As Rische explains:

When this method is chosen, the cost of the stock item is still added to the G&A base of the cost period when the items were produced. When items are issued to contracts, they then receive G&A burdening according to the allocation rate of the cost period at the time of issuance. [M. Rische, supra note 30, at 12-29.]

420. FAR 30.410-50(i)(1). Rische provides the following example:

For example, if 60 items are produced for inventory in a current cost accounting period, and 30 are issued in the following cost period, the first method would charge all items with the G&A rate of the current period, while the second method would charge half with the G&A rate of the current period and half with the G&A rate of the following period. Although the second method, including item costs in the base of one period and allocating G&A by the rate of another period, will result in a distortion of allocated G&A, the distortion is expected to be immaterial. Defense Contract Audit Manual ¶L-410.1(b)(4) (ii)(May 1979 Ed.). Inclusion of item costs in the base of the period when produced is deemed more important for proper allocation than is allocation by a rate which includes the costs in the cost base. [M. Rische, supra note 30, at 12-29.]

421. FAR 30.410-50(g).

422. FAR 30.410-50(g)(2).

423. FAR 30.410-50(g)(1).

424. FAR 30.410-50(h).

425. FAR 30.410-50(j). Rische points out that CAS 410's special allocation is similar to the special allocation under CAS 403 and CAS 418. The exception is that under CAS 410, the contractor

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alone decides to perform the special allocation, whereas under the others special allocation requires mutual agreement of the parties. [M. Rische, supra note 30, at 12-31.]

426. DoD CAS Steering Committee Paper No. 79-24 (W.G. 79-24) applying 4 CFR 410.50(j).

427. See P. Trueger, supra note 2, at 416. Trueger points out that facilities acquisition costs usually receive less benefit from G&A expense.

428. Id. at 416. The illustration is from Trueger's discussion of W.G. 79-24. Note that for purposes of the illustration, the corporate expense rate applicable to GOCO activities is 2%; the rate applicable to other activities of the contractor is 7%.

429. FAR 31.203(f).

430. ASBCA No. 27978, 89-2 BCA ¶21,696 (1989).

## APPENDIX A

### Cost Accounting Standard 400<sup>1</sup>

#### **Definitions**

(a) This part defines various terms used in standards promulgated by the Cost Accounting Standards Board. Unless the text of a particular standard demands a different definition or the definition is expressly modified for a particular standard, terms defined herein whenever used in any standard shall have the meanings ascribed to them in this part. For convenience, the definitions of terms which are prominent in an individual standard are reprinted in that standard. The selection or non-selection of a particular definition to be reprinted in an individual standard, however, does not affect the applicability of all definitions in this part to that standard.

#### Accrued Benefit Cost Method

An actuarial cost method under which units of benefit are assigned to each cost accounting period and are valued as they accrue -- that is, based on the services performed by each employee in the period involved. The measure of normal cost under this method for each cost accounting period is the present value of the units of benefit deemed to be credited to employees for service in that period. The measure of the actuarial liability at a plan's inception date is the present value of the units of benefit credited to employees for service prior to that date. (This method is also known as the Unit Credit cost method.) [This definition first appeared in Section 412.30; for the preamble see preamble A of the supplement to Part 412.]

#### Accumulating Costs

The collecting of cost data in an organized manner, such as through a system of accounts. [See Section 401.30; for preamble, see preamble A of supplement to Part 401.]

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1. 4 CFR 400 (1991). I have included CAS 400 as an appendix partly because it is not reproduced in whole in the FAR, and therefore may not be readily accessible to practitioners.

### Actual Cash Value

The cost of replacing damaged property with other property of like kind and quality in the physical condition of the property immediately prior to the damage. [See Section 416.30; for preamble, see preamble A of supplement to Part 416.]

### Actual Cost

An amount determined on the basis of cost incurred as distinguished from forecasted cost. Includes standard cost properly adjusted for applicable variance. [See Sections 401.30 and 407.30; for preamble, see preamble B of supplement to Part 401 and preamble A of supplement to Part 407]

### Actuarial Assumption

A prediction of future conditions affecting pension cost; for example, mortality rate, employee turnover, compensation levels, pension fund earnings, changes in values of pension fund assets. [See Section 412.30; for preamble, see preamble A of supplement to Part 412.]

### Actuarial Cost Method

A technique which uses actuarial assumptions to measure the present value of future pension benefits and pension fund administrative expenses, and which assigns the cost of such benefits and expenses to cost accounting periods. [See Section 412.30; for preamble, see preamble A of supplement to Part 412.]

### Actuarial Gain and Loss

The effect on pension cost resulting from differences between actuarial assumptions and actual experience. [See Section 412.30; for preamble, see preamble A of supplement to Part 412.]

### Actuarial Liability

Pension cost attributable, under the actuarial cost method in use, to years prior to the date of a particular actuarial valuation. As of such date, the actuarial liability represents the excess of the present value of the future benefits and administrative expenses over the present value of future contributions for the normal cost for all plan

participants and beneficiaries. The excess of the actuarial liability over the value of the assets of a pension plan is the Unfunded Actuarial Liability. [See Section 412.30; for preamble, see preamble A of supplement to Part 412.]

#### Actuarial Valuation

The determination, as of a specified date, of the normal cost, actuarial liability, value of the assets of a pension fund, and other relevant values for the pension plan. [See Section 413.30; for preamble, see preamble A of supplement to Part 413.]

#### Allocate

To assign an item of cost, or a group of items of cost, to one or more cost objectives. This term includes both direct assignment of cost and the reassignment of a share from an indirect cost pool. [See Section 402.30; for preamble, see preamble A of supplement to Part 402.]

#### Asset Accountability Unit

A tangible capital asset which is a component of plant and equipment that is capitalized when acquired or whose replacement is capitalized when the unit is removed, transferred, sold, abandoned, demolished, or otherwise disposed of. [See Section 402.30; for preamble, see preamble A of supplement to Part 404.]

#### Bid and Proposal (B&P) Cost

The cost incurred in preparing, submitting, or supporting any bid or proposal which effort is neither sponsored by a grant, nor required in the performance of a contract. [See Section 420.30; for preamble, see Preamble A of supplement to Part 420.]

#### Business Unit

Any segment of an organization, or an entire business organization which is not divided into segments. [See Section 411.30; for preamble, see preamble A of supplement to Part 411.]

### Category of Material

A particular kind of goods, comprised of identical or interchangeable units, acquired or produced by a contractor, which are intended to be sold, or consumed or used in the performance of either direct or indirect functions. [See Section 411.30; for preamble, see preamble A of supplement to Part 411.]

### Compensated Personal Absence

Any absence from work for reasons such as illness, vacation, holidays, jury duty or military training, or personal activities, for which an employer pays compensation directly to an employee in accordance with a plan or custom of the employer. [See Section 408.30; for preamble, see preamble A of supplement to Part 408.]

### Cost Input

The cost, except G&A expenses, which for contract costing purposes is allocable to the production of goods and services during a cost accounting period. [See Section 410.30; for preamble, see preamble A of supplement to Part 410.]

### Cost Objective

A function, organizational subdivision, contract or other work unit 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. [See Section 402.30; for preamble, see preamble A of supplement to Part 402.]

### Cost of Capital Committed to Facilities

An imputed cost determined by applying a cost of money rate to facilities capital. [See Section 414.30; for preamble, see preamble A of supplement to Part 414.]

### Deferred Compensation

An award made by an employer to compensate an employee in a future cost accounting period or periods for services rendered in one or more cost accounting periods prior to the date of the receipt of compensation by the employee. This definition shall not include the

amount of year end accruals for salaries, wages, or bonuses that are to be paid within a reasonable period of time after the end of a cost accounting period. [See Section 415.30; for preamble, see preamble A of supplement to Part 415.]

#### Defined-Benefit Pension Plan

A pension plan in which the benefits to be paid or the basis for determining such benefits are established in advance and the contributions are intended to provide the stated benefits. [See Section 412.30; for preamble, see preamble A of supplement to Part 412.]

#### Defined-Contribution Pension Plan

A pension plan in which the contributions to be made are established in advance and the benefits are determined thereby. [See Section 412.30; for preamble, see preamble A of supplement to Part 412.]

#### Direct Cost

Any cost which is identified specifically with a particular final cost objective. Direct costs are not limited to items which are incorporated in the end product as material or labor. Costs identified specifically with a contract are direct costs of that contract. All costs identified specifically with other final cost objectives of the contractor are direct costs of those cost objectives. [See Section 402.30; for preamble, see preamble A of supplement to Part 402.]

#### Directly Associated Cost

Any cost which is generated solely as a result of the incurrence of another cost, and which would not have been incurred had the other cost not been incurred. [See Section 405.30; for preamble, see preamble A of supplement to Part 405.]

#### Entitlement

An employee's right, whether conditional or unconditional, to receive a determinable amount of compensated personal absence, or pay in lieu thereof. [See Section 408.30; for preamble, see preamble A of supplement to Part 408.]



### Estimating Costs

The process of forecasting a future result in terms of cost, based upon information available at the time. [See Section 401.30; for preamble, see preamble B of supplement to Part 401.]

### Expressly Unallowable Cost

A particular item or type of cost which, under the express provisions of an applicable law, regulation, or contract, is specifically named and stated to be unallowable. [See Section 405.30; for preamble, see preamble A of supplement to Part 405.]

### Facilities Capital

The net book value of tangible capital assets and of those intangible capital assets that are subject to amortization. [See Section 414.30; for preamble, see preamble A of supplement to Part 414.]

### Final Cost Objective

A cost objective which has allocated to it both direct and indirect costs, and, in the contractor's accumulation system, is one of the final accumulation points. [See Section 402.30; for preamble, see preamble A of supplement to Part 402.]

### Fiscal Year

The accounting period for which annual financial statements are regularly prepared, generally a period of 12 months, 52 weeks, or 53 weeks. [See Section 406.30; for preamble, see preamble A of supplement to Part 406.]

### Funded Pension Cost

The portion of pension costs for a current or prior cost accounting period that has been paid to a funding agency or, under a pay-as-you-go plan, to plan participants or beneficiaries. [See Section 412.30; for preamble, see preamble A of supplement to Part 412.]

### Funding Agency

An organization or individual which provides facilities to receive and accumulate assets to be used either for the payment of benefits under a pension plan, or for the purchase of such benefits. [See Section 412.30; for preamble, see preamble A of supplement to Part 412.]

### General and Administrative (G&A) Expense

Any management, financial, and other expense which is incurred by or allocated to a business unit and which is for the general management and administration of the business unit as a whole. G&A expense does not include those management expenses whose beneficial or casual relationship to cost objectives can be more directly measured by a base other than a cost input base representing the total activity of a business unit during a cost accounting period. [See Section 410.30; for preamble, see preamble A of supplement to Part 410.]

### Home Office

An office responsible for directing or managing two or more, but not necessarily all, segments of an organization. It typically establishes policy for, and provides guidance to the segments in their operations. It usually performs management, supervisory, or administrative functions, and may also perform service functions in support of the operations of the various segments. An organization which has intermediate levels, such as groups, may have several home offices which report to a common home office. An intermediate organization may be both a segment and a home office. [See Section 403.30; for preamble, see preamble B of supplement to Part 403.]

### Immediate-Gain Actuarial Cost Method

Any of the several actuarial cost methods under which actuarial gains and losses are included as part of the unfunded actuarial liability of the pension plan, rather than as part of the normal cost of the plan. [See Section 413.30; for preamble, see preamble A of supplement to Part 413]

### Independent Research and Development (IR&D) Cost

The cost of effort which is neither sponsored by a grant, nor required in the performance of a contract, and which falls within any of the following three areas:

- (i) Basic and applied research,
- (ii) Development, and
- (iii) Systems and other concept formulation studies.

[See Section 420.30; for preamble, see preamble A of supplement to Part 420.]

### Indirect Cost

Any cost not directly identified with a single final cost objective, but identified with two or more final cost objectives or with at least one intermediate cost objective. [See Section 402.30; for preamble, see preamble A of supplement to Part 402.]

### Indirect Cost Pool

A grouping of incurred costs identified with two or more objectives but not identified specifically with any final cost objective. [See Section 401.30; for preamble, see preamble A of supplement to Part 401.]

### Insurance Administration Expenses

The contractor's costs of administering an insurance program, e.g., the costs of operating an insurance or risk-management department, processing claims, actuarial fees, and service fees paid to insurance companies, trustees, or technical consultants. [See Section 416.30; for preamble, see preamble A of supplement to part 416.]

### Intangible Capital Asset

An asset that has no physical substance, has more than minimal value, and is expected to be held by an enterprise for continued use or possession beyond the current accounting period for the benefits

it yields. [See Section 414.30; for preamble, see preamble A of supplement to Part 414.]

#### Labor Cost at Standard

A pre-established measure of the labor element of cost, computed by multiplying labor-rate standard by labor-time standard. [See Section 407.30; for preamble, see preamble A of supplement to Part 407.]

#### Labor-Rate Standard

A pre-established measure, expressed in monetary terms, of the price of labor. [See Section 407.30; for preamble, see preamble A of supplement to Part 407.]

#### Labor-Time Standard

A pre-established measure, expressed in temporal terms, of the quantity of labor. [See Section 407.30; for preamble, see preamble A of supplement to Part 407.]

#### Material Cost at Standard

A pre-established measure of the material element of cost, computed by multiplying material-price standard by material-quantity standard. [See Section 407.30; for preamble, see preamble A of supplement to Part 407.]

#### Material Inventory Record

Any record used for the accumulation of actual or standard costs of a category of material recorded as an asset for subsequent cost allocation to one or more cost objectives. [See Section 411.30; for preamble, see preamble A of supplement to Part 411.]

#### Material-Price Standard

A pre-established measure, expressed in monetary terms, of the price of material. [See Section 407.30; for preamble, see preamble A of supplement to Part 407.]

### Material-Quantity Standard

A pre-established measure, expressed in physical terms, of the quantity of material. [See Section 407.30; for preamble, see Preamble A of supplement to Part 407.]

### Moving Average Cost

An inventory costing method under which an average unit cost is computed after each acquisition by adding the cost of the newly acquired units to the cost of the units of inventory on hand and dividing this figure by the new total number of units. [See Section 411.30; for preamble, see preamble A of supplement to Part 411.]

### Multiemployer Pension Plan

A plan to which more than one employer contributes and which is maintained pursuant to one or more collective bargaining agreements between an employee organization and more than one employer. [See Section 412.30; for preamble, see preamble A of supplement to Part 412.]

### Normal Cost

The annual cost attributable, under the actuarial cost method in use, to years subsequent to a particular valuation date. [See Section 412.30; for preamble, see preamble A of supplement to Part 412.]

### Operating Revenue

Amounts accrued or charged to customers, clients, and tenants, for the sale of products manufactured or purchased for resale, for services, and for rentals of property held primarily for leasing to others. It includes both reimbursable costs and fees under cost-type contracts and percentage-of-completion sales accruals except that it includes only the fee for management contracts under which the contractor acts essentially as an agent of the Government in the erection or operation of Government-owned facilities. It excludes incidental interest, dividends, royalty, and rental income, and proceeds from the sale of assets used in the business. [See Section 403.30; for preamble, see preamble A of supplement to Part 403.]

### Original Complement of Low Cost Equipment

A group of items acquired for the initial outfitting of a tangible capital asset or an operational unit, or a new addition to either. The items in the group individually cost less than the minimum amount established by the contractor for capitalization for the classes of assets acquired but in the aggregate they represent a material investment. The group, as a complement, is expected to be held for continued service beyond the current period. Initial outfitting of the unit is completed when the unit is ready and available for normal operations. [See Section 408.30; for preamble, see preamble A of supplement to Part 408.]

### Pay-As-You-Go Cost Method

A method of recognizing pension cost only when benefits are paid to retired employees or their beneficiaries. [See Section 412.30; for preamble, see preamble A of supplement to Part 412.]

### Pension Plan

A deferred compensation plan established and maintained by one or more employers to provide systematically for the payment of benefits to plan participants after their retirement: Provided, That the benefits are paid for life or are payable for life at the option of the employees. Additional benefits such as permanent and total disability and death payments, and survivorship payments to beneficiaries of deceased employees may be an integral part of a pension plan. [See Section 412.30; for preamble, see preamble A of supplement to Part 412.]

### Pension Plan Participant

Any employee or former employee of an employer or any member or former member of an employee organization, who is or may become eligible to receive a benefit from a pension plan which covers employees of such employer or member of such organization who have satisfied the plan's participation requirements, or whose beneficiaries are receiving or may be eligible to receive any such benefit. A participant whose employment status with the employer has not been terminated is an active participant of the employer's pension plan. [See Section 413.30; for preamble, see preamble A of supplement to Part 413.]

## Pricing

The process of establishing the amount or amounts to be paid in return for goods or services. [See Section 401.30; for preamble, see preamble A of supplement to Part 401.]

## Production Unit

A grouping of activities which either uses homogeneous inputs of direct material and direct labor or yields homogeneous outputs such that costs or statistics related to these homogeneous inputs or outputs are appropriate as bases for allocating variances. [See Section 407.30; for preamble, see preamble A of supplement to Part 407%.]

## Projected Average Loss

The estimated long-term average loss per period for periods of comparable exposure to risk of loss. [See Section 416.30; for preamble, see preamble A of supplement to part 416.]

## Projected Benefit Cost Method

Any of the several actuarial cost methods which distribute the estimated total cost of all of the employees' prospective benefits over a period of years, usually their working careers. [See Section 412.30; for preamble, see preamble A of supplement to Part 412.]

## Proposal

Any offer or other submission used as a basis for pricing a contract, contract modification or termination settlement or for securing payments thereunder. [See Section 401.30; for preamble, see preamble A of supplement to Part 401.]

## Repairs and Maintenance

Maintenance is the regularly recurring activity of keeping assets in normal or expected operating condition. Repair is the activity of putting them back into normal or expected operating condition. The total endeavor to obtain the expected service during the life of tangible capital assets is generally called repairs and maintenance.

[See Section 404.30; for preamble, see preamble A of supplement to Part 404.]

### Reporting Costs

Provision of cost information to others. The reporting of costs involves selecting relevant cost data and presenting it in an intelligible manner for use by the recipient. [See Section 401.30; for preamble, see preamble A of supplement to Part 401.]

### Residual Value

The proceeds (less removal and disposal costs, if any, realized upon disposition of a tangible capital asset. It usually is measured by the net proceeds from the sale or other disposition of the asset, or its fair value if the asset is traded in on another asset. The estimated residual value is a current forecast of the residual value. [See Section 409.30; for preamble, see preamble A of supplement to Part 409.]

### Segment

One of two or more divisions, product departments, plants, or other subdivisions of an organization reporting directly to a home office, usually identified with responsibility for profit and/or producing a product or service. The term includes Government-owned contractor-operated (GOCO) facilities, and joint ventures and subsidiaries (domestic and foreign) in which the organization has a majority ownership. The term also includes those joint ventures and subsidiaries (domestic and foreign) in which the organization has less than a majority of ownership, but over which it exercises control. [See Section 403.30; for preamble, see preamble A of supplement to Part 403.]

### Self-Insurance Charge

A cost which represents the projected average loss under a self-insurance plan. [See Section 416.30; for preamble, see preamble A of supplement to part 416.]



### Service Life

The period of usefulness of a tangible capital asset (or group of assets) to its current owner. The period may be expressed in units of time or output. The estimated service life of a tangible capital asset (or group of assets) is a current forecast of its service life and is the period over which depreciation cost is to be assigned. [See Section 409.30; for preamble, see preamble A of supplement to Part 409.]

### Spread-Gain Actuarial Cost Method

Any of the several projected benefit actuarial cost methods under which actuarial gains and losses are included as part of the current and future normal costs of the pension plan. [See Section 413.30; for preamble, see preamble A of supplement to Part 413.]

### Standard Cost

Any cost computed with the use of pre-established measures. [See Section 407.30; for preamble, see preamble A of supplement to Part 407.]

### Tangible Capital Asset

An asset that has physical substance, more than minimal value, and is expected to be held by an enterprise for continued use or possession beyond the current accounting period for the services it yields. [See Section 404.30; for preamble, see preamble A of supplement to Part 404.]

### Termination Gain or Loss

An actuarial gain or loss resulting from the difference between the assumed and actual rates at which plan participants separate from employment for reasons other than retirement, disability, or death. [See Section 413.30; for preamble, see preamble A of supplement to Part 413.]

### Unallowable Cost

Any cost which, under the provisions 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. [See Section 405.30; for preamble, see preamble A of supplement to Part 405.]

Variance

The difference between a pre-established measure and an actual measure. [See Section 407.30; for preamble, see preamble A of supplement to Part 407.]

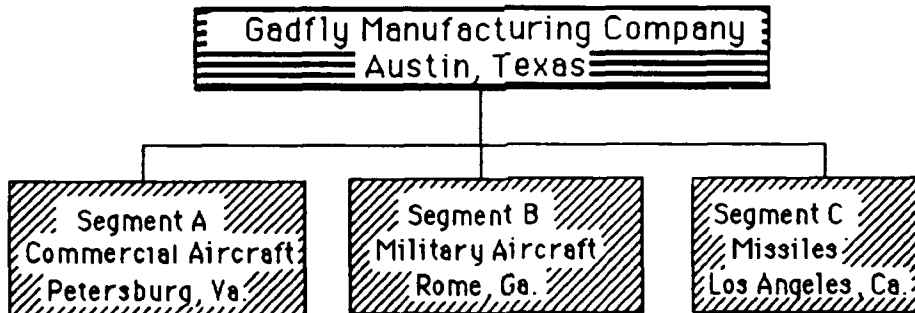
Weighted Average Cost

An inventory costing method under which an average unit cost is computed periodically by dividing the sum of the cost of beginning inventory plus the cost of acquisitions, by the total number of units included in these two categories. [See Section 411.30; for preamble, see preamble A of supplement to Part 411.]

## APPENDIX B

### Illustration: Allocation of Home Office Expenses to Segments under CAS 403<sup>1</sup>

#### - General Information & Organizational Plan



Gadfly Manufacturing Company home office provides the following services for Segments A, B and C:

1. Centralized Data Processing: Data processing is done on a job-order basis. The data processing department maintains a job log which identifies what was performed, how long it took to complete, and the segment obtaining the service. Home office tasks, which include but are not limited to payroll preparation, personnel record updating accounting functions, and management report preparation, are also accounted for on the job log.
2. Personnel. Personnel does the hiring, firing, and other customary personnel functions for the segments as well as for the home office.
3. Management. Home office provides management guidance and direction to the segments to ensure that the operations of each segment are aimed at achieving overall organizational goals. This includes production scheduling, marketing research,

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1. This illustration is by Frederick Neuman, Cost Accounting Standards - Course Materials, E-28 thru E-34 (Federal Publications 1987). It is reprinted with the permission of Federal Publications.

establishing quality control guidelines, and setting operating guidelines.

SEGMENT INFORMATION

	<u>Segment A</u>	<u>Segment B</u>	<u>Segment C</u>
# of Employees	10	25	15
Net Capital Assets*	\$100,000	\$ 200,000	\$ 300,000
Inventory*	\$ 25,000	\$ 50,000	\$ 75,000
Operating Revenue	\$500,000	\$1,000,000	\$1,500,000
Payroll	\$187,500	\$ 300,000	\$ 262,500
Direct Labor	\$125,000	\$ 200,000	\$ 175,000
Direct Materials	\$ 75,000	\$ 80,000	\$ 90,000
Units Produced	25	75	40
Marketing Budget	\$10,000	\$ 15,000	\$ 20,000

HOME OFFICE EXPENSES TO BE ALLOCATED

1. Data Processing - \$100,000. (Direct Allocation)

Data processing records show that approximately 25 percent of its effort was for Segment A, 5 percent for Segment B, and 10 percent for Segment C. The remaining 60 percent was divided equally among personnel, management reports, quality control analysis, and payroll preparation.

2. Personnel - \$25,000.

Personnel records show that 95 percent of their time was spent in various functions for the segments, and that 5 percent was for the home office.

### 3. Management - \$175,000.

The following cost breakdown represents management activity:

Marketing Budget	\$20,000
Quality Control Guidelines	\$50,000
General Management	\$75,000
Production Scheduling	\$15,000
Personnel Policy	\$15,000

Using this information, home office expenses could be allocated to segments using the following techniques.

	<u>Direct Allocation</u> <sup>1</sup>	<u>Number of Employees</u> <sup>2</sup>	<u>Number of Units Produced</u> <sup>3</sup>	<u>Marketing Budget</u> <sup>4</sup>	<u>Residual Expenses</u> <sup>5</sup>	<u>Total</u> <sup>6</sup>
Data Processing						
Direct	\$40,000					
Personnel Record Updating		\$15,000				
Payroll Preparation		\$15,000				
Quality Control Analysis			\$15,000			
Management Reports					\$15,000	\$100,000
Personnel						
Services to Segments		\$23,750				
Services to Home Office					\$ 1,250	\$ 25,000
Management						
Marketing Research				\$20,000		
Quality Control Guidelines			\$50,000			
General Management					\$75,000	
Production Scheduling			\$15,000			
Personnel Policy		\$15,000				\$175,000
<b>TOTAL FOR EACH BASE</b>	<b><u>\$40,000</u></b>	<b><u>\$68,750</u></b>	<b><u>\$80,000</u></b>	<b><u>\$20,000</u></b>	<b><u>\$91,250</u></b>	<b><u>\$300,000</u></b>

1. The beneficial or causal relationship between the incurrence of the cost and the cost objective is clear and, accordingly, the cost should be directly allocated to the segments.

2. This base was chose because the number of personnel served reasonably represents the use of the resources of the personnel function.

3. This base was selected because the number of units produced reflects a causal or beneficial relationship between activities represented by these costs and the units produced.

4. This base is a surrogate for marketing research effort. The assumption is that the higher the marketing budget, the greater the marketing research required.

5. The direct labor and materials was selected because it is a base representative of the total activity of each segment.

6. Total costs for each major category of home office expense: data processing, personnel, management.

In order to allocate the residual expenses of \$91,250 on the basis of direct labor and material, the aggregated total revenue test must be performed. Accordingly, the following computation is necessary to determine if the allocation base must be computed in accordance with the three factor formula specified in the Standard.

Total operating revenue	\$3,000,000
Times specified % for first \$100 million	<u>3.35%</u> \$100,500

Since the residual expenses of \$91,250 do not exceed the calculated threshold of \$100,500, the three factor formula need not be used. Prime costs (direct labor and materials) are considered representative of total activity and thus were used as the base for allocating the residual expenses to the segments.

ALLOCATION TO SEGMENTS

	<u>Segment A</u>	<u>Segment B</u>	<u>Segment C</u>	<u>Total</u>
Direct Allocation	\$25,000	\$ 5,000	\$10,000	\$40,000
Number of Employees				
\$68,750 x 10/50	\$13,750			
\$68,750 x 25/50		\$ 34,375		
\$68,750 x 15/50			\$20,625	\$ 68,750
Number of Units Produced				
\$80,000 x 25/140	\$14,286			
\$80,000 x 75/140		\$ 42,857		
\$80,000 x 40/140			\$22,857	\$ 80,000
Marketing Budget				
\$20,000 x 10k/45k*	\$ 4,444			
\$20,000 x 15k/45k		\$ 6,667		
\$20,000 x 20k/45k			\$ 8,889	\$ 20,000
Direct Labor & Materials				
\$91,250 x 200k/745k	\$24,497			
\$91,250 x 280k/745k		\$ 34,295		
\$91,250 x 265k/745k			\$32,458	\$ 91,250
Total Allocated	<u>\$81,977</u>	<u>\$123,194</u>	<u>\$94,829</u>	<u>\$300,000</u>

\*K = 1,000

Alternate Solution - Residual Expenses Exceed Threshold

Assuming that the residual expenses exceeded the permitted calculated threshold, it will be necessary to use the alternative formula. Computation of this allocation base is as follows (assumes operating revenue of \$1,750,000 - Segment A, \$250K; Segment B, \$500K; and Segment C, \$1,000K.):

Segment A

Payroll	$\frac{187^*}{750}$	=	25%		
Operating Revenue	$\frac{250}{1750}$	=	14%		
Assets plus Inventory	$\frac{125}{750}$	=	17%	$\frac{56\%}{3}$	= <u>18.7%</u>

Segment B

Payroll	$\frac{300}{750}$	=	40%		
Operating Revenue	$\frac{500}{1750}$	=	29%		
Assets plus Inventory	$\frac{250}{750}$	=	33%	$\frac{102\%}{3}$	= <u>34%</u>

Segment C

Payroll	$\frac{263}{750}$	=	35%		
Operating Revenue	$\frac{1000}{1750}$	=	57%		
Assets plus Inventory	$\frac{375}{750}$	=	50%	$\frac{142\%}{3}$	= <u>47.3%</u>

\* in thousands of dollars

ALLOCATION TO SEGMENTS - ALTERNATE SOLUTION

	<u>Segment A</u>	<u>Segment B</u>	<u>Segment C</u>	<u>Total</u>
Direct Allocation	\$25,000	\$ 5,000	\$ 10,000	\$ 40,000
Number of Employees				
\$68,750 x 10/50	\$13,750			
\$68,750 x 25/50		\$ 34,375		
\$68,750 x 15/50			\$ 20,625	\$ 68,750
Number of Units Produced				
\$80,000 x 25/140	\$14,286			
\$80,000 x 75/140		\$ 42,857		
\$80,000 x 40/140			\$ 22,857	\$ 80,000
Marketing Budget				
\$20,000 x 10k/45k*	\$ 4,444			
\$20,000 x 15k/45k		\$ 6,667		
\$20,000 x 20k/45k			\$ 8,889	\$ 20,000
Residual Expenses				
\$91,250 x 18.7%	\$ 17,064			
\$91,250 x 34%		\$ 31,025		
\$91,250 x 47.3%			\$ 43,161	\$ 91,250
Total Allocated	<u>\$74,544</u>	<u>\$119,924</u>	<u>\$105,532</u>	<u>\$300,000</u>

\*K = 1,000

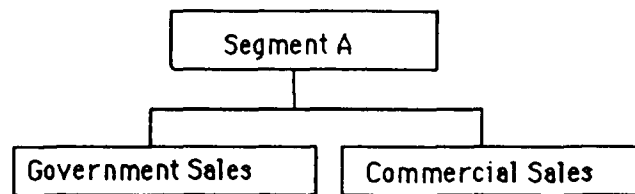


## APPENDIX C

### Illustration: Allocation of Business Unit G&A Expenses to Cost Objectives<sup>1</sup>

This example illustrates the application of Cost Accounting Standard 410, and shows the interrelationship of between CAS 410 and CAS 403. The G&A allocation of G&A for Segment A below is based on the allocation of home office expenses made in the illustration contained in Appendix B.

#### - General Information & Organizational Plan



Expenses accumulated by Segment A under the heading of G&A Expense consist of the following:

Segment Manager	\$ 25,000
Secretarial Support	\$ 30,000
Legal Staff	\$ 15,000
Contracts Administration	\$ 50,000
Home Office Allocation	<u>\$ 81,977</u>
Total	\$201,977

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1. This illustration is by Frederick Neuman, Cost Accounting Standards - Course Materials, E-46 thru E-49 (Federal Publications 1987). It is reprinted with permission of Federal Publications. For another illustration, see Attachment A to Interim Guidance for Implementation of CAS 410, CAS Working Group, Guidance Paper No. 77-11, 2 February 1977.

The following explanations and statistics are available.

Segment Manager - Expenses accumulated under this heading are costs for the general management of the segment.

Secretarial Support - Effort analysis shows that secretarial support is applicable to all areas. 20 percent of the secretarial support is related to government sales, 30 percent to commercial sales, and 50 percent to general management.

Legal Staff - Legal effort was primarily directed at government sales and was incurred to combat a suit filed by a government customer.

Contracts Administration - Negotiation, closing, and monitoring of contracts is the service provided by this staff section.

Home Office Allocation - These are costs which were allocated to the segment by the home office. The groupings and rationale, as well as the amounts, were sent to the segment by the home office.

Upon receipt of the charges listed above, the segment performed the following analysis.

Direct Allocations: \$25,000. This represented charges from the home office for data processing. The segment has determined that 25% of the jobs were for government work, 25% for commercial work, and the remaining 50% was for general management purposes.

Personnel: \$13,570. The segment, after analysis of this amount, determined that "number of employees" continues to be the best base for this cost.

Number of Units: \$14,286. It has been determined that the costs for quality control analysis in the amount of \$1,607 ( $\$15,000 \times 25/140$ ) will be allocated on the number of units produced. The remaining amount of \$12,679 is considered by the segment to be general management expense.

Marketing Research: \$4,444. This function is best reflected by cost input. For that reason, it is included in the G&A expense pool, which is also allocated on a cost input basis.

Residual Costs: \$24,497. The segment does not need to perform any further analysis of these costs, and they are included in the segment's G&A pool.

The segment's departments have the following characteristics:

	<u>Government</u>	<u>Commercial</u>
Direct Labor	\$ 75,000	\$ 50,000
Direct Materials	\$ 40,000	\$ 35,000
Units Produced	13	12
Number of Employees	7	3
Number of Contracts	7	3

For purposes of this illustration, cost input is considered to be direct labor, direct material, and those costs which are not properly included in the G&A expense pool. Those costs not properly included in the G&A expense pool are classified as overhead. All government work is considered to be CAS-covered.

ALLOCATION PROCEDURE

	<u>Government Overhead Pool</u>	<u>Commercial Overhead Pool</u>	<u>G&amp;A Expense Pool</u>
Segment Manager			\$25,000
Secretarial Support			
\$30,000 x 20%	\$ 6,000		
\$30,000 x 30%		\$ 9,000	
\$30,000 x 50%			\$15,000
Legal Staff	\$15,000		
Contracts Administration			
\$50,000 x 7/10	\$35,000		
\$50,000 x 3/10		\$15,000	
Home Office Allocation			
- Data Processing			
\$25,000 x 25%	\$ 6,250		
\$25,000 x 25%		\$ 6,250	
\$25,000 x 50%			\$12,500
- Personnel			
\$13,750 x 7/10	\$ 9,625		
\$13,750 x 3/10		\$ 4,125	
- Units			
\$ 1,607 x 13/25	\$ 836		
\$ 1,607 x 12/25		\$ 771	
\$ 12,679			\$12,679
<u>Marketing</u> \$4,444			\$ 4,444
<u>Residual</u> \$24,497	_____	_____	<u>\$24,497</u>
 TOTAL	<u>\$72,711</u>	<u>\$35,146</u>	<u>\$94,120</u>

G&A Rate Calculation:

Cost Input:

Direct Labor	\$125,000
Direct Material	\$ 75,000
Government Overhead Pool	\$ 72,711
Commercial Overhead Pool	<u>\$ 35,146</u>

Total Cost Input \$307,857

Total G&A Expense Pool \$ 94,120

G&A Rate 30.57%

	<u>Government</u>	<u>Commercial</u>
G&A Applicable to:		
Direct Labor	\$ 75,000	\$ 50,000
Direct Material	40,000	35,000
Overhead	<u>72,711</u>	<u>35,146</u>
Total Cost Input	\$187,711	\$120,146
G&A Rate	<u>30.57%</u>	<u>30.57%</u>
G&A Expense Amount	<u>\$ 57,388</u>	<u>\$ 36,732</u>

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