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American Institute of Certified Public Accountants

AUDITS of FEDERAL GOVERNMENT CONTRACTORS

With Conforming Changes as of May 1, 1993

Audit and Accounting Guide

American Institute of Certified Public Accountants

'AUDITS of FEDERAL GOVERNMENT CONTRACTORS

With Conforming Changes as of May 1, 1993

This edition of the audit and accounting guide Audits of Federal Government Contractors has been modified by the AICPA staff to include certain changes necessary due to the issuance of authoritative pronouncements since the guide was originally issued. The changes made are identified in a schedule in Appendix E of the guide. The changes do not include all those that might be considered necessary if the guide were subjected to a comprehensive review and revision.

Audit and Accounting Guide

Published for the
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NOTICE TO READERS

This audit and accounting guide presents recommendations of the AICPA Government Contractors Guide Special Committee on the application of generally accepted auditing standards to audits of financial statements of federal government contractors. This guide also presents the committee's recommendations on and descriptions of financial accounting and reporting principles and practices for federal government contractors. The AICPA Accounting Standards Executive Committee and members of the AICPA Auditing Standards Board have found this guide to be consistent with existing standards and principles covered by Rules 202 and 203 of the AICPA Code of Professional Conduct. AICPA members should be prepared to justify departures from this guide.

Government Contractors Guide Special Committee (1990)

Louis I. Rosen, Chairman
Rein Abel
Frank M. Alston
James P. Bedingfield

William T. Keevan
Fred J. Newton
Charles H. Noski
Nelson H. Shapiro

Defense Contractors Committee (1992-1993)

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William T. Keevan
Stuart R. Lloyd
Leonard M. Sturm

AICPA Staff

Joseph F. Moraglio Gerard L. Yarnall Vice President Director

Federal Government Division Audit and Accounting Guides

Ian A. MacKay Susan W. Hicks
Director Technical Manager

Federal Government Division Federal Government Division

Preface

This guide has been prepared to assist the independent auditor in auditing and reporting on the financial statements of entities that provide goods and services to the federal government, or to prime contractors or subcontractors at any tier and for which such transactions are material to such entities' financial statements. It describes relevant accounting practices and auditing procedures unique to these entities. The descriptions in this guide are generally oriented to the defense contracting industry; however, the provisions of this guide apply to all federal government contractors.

This guide focuses on auditing and reporting issues with respect to the financial statements of government contractors and subcontractors; however, the guide does not discuss the application of all generally accepted accounting principles and auditing standards as they pertain to the preparation and audit of such financial statements.

The guide makes reference to and highlights a number of federal government contract regulations and requirements. Independent auditors auditing relevant entities should understand the contractor's business and consider these regulations and requirements as part of their planning and execution of their services. More specifically, independent auditors must be aware of the impact of these regulations and requirements with respect to the application of Statement on Auditing Standards (SAS) No. 53, The Auditor's Responsibility to Detect and Report Errors and Irregularities and SAS No. 54, Illegal Acts by Clients.

A number of auditing procedures are discussed, but detailed internal control structure questionnaires and audit programs are not included.

The nature, timing, and extent of auditing procedures are a matter of professional judgment and will vary according to the size of the entity, the organizational structure, the existing internal control structure, and other factors.

This guide supersedes AICPA Industry Audit Guide Audits of Government Contractors (1975).

Effective Date and Transition

The accounting and financial reporting provisions of this guide apply to contracts entered into after December 31, 1990.

The auditing provisions of this guide are effective for audits of financial statements for periods beginning on or after December 15, 1990.

Government Contractors Guide Special Committee

Executive Summary

General

This guide applies to audits of financial statements of entities that provide goods and services to the federal government or to prime contractors or subcontractors at any tier and for which such transactions are material to its financial statements. Further, AICPA Statement of Position (SOP) 81-1, Accounting for Performance of Construction-Type and Certain Production-Type Contracts [Appendix C], is applicable to financial statements of federal government contractors. The guide provides the practitioner with an introduction to understanding the requirements of the federal government contract process.

Method of Accounting

The basic accounting policy decision is a choice between the two generally accepted methods of accounting for contracts—the percentage-of-completion method, including units-of-delivery, and the completed-contract method. The determination of which of the two methods is preferable should be based on careful evaluation of the circumstances because the two methods should not be acceptable alternatives for the same circumstances (paragraph 3.10).

The program method of accounting is not appropriate for government programs (paragraphs 3.57 through 3.60).

Revenue and Expenses

Revenue and expenses should include all items for which the contractor has an associated risk, including items on which its contractual fee is based (paragraph 3.48).

Major factors that must be considered in determining total estimated revenue include the basic contract price, contract options, change orders, claims, and contract provisions for penalties and incentive payments, including award fees and performance incentives. Those factors and other special contract provisions must be evaluated throughout the life of a contract in estimating total contract revenue to recognize revenue in the periods in which they are earned under the percentage-of-completion method of accounting (paragraph 3.03).

Government contractors frequently include general and administrative expenses allowable under government procurement regulations with indirect costs allocated to government contract inventories (paragraphs 3.04 and 3.05).

When the completed-contract method is used, it may be appropriate to allocate general and administrative expenses to contract costs rather than to period income. This may result in a better matching of costs and revenues than would result from treating such expenses as period costs, particularly in years when no contracts were completed (paragraph 3.05).

The costs associated with certain fixed-price best-efforts research and development cost-sharing arrangements that meet all the criteria in paragraph 3.52 should be recognized as research and development expenses as incurred in conformity with FASB Statement No. 2, Accounting for Research and Development Costs. Furthermore, the amounts funded by the customer should be recognized as an offset to the contractor's aggregate research and development expense rather than as contract revenues.

In circumstances in which a basis exists for reasonable prediction of performance in relation to established targets, the effect of the upward or downward incentive adjustment should be recorded in a manner consistent with the accounting method used for the contract. Situations in which performance may not reasonably be predictable may involve either a single opportunity to accomplish a test or a demonstration in accordance with established performance criteria or award fee, both of which may be determined solely by the government and subject to retroactive adjustment after evaluation of the contractor's performance (paragraph 3.27).

Financial Statements

Government contractors usually present classified balance sheets on the basis of one year or the operating cycle (if it exceeds one year) (paragraph 3.72).

Disclosures by government contractors generally include a description of (a) the basis for stating the amounts related to contracts in progress, (b) methods of determining revenue and related costs, and (c) methods of measuring extent of progress towards completion, if appropriate (paragraph 3.65).

Government contract receivables, if material, are usually shown separately from other receivables in the balance sheet. Unbilled amounts should be stated separately when the amounts constitute a significant portion of the U.S. government contract receivables. The amount of progress payments offset against unbilled receivables should also be disclosed, if material (paragraph 3.66).

Progress and advance payments may be reported as reductions of unbilled contract receivables or accumulated contract costs (inventory), or as a liability (paragraph 3.70).

Auditing

The audits of contracts in process is typically the most significant and complex area of the audit of a government contractor. The independent auditor should evaluate the contractors systems for accumulating costs, estimating the cost of future contract performance and the estimates of contract revenues realized and to be realized. The independent auditor should consider the risks associated with contract performance. The use of specialists may be necessary (paragraphs 4.88 through 4.124).

The independent auditor should be aware of the impact of federal government contract regulations and requirements with respect to the application of Statement on Auditing Standards (SAS) No. 53, The Auditor's Responsibility to Detect and Report Errors and Irregularities and SAS No. 54, Illegal Acts by Clients.

The independent auditor considers laws and regulations that are generally recognized by auditors to have a direct and material effect on the determination of financial statements' amounts—for example, laws and regulations regarding cost allowability and cost accounting standards.

The independent auditor's decision about the effects of a scope limitation resulting from classified contracts on the auditor's report depends on the auditor's assessment of the materiality of, and audit risk associated with, those classified contracts (paragraph 4.175).

The independent auditor should review the government's audit reports and any related correspondence between the contractor and the government regarding the various audit issues. The independent auditor should discuss these matters with management and review management's evaluations of the impact of these matters on financial statements (paragraph 4.67).

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Chapter 1

Contract Procurement Process

Introduction

- **1.01** The federal government is among the world's largest purchasers of goods and services. The Department of Defense (DoD) alone accounts for more than one-third of the government's total purchases.
- 1.02 Companies electing to do business with the federal government will find a customer who behaves, in some significant ways, very differently from their commercial customers. This unique behavior results from the customer being a sovereign power that conducts its procurement activities under specific laws and implementing regulations, which will be discussed in chapter 2. These procurement statutes and regulations govern the process the federal government must follow in its business dealings with private industry. They cover such critical matters as how the federal government selects, monitors, and pays its contractors.
- 1.03 The purpose of this chapter is to provide general background information on the federal government procurement process. This knowledge is necessary for the independent auditor with clients who are government contractors or subcontractors and for accountants employed by these enterprises. This chapter also describes the government procurement process to assist the independent auditor in understanding the financial accounting and reporting requirements unique to government contractors and subcontractors.

Procurement Overview

- 1.04 Many purchases made by the federal government are for standard commercial products and services where the demands and competitive forces of supply have established the market price. For these purchases, the buying agency is similar to any other customer seeking to satisfy procurement needs at the most favorable prices available in the marketplace. Under these conditions, the federal procurement process is relatively simple and straightforward. However, it is important to recognize that for a substantial amount of its purchases, the federal government is the only customer for the products and services it acquires. In these circumstances, prices have not been established by the marketplace. Therefore, the price the government pays must be determined by other means, such as negotiations based on estimated or actual cost to produce, plus a consideration for profit.
- 1.05 Federal government policy is to procure supplies and services at fair and reasonable prices from responsible sources. Critical to accomplishing this objective is the government's ability to make it attractive for the best-qualified companies to devote their resources to meeting the government's procurement needs. To that end, the profit policy emphasizes the need for federal contracting to provide companies the opportunity to earn a reasonable rate of return on investment
- 1.06 Competition is an important factor used by the government to control its procurement costs. This concept was formalized into law when Congress enacted the Competition in Contracting Act of 1984 (CICA), Title VII of Public Law (PL) 98-369, which became effective on April 1, 1985.
- 1.07 Before CICA, the two most commonly used methods of procurement were formal advertising and negotiated procurement. CICA established a requirement to use full and open competition, either by soliciting sealed bids,

or by request for competitive proposals, except in certain circumstances as discussed in paragraph 1.09 below.

- 1.08 Sealed bidding procedures and competitive proposals form the basis of full and open competition. Under sealed bidding, the federal government issues an Invitation for Bids (IFB), which specifies what the government wants to buy and the terms and conditions under which it will procure. Contractors respond to the IFB with sealed bids that are opened publicly, and the award generally is made to the bidder offering the lowest price. Competitive proposals are submitted by contractors in response to the government's Request for Proposal (RFP) or Request for Quotation (RFQ), which allows the government to enter into negotiation with individual contractors in order to establish the contract price.
- **1.09** Noncompetitive proposals may be used only in the following specific circumstances:
 - a. Only one responsible source or a limited number of responsible sources of goods or services exists, and no other type of property or services will satisfy the agency's needs.
 - b. There is such an unusual and compelling urgency for the federal government to obtain the goods or the services that the number of sources must be limited.
 - c. The services to be provided are for industrial mobilization or research or are experimental or developmental in nature.
 - d. The goods and services are to be provided by an international agreement that effectively requires use of other than competitive procedures.
 - e. The procurements are authorized or required by federal statute.
 - It is necessary to limit the number of sources for reasons of national security.
 - g. Limiting the number of sources is in the public interest.
- 1.10 To accomplish its procurement objectives, the government uses a variety of pricing arrangements in its contracts. These pricing arrangements, usually referred to as contract types, reflect varying degrees of financial risk that are assumed by the parties. (See discussion of contract types later in this chapter.) For example, the contractor may accept the contractual obligation to deliver the required product or service for an established price without regard to actual costs incurred. Alternatively, the government may retain most of the financial risk by agreeing to reimburse the contractor for actual costs incurred in return for the contractor's best efforts to achieve the contract's objectives. In this latter instance, the contract price is established after the work is done and actual costs of performance are known. Between these two extremes are other pricing arrangements that assign varying levels of risk to the government and the contractor. In negotiated contracts, according to policy guidance for procurement officials, the type of contract is a matter on which both parties must agree.
- 1.11 The amount of government financial review and surveillance is determined by the type of contract awarded. The government will have greater interest in the company's accounting practices where incurred costs are the primary factor in establishing the amount the contracting agency ultimately pays for the work performed. When the final contract price is unaffected by actual cost of performance, government procurement policy requires considerably less review and surveillance of the contractor's financial management activities. In the former case, the terms and conditions of the

contract give the buying agency fairly broad rights to review the contractor's books and records. The objectives of the government in conducting these reviews include ascertaining whether the contract pricing conforms to applicable procurement regulations and assessing the adequacy of the contractor's financial management systems.

- 1.12 The government has authorized its contracting officers to act as exclusive agents to enter into and administer contracts. Before negotiating or modifying contracts in excess of certain dollar thresholds, contracting officers usually obtain assistance from pricing-support personnel. This supporting staff may include administrative contracting officers, contract auditors, price analysts, quality assurance specialists, engineers, and small business and legal specialists (Federal Acquisition Regulation [FAR] subsection 15.805-5).
- 1.13 The contract auditor provides advice to the contracting officer on whether the contractor's cost representations are allocable, reasonable, and in compliance with applicable rules and regulations. Various statutes, regulations and contract clauses provide the contract auditor, or the contracting officer's representative, access rights to audit the contractor's books and records for purposes of gathering evidential matter to form the basis for advising the contracting officer.

The Procurement Process

- 1.14 Enterprises interested in providing specific goods or services to the federal government must respond in writing to its solicitation for bids. The nature of the written response depends primarily on the type of pricing arrangement contemplated. For example, the contractor would submit a sealed bid in response to an IFB. This firm bid represents an offer by the contractor to provide the required goods or services at a fixed price.
- 1.15 As previously noted, the government uses RFPs and RFQs for competitive proposals. A written acceptance of the contractor's proposal in response to an RFP creates a binding contract. However, the government cannot unilaterally accept a proposal submitted in response to an RFQ, because such a proposal is only a quotation. For an RFQ, further negotiations must occur to reach a binding agreement between the two parties.
- 1.16 To achieve maximum benefit from competition, the government widely publicizes its solicitations for bids or quotes. In some cases, direct mailings may be used to notify prospective bidders. At times, the government also announces its intention to purchase in Commerce Business Daily (CBD), Synopsis of U.S. Government Proposed Procurement Sales and Contract Awards, published by the U.S. Department of Commerce. A potential supplier also may be notified of a procurement directly by a government agency.
- 1.17 When a contractor responds to a government procurement notification, the buying agency begins the process of evaluating the proposal for the responsiveness and responsibility of the contractor. A responsive contractor meets all the salient terms addressed in the original procurement document (IFB, RFP, or RFQ). A responsible contractor is deemed capable of providing the goods or the services required. To receive government acceptance of its bids and quotes, a contractor must be both responsive and responsible. The concept of responsibility is contained in FAR section 9.103 as follows:

While it is important that Government purchases be made at the lowest price, this does not require an award to a supplier solely because that supplier submits the lowest offer. A prospective contractor must affirmatively demonstrate its responsibility, including, when necessary, the responsibility of its proposed subcontractors.

- 1.18 The pre-award survey is one of the tools used by the government to determine whether a contractor is both technically and financially responsible. The objective of the survey is to assess the contractor's technical qualifications, financial soundness, and the ability of the contractor's cost accounting systems to identify and accumulate costs by contract. To perform this effort, generally, the contracting officer will obtain support from the technical staff and the contract auditor.
- 1.19 As discussed in the introduction to this chapter, the responsive and responsible bidder offering the lowest price generally is awarded an IFB contract without any negotiation. However, if the government deems that the lowest price is unreasonable, the buying agency may cancel the award process and begin again by readvertising the procurement. The agency would not use negotiations to resolve any questions regarding the bid price.
- 1.20 Different procedures are employed for competitive proposals when negotiations will be used to establish the price. In such a case, the government establishes a competitive range and decides which of the bidders fall within the established range. This is, for the most part, a subjective process that gives specified weights to cost, technical, and other factors in evaluating the bids. Contractors falling within the range are then requested to submit a best and final offer. The second offer affords a company an opportunity to revise its price in an attempt to secure the contract. After the best and final offers are reviewed, a company is selected and negotiations are initiated to arrive at a final price. The company selected is not necessarily the one offering the lowest price because the other factors noted above often weigh heavily in the government's selection decision.
- 1.21 In preparing for contract negotiations, the contracting officer may request the contract auditor to evaluate the cost and pricing data submitted by the contractor in support of the competitive proposal. However, this cost and pricing data are not only historical accounting information. In fact, all significant and relevant facts that can be reasonably expected to contribute to assessing the soundness of estimates of future costs should be disclosed and considered in the proposal evaluations. The evaluations are generally performed by the agency's contract audit personnel and involve (1) examining historical or forecasted cost data presented by the company and (2) evaluating the estimating techniques used to arrive at the proposed price. The contract auditor also looks for significant inconsistencies in the methods used to estimate and those used to accumulate costs.

Contract Types

- 1.22 Generally, contracts are divided into the following broad classifications:
 - a. Contracts for items to be delivered or services to be performed
 - b. Research and development contracts
 - c. Construction contracts
 - Facilities contracts for the acquisition, construction, or operation of plant and production equipment
- 1.23 Within those broad classifications, the specific contract type is defined by the pricing arrangement selected for procurements other than those awarded based on the sealed-bid process (contracts awarded by sealed bids are firm fixed-price). Selecting the pricing arrangements is a critical step in the government procurement process because the contract type determines the amount of risk each individual party is willing to accept. For example, entering a fixed-price contract without definite specifications for what is to be

done may represent significant financial exposure for the contractor. When this occurs, the government agency should be concerned when a contractor assumes an unreasonable risk because the company may find itself financially incapable of performing the work. It is important to recognize that the federal procurement system is based on the premise that the greater the risk assumed by the contractor, the greater the earnings potential. Therefore, the appropriate contract type for a given procurement would achieve a proper balance between risk and profit. Consequently, it is critical that the contractor have a comprehensive understanding of the various types of contracts and the situations to which they are most appropriate.

- 1.24 Federal contracts are generally classified as either fixed-price or cost-reimbursement. The type of contract selected for other than sealed bid procurements is generally a matter for negotiation and requires the exercise of sound judgment. The objective should be to negotiate a contract type that will represent a reasonable sharing of risk considering the nature of the work to be done, the scope of the effort, and the performance schedule. Under the fixed-price arrangement, the company is obligated to deliver the product or service at the established price without regard to the actual cost to perform. The contractor assumes less risk under a cost-reimbursement contract since the final price is determined after the work is performed and actual performance costs are known. It is important to recognize that a wide selection of contract types (representing variations of the basic arrangement—fixed-price and cost-reimbursement) available to the government and contractors to provide the needed flexibility in acquiring the myriad of goods and services required by federal agencies.
- 1.25 There are other fixed-price contracts where the established price is adjusted to recognize the effect of inflation/deflation, or the operation of financial incentive arrangements incorporated into the contract or an agreement to redetermine the fixed-price at specified intervals during or after contract performance. These flexible fixed-price contracts are used when there are contingencies at the time of negotiation which could have a material effect on contract price should they materialize. (See paragraphs 1.27 through 1.35 for a description of these contracts.)
- 1.26 Cost-type contracts typically provide for reimbursement of allowable costs incurred plus a fee (profit). Unlike fixed-price contracts in which the contractor is committed to delivery without regard to performance costs, cost-type contracts normally obligate the contractor to use its best efforts to accomplish the scope of work within a specified time and a stated contract dollar limitation. A description of the various contract types (derived from FAR part 16) is presented below.

Fixed-Price Contracts

- **1.27** Firm fixed-price contract. In this type of contract, price is not subject to any adjustment on the basis of cost incurred to perform the required work.
- **1.28** Fixed-price contract with economic price adjustment. This contract provides for revision of the contract price based on the occurrence of specifically defined economic contingencies, for example, increases/decreases in either material prices or labor wage rates.
- **1.29** Fixed-price contract providing for prospective periodic redetermination of price. This contract establishes a firm fixed price for an initial number of units or for an initial period of performance, with prospective price redeterminations at stated intervals during the remaining period of performance.

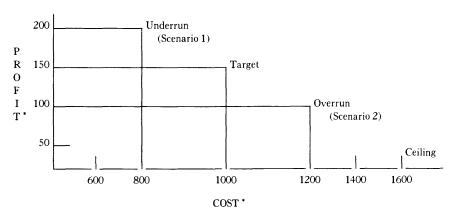
- **1.30** Fixed-price contract providing for retroactive redetermination of price. This contract establishes a ceiling price and retroactive price redetermination (within the ceiling price) after the completion of the contract, based on costs incurred, with consideration given to management ingenuity and effectiveness.
- 1.31 Fixed-price contract providing for firm target cost incentives. This contract establishes the initial firm target cost, firm target profit, price ceiling (but not a profit ceiling or floor), and formula for establishing final profit and price based on the relationship that the final negotiated total cost bears to total target cost. The formula is typically based on the contractor and the customer sharing the benefits of cost underruns or the burden of cost overruns.
- 1.32 The following example is an illustration of a fixed-price incentive contract with varying cost and profit results. Fixed-price incentive (FPI) contracts establish targets based on cost with adjustments to profit based on performance. After the contract is completed, the final cost is negotiated and the final price determined through application of the formula. The formula provides greater profits when actual costs are less than the target cost and, conversely, lower profits when actual costs exceed the target cost. In this example, the contractor's profit is adjusted by 25 percent of the difference between the target cost and actual cost.

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Sha	ring	Formul	a·

Government's share 75% Contractor's share 25%

	Target Results per	Actual Results	
	Contract Terms	Scenario 1	Scenario 2
Cost	\$1,000,000	\$ 800,000	\$1,200,000
Profit	150,000	200,000 *	100,000 †
Price	1,150,000	1,000,000	1,300,000
Price ceiling	1,600,000	1,600,000	1,600,000

^{*} Profit calculated: (\$1,000,000 - \$800,000) × 25% + \$150,000 = \$200,000 † Profit calculated: (\$1,000,000 - \$1,200,000) × 25% + \$150,000 = \$100,000



^{* \$} thousands omitted.

1.33 Fixed-price contract providing for successive target cost incentives. This contract establishes an initial target cost and profit, a price ceiling, a formula for subsequently fixing the firm target profit (within a ceiling and

floor established at the contract date), and a production point at which the formula will be applied.

- **1.34** Fixed-price contract providing for performance incentives. This contract incorporates an incentive to the contractor to surpass stated performance targets by providing for increases in profit to the extent that such targets are surpassed and for decreases to the extent that such targets are not met.
- **1.35** Fixed-price level-of-effort term contract. This is a contract usually calling for investigation or study in a specific research and development area. It obligates the contractor to devote a specified level of effort over a stated period of time for a fixed dollar amount.

Cost-Type Contracts

- **1.36** Cost-sharing contract. This contract specifies that the contractor is reimbursed only for an agreed portion of costs incurred to perform with no provision for a contractor fee.
- **1.37** Cost-without-fee contract. This contract provides for the contractor to be reimbursed for allowable incurred costs with no provision to give the contractor any profit or fee.
- **1.38** Cost-plus-fixed-fee contract. This contract specifies that the contractor is reimbursed for costs plus a fixed fee. The negotiated fee arrangements are specified in cost-type contracts. Such fees have statutory limits (FAR subsection 15.903).
- 1.39 Cost-plus-award-fee contract. This contract provides for the contractor to be reimbursed for allowable incurred costs plus a fee consisting of two parts: (1) a fixed amount that does not vary with performance, and (2) an award amount based on performance measures of quality, timeliness, ingenuity, and cost-effectiveness. The amount of award fee is based on a subjective evaluation of the contractor's performance by the government based on criteria set forth in the contract.
- 1.40 Cost-plus-incentive-fee contract (incentive based on cost). This contract specifies that the contractor is reimbursed for allowable incurred costs plus a fee adjusted by a formula based on the ratio of total allowable costs to target cost. Target cost, target fee, minimum and maximum fee, and adjustment formula are agreed on when the contract is negotiated.
- 1.41 Cost-plus-incentive-fee contract (incentive based on performance). In this type of contract, the contractor is reimbursed for allowable incurred costs plus an incentive to meet or surpass stated performance targets. The contract provides for increases in the fee to the extent that such targets are surpassed and for decreases to the extent that such targets are not met.
- 1.42 In addition, incentive contracts may also include a combination of both cost and performance incentives. However, most such incentive contracts include only cost incentives in the form of a fee (profit) adjustment formula intended to motivate the contractor to effectively manage costs. Technical performance incentives may relate to specific product/service characteristics, for example, missile range, aircraft speed, engine thrust, vehicle maneuverability, or other elements of the contractor's performance. On the other hand, delivery incentives are used when improvement from a required delivery schedule is a significant government objective.

Other Types of Contracts and Arrangements

1.43 Time and material contract. In addition to fixed-price and cost-type contracts, the government awards contracts for time expended and material

- used. Under this type of contract, the contractor is paid a fixed hourly rate for direct-labor hours expended. The rate includes direct-labor, indirect expenses, and profit. The costs of materials or other specified costs are usually reimbursed for actual costs.
- 1.44 Letter contract. A letter contract may be used to authorize the contractor to start work before the definitive contract is awarded. The final contract must be negotiated at the earliest possible date; however, this does not generally exceed 180 days from the date of the letter contract or completion of 40 percent of the product or service covered in the contract.
- **1.45** *Indefinite delivery contracts.* These types of contracts are used when the exact time of delivery or the quantities to be delivered are unknown at the time the contract is executed. Following are three types of indefinite delivery contracts:
 - a. A definite quantity contract provides a specified amount of goods or services to be delivered over a fixed period, with delivery, or performance, being made at locations designated in the particular order
 - b. A requirements contract provides for filling all actual requirements of procuring activities for supplies and services during a specified contract period. The contract estimates total quantities of goods or services, but funds are obligated by each individual order and not by the contract itself.
 - c. An indefinite quantity contract provides for an indefinite quantity of goods or services, within stated limits, during a specified period, with deliveries scheduled when orders are placed with the contractor. This type of contract is used when the government does not know in advance the precise quantities it will need and enables the government to commit itself only for a minimum quantity.
- 1.46 Cooperative agreement. A cooperative agreement is neither a grant nor a procurement contract. Rather, it is an agreement under which the government agrees to share in the responsibility for performance and cost of performance. An example of a cooperative agreement would be an agreement between the federal government and a nonfederal governmental entity to develop a project. The project requirements are jointly determined and progress is jointly monitored. Contracts for work performance typically are entered into between the nonfederal entity and contractors. The costs are shared, in predetermined ratios, between the federal and nonfederal entities.
- **1.47** Basic ordering agreements. A basic ordering agreement (BOA) is a written instrument of understanding between a contractor and a procuring agency describing the supplies or services the contractor will provide and the method for determining the price to be paid. The agreement sets forth the terms and conditions of delivery and the procuring activities that may issue purchase orders pursuant to the basic agreement. Each order incorporates, by reference, the provisions of the BOA and becomes a binding contract.
- 1.48 Grants. Although the government awards contracts to acquire goods and services from commercial organizations, grant agreements are used to establish relationships with state and local governments and other not-for-profit organizations. The primary purpose of a grant is to effect a transfer of money, property, services, or anything of value from the federal government to the grantee to carry out specified programs, services, or activities. Usually there is no substantial federal monitoring of the activities conducted under the grant. These are essentially cost-reimbursement instruments governed by

Office of Management and Budget (OMB) Circulars that establish uniform cost principles (see the cost principles section in chapter 2).

Contract Clauses

1.49 The procurement regulations require numerous clauses to be included in government contracts (FAR subpart 52.2). Many of the clauses directly affect the amount paid by the government for the work performed. Other clauses address socioeconomic issues unrelated to the procurement function. Because many clauses are incorporated into the contract by reference, a contractor should know the requirements. A violation of a clause may have serious consequences; for example, a contract may be cancelled and the contractor held liable for any related damages suffered by the government. Many of the clauses are specifically required by law. For those clauses mandated by legislation, even their omission from the contract does not release the contractor from complying with their requirements. Examples of such laws are PL 87-653 (10 U.S.C. 2306(f)), "Truth in Negotiations Act," and PL 91-379 (50 U.S.C. App. 2168), "Cost Accounting Standards." The following are examples of types of clauses that may be included in a contract that typically would be expected to have financial statement implications:

- Allowable cost and payment. Included in cost-type contracts, this
 clause provides for reimbursement of incurred costs allowable under
 the applicable cost principles and contract terms. It also outlines the
 conditions under which actual payments are made (FAR subsection
 52.216-7).
- Audit and records. Included in virtually all negotiated contracts, this clause requires the contractor to maintain books and records sufficient to allow the contracting officer to determine allowable incurred costs. It also grants the contracting officer the right to review the contractor's books and records for contract negotiation and settlement (FAR subsection 52.215-2).
- Limitation of cost (funds). This clause obligates the contractor to notify the contracting officer of any significant cost overruns or underruns within sixty days of the time when 75 percent of the estimated costs specified in the task or contract have been incurred. The "Limitation of Costs" clause is used in fully funded cost reimbursement-type contracts, whereas the "Limitation of Funds" clause usually is inserted in incrementally funded cost reimbursement-type contracts (FAR subsection 52.232-20-1).
- Changes. This clause permits the government to unilaterally make alterations at any time to the contract requirements, provided the changes are within the general scope of the contract. The clause also obligates the government to adjust the contract price or the delivery schedule to reflect the impact of the change (FAR subsection 52.243).
- Price reduction for defective cost or pricing data. If the contractor fails to disclose to the government at the time of price agreement all the significant cost and pricing data used in developing the proposal, or the data submitted were not current, accurate, and complete, the government may reduce the negotiated price to reflect this violation. This clause also requires the contractor to certify that the requirements have been met and gives the government an adminis-

- trative remedy (price adjustment) if the certification is deficient (FAR subsection 52.215-22).
- Termination for convenience. This clause gives the government the unilateral right to cancel the contract whenever the buying agency deems the cancellation is in the public interest. However, the government is obligated to reimburse the contractor for all completed units and for incurred costs on work-in-progress and "profit associated with the terminated effort."
- Termination for default. When the contractor fails to comply with a significant contract requirement, this clause permits the government to terminate the contract. Such a termination may have serious implications because the contractor is obligated to reimburse the government for the costs of acquiring the terminated effort from another contractor. Furthermore, the government pays the terminated contractor only for completed units delivered; costs incurred for work in progress are absorbed by the contractor (FAR subsection 52.249-8,9, & 10).
- Disputes clause. This clause provides a mechanism for timely settlements while ensuring fair and equitable treatments to both parties (FAR 52.233.1). The disputes clause implements the "Contract Disputes Act of 1978," which attempts to provide a comprehensive system of legal and administrative remedies in resolving government contract claims.
- CAS clauses. All contracts subject to CASB regulations must include a clause that sets forth the obligations imposed on the contractor. The clauses distinguish between full coverage (FAR subsection 52.230.3) and modified coverage (FAR subsection 52.230-5).
- Examination of records by Comptroller General. This clause states that the Comptroller General of the United States or a duly authorized representative from the GAO shall have access to and the right to examine any of the contractor's directly pertinent books, documents, papers, or other records involving transactions related to a contract (FAR subsection 52-215.1).
- Penalties for unallowable costs. In DoD FAR Supplement Section 52 (specifically DFARS 252.231-7001, which is applicable only to DoD contracts), a contractor may be assessed a penalty if a cost submitted by the contractor is unallowable. The penalty may equal the amount of the disallowed cost allocated to this contract plus simple interest. An additional penalty in an amount equal to two times the amount of the unallowable cost may also be assessed.
- Socioeconomic clauses. As previously mentioned, government contracts include certain socioeconomic clauses requiring contractors to meet specified requirements with respect to social issues often unrelated to the procurement process. Although these clauses are not directly related to procurement, they do relate to the government's overall function; therefore, failure to comply with these clauses carries the same penalties as other violations of contract terms. Contract clauses involving social issues may have wide-ranging objectives and may include affirmative action in employing women and minorities (FAR subsection 52.222-25), prohibiting child labor

or the use of convicts for contract performance (FAR subsection 52.222-2), fostering small business activity (see the subcontracts section of this chapter), protecting the environment (FAR subsection 52.233-2), and restricting the purchase of certain material to domestic sources (FAR subsection 52.225-3).

The government does not claim that these issues relate to procurement; however, the federal contract is regarded as an effective tool for implementing certain federal programs. Therefore, a contractor should understand these and similar clauses and be satisfied that compliance with them is achievable before accepting a government contract.

- 1.50 Federal supply schedule (FSS) contracting. The government awards contracts for certain goods that generally are not manufactured to government specifications but are, instead, off-the-shelf items sold in substantial quantities to the general public. The Federal Supply Schedule (FSS) Program gives federal agencies a simplified process of buying commonly used supplies and services in varying quantities while obtaining discounts associated with volume buying. Indefinite delivery contracts are awarded competitively and require vendors to provide supplies and services at stated prices for given periods of time. The buying office then publishes a schedule providing the information needed by other federal agencies to place orders with the contractors.
- 1.51 If the FSS covers contracts awarded to just one supplier, it is called a single-award schedule. A multiple-award schedule (MAS) is based on contracts awarded to more than one supplier for delivery of comparable commercial supplies and services.
- 1.52 The negotiated prices for FSS contracts are generally below the contractor's established catalog (commercial) price and may not be higher than the price given to that contractor's most favored customer (MFC) under similar terms and conditions. There are several contract clauses that affect the MFC principle. The MFC requirement may be found in price certification provisions, price warranty clauses, or the contractual condition that the contractor disclose prices charged to other customers. A violation of the MFC requirement both financially and legally exposes a contractor. For example, the government may request a refund of any amounts paid in excess of the most favorable price alleging that the contractor made a false claim or statement. The following is a brief illustration of the potential effects of noncompliance with the FSS.

The U.S. government awards an FSS contract containing the MFC provision. The parties agree that the MFC price is the established catalog price less a 15-percent discount. Accordingly, similar sales made to the government under the FSS contract must reflect a discount of not less than 15 percent. A subsequent government review discloses that, during the contract period, the supplier granted a 20-percent discount to a most favored customer and failed to make similar adjustments to the prices offered the government. The MFC clause gives the government the contractual right to request a refund of any amounts paid in excess of the MFC price.

In addition, the contractor is exposed to potential legal action if, during the performance of the government contract, the contractor makes comparable sales to customers other than the government at discounts greater than 15 percent and intentionally fails to adjust the government's contract price. In those circumstances, the government is likely to regard the overcharge as a false claim and may file either civil or criminal charges against the contractor.

Government Audits and Other Reviews

- 1.53 One of the most distinctive features of federal contracts is the audit clause that gives the contracting officer the right to review the contractor's books, records, and other supporting documentation to establish the contract price. This clause, which is most frequently found in negotiated procurements, states the following:
 - a. Examination of costs. If this is a cost-reimbursement, incentive, time-and-materials, labor-hour, or price-redeterminable contract, or any combination of these, the contractor shall maintain—and the contracting officer or representatives of the contracting officer shall have the right to examine and audit—books, records, documents, and other evidence and accounting procedures and practices, regardless of form (for example, machine-readable media such as disk or tape) or type (for example, data bases, applications software, data base management software, and utilities) sufficient to reflect properly all costs claimed to have been incurred or anticipated to be incurred in performing this contract. This right of examinations shall include inspection at all reasonable times of the contractor's plants, or parts of them, engaged in performing the contract (FAR subsection 52.215[a]).
 - b. Cost or pricing data. If, pursuant to law, the contractor has been required to submit cost or pricing data in connection with pricing this contract or any modification to this contract, the contracting officer or representatives of the contracting officer who are employees of the Government shall have the right to examine and audit all of the contractor's books, records, documents, and other data, regardless of form (for example, machine-readable media such as disk or tape) or type (for example, data bases, applications software, data base management software, and utilities), including computations and projections, related to proposing, negotiating, pricing, or performing the contract or modification, in order to evaluate the accuracy, completeness, and currency of the cost or pricing data. The right of examination shall extend to all documents necessary to permit adequate evaluation of the cost or pricing data submitted, along with the computations and projections used (FAR subsection 52.215 [b]).
- 1.54 The federal government contract audit agencies, the largest of which is the Defense Contract Audit Agency (DCAA), are responsible for providing financial and accounting advice to federal government procurement officials. The contracting officer is required to request a field-pricing report, which includes a government audit before negotiating any contract or modification in excess of stated thresholds when cost or pricing data are required (FAR subsection 15.805-5). The contract auditor serves as the contracting officer's representative in the review of contractor accounting records and provides advisory comments and recommendations to the contracting officer. While the contract audit opinions are advisory, internal government follow-up procedures have been established to assure appropriate consideration and action taken on audit recommendations.
- **1.55** To provide the contracting officer with financial and accounting advice, the contract auditor performs various reviews, such as—

- Preaward survey. This review is to determine whether a contractor is responsible from both a technical and financial standpoint. The objective of the survey is to assess the contractor's technical qualifications and financial soundness, as well as the adequacy of the accounting system to accumulate the type of cost information required by the contract.
- Forward pricing proposals evaluation. The contract auditor evaluates cost estimates in the contractor's contract-pricing proposal for allocability, reasonableness, and allowability. These government audits may be directed at specific procurement actions or may involve prospective cost rates that may be used to estimate costs on future procurement actions.
- Postaward review of cost and pricing data. This is the government's terminology for reviews intended to test compliance with PL 87-653, commonly known as "The Truth in Negotiations Act." This legislation requires the contractor to provide the government with accurate, current, and complete cost and pricing data when negotiating contracts subject to PL 87-653. To the extent that the contractor does not comply with the requirements, thereby increasing the contract price, the government is entitled to a corresponding price reduction for the so-called "defective pricing."
- Incurred cost audit. This government audit focuses on the allowability of direct and indirect costs billed to the government on contracts providing for cost reimbursement or settlement of final prices based on costs incurred.
- Cost accounting standards compliance and adequacy reviews. The purpose of the compliance review is to determine whether the contractor's accounting practices conform to the standards promulgated by the CASB. The adequacy reviews are designed to determine whether the description of the cost-accounting practices contained in the company's CAS Disclosure Statement is accurate, current, and complete.
- Terminated contract audits. When a contract or subcontract is partially or completely terminated, the terminating contracting officer is required to submit all contractor settlement proposals to the DCAA for appropriate examination and recommendations concerning the allocability, allowability, and reasonableness of the related costs.
- Claim audits. These audits include equitable adjustment and claims to be resolved under the Contract Disputes Act of 1978.
- Operations audits and other functional reviews. Generally, these audit activities involve evaluating those management and operational decisions made by the contractor that affect the nature and level of costs being proposed and incurred on government contracts. These reviews usually result in the government auditor providing the company with recommendations on how to improve internal control structure policies and procedures, and the economy and efficiency of contractor operations.
- 1.56 In summary, the fundamental purpose of a government contract audit is to determine the allowability (including reasonableness and allo-

cability) of costs contained either in a proposed price or in a statement of costs incurred during contract performance. FAR part 31 provides the authoritative criteria for making this determination. Furthermore, contracts provide broad access rights, and the DCAA has the authority to subpoena a contractor's books, records, and other supporting documentation to carry out its responsibilities.

Allowability and Allocability of Costs

- 1.57 The concept of allowability of costs is derived primarily from the procurement regulations. For most federal agencies, the criteria for determining allowability are contained in FAR part 31. For a cost to be considered allowable, it must be reasonable and allocable and not prohibited by the provisions of FAR or contractual terms and conditions. (The concepts of allowability and allocability are discussed further in chapter 2.)
- 1.58 For many contractors, the standards promulgated by the CASB contained in FAR part 30 provide the guidance for determining the allocability of costs to government contracts. FAR part 31 also contains some basic guidance relating to allocability. Once the cost is determined to be allocable, the contract cost principles (FAR part 31) provide the guidance for identifying which of these costs are eligible for reimbursement. Generally accepted accounting principles (GAAP) apply where FAR or CAS fail to address a specific element of cost. (Both FAR and CAS are discussed more fully in chapter 2.)
- 1.59 In doing business with the federal government, it is important to recognize that most of the contract pricing not subject to sealed-bid competitive procedures is cost-based. Furthermore, the accounting method used in pricing negotiated contracts is full-absorption costing. Therefore, all allowable and allocable costs should be identified in conformity with applicable procedures so that reimbursement may be obtained.
- 1.60 The government does not generally require contractors to restructure their accounting systems to accommodate the full absorption concept. Therefore, memorandum records may be used to make the allocations. For example, some companies do not include general and administrative (G&A) expenses in work process inventory. Nonetheless, contractors are permitted to use memorandum records to make the allocation because those costs are allocable and allowable. However, the memorandum records are subject to audit and, therefore, should be reconcilable to the formal accounting records.

Financing the Contract

- 1.61 The need for financing is not considered a negative factor in awarding contracts. As a matter of policy, when necessary and appropriate to do so, the government provides contractors with interest-free financing. The types of financing available in a specific situation depend on the nature of the contract, the needs of the contractor, and the statutory restrictions imposed by Congress. The most common methods of financing available are
 - a. Progress payments. Contracts requiring the use of a significant amount of contractor working capital generally provide for interim payments as the work progresses. These payments are usually based on cost incurred but may also reflect percentage-of-completion or other specified measures. The progress payments are then liquidated against actual deliveries of contract items. This form of financing applies only to fixed-price type contracts and is, by far, the most common form of contract financing (FAR subpart 32.5).

- b. Advance payments. Advance payments are essentially loans authorized for all types of contracts and subcontracts. They are available to contractors whose developmental or preliminary costs are so significant that the contractor may face undue financial hardship before earning any return on the contract. Advance payments are available to prime contractors for the purpose of making similar advances to subcontractors (FAR subpart 32.4).
- c. Guaranteed loans. The government may enter into an agreement with a private financial institution to guarantee all or a portion of a loan made to a contractor engaged in national defense. The government becomes obligated to share with the lender any losses on the loan up to the guaranteed percentage (FAR subpart 32.3).
- **1.62** Alternatively, a contractor may elect to obtain financing from a private lending institution and assign contractual payments to the financial institution, which are then repaid directly by the government.

Profit

1.63 Prenegotiation fee objectives, according to the regulations, are to be used as a "motivator of efficient and effective contract performance." The government uses a structured approach called the weighted-guidelines method for establishing prenegotiation fee and profit objectives (FAR subpart 15.9). The weighted-guidelines method is designed to tailor prenegotiated profit or fee objectives to the circumstances of each contract. It provides fairly precise factors to apply to various components of the cost proposal to develop the prenegotiated profit or fee objectives for an individual procurement. As mentioned previously, however, there are statutorily mandated fee limitations on cost-type contracts (FAR 15.901[c]).

Subcontracts

- **1.64** Companies serving as subcontractors, at all tiers, are generally subject to the same terms and conditions that apply to the federal prime contractors. The prime contractor, or higher-tier subcontractor, is responsible for administering the respective subcontracts. This includes performing audits of subcontract prices and compliance with contractual requirements, such as CAS, cost and pricing data, and progress payment provisions.
- 1.65 Understandably, subcontractors are often reluctant to allow prime contractors to review their books and records. The government, in recognizing this sensitivity, may perform these reviews in lieu of the prime contractor (FAR subsection 52.215-2[e]). However, the prime contractor still remains contractually liable for its subcontractors' compliance with applicable procurement rules and regulations. The government has the right to reduce the prime contract price for subcontractor violations. The prime contractor is then faced with obtaining indemnification from the subcontractor for losses suffered as a result of the subcontractor's failure to comply with any procurement regulation.
- **1.66** Unique to government contracts is the requirement that prime contracts meeting certain dollar thresholds contain a positive plan for awarding subcontracts to small business concerns. Additionally, the Small Business Act of 1958, as amended, established direct procurement responsibilities for each procuring agency with socially and economically disadvantaged firms under section 8(a) of the Act. The program is more commonly known as the 8(a) program. Actually, the procuring agency enters a tripartite agreement

with the Small Business Administration and the socially and economically disadvantaged firm. These 8(a) procurements are, by definition, negotiated (FAR part 19).

Contract Performance

- 1.67 The level of monitoring of the contractor's day-to-day operations by the government is determined by the nature of the pricing arrangement negotiated. For fixed-price contracts, the level of government surveillance may be limited. When progress payments are made based on costs incurred, the contracting officer may exercise the contractual right to review the accounting books and records to validate the calculation of the requests for payments. Tests of compliance with CAS and cost or pricing data also may be performed.
- 1.68 If a cost reimbursement arrangement covers the work, a contractor is required to maintain a cost accounting system that accumulates costs for the contract. The government, on an interim basis, may review the contractor's books and records to determine the allowability of the costs being incurred and billed. This is a very important process, because the recording of actual financial transactions in the accounting system directly affects the amount the contractor will receive.
- 1.69 DoD requires its contractors to certify indirect cost proposals submitted to establish billing rates or final costs on flexibly priced contracts (DFARS 52.242-7003[c]). The rates applied in calculating progress payments under fixed-price contracts also must be certified. By this certification, contractors warrant that, to the best of their knowledge and belief, the indirect cost proposal includes no unallowable costs as established by DoD acquisition regulations.
- 1.70 Another significant requirement of government contracts is the reporting of contract performance. The contract may require a contractor to provide the following types of management reports:
 - a. Cost/schedule control system (C/SCS). The C/SCS is required on major systems acquisitions that are not fixed-price contracts. The C/SCS is a rather complex measuring device that gives scheduling and cost data to both the contractor and the government.
 - b. Contract funds status report (CFSR). The CFSR is not normally imposed on firm fixed-price contracts because the reporting is designed to provide the government with the financial information that will allow it to forecast its funding requirements under the contract.
 - c. Cost performance report (CPR). The CPR provides data to government systems managers who then may evaluate contract performance and identify potential or actual problems that might have a significant cost impact.
 - d. Cost/schedule status report (C/SSR). The C/SSR is used for smaller projects where the CPR is not appropriate. The C/SSR requires information on cost schedule performance at a lower detail level and is accompanied by a narrative that explains variances in cost or scheduling.

Contract Settlement

1.71 Normally, contracts are settled after successful completion of the required work. For flexibly priced orders, a final price is negotiated based on

actual costs incurred and the price-setting mechanisms (for example, incentive, cost-sharing, and price ceilings) included in the contract. To settle a cost reimbursement contract, the contracting officer obtains an opinion from the contract auditor on the allowability of the costs claimed by the company. Using the contract auditor's report, the contracting officer, in most instances, reaches a final agreement with the contractor. If a settlement is not achieved through discussions between the contracting officer and the contractor, the contracting officer may render a unilateral decision; the contractor may then appeal that decision to the buying agency's administrative contract appeals board or the federal courts.

- 1.72 Firm fixed-price contracts are settled after all deliveries are made and payments received consistent with the negotiated price. Incurred costs are not considered for this type of pricing arrangement.
- 1.73 In addition to the settlement arrangements previously discussed, government contracts may be terminated for either convenience of the government or default by the contractor. The authority to exercise these terminations stems from the termination clauses contained in the contract. Unlike commercial contracts, the government may terminate a contract for its convenience and not risk significant financial penalties, such as liability for the total original price of the terminated contract. In these situations, the contractor's recovery rights in convenience terminations are limited usually to costs incurred and, depending on the contract type, some amount of profit. On the other hand, under fixed-price type contracts, terminations for contractor default may require the contractor to bear considerable financial hardship. For example, the contractor will be paid at the contract price only for completed and accepted items. No payment will be made by the government for costs incurred on undelivered work. In addition, any advances or progress payments received by the contractor on the terminated portion of the contract must be repaid. Finally, the contractor is liable for any additional costs the government incurs in acquiring the terminated contract items from another source. Default terminations on cost-reimbursement-type contracts allow for only contractor recovery of incurred costs. The penalty is that the fee is paid only for acceptable work, and the contractor is not reimbursed for terminated settlement costs. (Regulations pertaining to contract terminations and the related accounting treatment are covered in chapters 2 and 3, respectively.)

Oversight Activities

1.74 There are two important oversight functions related to federal government contracting: the General Accounting Office (GAO) and the Office of the Inspector General (OIG). The GAO is an agent of Congress and conducts reviews necessary to evaluate all the activities in the executive departments, including procurement. Its focus is to ascertain whether the executive agencies are properly implementing the laws passed by Congress. The GAO's examination authority is granted through a contract clause. The OIG's examination authority is derived from the Inspector General Act of 1978, as amended. The OIG operates as an oversight function within the agency for which it was established. In connection with its review of the procurement process, OIG has been granted administrative subpoena authority to assure access to the books and records of government contractors. It should be noted that, for some government agencies, the OIG has contract audit responsibility.

Chapter 2

Federal Acquisition Legislation and Regulations

Overview

Federal Acquisition Regulation

2.01 Effective April 1, 1984, the Federal Acquisition Regulation replaced the Federal Procurement Regulation (FPR), the Defense Acquisition Regulation (DAR), and the National Aeronautics and Space Administration (NASA) Procurement Regulation.

2.02 History. The forerunner of the FAR is the Armed Services Procurement Regulation (ASPR) established in March 1949. Section 15 of the ASPR contained cost principles but was limited to cost reimbursement contracts. Those principles developed from the procurement knowledge acquired by the government during World War II. The principles became the subject of considerable controversy and criticism during the 1950s and, consequently, were substantially revised in November 1959. The same types of principles were incorporated into the FPR to establish uniformity among cost principles for both defense and nondefense agencies. Nonetheless, a significant number of differences developed between the two sets of regulations; therefore, the Commission on Government Procurement recommended in 1972 that a single set of procurement regulations be established.

2.03 The FAR Project was established in January 1978 by the Office of Federal Procurement Policy (OFPP). It obtained further direction from the OFPP Act Amendments of 1979 (PL 96-83) and was finally implemented in April 1984.

2.04 The FAR process provides for two councils to be responsible for the regulations: Defense Acquisition Regulation (DAR) Council chaired by the Department of Defense (DoD) and the Civilian Agency Acquisition Council (CAAC) chaired by the General Services Administration (GSA). The DAR Council is responsible for the majority of the FAR parts including FAR part 30, "Cost Accounting Standards," and part 31, "Cost Principles." The CAAC is responsible for other selected FAR sections. In addition, PL 100-679 established a Federal Acquisition Regulatory (FAR) Council comprising the administrators of the OFPP, NASA, GSA, and the Secretary of Defense. This Council is to oversee the FAR process and review procurement regulations by individual agencies to assure consistency with the FAR.

2.05 Authority and purpose. The purpose of FAR is to establish a single regulation for use by all executive agencies in their acquisition of supplies and services with appropriated funds. The major objectives of FAR are to (a) produce a clear, understandable document that maximizes uniformity in the acquisition process, (b) reduce the proliferation of agency acquisition regulations, (c) implement recommendations made by the Commission on Government Procurement, the Federal Paperwork Commission, various congressional groups, and others, and (d) facilitate agency, industry, and public participation in the development and maintenance of FAR.

2.06 The FAR is maintained jointly by DoD, GSA, and NASA under their statutory authorities for issuing procurement regulations.

- **2.07** Contents. The FAR contains fifty-three parts, grouped into the following categories:
 - General
 - Acquisition planning
 - Contracting methods and contract types
 - Socioeconomic programs
 - General contracting requirements
 - Special categories of contracting
 - Contracting management
 - Contract clauses and forms

Agency Supplements

- 2.08 Authority and purpose. Government agencies may issue supplemental acquisition regulations that implement or supplement FAR. They may provide agency-wide policies, procedures, contract clauses, and solicitation provisions that govern the contracting process or control the relationship between the agency and the contractors. Most agencies of the government, including DoD, NASA, and GSA, have issued agency supplements. Finally, agency supplements should not unnecessarily repeat, paraphrase, or otherwise restate material contained in the FAR, or conflict or be inconsistent with FAR content.
- **2.09** Contents. The FAR Supplements (FARS) have substantial additional guidance beyond that found in the FAR, for instance, profit policy. However, they provide only limited additional guidance in the area of cost allowability. For example, the DoD FARS covers the application of cost of money in developing forward-pricing rates and cost proposals. There is also some material provided on differences in determining allowability of cost of money, foreign military selling expense, independent research and development (IR&D) expenditures, and bid and proposal costs.

Cost Accounting Standards

- 2.10 History. The original Cost Accounting Standards Board was created in 1970 by PL 91-379, an amendment of the Defense Production Act. This action was the result of congressional concern first expressed in 1968 over increased defense procurement, lack of guidance on cost accounting, and inconsistencies in accounting for the cost of contracts. At that time, Congress directed the GAO to perform a feasibility study. In 1970, the GAO reported to Congress that cost accounting standards developed to achieve a higher degree of uniformity and consistency in accounting for government contracts were feasible, although a uniform accounting system was not feasible.
- **2.11** The congressional mandate to the CASB in PL 91-379 was to develop standards increasing uniformity and consistency. In addition, the CASB was to determine that the benefits from imposing standards would exceed the costs of implementing those standards.
- 2.12 The original CASB promulgated nineteen standards covering consistency in accounting, allocation of indirect costs, fixed-asset accounting, accounting for material costs, and accounting for labor-related costs. The standards were intended to cover only the measurement of cost, the assignment of cost to accounting periods, and the allocation of cost to cost objectives. Therefore, they did not cover allowability, which establishes limitations on cost or defines reimbursable costs. PL 100-679 reestablished a CASB under the OFPP. The new CASB has been given the responsibility for the standards,

rules and regulations promulgated by the old CASB, as well as the ability to make and promulgate new standards, rules and regulations. In addition, the new CASB may amend, rescind, or interpret the standards, rules, and regulations so promulgated. PL 100-679 also repealed the previous CAS legislation.

- 2.13 Applicability. Regulations governing the administration of cost accounting standards are currently incorporated in FAR part 30. The standards are applicable to negotiated government contracts in excess of \$500,000. Excluded are contracts awarded based on catalog or market prices of commercial items sold in substantial quantities to the general public, or on prices set by law or regulation, or when no cost data is submitted.
- **2.14** The regulations provide that small business concerns and educational institutions are exempt from CAS requirements. The regulations also provide for modified coverage, that is, compliance with only the standards on consistency if a business unit/segment has less than \$10 million in awards of covered contracts, and such awards represent less than 10 percent of the unit's total sales in its last fiscal year.
- **2.15** Administration. As discussed previously, FAR part 30 covers the administration of CAS and includes the standards and regulations and DoD administrative guidance for their administration. It also provides guidance for applicable solicitation provisions to be included in requests for proposals. Companies must indicate in proposals for negotiated contracts whether CAS coverage, either modified or full, is applicable. Companies must also indicate whether a disclosure statement is required and has been filed. (See the section on disclosure statements later in this chapter.)
- 2.16 In addition, FAR part 30 includes CAS coverage on changes in cost accounting practice. CAS requires consistency in accounting practice over time; therefore, a change in cost accounting is subject to a required procedure for negotiation of the cost impact of the change. FAR part 30 requires advance notification of a proposed change by a contractor and submission of a statement indicating the effect on covered government contracts. FAR part 30 also provides guidance for the review of the contractor's proposed change and negotiation of the effect. The government may withhold up to 10 percent of subsequent payment requests from a contractor for not filing an impact statement.

Cost Principles

2.17 The cost principles are included in the General Contracting Requirements of FAR part 31. FAR section 31.103 concludes that all contracts and contract modifications for supplies and services or experimental, developmental, or research work, negotiated on the basis of cost with commercial organizations (whether on a fixed-price or cost-plus basis) must adhere to the cost principles. Furthermore, the cost principles must be used in pricing negotiated supplies, services, experimental, developmental, and research contracts, and contract modifications with commercial organizations whenever cost analysis is to be performed in the procurement process. In addition, compliance with cost principles is mandatory when—

- Determining reimbursable costs under cost-reimbursement contracts, including any cost-reimbursement subcontracts, and the cost-reimbursement portion of time and materials contracts.
- Negotiating overhead rates.
- Claiming, negotiating, and determining costs under terminated fixed-price, cost-reimbursement contracts.
- Establishing the final price of fixed-price incentive contracts.

- Redetermining prices of prospective and retroactive price redetermination contracts.
- Pricing changes in contract modifications.
- **2.18** As noted in chapter 1, guidance on cost principles applicable to contracts and subcontracts with other than commercial organizations is addressed in the appropriate OMB circulars. Circular A-21 provides the cost principles for educational institutions; Circular A-87 provides the cost principles for state and local governments; and Circular A-122 provides the cost principles for nonprofit organizations. Certain large not-for-profit organizations, particularly those receiving significant defense contracts, are exempt from the provisions of Circular A-122 but must comply with FAR subpart 31.2. In addition to the cost principles, Circular A-110 provides uniform administrative requirements for grants to educational institutions, hospitals, and other not-for-profit organizations.
- **2.19** The cost principles provide an explanation of the factors that determine allowability. Such factors include reasonableness, allocability, standards issued by the CASB, if applicable, or generally accepted accounting principles and practice, terms of the contract, and other limitations imposed by FAR subpart 31.2. The cost principles further define reasonableness and allocability. (The effects of each of the factors on allowability are covered later in this chapter in the section on contract cost regulations.)
- **2.20** The cost principles describe direct and indirect costs and provide guidance on the allocation of indirect costs. However, the guidance is limited because it only requires that indirect costs be accumulated in logical cost groupings and then allocated on the basis of benefits accruing to the several cost objectives. The principal criteria for selection of an allocation base are that the base should be common to all benefiting cost objectives and that it should permit allocation reflecting the beneficial relationship. The cost principles refer to the required use of cost accounting standards, when applicable. Cost accounting standards contain significantly more guidance on cost allocation than found in FAR subpart 31.2.
- **2.21** FAR section 31.205 provides guidance on the allowability and reasonableness of selected items of cost, including the following items that are unallowable:
 - Product advertising
 - Alcoholic beverages
 - Bad debts
 - Contributions and donations
 - Entertainment
 - Federal income and excess profits tax
 - Fines and penalties
 - Goodwill
 - Interest and other financial costs
 - Lobbying costs
 - Losses on other contracts
 - Memberships in social organizations
 - Organizational costs
- **2.22** This section also provides substantial guidance on the allowability and reasonableness of certain significant cost items, for example, compensation and related costs, fixed-asset costs, rental costs, insurance, taxes, termina-

tion costs, selling costs, bid and proposal costs, and independent research and development costs.

Renegotiation Board

2.23 The Defense Production Act was amended in 1976 to eliminate the Renegotiation Board. No renegotiation filings have been required for fiscal years ending after September 30, 1976.

Office of Management and Budget (OMB)

- **2.24** OMB has several responsibilities assigned to it for the regulation and administration of government procurement. Two of its operating units are the Office of Federal Procurement Policy (OFPP) and the Financial Management Division (FMD).
- 2.25 Office of Federal Procurement Policy (OFPP). This office was created to provide overall direction for government procurements and establish government-wide policies that are implemented in the FAR. It also has responsibility for reviewing proposals for changes in the FAR and may act to resolve differences among the agencies responsible for maintaining the FAR. OFPP, other than its general responsibilities and oversight of the FAR system, does not provide direct regulatory or administrative guidance affecting government contractors. The OFPP Administrator, however, serves on the FAR Council, which has direct responsibility for oversight of the FAR process. In addition, the CASB is established within the OFPP and the OFPP Administrator serves as chairman of the CASB.
- **2.26** Financial Management Division (FMD). This division is responsible for establishing cost principles for other than commercial organizations. Through the authority of OMB circulars, the FMD has been responsible for promulgating and administering the cost principles for educational institutions (Circular A-21), nonprofit organizations (Circular A-122), and state and local governments (Circular A-87).
- 2.27 The OMB circulars are structured much like the cost principles for commercial organizations in the FAR and provide definitions of direct and indirect costs and guidance for the allocation of indirect costs. The guidance on indirect cost allocation is more definitive than that found in the FAR. In some cases, specific allocation pools and bases are designated by the circulars. The circulars also contain specific guidance on the allowability and reasonableness of selected individual items of cost.

Contract Cost Regulations

Cost Allowability

2.28 Allowable costs are used in flexibly priced and cost-reimbursement contracts to determine contractor revenue, which is based on aggregate allowable costs plus contract profit or fee. Accordingly, for those types of contracts, allowable costs generally have a direct effect on financial statement amounts. The following is a list of those factors contained in FAR subsection 31.201-2 and used to determine the allowability of an incurred cost:

- Reasonableness
- Allocability
- Cost accounting standards, if applicable
- Generally accepted accounting principles if not specifically covered by FAR and CAS
- Terms of the contract.

- Limitations on allowability in FAR
- **2.29** Although the term *allowability* is used broadly here to include reasonableness and allocability, it may also be used more narrowly to refer to the acceptability of specific incurred costs as contract costs. FAR section 31.205 provides guidance on the allowability of types of costs based on either the purpose for which incurred or the relationship of cost to contract performance.
- **2.30** By definition, an unallowable cost cannot be included in progress payment requests or in the aggregate cost to be reimbursed of a flexibly priced or cost-reimbursement contract. Therefore, the incurrence of unallowable costs produces no revenues and, therefore, ultimately reduces net income or increases net loss. The amount of unallowable costs will vary from company to company and may be relatively small compared to total costs; however, it can have a significant impact on a contractor's earnings.
- 2.31 CAS 405 and FAR subsection 31.201-6 require that expressly unallowable costs or mutually agreed-to unallowable costs and directly associated costs be separately identified and not included in billings claims or proposals to the government. It is additionally required that costs determined to be unallowable by a contracting officer's final decision, which a contractor is appealing, should also be identified but may be included in billings to the government. In March 1985, DoD began requiring contractors to certify that no unallowable indirect costs are included in submissions for reimbursement of actual costs or in bidding rates used for pricing proposed contracts. The 1986 Department of Defense Authorization Act (PL 99-145) mandated the certification that is now included in DFARS section 52.242.
- 2.32 The signing of a certificate imposes potential civil and criminal penalties for violation of the requirement to remove unallowable indirect costs from government cost or price submissions. Therefore, appropriate internal control structure policies and procedures are typically the most effective means of assuring that the certifications are not being violated. (Important elements of a contractor's internal control structure are discussed in chapter 4.)
- **2.33** Reasonableness. FAR subsection 31.201-3 states that "a cost is reasonable if, in its nature and amount, it does not exceed that which would be incurred by a prudent person in the conduct of competitive business." Following are other factors to consider in assessing reasonableness:
 - Is the cost ordinary and necessary?
 - Are there any restraints or requirements imposed on the incurrence of cost?
 - Does the cost represent any significant deviation from established practices?
- **2.34** The government is giving more attention to reasonableness and using it as a determinant for disallowing costs. When the government challenges costs, the burden of proof is placed on the contractor to establish that the costs are reasonable.
- **2.35** Allocability. FAR subsection 31.201-4 provides that a cost is allocable to a government contract if it is assignable on the basis of relative benefits received or other equitable relationships. In the various parts of FAR section 31.205 dealing with related items of cost, FAR provides allocation guidance on some individual elements of cost, particularly the assignment of cost to appropriate accounting periods. Some major examples of allocated cost are

depreciation and amortization of the cost of fixed assets, labor-related costs, state and local income taxes, and insurance.

- **2.36** Cost accounting standards. Cost accounting standards in FAR part 30 address allocability of cost and cover many areas of cost allocation.
- 2.37 Disclosure statement. As required by Part 351 of the CAS and FAR subpart 30.2, companies with greater than \$10 million in government contracts covered by CAS must file disclosure statements containing details of the entity's accounting practices. Furthermore, the requirement to file is applied to any segment of the company that has a contract subject to cost accounting standards. The disclosure document requires disclosure of, among other things, the following: accounting for direct costs and indirect costs; allocation of indirect costs; depreciation practices; accounting for pension costs, deferred compensation, and insurance programs; and allocation of corporate or homeoffice costs to segments. The disclosure statement describes an entity's accounting practices against which consistency in estimating, accounting and reporting of practices on individual contracts is measured.
- 2.38 The disclosure statement is reviewed by the government to determine that it is current, accurate, and complete. Therefore, changes in accounting practices must be communicated to the government office responsible for retaining the contractor's disclosure statement. However, a determination by the government that the disclosure statement adequately describes the contractor's accounting system does not signify that the practices are in compliance with CAS and the FAR cost principles.

Changes in Cost Accounting Practices

- **2.39** Changes in cost accounting practices for government contracts may have a significant effect on contractors subject to CAS. The relevant regulations and effects of those changes on contract costs and pricing are discussed in the following paragraphs. (The effects of accounting changes on a contractor's financial statements are covered in chapter 3.)
- **2.40** Regulations. The CAS contract clause requires consistency in accounting practices used in estimating, accumulating, and reporting contract cost data for contracts covered by CAS. It also requires amending the disclosure statement for any change in practices and the adjustment of contract price for the effect of a change. FAR subpart 30.4 also provides administrative guidance on the various accounting changes discussed in the section on impact proposals.
- 2.41 Definition. CAS 331.20(k) defines a cost accounting practice as "any disclosed or established accounting method or technique which is used for measurement of cost, assignment of cost to cost accounting periods, or allocation of cost to cost objectives." Measurement of cost includes defining the components of cost and determining the basis for measurement, which includes the choice between actual cost and standard cost or the choice among historical cost, market value, and present value. Assignment of cost to the appropriate accounting periods includes determining methods of depreciation, calculating pension expense, and selecting accrual- or cash-basis accounting. Finally, allocation of costs to cost objectives is defined as the method of attributing direct and indirect cost to cost objectives, including the method of indirect cost allocation.
- **2.42** Impact proposal. When a change in accounting practice is considered, the administrative contracting officer (ACO) would request a costimpact proposal from the contractor. The proposal would identify the cost effect on all contracts and subcontracts covered by CAS. The government

would review the cost-impact proposal and, if necessary, recommend an adjustment. If the contractor fails to submit an impact proposal, the ACO may withhold a percentage of each subsequent payment on contracts covered by CAS until the proposal is submitted.

- **2.43** The ACO is responsible for analyzing the impact proposal, with the assistance of government auditors, and negotiating the contract price adjustments. If the government and the contractor do not agree on a revised price, the issue proceeds as a dispute under the normal disputes process.
- **2.44** When a change in accounting practice occurs, the effect of adjustment on contract costs depends on the reason for the change. If, for example, the change reflects the implementation of a new governmental cost accounting standard, contract costs would be adjusted either up or down for the effect of the change. If the change were made to correct noncompliance with established governmental cost accounting standards, the effects on individual contracts may be offset and any excess charges to the government resulting from noncompliance plus interest thereon would be returned. If the change by the contractor is voluntary, the contract would be adjusted to reflect the change. Contract costs would be adjusted either up or down, as appropriate, if the ACO determines that the change is desirable and not detrimental to the government's interest.
- 2.45 Because voluntary changes include changes initiated for the contractor's convenience, changes suggested by the government, and changes to be in compliance with cost accounting standards, the FAR, or other government law or regulations, the issue of desirability to the government is an important consideration. Currently, there is little guidance on this subject, with the exception of a DoD interpretation stating that "the contracting officer's finding shall not be made solely because of the financial impact of the proposed change on the contractor's current CAS-covered contracts." If the change is determined by the ACO not to be desirable, the contracts are adjusted for the impact of the change; however, the total adjustment may not result in increased costs to the government.
- **2.46** Applicability of GAAP. Generally accepted accounting principles (GAAP) are established for financial accounting purposes and provide little guidance for cost accounting purposes in the government contracting industry. Consequently, GAAP is applied only when no guidance in FAR or CAS exists. Because there are significant differences between certain FAR allocability principles and GAAP and, to a lesser extent, between CAS and GAAP, there is often the need for memorandum records or adjustments to contract cost records to reconcile those differences to the contractor's GAAP financial statements. The differences are primarily related to labor-related costs, fixed asset accounting, accounting for income taxes, and, to a lesser degree, inventory accounting, for example, LIFO adjustments.
- **2.47** Limitations on allowability. When a contractor believes that in the next sixty days it will have incurred 75 percent of the total cost of a cost-type contract, the limitation-of-cost clause in the contract requires the contractor to advise the government whether the contract can be completed with the available contract funds.
- **2.48** In making such notification, the contractor considers estimates of both direct and indirect costs. Often the level of effort necessary to complete the contract work can be reasonably estimated; however, the indirect costs may be a problem, particularly when future volume changes substantially affect projected overhead rates.

- 2.49 When projected costs exceed the contract ceiling amount, the government must notify the contractor whether additional funds will be made available to complete the contract or the contract terminated when the funds limitation is reached. The government may dictate the work to be performed for the remaining contract funds.
- **2.50** Under a cost-reimbursement contract, there is no obligation for the government to pay any cost or to fund any effort in excess of the contract limitations. The courts have found, however, that a contractor may be entitled to reimbursement of costs incurred in excess of the contract ceiling when it is not possible for the contractor to know that the limitation has been exceeded.
- 2.51 Although the government has no obligation to fund overruns, the contractor also has no obligation to continue to perform under the contract or incur costs in excess of the contract limitations. This is true although the overrun is not predicted or reported to the government before the ceiling is reached.

Cost Estimation

- 2.52 Cost-based contracts require a system of estimating practices that provides the information for bidding. Estimating system guidelines are found at FAR 15.811 and DFARS 15.811. Specific estimating system guidelines are found at FAR Section 15.811 and DFARS Section 215.811. As mentioned previously, cost-based contracts may be either fixed-price for which price is based on estimated costs or cost-reimbursement for which contract ceilings and fees are based on estimated costs.
- 2.53 Estimating practices should produce information that is current, accurate, and complete, as well as use accounting practices consistent with those to be used during contract performance. Formal estimating practices represent a valuable function as an element of the internal control structure as well as for other management objectives and minimize conflict with government representatives regarding questions about consistency. Specifically, well-designed estimating systems provide data that—
 - Support cost estimates for proposed price negotiation.
 - Are required to be disclosed to the government (see section on defective pricing herein).
 - Are adequate to establish a fair price.
 - **2.54** An effective estimating system includes—
 - The ability to produce acceptable forward pricing rates that include overhead, G&A, and labor rates. The rates should be based on projections of level of activity expected, mix of labor categories, and expected overhead and management costs. When contracts are expected to be performed over several future periods, it may be necessary to project different rates for future periods based on current expectations of future volume, inflation, and staffing and support needs. When either party to the contract is concerned with future cost levels (primarily direct labor and materials), an economic price adjustment clause may be included to provide for adjustment of contract price based on published indices.
 - A material pricing system that produces current estimates of material cost. The estimates may be developed through use of historical data, vendor quotes, and estimates of the ability to bargain for

- reductions in such quotes through negotiations, quantity purchases, or additional sources of supply.
- A system that assures some conformity with the past and with projections for the future. A method of assuring that future projections conform to the past is to use historical data as either a basis for estimating or a checkpoint with which to compare the estimate. Estimates should be compared with future plans and projections to ensure that methods of performance, facilities expected to be used, and labor skills fit with other work. One way to track past and future productivity is to use efficiency measures such as improvement or learning curves.
- Provision for adequate review. Such reviews should be performed at the levels of responsibility consistent with the significance of the individual proposal to total future work.

Defective Pricing

- **2.55** Defective pricing results from violations of the Truth in Negotiations Act, which requires contractors to provide current, accurate, and complete cost or pricing data in connection with the negotiation of a contract. The act provides for the signing of a certificate at the date of agreement on price that indicates that current, accurate, and complete data were provided.
- 2.56 The definition of cost and pricing data has broadened since the act was passed. Cost and pricing data now encompass vendor quotes, labor rates, and projected indirect cost rates. The Act has also been interpreted to include projections of future events, for example, business volume, projected manning charts, expected scrap, rework, and ability to negotiate lower prices on material purchases. Also included are management decisions that affect future costs, such as decisions to automate, acquire businesses, change employee benefits, and change tax accounting methods.
- **2.57** To the extent the data made available to the government are not current, accurate, and complete, and the probable effect of not providing the data would have caused an increased contract price, the resulting contract price would be reduced and thus have a direct effect on the determination of financial statements amounts. The downward adjustment to contract price is the amount that would have been negotiated if the data had been known to the government. However, potential contract price increases and decreases may be offset in arriving at an adjusted contract price.
- 2.58 The federal government also reviews defective pricing situations to determine whether a fraudulent act has occurred. The government examines the circumstances to determine whether there was intent either to make a false statement or to prepare a false claim by providing the defective data. If fraudulent intent is found, the government may take civil and criminal action against the offending contractor.
- **2.59** Because the potential exists for defective pricing and a subsequent adjustment in contract prices, contractors should employ estimating systems that produce current, accurate, and complete data for contract pricing purposes. The contractor should also have adequate internal control structure policies and procedures to ensure that the system is working effectively (see chapter 4). One significant effect of weaknesses in the system is a potential reduction in contract revenues and income. (The potential effect of fraudulent activities in estimating and negotiating contract prices is later discussed in the section on suspension and debarment herein.)

- 2.60 Pricing activities related to negotiated government contracts are subject to specific fraud statutes, pricing disclosures, and cost redetermination. The potential for fraud, therefore, may significantly exceed the potential in a commercial environment. The two areas of potential fraud most prevalent in government contracts rarely occur outside the government contracting environment. The first area is cost mischarging between two government contracts or between government contracts and other contractor activity. This potential problem area originates in the use of cost-type contracts. The second significant area of fraud is related to the Truth in Negotiations Act. As noted previously, the Act requires a contractor entering into a negotiated contract with the government to provide—or otherwise make available to the government—all data known to the contractor that may have an impact on the negotiation of the contract price. Fraud occurs if data are intentionally not disclosed. Data have been described to include information provided in a contract proposal, sales and manning projections, management decisions that can affect contract cost or contract performance, and external conditions of which the contractor is aware.
- **2.61** Other kinds of fraudulent activity that may not be as prevalent, but that do occur, include kickbacks, product substitution, and offering of bribes and gratuities.
- **2.62** When fraud is discovered, generally, the cost to a contractor is significant, because the government may adjust the contract price for the effect of the fraudulent acts. Furthermore, civil and criminal fines and penalties can be imposed. Lastly, the government can suspend or debar the company from obtaining new contracts for a period of time, and employees may be barred from working on government contracts or even imprisoned.

Contract Claims

- **2.63** A number of events in the performance of a contract may lead to claims for compensation by a contractor. The changes clause of a government contract allows the government to impose changes in contract performance, whether in the product, or delivery, or otherwise. The changes clause also entitles the contractor to reimbursement for any additional allowable incurred cost as a result of the government's required change in performance.
- **2.64** A change order is a directive by the government to perform work not called for in the original contract or at a time or in a manner that is inconsistent with the terms of the original contract. As noted above, the mechanism for initiating change orders is the changes clause in each government contract. The changes clause gives the government a unilateral right to impose revisions as long as those revisions are within the general scope of the contract. The contractor is required to proceed with the changed work, and any dispute regarding the change is to be settled pursuant to the disputes clause of the contract. If the contractor fails to proceed with the changed work, the government may terminate the contract for default.
- **2.65** Under the changes clause, the contractor is entitled to an equitable adjustment to the contract price, the delivery schedule, or both. The equitable adjustment covers both direct and indirect impact-type costs. Indirect costs are generally the most difficult costs to quantify.
- **2.66** By virtue of the flow-down provision typically included in subcontracts, the subcontractor is required to comply with the provisions of most of the clauses included in the prime contractor's contract with the government. However, the subcontractor has no privity of contract with the government, although the subcontractor is required to comply with the changes clause. The

subcontractor's right of recourse is principally with the prime contractor or, in the case of a second-tier subcontractor, with the contracting party.

- 2.67 Government contract change orders present problems similar to those experienced by commercial contractors. However, the nature of the government procurement process typically results in more frequent change orders (formal and constructive), particularly when contracts cover technologically advanced and sophisticated products. In addition, government regulations require contractors to provide detailed cost or pricing data as the basis for negotiating the price of the change with the government.
- 2.68 Other contractor claims may occur from a number of different causes, including government actions, such as providing defective specifications, making late delivery of government-furnished materials, and not making facilities available in a timely fashion. Contractors are entitled to claim the cost effect on performance under the contract due to such government actions.
- 2.69 The contractor is responsible for making a timely claim and submitting a claim proposal. For changes in performance, the claim reflects the difference in cost between expected performance cost under the contract and the expected cost under the revised performance requirements. Other claims proposed by the contractor should reflect the expected cost effects of the changed circumstances.
- 2.70 In the event of a disagreement between the contractor and the government over the contractor's legal entitlement to an equitable adjustment or the amount of the adjustment, the disputes clause of the contract requires the contractor to submit its claim in writing to the contracting officer for equitable adjustment. If the claim exceeds the amount specified in the regulations, the contractor is required to certify the following: the claim is made in good faith, the supporting data are accurate and complete to the best of the contractor's knowledge and belief, and the amount claimed accurately reflects the contract adjustment for which the contractor believes the government is liable.
- **2.71** Accounting and auditing guidance related to claims are covered in chapters 3 and 4, respectively.

Terminations

- 2.72 As discussed in chapter 1, there are two principal types of terminations: termination for convenience and termination for default. Termination for convenience is similar in concept to a contract change because the government has the right to change the scope of the contract by terminating all or a portion of the remaining work under the contract. As with other changes, the contractor is entitled to the cost attributable to the termination action. However, the contractor has additional rights under a termination for convenience not pertaining to a change. For this reason, there may be disagreements between the government and the contractor concerning the distinction between changes and partial terminations for convenience.
- 2.73 Terminations for default occur when a contractor has defaulted on some term, condition, or requirement of the contract, for example, late delivery or delivery of a product that does not meet specifications. Before the contracting officer can terminate the contract, he or she must issue a cure notice that provides the contractor with a stated period of time to correct the deficiency. If the contractor does not correct the deficiency, the government has the right to terminate and reprocure from other sources the items previously expected to be delivered under the contract. The contractor would be

obligated to reimburse the government for the amount by which the aggregate of reprocurement costs and costs previously reimbursed to the contractor exceeded the contract price.

2.74 In a termination for convenience, the contractor is entitled to recover all costs incurred to the termination date, plus other costs not recovered at termination (for example, start-up costs and ongoing costs not able to be discontinued, such as rental costs or restoration of rental property). In addition, the contractor is entitled to settlement costs related to the contractor's duties and responsibilities under a termination, including the preparation and the submission of a termination settlement proposal. All costs incurred in connection with the settlement of the termination, including the effort to inventory and control property under the contract, to terminate subcontracts, and to prepare and submit the settlement proposals, are treated as direct costs of the settlement. Many of the costs incurred are normally indirect or administrative in nature, including legal, accounting, and other professional services; consequently, accurate records should be kept of the time spent and costs incurred.

2.75 In terminations for convenience, allowable costs are established by FAR subsection 31.205-42, "Termination Costs," and other parts of the FAR cost principles. Profit is allowed on the costs incurred on unfinished work that has been terminated. No profit is allowed on settlement costs. Losses related to work already performed and anticipated profits on work not performed due to termination are not reimbursed.

Suspension and Debarment

2.76 In addition to the significant civil and criminal penalties associated with fraud convictions, contractors are subject to suspension or debarment proceedings. Debarment proceedings can be instituted against a contractor who has either been convicted of a criminal offense or lost a civil fraud case. However, a contractor may be debarred for an alleged violation of a contract that is so serious and compelling in nature that it affects a contractor's responsibility without a prior criminal conviction or civil judgment.

2.77 Suspension or debarment generally will preclude the awarding of new contracts or extension of existing contracts. For contractors performing a significant amount of business with the government, suspension or debarment probably will have a substantial effect on earnings capacity and may affect the ability of the enterprise to continue in business.

Chapter 3

Financial Reporting Considerations

Income Determination

3.01 Because there are many unique aspects to long-term government contracts, it is especially important to be cognizant of the related accounting principles to properly recognize revenues and expenses in a consistent manner for financial reporting purposes. This chapter summarizes the basic accounting principles and practices related to the recognition of revenues and expenses for government contracts in general and other types of contractual arrangements involving contractors and the government.

Revenue Elements

3.02 Revenue generally is recognized when the activity surrounding the sale of products or rendering of services is complete or virtually complete and an exchange has taken place. However, revenue is sometimes recognized as performance progresses. This exception is based on the consensus that a better measurement of periodic income results. Chapter 11, section A, paragraph 13, of Accounting Research Bulletin (ARB) No. 43, *Government Contracts*, states the following:

It is, however, a generally accepted accounting procedure to accrue revenues under certain types of contracts [cost-plus-fixed-fee (CPFF)] and thereby recognize profits, on the basis of partial performance, where the circumstances are such that total profit can be estimated with reasonable accuracy and ultimate realization is reasonably assured. Particularly where the performance of a contract requires a substantial period of time from inception to completion, there is ample precedent for pro rata recognition of profit as the work progresses, if the total profit and the ratio of the performance to date to the complete performance can be computed reasonably and collection is reasonably assured. Depending upon the circumstances, such partial performance may be established by deliveries, expenditures, or percentage of completion otherwise determined. This rule is frequently applied to long-term construction and other similar contracts; it is also applied in the case of contracts involving deliveries in installments or the performance of services. However, the rule should be dealt with cautiously and not applied in the case of partial deliveries and uncompleted contracts where the information available does not clearly indicate that a partial profit has been realized after making provisions for possible losses and contingencies.

3.03 In addition to the accounting for CPFF contracts covered in ARB No. 43, AICPA Statement of Position (SOP) 81-1, Accounting for Performance of Construction-Type and Certain Production-Type Contracts, which applies to government contractors, contains specific guidance on accounting for certain types of long-term contracts. Paragraphs 53 through 67 of SOP 81-1 cover the major factors and the recommended procedures for estimating, measuring, and accounting for contract revenue. As noted in paragraph 54, the "major factors that must be considered in determining total estimated revenue include the basic contract price, contract options, change orders, claims, and contract provisions for penalties and incentive payments, including award fees and performance incentives. [Furthermore, all] those factors and other special contract provisions must be evaluated throughout the life of a contract in estimating total contract revenue to recognize revenues in the periods in which they are earned under the percentage-of-completion method of accounting."

Cost Elements

3.04 Paragraph 80 of Financial Accounting Standards Board (FASB) Statement of Financial Accounting Concepts (SFAC) No. 6, *Elements of Financial Statements*, states that expenses are "outflows or other using up of assets or incurrence of liabilities (or a combination of both) from delivering or producing goods, rendering services, or carrying out other activities that constitute the entity's ongoing major or central operations. [footnote deleted]" Although G&A costs generally would be classified as expenses under this definition, government contractors frequently allocate G&A costs to government contract inventories as indirect costs to the extent such costs are allowable under government procurement regulations.

3.05 Support for this practice is contained in paragraph 10 of ARB No. 45, *Long-Term Construction-Type Contracts*, which concludes the following:

When the completed-contract method is used, it may be appropriate to allocate general and administrative expenses to contract costs rather than to period income. This may result in a better matching of costs and revenues than would result from treating such expenses as period costs, particularly in years when no contracts were completed. It is not so important, however, when the contractor is engaged in numerous projects and, in such circumstances, it may be preferable to charge those expenses as incurred to periodic income. In any case, there should be no excessive deferring of overhead costs, such as might occur if total overhead were assigned to abnormally few or abnormally small contracts in process.

3.06 Another exception to the definition of expenses contained in paragraph 80 of SFAC No. 6 may occur in cost-type contracts when reimbursable costs, including G&A expenses, and fees are the determinants for the amount of recorded revenue. In those cases, all allowable unbilled costs are often included in contract costs rather than some portion of unbilled costs being charged to period income.

3.07 Maintaining a reasonable degree of accuracy in identifying, estimating, and accumulating contract costs is essential in determining the amount of income earned. Although the systems and procedures used to account for costs are diverse, the objective of each system or each set of procedures should be to accumulate costs consistently in a manner permitting the identification of contract revenues and related costs. Contract costs represent all direct costs and certain indirect costs incurred in the performance of a contract. Paragraphs 68 through 72 of SOP 81-1 address the accounting for costs incurred pursuant to a contract.

3.08 Precontract costs, or costs incurred in anticipation of a contract, may arise in a variety of situations, including those listed below:

- Engineering, design, mobilization, or other services performed on the basis of commitments or other such indications of interest
- Costs for production equipment and materials relating to specific anticipated contracts
- Costs incurred to produce goods in excess of contractual requirements in anticipation of follow-on orders or undefinitized options
- Start-up or learning costs incurred for anticipated but unidentified contracts

3.09 Precontract costs should be accounted for in conformity with paragraph 75 of SOP 81-1. The recoverability of precontract costs as allowable under U.S. Government contracts is prescribed by FAR 31.205-32.

Determining a Basic Accounting Policy for Government Contracts

Selection of Accounting Policy

- **3.10** Paragraph 21 of SOP 81-1 states that "the basic accounting policy decision is the choice between the two generally accepted methods: the percentage-of-completion method, including units-of-delivery, and the completed-contract method. [Furthermore, the] determination of which of the two methods is preferable should be based on a careful evaluation of the circumstances because the two methods should not be acceptable alternatives for the same circumstances."
- **3.11** Percentage-of-completion method. Under this method of accounting, revenues and costs associated with a contract are recognized as work on the contract progresses. In this regard, paragraph 22 of SOP 81-1 concludes the following:

The percentage-of-completion method recognizes the legal and economic results of contract performance on a timely basis. Financial statements based on the percentage-of-completion method present the economic substance of a company's transactions and events more clearly and more timely than financial statements based on the completed-contract method, and they present more accurately the relationships between gross profit from contracts and related period costs. The percentage-of-completion method informs the users of the general purpose financial statements of the volume of economic activity of a company.

- **3.12** The circumstances appropriate to selection of the percentage-of-completion method and the hazards involved in developing reasonable contract estimates are discussed in paragraphs 23 through 25 and 26 through 29, respectively, of SOP 81-1.
- **3.13** Completed-contract method. As stated in paragraph 30 of SOP 81-1, income under the completed-contract method is "recognized only when a contract is completed or substantially completed." Accordingly, "billings and costs are accumulated on the balance sheet [during the period of performance], but no profit or income is recorded before completion or substantial completion of the work." Consequently, this method "precludes reporting on the performance that is occurring under the enforceable rights of the contract as work progresses."
- **3.14** The circumstances leading to the use of the completed-contract method are discussed in paragraphs 31 through 33 of SOP 81-1. In addition, paragraph 52 of the SOP sets forth recommendations on procedures for determining when a contract is substantially completed under the completed-contract method.
- **3.15** Measures of progress. In applying the percentage-of-completion method, "meaningful measurement of the extent of progress toward completion is essential since this factor is used in determining the amounts of estimated contract revenue and estimated gross profit that will be recognized as earned in any given period." Paragraphs 44 and 45 of SOP 81-1 describe several acceptable methods for measuring progress toward completion. They include the cost-to-cost method, variations of the cost-to-cost method, efforts-expended method, units-of-delivery method, and units-of-work-performed method. Criteria for selecting those methods are discussed in paragraphs 46 through 51 of SOP 81-1, which groups the various methods into input and output measures.

3.16 As noted in paragraph 44 and footnote 8 of SOP 81-1, paragraph 4 of ARB No. 45 provides guidance about the recognition of income under the percentage-of-completion method. However, ARB No. 45 also indicates a possible need to adjust costs if alternative (a) of paragraph 4 of the ARB is used. The ARB qualifies the statement relative to costs incurred to date by concluding in paragraph 4:

Costs as here used might exclude, especially during the early stages of a contract, all or a portion of the cost of such items as materials and subcontracts if it appears that such an exclusion would result in a more meaningful periodic allocation of income. . . .

- **3.17** The above qualification takes into account situations in which substantial quantities of materials may have been acquired but not used. For example, materials acquired to date to perform under a fixed-price contract may represent 15 percent of total estimated costs. In terms of work performed, however, the contract may only be 5 percent complete. In these circumstances, income recognized as allocable to the period should be related to only 5 percent of the total, not 15 percent.
- **3.18** On the other hand, alternative (b) of paragraph 4 permits the use of an alternative measure of progress when a more meaningful income allocation would result. For example, the stage of completion of engineering contracts may be more appropriately measured by engineering estimates of progress than the relationship of costs incurred to total estimated costs.
- 3.19 Under an output measure, such as units-of-delivery, unit sales values and costs are used to record sales and cost of sales. A number of practices in determining sales may be used to apply this measure of contract progress. For example, sales may be recorded as deliveries are made based on the unit sales value stated in the contract. Sales also may be recorded based on an average unit sales value determined by dividing the contract sales value by the number of units called for by the contract. Cost of sales for units delivered may be based on actual unit cost or average cost, which is usually determined by dividing total estimated cost at completion by the number of units to be produced. In the performance of production contracts, it is common for the actual cost per unit to decline over the life of the contract. For this reason, some contractors prefer the average-unit-cost approach. Others prefer to use actual costs for purposes of determining cost of sales. If, in the early stage of deliveries, actual unit cost is higher than unit sales value, unit cost of sales sometimes is recorded at an amount not in excess of unit sales price. The excess of actual costs over recorded sales is deferred and spread over units remaining after the break-even point is reached. However, an estimated loss on the overall contract should be recognized in the current period (see paragraph 3.35 herein).
- **3.20** The costs of various operating activities are often treated differently within a contract. For example, manufacturing or assembly costs may be charged according to the actual costs of identified units, whereas the cost of engineering, manufacturing, planning, and tooling considered applicable to all units may be allocated ratably over all units to be produced. Although the variations that may be encountered are too numerous to cover in this chapter, the independent auditor should be aware of the existence of such differences and obtain a comprehensive understanding of the contractor's cost accounting practices.
- **3.21** Price-redeterminable and economic-price-adjustment contracts provide for price adjustments based on cost or other considerations. The probable effects of adjustments should be reflected in total revenue estimates as the estimates are revised based on current information and expectations.

Change in Accounting Policy

3.22 When a contractor changes from the completed-contract method to the percentage-of-completion method, or vice versa, the change in accounting policy, if material, should be accounted for in conformity with paragraph 27 of Accounting Principles Board Opinion (APB) No. 20, Accounting Changes, which requires restatement of prior years' financial statements. In addition, a change in the application of a policy (for example, a change from the cost-to-cost method to the units-of-delivery method) represents a change in accounting principle to be reported in conformity with paragraphs 19 through 22 of APB Opinion No. 20, which require the cumulative effect of the change to be recognized in the year in which the change occurs. The section on contract cost estimates also discusses accounting for changes in estimated contract costs.

Combining and Segmenting Contracts

- **3.23** To recognize the appropriate amount of income in a given accounting period, consideration also should be given to combination and segmentation of contracts. The criteria for combining and segmenting contracts are set forth in paragraphs 34 through 42 of SOP 81-1.
- **3.24** The issue of combining or segmenting contracts may go beyond the contract level, per se, and needs to be addressed at the change order, option, or addition level. For example, production-type contracts may have follow-on provisions in the form of options. In such cases, an analysis should be performed in light of the criteria outlined in SOP 81-1 to determine the propriety of combining these contract addendums for profit recognition purposes. Segmenting the option from the basic contract may be required if the product to be provided pursuant to the contract option, or the contract option price and cost relationship, differ significantly from those of the existing contract. Accounting for change orders and contract options and additions is discussed in paragraphs 61 through 64 of SOP 81-1.
- **3.25** For gross profit on contracts to be appropriately and consistently reported in conformity with SOP 81-1, it is important that the criteria for combining and segmenting contracts be applied consistently to contracts with similar characteristics in similar circumstances.

Contract Incentives

- **3.26** Government contracts may contain certain incentives and award fees that provide for increasing (upward adjustment) or decreasing (downward adjustment) the fee for cost-type contracts or the target profit for fixed-price-type contracts. These provisions for incentives and award fees are generally based on (a) the relationship of actual contract costs to an agreed-upon target cost or (b) some measure of contract performance (for example, speed, distance, or accuracy) in relation to agreed-upon performance targets. Consequently, the contractor's profit allowance is adjusted upward (increased) when actual costs are less than agreed-upon cost targets. Similarly, the profit allowance is adjusted upward (increased) when actual performance (in terms of speed, distance, accuracy, and so forth) exceeds agreed-upon performance targets. Conversely, the contractor's profit allowance is adjusted downward (decreased) when actual results (in terms of either cost or performance targets) do not meet the established cost or performance targets.
- **3.27** A basis frequently exists for the reasonable prediction of performance in relation to established targets. In those circumstances, the effect of the upward or downward incentive adjustment should be recorded in a manner consistent with the accounting method used for the contract. Situations when

performance may not be reasonably predictable may involve either a single opportunity to accomplish a test or a demonstration in accordance with established performance criteria or award fees that may be both determined solely by the government and subject to retroactive adjustment after evaluation of the contractor's performance.

3.28 The recognition of revenue on contracts containing provisions for incentives and award fees should be in conformity with SOP 81-1. Paragraph 23 of the SOP concludes that "the use of the percentage-of-completion method depends on the ability [of the contractor] to make reasonably dependable estimates." Furthermore, as noted in paragraph 3.05 of this guide, all components of contract revenue—including basic contract price, contract option, change orders, claims, and incentive payments, such as award fees and performance incentives—should be considered in determining total estimated revenue. Thus, contractors must be able to make reasonably dependable estimates of incentives or award fees to consider them in determining total estimated contract revenue. However, the mere existence of provisions for incentives or award fees should not be considered presumptive evidence that such incentives or award fees are to be included automatically in determining total estimated revenue. In some instances, the contractor may not be able to reliably predict whether performance targets will be met and, consequently, will be unable to reasonably estimate the amount to be received under the incentive or award-fee provisions. In such cases, revenues related to the performance incentives or award fees should be excluded from the determination of total estimated revenue.

3.29 In the case of cost incentives, an assessment of whether actual costs will meet targeted cost objectives is based on the contractor's ability to make reasonably dependable estimates of costs to complete, which, as noted in paragraph 3.28, is one of the factors to be considered for using the percentage-of-completion method. In the case of performance incentives, assessing whether actual performance will produce results that meet targeted performance objectives may require substantial qualitative judgment and experience with the types of activities covered by the contract. However, these estimations of expected performance vis-à-vis targeted performance are not unlike the processes used to estimate percentage-of-completion and, therefore, are consistent with the concept of accounting for contracts under the percentage-of-completion method prescribed in SOP 81-1.

Contract Cost Estimates

3.30 The task of estimating total costs to be incurred in the completion of a contract requires evaluation of all available data and is affected by many factors including, but not limited to, the following:

- Current actual costs of contract performance
- Changes in cost of materials not covered by firm purchase orders to be purchased in the future
- Changes in cost of labor, including fringe benefits, that may be experienced in the future
- Changes in indirect costs, such as manufacturing and engineering overhead and general and administrative expenses
- Advance agreements and cost-sharing arrangements with the government, including recoverability of company-sponsored research and development expenses:
- Production efficiencies, in other words, the effects of the learning curve

- Fluctuations in the total production activity and the resulting effect on allocation bases for the various indirect costs
- Specific contract provisions, such as performance requirements, warranties, and damages
- Changes in the cost of subcontracts
- Technical problems encountered in performing the contract
- Contract changes
- **3.31** Because of the complexities involved in estimating contract costs, the participation of financial, engineering, manufacturing, and other technical departments normally will be necessary to determine the remaining costs to be incurred in the performance of the contract. In the case of more complex contracts, computer-based simulation models are sometimes used to support contract cost estimates. Paragraphs 69 through 72 of SOP 81-1 discuss the general principles of accounting for contract costs.
- **3.32** Contract cost estimates change as contract modifications occur, as more experience is acquired, and as additional information is obtained. Therefore, accounting estimates should be reviewed and updated regularly over the term of contract performance. The updates may vary in degree from refining estimates at the major cost element level to generating a completely revised contract cost estimate at the cost-center level. The frequency of such review and updating may depend on financial, contractual, or other reporting requirements.
- **3.33** Assuming the percentage-of-completion method is used, a change in the estimate of total contract cost could cause a change in the fee-accrual rate for a cost-type contract or a change in the profit-accrual rate for a fixed-pricetype contract for financial reporting purposes. Paragraphs 82 through 84 of SOP 81-1 discuss accounting for such changes, and paragraph 83 states that such changes should be accounted for in conformity with paragraphs 31 and 32 of APB Opinion No. 20. Consequently, the cumulative effect of the change should be included in the accounting period in which the change is made. This is accomplished by adjusting the total amount of fee or profit recorded to date to bring that amount into agreement with the amount that would have accrued had the newly determined fee or profit rate been applied in all earlier accounting periods. Under this method, the amount of accrued fee or profit at any point in time should be in conformity with the current cost estimate for that contract. This method is consistent with the percentage-of-completion method based on the relationship of incurred costs to estimated total costs after giving effect to estimates based on the most recent information.

Provisions for Anticipated Losses on Contracts

- **3.34** The following section summarizes the recommended accounting for provisions for anticipated losses on contracts contained in paragraphs 85 through 89 of SOP 81-1. The major provisions of those paragraphs require losses on contracts to be—
 - Accrued when the losses become evident, regardless of the method of accounting for the contract.
 - Computed on the basis of the total estimated cost to complete the contract and should reflect all elements of costs included in contract costs in conformity with paragraph 72 of SOP 81-1.
 - Deducted first from any related accumulated costs included in the balance sheet and the balance, if any, shown separately as a liability.

- Included in the income statement as an element of contract costs rather than as a reduction of contract revenue.
- **3.35** As noted previously, losses on contracts should not be allocated to future periods by spreading them over the remaining life of the contract. Furthermore, losses should not be deferred in expectation of future or follow-on contracts or in anticipation that the customer will exercise options for the delivery of additional units, components, or spare parts. In those cases in which it is probable that an unexercised contract option will be exercised and a loss will be incurred in connection with the performance thereof, a provision for loss should be recorded; however, determining whether a contract loss provision should be recorded can be significantly affected by the definition of the profit center for revenue recognition purposes and the application of the contract combination and segmentation criteria of paragraphs 34 through 42 of SOP 81-1.
- **3.36** When a contractor manufactures quantities for inventory in excess of contract requirements, the costs of production should be allocated appropriately between the contract and other inventory costs. The contractor should assess the recoverability of the costs of producing the inventory in determining whether such costs should be classified as assets under SFAC No. 6.
- 3.37 Some government contractors may incur research and development costs in connection with products that may be sold both commercially and under government contracts. FASB Statement No. 2. Accounting for Research and Development Costs, requires all research and development costs not directly reimbursable by others or R&D costs indirectly reimbursable under the terms of a contract (for example, allowable IR&D costs) to be charged to expense when incurred. Consequently, a contractor should determine whether R&D costs allocable to government products are allowable under terms of the contract. Those costs may not be allowable by FAR unless the government contract or some other agreement specifically provides for them. Frequently, contractors enter into IR&D advance agreements with the government, which provide for recovery of such costs from government contracts up to a stated ceiling amount allocated ratably to all of the contractor's business. Expenditures in excess of the ceiling are not allowable for government contract purposes and are considered as a contractor's expense in the period in which they are incurred.

Contract Terminations

3.38 As discussed in chapters 1 and 2, government contract termination clauses are unique and, therefore, involve special accounting and reporting considerations.

Termination for Convenience

- **3.39** Accounting for convenience terminations should reflect the rights established in the contract and in the procedural rules for such terminations. Such rights result in claims under the contract requiring recognition for accounting purposes in a manner substantially equivalent to the percentage-of-completion method.
- **3.40** The income effects of a termination for convenience should be recognized when the amounts associated with the contract can be reasonably determined. Both allowable and unallowable costs (as defined in the applicable procurement regulations and discussed in chapter 2) should be charged to expense. Revenue from the claim should be recognized on the basis of allowable costs only.

3.41 Subcontractor and other vendor claims should be recorded as liabilities at the estimated amounts payable in conformity with the provisions of FASB Statement No. 5, *Accounting for Contingencies*. To the extent such amounts are recoverable by the prime contractor, they should be included as part of the claim.

Termination for Default

3.42 The rights of the contracting parties in a default termination differ significantly from those in a convenience termination; consequently, the accounting must reflect these differences. Accordingly, contractors should record, in addition to normal contract liabilities, those liabilities arising from a default termination (for example, damages, excess reprocurement costs, and progress payments to be repaid). Termination for default may result in a reduction of previously recorded earnings. In such cases, adjustments of prior-period amounts are not appropriate; instead, the resulting income effect should be included in the loss on termination of the contract in the current period as a change in an accounting estimate in conformity with APB Opinion 20. If material in amount, such loss should be reported as a separate item in the income statement or otherwise disclosed in the notes to the financial statements in conformity with FASB Statement No. 5.

Financial Statement Presentation

- 3.43 Generally, the effect of a contract termination should be reflected in the financial statements of the contractor in the period in which the termination occurs, or earlier if the termination is a subsequent event occurring prior to issuance of the financial statements and attributable to conditions that existed at the date of the balance sheet. However, if sufficient information is not available to predict the effect of a very recent termination, then the best information available should be disclosed in the notes to financial statements in conformity with FASB Statement No. 5.
- **3.44** Significant items of a known controversial nature also should be disclosed in the notes to financial statements, although estimates of ultimate amounts to be realized may not be determinable. The government contractor is subject to a degree of risk different from its commercial counterpart because of the unilateral contract right of the government to terminate a contract. When there are indications that a contract termination may occur and the termination would have a material effect on the contractor's operations, disclosure of the circumstances and the potential effects should be made in the notes to financial statements. Indicators of a potential contract termination include notice of a possible termination, contract performance problems, procurement cutbacks, and so forth.
- **3.45** Significant uncertainties may exist about the recoverability of costs in a termination claim, particularly in cases of termination for default. Such termination may create additional uncertainties regarding possible liabilities for damages or excess reprocurement costs. As required by paragraphs 8 through 10 of FASB Statement No. 5, a determination should be made about the probability that a loss has been incurred and whether an amount can be estimated. Based on this determination, such liabilities should be recorded or disclosed.

Other Contracts, Arrangements, and Related Accounting Considerations

3.46 Under some contracts, the contractor may act in an agency or similar administrative capacity that makes it inappropriate to report reim-

bursable costs as sales. For example, a contractor may operate a government-owned facility in an agency capacity for which the contractor will be reimbursed for costs of operations and receives a fee for performing the management service. In such situations, chapter 11, section A, paragraphs 19 and 20, of ARB No. 43 would require the contractor to record only the fee in sales or revenues.

3.47 Contracts requiring the government to furnish (or requiring the contractor to act as agent for the government to purchase) materials or equipment may also raise questions about whether the costs of the items furnished should be included in the contractor's sales and cost of sales. Paragraph 60 of SOP 81-1 indicates that, as a general rule, revenues and costs should include all items for which the contractor has an associated risk, including items on which its contractual fee is based.

3.48 Given the general rule that recognition of sales and cost of sales is based upon the contractor's assumption of risk, questions of accounting may arise when subcontract costs or the cost of special equipment to perform the contract, even though included in the contract price, represent such a substantial amount in relation to the contractor's other costs of performance that inclusion of such costs in sales and costs of sales might distort significantly the contractor's volume of activity. For example, the contractor may be under contract to produce specific goods for which unique facilities also need to be constructed under separate contract with the government. In this case, it may be preferable to exclude such costs from sales and costs of sales, as the construction of facilities is not the contractor's normal activity and the costs are not a part of the production contract. How those costs should be reported by the contractor should be based on the terms of the contractual arrangements and the approach providing the more useful financial information. In those instances in which such costs are appropriately excluded from sales and cost of sales, the general nature of the related transactions (if material) and the accounting policy applied thereto should be disclosed in the notes to the financial statements.

Fixed-Price Best-Efforts R&D Cost-Sharing Arrangements

3.49 Contractors also may enter into contractual arrangements in which the customer agrees to share the estimated costs of certain R&D activities (for example, the development of a prototype for new or advanced weapons systems). The discussion and conclusions of this section relate only to arrangements in which the federal government is the sole or principal expected ultimate customer (including foreign military sales) for the research and development or for products directly resulting from the R&D activity subject to the arrangement, and do not relate to projects in which federal government funding is incidental. Under the types of arrangements discussed herein, the contractor is obligated contractually to perform only on a best-efforts basis to achieve the agreed-upon objectives of the research and development activity; that is, a product (or service) meeting certain defined performance or other (such as design) specifications is not required to be delivered under the contractual arrangement. In addition, the parties to the contract anticipate that the aggregate costs of the R&D activity specified in the agreement will exceed the amounts funded by the customer. Nonetheless, the contractor benefits from both lower net R&D costs and the retention of rights to the R&D results. The knowledge gained from such R&D activities may be used by the contractor in future production activities, including "follow-on contracts" for full-scale production of products based on the prototypes or models developed during the R&D phase. At the same time, the customer benefits from the arrangement by receiving a nonexclusive right to the results of the R&D effort. Consequently, the customer is able to encourage the contractor to focus its R&D efforts on activities important to the customer's long-range, strategic objectives in areas such as national defense.

- **3.50** Paragraph 8 of FASB Statement No. 2 defines research and development as follows:
 - a. Research is planned search or critical investigation aimed at discovery of new knowledge with the hope that such knowledge will be useful in developing a new product or service (hereinafter product) or a new process or technique (hereinafter process) or in bringing about a significant improvement to an existing product or process.
 - b. Development is the translation of research findings or other knowledge into a plan or design for a new product or process or for a significant improvement to an existing product or process whether intended for sale or use. It includes the conceptual formulation, design, and testing of product alternatives, construction of prototypes, and operation of pilot plants. It does not include routine or periodic alterations to existing products, production lines, manufacturing processes, and other ongoing operations even though those alterations may represent improvements and it does not include market research or market testing activities.

Paragraph 9 of FASB Statement No. 2 provides the following examples of the various types of activities that "typically would be included in research and development in accordance with paragraph 8 [of FASB Statement No. 2]":

- a. Laboratory research aimed at discovery of new knowledge
- Searching for application of new research findings or other knowledge
- Conceptual formulation and design of possible product or process alternatives
- d. Testing in search for or evaluation of product or process alternatives
- e. Modification of the formulation or design of a product or process
- Design, construction, and testing of preproduction prototypes and models
- g. Design of tools, jigs, molds, and dies involving new technology
- h. Design, construction, and operation of a pilot plant that is not of a scale economically feasible to the enterprise for commercial production
- Engineering activity required to advance the design of a product to the point that it meets specific functional and economic requirements and is ready for manufacture.
- 3.51 Although accounting for the costs of R&D activities conducted for others under a contractual arrangement is not covered by FASB Statement No. 2, the types of activities (and contractual arrangements) described in paragraphs 350 and 351 are not performed for the purposes of designing, engineering, fabricating, constructing, and manufacturing tangible assets (product). Instead, such activities are undertaken with the expectation that the results of the R&D effort may be used in future production applications.
- **3.52** The committee believes that arrangements involving the types of activities described in paragraph 3.49 are different from production-type

contracts covered in SOP 81-1 and that such activities are research and development as previously defined in paragraph 3.50. Consequently, the committee believes that contract accounting principles do not apply to those arrangements meeting all of the following conditions:

- Activities performed in connection with the contractual arrangement qualify as research and development as defined by FASB Statement No. 2.
- b. The contractor retains a right to the data and results of the research and development activities.
- c. The contractual arrangement obligates the contractor to perform only on a best-efforts basis to achieve the agreed-upon objectives of the research and development activity, rather than to deliver a product or service meeting defined performance or other (such as design) specifications.
- d. At the inception of the contract, the contractor and the customer enter into the arrangement with the expectation that costs will be incurred in excess of amounts to be funded. This condition will be met if contractual or other documentation specifically evidences acknowledgment of this expectation by both the contractor and the customer. Implicit in this condition is the existence of significant uncertainty at the date the contractor enters into the arrangement regarding the likelihood of successfully securing follow-on contracts related to the research and development activity.
- e. The research and development arrangement is not combined with other contracts or segmented in accordance with paragraphs 35 through 42 of SOP 81-1.
- f. The federal government is the sole or principal expected ultimate customer (including foreign military sales) for the research and development activity or products directly resulting from the R&D activity subject to the arrangements.
- **3.53** The types of arrangements described in paragraph 3.49 should be recognized as R&D expense as incurred in conformity with FASB Statement No. 2. Furthermore, because of the cost-sharing nature of these fixed-price R&D arrangements, the amounts funded by the customer should be recognized as an offset to the contractor's aggregate R&D expense rather than as contract revenues. The following simplified example illustrates the accounting entries for recording these types of transactions.

Assumptions

 Estimated aggregate cost to be incurred by contractor in the specified R&D activity

\$110

Anticipated reimbursement from customer

\$100

- As of the current reporting date 50% of the estimated aggregate costs have been incurred
- Customer has paid 30 percent of its pro rata funding

Accounting Entries

R&D Expense

\$55

Cash

\$55

To record expenditures for R&D in connection with the XYZ project.

35

Cash	15
R&D Expense	50

To record amounts receivable and collections of receivables from customer in connection with the XYZ project.

- **3.54** If any of the conditions described in paragraph 3.52 is not met, the types of arrangements described in paragraph 3.49 should be accounted for in conformity with the guidance contained in the section of this guide regarding the determination of a basic accounting policy for government contracts. In other words, contracts to deliver a product or perform a service to the buyer's specifications should be accounted for under the percentage-of-completion method or, if appropriate, the completed-contract method of accounting. Provisions for losses from such arrangements should be made in the period in which they become evident. In those instances where this method of accounting is appropriate, the auditor should consider the audit considerations relating to billed and unbilled receivables as discussed in paragraphs 4.127 through 4.133.
- **3.55** Financial statement disclosures for the types of research and development arrangements described in paragraph 3.49 should provide sufficient information to enable financial statement users to assess the potential impact of future commitments upon the earnings and cash flows of current and future accounting periods.
 - 3.56 Such disclosures should include—
 - a. Significant terms and conditions of the research and development arrangements (including estimated total contract expenditures and customer funding), a general description of the activities to be performed under the arrangement, any unusual contractual commitments or funding contingencies, and a description of the accounting policy for such research and development arrangements.
 - b. The net amount of research and development costs incurred for such arrangements and the amount of customer funding recorded as an offset to such costs for each period an income statement is presented.

Program Accounting

Receivable

- **3.57** Program accounting is a method of accounting for the costs of certain products manufactured for delivery under production-type contracts. Under this method, costs are accumulated and accounted for by programs rather than by individual units or individual contracts. A program consists of the estimated number of units of a product to be produced by an enterprise in a continuing, long-term production effort for delivery under existing and anticipated contracts. The program is used as the accounting cost center for accumulating costs and allocating costs to cost of sales.
- **3.58** In practice, the program method of accounting has had very limited applications, such as in major commercial aircraft production sold to commercial (or, in some cases, commercial and government) customers. It is not often used because of (a) the significant uncertainties associated with making reasonably dependable estimates of the total number of units to be produced and sold, (b) the length of time to produce and sell them, and (c) the associated production costs and selling prices.
- 3.59 The unique aspects of the government procurement process make estimating the market and timing of deliveries extremely difficult. For exam-

ple, estimating quantities and prices of future purchases by the government would be affected directly by the amount and timing of funding allocated to the program. If funding were reduced or eliminated, the effect on the program could be substantial.

3.60 In addition, the government, rather than the contractor, often retains rights to tooling and design data. This limits the potential market of the contractor and increases the risk of estimating the total market for a program by narrowing its potential customer base. Therefore, the program method of accounting is not appropriate for government contracts or subcontracts except as provided in paragraph 3.58.

Contract Costs Included in Inventory

3.61 Practice varies among government contractors concerning the extent to which costs are included in inventory. Some contractors include in inventory all direct costs and only certain indirect costs—for example, allocated manufacturing and engineering overhead expenses. This practice is consistent with the belief of many accountants that certain expenditures do not fall within the definition contained in ARB No. 43 that defines inventory costs "generally as the price paid or consideration given to acquire an asset." Chapter 4 of ARB No. 43 also concludes that "general and administrative expenses should be included as period charges, except for the portion of such expenses that may be clearly related to production and thus constitute a part of inventory costs (product charges)."

3.62 Other contractors record as inventory all costs identified with the contract, including an allocation of general and administrative, research and development, and bidding and proposal expenses. This practice derives its support from the concept of matching revenues and expenses inasmuch as the negotiation of the price of a fixed-price-type contract specifically includes allocable costs deemed allowable under government procurement regulations. Therefore, many accountants believe that costs incurred pursuant to a government contract are associated directly with the contract's revenue, and both should be recognized in the same period. Additionally, any costs anticipated to be allocated to contract inventory should be included in the determination of the contract's estimated profit or loss. Periodic income should be approximately the same under either approach when the cost-to-cost or other similar input measure of the percentage-of-completion method is used. Theoretically, this will also be true for the completed-contract method. However, certain output measures of the percentage-of-completion method may result in substantially different periodic income under each of the practices previously described. A contractor's accounting practices with respect to costs included in inventory should be disclosed in the notes to financial statements.

Financial Statement Reporting and Disclosure

3.63 Financial statement reporting and disclosure requirements of government contractors generally do not differ from the requirements for other business enterprises. This section discusses reporting and disclosure practices unique to government contractors. These practices apply when sales or revenues made under government contracts and subcontracts constitute an important portion of the contractor's operations.

3.64 In addition to the authoritative pronouncements of the FASB, the AICPA, and regulatory agencies providing general standards of financial statement disclosure requirements, the Securities and Exchange Commission (SEC) issued Accounting Series Release (ASR) Nos. 138 and 164 and Financial

Reporting Release (FRR) No. $32.^1$ These SEC reporting policies provide specific guidance to publicly held companies regarding (a) long-term contracts and programs, (b) extraordinary, or material, unusual charges and credits to income, and (c) material provisions for losses.

Accounting Policies

3.65 Disclosure of significant accounting policies is required in the presentation of financial statements in conformity with APB Opinion No. 22, Accounting Policies. In adhering to this requirement, disclosures by government contractors include a description of the following accounting practices:

- Basis for stating amounts related to contracts in progress (including practices with respect to accounting for indirect costs)
- Methods of determining revenues and related costs (including the policies with respect to combining and segmenting contracts and the recognition of contract incentives)
- Methods of measuring extent of progress toward completion (when the percentage-of-completion method is used)
- Specific criteria used to determine when a contract is substantially complete (when the completed-contract method is used)

Receivables

3.66 Receivables from the U.S. government may include billed and unbilled amounts. Unbilled amounts arise when sales or revenues, though appropriately recorded, cannot be billed, yet under terms of the contract or when unit prices for items shipped have not been determined. Government contract receivables, if material, usually are shown separately from other receivables in the balance sheet (or otherwise disclosed). Unbilled amounts (net of unliquidated progress payments) should be stated separately when the amounts constitute a significant portion of the U.S. government contract receivables. The amount of progress payments offset against unbilled receivables should also be disclosed, if material.

3.67 Accounts receivable from customers other than the government often arise from prime contractor-subcontractor activity in connection with government contracts. These receivables require many of the same considerations concerning allowable costs, billable amounts, and other related matters as do receivables from the government under prime contracts. However, receivables of a subcontractor from a higher-tier contractor will also involve the usual credit and collection problems (which typically do not exist with respect to amounts receivable from the government) associated with normal commercial receivables.

Inventories and Partial Payments

3.68 In general, inventories related to government contracts represent costs accumulated under fixed-price-type contracts accounted for under the completed-contract method and certain output measures of the percentage-of-completion method. Costs under cost-type contracts or fixed-price-type contracts accounted for under most input measures of percentage-of-completion methods (such as cost-to-cost), even though accumulated in contract inventory-type accounts, are generally classified as unbilled receivables.

¹ The SEC subsequently incorporated certain ASRs into the Codification of Financial Reporting Policies (CFRP). ASR No. 138 was codified as section 216 of the CFRP, *Disclosure of Unusual Charges and Credits to Income*, and ASR No. 164 was codified as section 206 of the CFRP, *Disclosures Related to Defense and Other Long-Term Contract Activities*.

- **3.69** Most contractors bill contract amounts as promptly as practicable. Costs incurred under cost-type contracts usually are reimbursable and, therefore, are billed as incurred. In many fixed-price-type contract situations, the contractor receives some payment as work progresses. Such payments may be in the form of progress payments, payments made on the basis of partial delivery, or advance payments. Procurement regulations and contract provisions govern the form and timing of the payments.
- 3.70 Predominant practice among government contractors provides that progress payments received on fixed-price-type contracts are usually applied (by individual contract) first to amounts carried in unbilled receivables, with any remainder applied to accumulated costs of contracts in progress (inventories). This is based on the view that, pursuant to the standard progress payments clause contained in most government contracts, legal title to the related inventories vests with the U.S. government on the contractor's receipt of progress payments. However, some legal controversy exists: Some contractors believe that the standard progress payment clause entitles the U.S. government only to a lien or secured interest in the related inventory. If this controversy is resolved by a legal determination that the U.S. government receives only a secured interest in contract inventories, progress payments received should be accounted for as a financing transaction. Amounts representing progress payments billed but not yet received by the contractor are not shown in the balance sheet because it would be improper to show uncollected progress payments as an offset to inventories. Although advance payments differ from progress payments in that they are not related to progress of work on a contract, they are reported in a manner similar to progress payments. However, advance payments received in excess of unbilled receivables and accumulated costs are classified as a liability; if material, they are described typically by such captions as "advance payments on U.S. government contracts" or "amounts received in excess of costs incurred under U.S. government contracts."
- 3.71 If progress or advance payments have been received on contracts, the nature, the amount, the classification, and the existence of protective title to inventories under the contracts to which the payments relate are usually disclosed in the financial statements.

Balance Sheet Classification of Contract-Related Assets and Liabilities

- **3.72** The predominant practice among government contractors is to present classified balance sheets on the basis of one year or the operating cycle (if it exceeds one year).
- 3.73 For most contractors, the operating cycle is difficult to measure with precision because it is determined by contracts of varying durations. Chapter 3 of ARB No. 43 defines the operating cycle as "the average time intervening between the acquisition of materials or services entering [the production] process and the final cash realization."
- **3.74** The operating cycle of a contractor is determined by a composite of many individual contracts in various stages of completion. Thus, the operating cycle of a contractor is measured by the duration of contracts, that is, the average time intervening between the inception of contracts and the substantial completion of those contracts.
- **3.75** Chapter 3 of ARB No. 43 defines current assets and current liabilities in relation to the operating cycle. In applying these definitions, the predominant practice for contractors whose operating cycle exceeds one year is

to classify all contract-related assets and liabilities as current under the operating cycle concept and to follow the more specific guidance in ARB No. 43 in classifying other assets and liabilities. To promote uniformity of presentation and to narrow the range of variations in practice, contractors should follow the predominant practice in applying ARB No. 43. The following table is a list of assets and liabilities generally considered to be contract-related and are classified as current under the operating cycle concept.

Contract-Related Assets and Liabilities

Assets

Liabilities

Accounts receivable on contracts (including retentions)

Unbilled contract receivables

Costs in excess of billings and estimated earnings

Other deferred contract costs

Equipment and tooling specifically purchased for, and expected to be used solely on, an individual contract or group of related contracts Accounts payable on contracts (including retentions)

Accrued contract costs

Billings in excess of cost and estimated earnings

Advance payments on contracts

Obligations for equipment specifically purchased for, and expected to be used solely on, an individual contract or group of related contracts—regardless of the payment terms of the obligations

Provisions for losses on contracts (see paragraph 89 of SOP 81-1)

Income Statement Classification and Disclosures

3.76 The form and content (including descriptive captions) of the income statement for enterprises involved in government contracting are the same as for other business enterprises. Revenues, costs, and expenses are not segregated in the income statement between government and nongovernment business. However, certain other matters related to the operations of an enterprise involved in long-term government contracts may require disclosure in the notes to financial statements. These disclosures are covered in paragraphs 3.82 through 3.93.

3.77 The government contractor may be faced with significant problems in performing long-term contracts and estimating contract costs, profits, and losses. Those problems are often more severe for the contractor performing contracts that call for complex systems or involve significant technological advances. Although it is not possible to describe the many situations that may be encountered or indicate the specific financial statement disclosures that may be appropriate in each instance, the obligation exists to disclose information affecting the conclusions formed by a reasonably informed reader, including contingencies. Following are situations and types of information that affect income statement comparability and, therefore, may indicate a need for amplification in the notes to financial statements:

- Unusual or infrequent contract price adjustments
- Substantial provisions for loss
- Material changes in contract estimates
- Substantial incentive income
- Significant claims revenues
- Significant problems encountered in the performance of contracts materially affecting operations

Presentation of Statement of Cash Flows

- **3.78** FASB Statement No. 95, Statement of Cash Flows, establishes standards for cash-flow reporting. It requires a statement of cash flows as part of a full set of financial statements for all business enterprises in place of a statement of changes in financial position.
- 3.79 The form and content (including descriptive captions) of the statement of cash flows for government contractors are similar to those for other business enterprises. In the statement of cash flows, cash receipts and payments should be classified as relating to operating, investing, or financing activities. FASB Statement No. 95 provides definitions of each of these categories and encourages enterprises to report cash flows from operating activities directly by showing major classes of operating receipts and payments (the direct method). However, enterprises may report cash flows from operating activities by adjusting net income to reconcile it to net cash provided from operating activities (the indirect method). Many government contractors use the indirect method of reporting cash flows.
- **3.80** In reporting cash flows from operating activities, progress and advance payments received on contracts (and reported as offsets to contract receivables and inventories, as described in paragraph 3.71) should be reported gross, regardless of whether those payments have been applied against unbilled contract receivables or accumulated costs of contracts in progress (inventories) in the balance sheet. Accordingly, government contractors that use the direct method in reporting cash flows from operating activities should show progress and advance payments received on contracts, if significant, as a separate major class of cash receipts. Government contractors that use the indirect method should show progress and advance payments, if significant, as a separate adjustment in reconciling net income to net cash provided for operating activities. If progress and advance payments are accounted for as borrowings, such amounts should be reported as cash received from financing activities.

Other Reporting Matters

- **3.81** Additional disclosures of significant information may be appropriate with respect to government contract activities and should be considered in light of the circumstances and conditions that may arise from time to time. Some of those matters are discussed below in paragraphs 3.82 through 3.90.
- **3.82** Defective pricing. As discussed in chapter 2, the Truth in Negotiations Act permits the government to make contract price reductions if a contractor fails to submit certified accurate, current, and complete cost or pricing data before award of certain negotiated contracts or contract amendments. When defective pricing exists, contract prices, including profit or fee, may be adjusted, and disclosure should be made if the amounts are material. Instances may occur when defective pricing may be alleged by the government but disputed by the contractor. In these cases, consideration of the circumstances (including consultation with legal counsel) and judgment is required. If the potential amounts involved are material, disclosure in the notes to financial statements should be made in accordance with FASB Statement No. 5.
- **3.83** Contract claims. Contract claims, either against the contractor or the government, often arise in connection with government contracts and subcontracts. Generally, those situations are considered to be a normal consequence of business and not sufficiently important to warrant disclosure except when amounts involved become significant to the overall financial statements.

The accounting and reporting of claims is prescribed in paragraphs 65 through 67 of SOP 81-1. (Common audit procedures related to claims transactions are covered in chapter 4.)

- **3.84** An important consideration in reporting contract claims is the determination of costs associated with a claim. Frequently, costs associated with a claim are not accumulated in separate accounts during the performance of a contract but are identified only at a later date. In those cases, the basis for a claim may be derived from internal management reports or subsequent studies of costs incurred. The studies, data, and estimates used to establish the value of the recorded assets in assessing the recoverability of claim-related assets should be reconcilable to the accounting records and attributable to the claim to satisfy the requirements of the SOP. In the event this condition is not met, no deferral of claim-related costs or accrual of revenue from claims should be recorded. Furthermore, paragraph 65 of SOP 81-1 precludes recognition of claim revenue in excess of contract costs incurred and concludes that recognition of "contract revenue relating to claims is appropriate only if it is probable that the claim will result in additional contract revenue and if the amount can be reliably estimated." Material amounts of claims revenue should be disclosed in the notes to financial statements.
- **3.85** Unusual contracts and provisions. A government contractor may enter into a contract or subcontract so different in type, amount, or other condition from other contracts in which the contractor is involved that disclosure might be warranted. For example, a contractor may customarily engage in firm fixed-price-type contracts that are relatively consistent in amount. However, if the contractor undertakes a fixed-price-incentive-type contract much greater in amount and subject to substantial added risks, additional disclosure about the new contract may be warranted. On the other hand, the terms of a contract might be sufficiently unique to warrant specific disclosure. For example, disclosure of a substantial award fee or penalties to be determined at the conclusion of the contract may be warranted.
- **3.86** Cost limitations. At times, total funding may not be available at the outset of the contract and the total estimated contract price will only be incrementally funded by the government; in this instance, the contract will contain a clause entitled "Limitation of Funds." Unless the contracting officer takes action on the notification and provides additional funding, if necessary, the government will not be obligated to reimburse the contractor for costs incurred in excess of the amount funded, nor is the contractor obligated to continue performance once the contractor has incurred costs up to the level of funding. Therefore, a contractor incurs costs in excess of the amount funded by the government at its own risk. Costs in excess of amounts funded should be expensed as incurred unless the facts and circumstances clearly support the classification of such costs as assets, as defined in paragraphs 25 through 34 of SFAC No. 6. If material, the amount of capitalized costs in excess of funding should be disclosed in the notes to financial statements.
- **3.87** Disclosure of information about major customers. Information about the contractor's major customers should be disclosed in conformity with FASB Statement No. 30, Disclosure of Information about Major Customers. Although not required by the Statement, some contractors consider disclosure of the amounts of U.S. government and foreign military sales or sales by type of contract and government agency to be additional useful information.
- **3.88** Capitalization of interest costs. Some government contracts may appear to qualify for capitalization of interest costs in conformity with FASB Statement No. 34, Capitalization of Interest Cost. However, FASB Statement No. 34, paragraph 10, proscribes interest capitalization for assets employed in

the earnings activities of an enterprise. Because many contractors recognize revenue under the percentage-of-completion method as the related asset is being constructed, the asset is considered to be employed in the earnings activities of the contractor. Further, many production-type contracts require the manufacture of inventories that are routinely manufactured or otherwise produced in large quantities on a repetitive basis, for which interest capitalization is considered to be inappropriate. Accordingly, the predominant practice among government contractors is to exclude long-term contracts accounted for under the percentage-of-completion method from the interest capitalization provisions of FASB Statement No. 34.

- **3.89** As previously discussed, revenue under the completed-contract method is recognized only when a contract is completed, and costs are accumulated on the balance sheet during the period of performance. Therefore, costs incurred on a discrete project are qualifying assets when activities are underway to bring the asset to the condition and location necessary for its intended use. When a contractor bills all costs currently, its investment in the asset would be limited to uncollected receivables. Such uncollected amounts would need to be reduced by related noninterest-bearing liabilities, such as accounts and wages payable and accrued payroll taxes. Significant fluctuations in both outstanding receivables and accrued costs may require accumulation for each contract on a daily basis to reasonably determine the amount of such costs qualifying for interest capitalization. The FASB explicitly sought to alleviate unnecessary administrative burdens in applying the requirements for interest capitalization. Therefore, it may be acceptable to exclude such projects from interest capitalization when all costs are being billed and collected currently.
- **3.90** Financial reporting and changing prices. For those contractors electing to disclose supplementary information on the effects of changing prices in accordance with FASB Statement No. 89, Financial Reporting and Changing Prices, the following matters should be taken into consideration when calculating the purchasing power gain or loss on net monetary items:
 - In practice, contract inventories typically are not considered to be monetary assets. This approach is based on the view that, in most cases, the negotiated price of the contract under which the inventories are produced provides for the estimated effects of inflation during the period of contract performance.
 - Appendix D of FASB Statement No. 33 concludes that advances related to fixed-price-type contracts, although considered current liabilities, should be classified as nonmonetary items because they represent the government's claims to nonmonetary goods or services; in other words, these advances are not rights to receive money. Additionally, obligations under warranties should be classified as nonmonetary items because they obligate the contractor to furnish goods or services at future prices.
 - Accrued losses on contracts should be classified as monetary items because they are, in essence, future accounts payable.

Accounting for Pensions

3.91 FASB Statement No. 87, Employers' Accounting for Pensions, significantly changed both the determination of pension expense and the financial statement presentation of the financial status of a company's pension plan. Although FASB Statement No. 87 sought to standardize pension accounting among companies, the required accounting may frequently result in a differ-

ence between annual pension expense reported in a company's financial statements and annual pension funding. This difference results from using one actuarial cost method for financial reporting purposes (for example, the projected-unit-credit method) and a different method for funding and tax purposes. Differences may also exist between pension expense reported in a contractor's financial statements and annual pension cost allowable for government contract costing purposes.

3.92 When the market value of pension plan assets exceeds the plan's projected benefit obligation, an overfunded condition results. The initial application of FASB Statement No. 87 necessitates the establishment of such overfunded amount as an unrecognized net asset that will be recognized as a reduction in net periodic pension cost in current and future years. Some accountants believe that, since the government indirectly funded the pension plan via the allocation of allowable pension costs to government contracts, the total amount of the unrecognized net asset will not be fully recoverable by the contractor should the plan be terminated. This view postulates that, should a plan be terminated and excess pension plan assets revert to the contractor, the government will likely assess the claim against the contractor for reimbursement of its share of the excess. Accordingly, under this assumption, the amount of the amortization of the unrecognized net asset should not exceed the net excess expected to be realized from the pension plan termination after the government's recovery. Other accountants believe that, in the absence of management's intention to terminate a pension plan, no accounting recognition of a possible reimbursement to the government for a share of the excess assets realized by the contractor in a pension plan termination should be given in a contractor's financial statements. Contractors should consider the effect, if any, of the government's rights with respect to any excess pension plan assets in the event of a plan termination upon the financial statements and notes thereto.

Income Taxes

3.93 Government contractors may report periodic contract income using different accounting methods for financial reporting and tax purposes, resulting in temporary differences. Such differences, as well as others, result from specific and complex tax laws pertaining to long-term contracts. Accordingly, the financial statements of government contractors should include a provision for deferred income taxes.

Chapter 4

Auditing Considerations

Introduction

- **4.01** This section provides guidance to the independent auditor in performing audits of financial statements of government contractors. Audits of government contractors often involve unique and complex problems, principally because of the environment in which contractors operate and the accounting methods used.
- **4.02** As is the case in all audits, the auditor must exercise significant judgment in designing the audit plan and determining the audit procedures to be performed in light of the particular circumstances. Accordingly, this section is not intended to mandate auditing procedures to be applied in every audit of a government contractor. Nor is the discussion of management's responsibility for the internal control structure intended to prescribe the types of internal controls to be implemented by government contractors in all circumstances. Indeed, the types of internal controls required and the audit procedures performed by the independent auditor will vary from contractor to contractor depending on the nature of the contractor's operations and the results of the auditor's consideration of the contractor's internal control structure and assessment of the materiality of account balances and individual transactions in relation to the financial statements as a whole.

Factors Unique to Government Contractors

- **4.03** Almost every industry includes companies that are government contractors. However, there are certain industries that are more heavily involved in providing goods and services to the government. These industries include manufacturing, architect-engineering, construction, aerospace, shipbuilding, and high technology. Consequently, companies engaged in government contracting are subject to the risks associated with their respective industries, as well as additional risks that generally are not encountered by other business enterprises in the commercial sector. These additional risks are caused principally by the highly regulated environment in which government contractors operate and include, but are not necessarily limited to, the following:
 - Contractors are subject to extensive and complex cost accounting and other regulations, and in some cases, significant penalties even for violations of relatively immaterial dollar amounts (such as penalties under the False Claims Act).
 - Business and accounting practices are subject to frequent scrutiny by the government.
 - The government has unilateral rights not found in commercial relationships.
 - When contracts or contract changes are negotiated based on cost, cost accounting considerations play a vital role in pricing and administering government contracts and, consequently, determining the contractor's reported financial position and results of operations.
- **4.04** The operating environment of government contractors vis-à-vis most commercial enterprises also includes the following characteristics:
 - Reliable payment of appropriate billing

- Disallowance of incurred costs resulting in reduced revenues
- Risks relating to excess and obsolete stock, which are usually less than commercial enterprise experience
- Unilateral contract changes or claims affecting revenues
- Contract losses, if the contractor is unable to meet its contractual obligations requiring the design or the manufacture of complex or state-of-the-art products
- Potential for unrealizable investments in equipment and facilities and a general reduction in business activity if government programs and funding policies change
- Possible allegations of defective pricing if the contractor fails to submit current, accurate, and complete cost or pricing data
- Possible allegations of fraud for cost mischarging that can lead to loss of contracts, debarment, loss of reputation, or criminal penalties assessed against both the contractor and the responsible management
- Financing in the form of advance payments, progress billings, and the like
- Cash flow deficiencies if progress payments are withheld by the government or retentions are increased because of disputes with the government, noncompliance with regulations, or other problems
- Cost-based pricing, which provides for reimbursement of allowable costs
- Government audit and other oversight of the contractor's operations that often provide recommendations for avoiding costs

Audit Focus

4.05 The focus in auditing a government contractor is usually on accounting systems and individual contracts that represent the profit centers for recording cost and recognizing revenue. Because government contractors operate in a highly regulated environment, the extent to which the contractor is complying with those regulations that have a direct and material effect in determining the amounts in the contractor's financial statements is a critical audit consideration. Therefore, in addition to the usual audit considerations, it is important for the auditor to focus on the contractor's policies and practices ensuring compliance with such regulations.

Management's Responsibility for the Internal Control Structure

4.06 This section describes management's responsibility for maintaining internal controls and describes some specific control procedures that are typically found in a well-designed internal control structure. The auditor's responsibility for assessing control risk is discussed later as part of the auditor's considerations.

4.07 Management is responsible for maintaining an effective internal control structure. For government contractors, the internal control structure encompasses policies and procedures governing aspects of the business that are particularly important to contractors, such as estimating and proposal preparation, as well as controls over other segments of the operations typically found in other business enterprises.

- **4.08** As described in SAS No. 55, Consideration of Internal Control Structure in a Financial Statement Audit, the three elements of a contractor's internal control structure are (a) the control environment, (b) the accounting system, and (c) control procedures. The following factors, some of which are unique to government contractors, are particularly important elements of a contractor's internal control structure:
 - Systems for monitoring compliance with government procurement regulations
 - Estimating systems and proposal preparation practices
 - Contract cost accounting practices
 - Contract revenue recognition practices
 - Billing procedures and controls
 - Change order identification, pricing, and reporting
 - Claims processing and reporting
 - Inventory costing and control
 - Government-furnished property
 - Cost aspects of related-party and interorganizational transactions

Control Environment

- **4.09** One of the elements of the internal control structure is the control environment, which includes management philosophy and operating style. Management creates the overall environment that establishes the attitudes of the entire organization and develops the policies, procedures, and guidelines intended to provide continued and effective monitoring of the organization's operations. In addition to addressing other matters, the auditor's evaluation of the control environment should answer the basic question: What are the attitudes and actions of the board of directors and top management concerning controls within the various areas of the company?
- **4.10** Because internal controls in areas such as progress billing and compliance with government regulations are significant to government contractors, management's attitude toward controls is an important consideration. Without the overall guidance and involvement of top management, there is less assurance that controls will operate effectively and that errors and irregularities material to the financial statements will be prevented or, at a minimum, detected and corrected on a timely basis.
- **4.11** In addition to management philosophy and operating style, other elements of the control environment may include the following:
 - Organizational structure
 - Existence of an audit committee
 - An ethics program
 - Methods of assigning authority and responsibility
 - Personnel policies and practices
 - External influences over the contractor (for example, regulatory influences)
 - Internal audit function

Systems for Monitoring Compliance With Government Procurement Regulations

4.12 In addition to the general controls required for any company, government contractors should implement controls designed to provide reasonable assurance of compliance with applicable regulations and to provide the

capability for identifying and responding to changes in those regulations. Besides noncompliance, inadequate controls in those areas can result in loss of revenues, penalties, and, in some cases, suspension or debarment (as discussed in chapter 2). The operating environment is one in which additional regulations are expected to be issued more frequently and existing regulations are often subject to more stringent interpretation and application than in the past.

- **4.13** Contractors with substantial business with the government are generally required to comply with Cost Accounting Standards (CAS). However, for those contractors not required to comply, the CAS may provide guidance in the area of cost accounting. In addition, as a contractor's volume of government work increases and full CAS compliance becomes imminent, an understanding and preparation for CAS may facilitate a more effective transition to full CAS compliance when required.
- **4.14** Government contractors are required to comply with the FAR and certain FAR supplements. The FAR is a compendium of rules governing essentially all aspects of the acquisition process. Included in the FAR is a detailed set of cost principles, an understanding of which is critical to a contractor's ability to properly account for contract costs and to price contracts knowledgeably. Understanding and complying with the cost principles and other applicable provisions of the FAR are essential to a contractor's success in doing business with the government.
- **4.15** Contractor controls to provide reasonable assurance of compliance with applicable government regulations may include the following procedures:
 - Ensure that all personnel performing functions requiring compliance with government regulations are adequately trained and supervised
 - Establish and communicate compliance policies and procedures
 - Monitor compliance with such policies and procedures
 - Monitor changes in regulations
 - React to and communicate results of government audits and reviews
 - Encourage communication with top management regarding potential compliance problems
 - Document support for reasonableness of significant cost elements
 - Ensure that documents filed with the government, such as the CAS Disclosure Statement, are properly revised as changes are made to systems and procedures

Estimating Systems and Proposal Preparation

- **4.16** Controls in this area are necessary to produce reliable cost estimates in support of contract proposals, to identify the sources of factual data used in developing such cost estimates, and to provide reasonable assurance that the cost or pricing data submitted are accurate, current, and complete. In general, lack of control over the estimating system and the proposal preparation function can result in a substantial increase in management's risk when signing a contract's cost or pricing data certification.
- **4.17** A contractor's estimating system and proposal preparation controls should provide reasonable assurance that—
 - Written estimating policies and procedures are maintained.
 - Estimates are consistently prepared.
 - Prices and quantities are obtained from approved sources.

- Forward pricing and provisional overhead rates are based on current financial data and consistent with the latest management plan.
- Estimates are adequately documented and include support for any management pricing decisions reflected in the final proposal.
- Changes in cost or pricing data are communicated so that proposals and updates to proposals reflect accurate, current, and complete data.
- Subcontractor and vendor proposals are reviewed by the contractor and that vendors and subcontractors certify that these proposals are accurate, current, and complete.
- Alternative sources for purchases, subcontracts, and intercompany work are identified.
- Estimates are clerically accurate and independently reviewed by an appropriate level of management knowledgeable of government contracting regulations.
- Where applicable, compliance with CAS 401—Consistency in Estimating, Accumulating, and Reporting Costs, and CAS 402—Consistency in Allocating Costs Incurred for the Same Purpose is assured.

Contract-Cost Accounting Practices

- **4.18** A contractor uses contract-cost information to control costs, evaluate the status and profitability of contracts, and in some cases, prepare customer billings. Therefore, the importance of accurate cost information cannot be overemphasized.
- **4.19** Contract-cost records should be designed to facilitate comparisons of actual costs with estimated costs. The records should provide for the classification and summarization of costs into appropriate categories, such as materials, subcontract charges, labor, labor-related costs, equipment costs, and overhead, in a manner consistent with the applicable regulations, such as CAS 401. The accounting system should provide for the periodic submission of detailed cost reports to management and to project managers. Their review of these reports serves to identify potential operational and financial problems on contracts, check on the reasonableness of the cost records, and reduce the possibility of having inappropriate costs charged to the contract.
- **4.20** Although recommended controls over the recognition, distribution, and accumulation of contract costs of government contractors are similar to those for commercial contractors, the unique features of the government environment require that special attention be given to establishing and maintaining controls to provide reasonable assurance that—
 - Costs are accurately distributed to the contract(s) or other cost objective(s) (for example, an independent research and development project) for which they are incurred.
 - Costs are reasonable and in accordance with the specific contract provisions.
 - The cost accounting system segregates unallowable costs or has the capability of providing sufficient detail to do so.
 - Cost-allocation practices used to charge costs to contracts are reasonable, reflect the beneficial or causal relationship between costs and cost objectives, and are in conformity with applicable CAS and, if applicable, the contractor's disclosure statement and established practices.

- When applicable, costs should be estimated and accumulated in a manner consistent with the applicable cost principles and the contractor's CAS Disclosure Statement and established practices.
- Memorandum records, if any, used by the contractor are reconciled periodically to the contractor's formal accounting records.
- Costs incurred on all projects or contracts during the period are reconciled to the costs reflected in the financial statements.
- Costs associated with contracts that have not been formally funded by the government are evaluated for recoverability. A contractor's prior experience with work on unfunded contracts is an important consideration in the contractor's evaluation.

Contract-Revenue Recognition Practices

- **4.21** A contractor's internal controls over contract revenues should be designed to provide reliable information on the amount and timing of contract-revenue recognition. The nature of these controls depends on the method of revenue recognition used by the contractor.
- **4.22** Contract revenues (but not necessarily the timing of revenue recognition) are a function of the terms of the contract and generally bear a relationship, at least indirectly, to contract costs. In the case of cost-reimbursement contracts, revenues are related directly to the costs incurred. Revenues on fixed-price-type contracts ultimately may be a function of the contractor's costs (for example, negotiated contracts when cost or pricing data is submitted) or independent of actual costs incurred as in sealed-bid contracts. As a result of this correlation of costs to revenues, compliance with the applicable cost principles and CAS may have a direct effect on the amount of revenue recognized. In other words, recoverability of cost affects revenue. Regardless of the extent to which contract costs directly determine total contract revenue, contract costs often serve as the basis for estimating contract progress and, therefore, may directly affect revenue recognition. A government contractor should establish control procedures to provide reasonable assurance that—
 - Estimates of contract revenues and costs are updated periodically and reported to the appropriate levels of management.
 - Revenue recognition is based on current estimates of progress in terms of cost incurred, physical completion in relation to contract statement of work, or another appropriate measure.
 - Recorded contract revenues are periodically compared with contract terms for compliance.
 - Change order and claim revenues are recognized in conformity with generally accepted accounting principles.
 - Adjustments to previously recognized contract profits resulting from management decisions are thoroughly documented.
 - Revenues recognized on all contracts during the period are reconciled to the total revenues reflected in the financial statements.
 - Management reporting of estimate updates provide sufficient information to allow for the determination of whether a contract loss reserve is required.

Billing Procedures and Controls

- **4.23** Billing procedures for government contractors may differ substantially from those of other business enterprises. For example, most contractors generally submit progress billings during the course of a contract based on either costs incurred (public vouchers for cost-reimbursement contracts or requests for progress payments for fixed-price-type contracts) or a predetermined schedule (milestone billing). In addition, the contractor may submit billings in advance of performance (requests for advance payment).
- **4.24** FAR part 32, "Contract Financing," sets forth the recordkeeping and reporting requirements covering advance and progress billings and, therefore, should be reviewed by the auditor. The contractor's internal control structure should provide reasonable assurance that the personnel responsible for billing the government receive adequate training in the applicable regulations and are provided with timely and accurate billing-related information for each contract. Procedures should ensure that the method of billing is in accordance with the specific contract terms and is reviewed and approved at an appropriate level of management.

Change Order Identification, Pricing, and Reporting

- **4.25** Because of the frequency of change orders and the stringent requirements for obtaining an equitable price adjustment for a change, it is important for government contractors to have in place effective controls over the identifying, negotiating, and processing of changes.
- **4.26** In the case of formal change orders, entitlement is acknowledged by the government. Accordingly, formal changes present fewer problems to contractors in terms of revenue recognition and cost recovery than constructive change orders. Because constructive changes normally are not accompanied by concurrent negotiation between the parties, they are frequently identified only after the work has begun or occasionally after it has been completed. This makes determination of entitlement more difficult. Consequently, costs may have already been incurred and often have not been segregated in the cost records before the contractor realizes a constructive change order has occurred. At that point, it is often difficult to quantify the actual cost of the constructive change order. This is particularly true for complex contracts or projects where delays and disruptions in any one phase of the project may create a "ripple effect" that negatively affects other phases of the project not directly affected by the change. The contractor's internal control structure generally includes procedures providing for communication between contract management and the estimating and accounting functions. Such procedures minimize the risks of failing to produce reasonable estimates and documentation of the impact of a constructive change order. Constructive change orders, by their nature, are difficult to identify; however, frequent communication and status updates may enable management to more quickly identify events that represent, or lead, to constructive change orders.
- **4.27** In addition to procedures for identifying change orders, contractors should also consider the need for control procedures over the segregation of costs incurred for work performed on change orders when changes have occurred. Establishing a new job or activity code for each change order on a contract may assist management in monitoring and controlling performance of the change. For constructive changes, the lack of early identification may complicate the accurate and complete capturing of all incurred costs. In this event, the contractor should extract from the cost records the estimated costs of the change, including delay and disruption costs. The contractor should also

maintain memorandum records, as allowed by FAR and CAS, in support of the change.

Claims Processing and Reporting

- **4.28** Claims may arise from disputes over change orders or constructive change orders. (See paragraphs 4.132 and 4.133 for a further discussion of constructive change orders.) Like change orders, claim revenues and costs often determine the ultimate profitability of a contract. For this reason, it is important for the contractor to have controls in place to provide reasonable assurance that—
 - Potential claim conditions are identified on a timely basis.
 - The government is notified on a timely basis when there is evidence that a potential claim exists.
 - The basis for entitlement and the costs relating to the changed conditions are fully documented.
 - The impact of the claims on reported contract revenues and costs are appropriately recognized.
 - Costs associated with the claim are segregated.

4.29 The preceding discussion applies equally to subcontractor claims against the prime contractor; however, there is generally no privity of contract between the subcontractor and the government. Therefore, when evaluating realization of the subcontractor's claims, the focus should be on the contract with the prime contractor and its ability to pay or willingness to sponsor the subcontractor's claim with the government. Frequently, subcontractor claims are the result of actions by the government that form the basis for a claim by the prime contractor against the government. In these cases, recovery of the subcontractor's claim may be delayed pending the settlement of the prime contractor's claim against the government.

Inventory Costing and Control

4.30 From a government contractor's perspective, the principal risk involving inventories is realization. However, unlike a commercial concern that acquires materials and produces inventory for the general market, a government contractor typically is producing inventory for a specific customer under specific contracts. Therefore, when a government contract is complete, evaluating the realization of any remaining inventory is often relatively straightforward. Indeed, such inventory, if any, may belong to the government. For these reasons, the government contractor's risks relating to excess and obsolete stock may be less than those of a commercial enterprise. However, the use of a borrow/payback system in which inventory is transferred between contracts may present the risk that inventory could be transferred at an incorrect cost, that credit for the inventory transferred may not be applied to the proper contracts, and that inventory transfers may be made without proper government approvals, where required, or in violation of other applicable contract provisions or regulations such as those governing the acceptability of the contractor's material management and accounting systems.

Government-Furnished Property

4.31 Many government contractors use property furnished by the government. Consequently, they are subject to specific requirements regarding control over and accountability for such property. Government-furnished property includes equipment used in the operation of the business as well as materials included in the final product. FAR part 45 describes the contractor's

responsibilities for government-furnished property, including regulations covering—

- Safeguarding government-furnished assets.
- Recordkeeping and reporting the use and the disposal of the property.
- Periodic substantiation and accounting for the property.
- **4.32** The contractor should have controls in place to ensure that government-furnished property is neither charged to contracts nor included in the contractor's assets for financial reporting purposes.

Cost Aspects of Related-Party and Interorganizational Transfers

4.33 The controls over interorganizational transfers should be designed to ensure that such transactions are identified and accounted for appropriately. In most cases, for both financial reporting and government contract costing purposes, transfers of property and purchases and sales of materials and services between divisions, subsidiaries, and affiliates of the contractor should be recorded at the transferor's cost. However, in certain circumstances, transfers at a price other than cost are permitted under current FAR regulations for government contract costing purposes (see FAR subpart 31.205-26 for examples).

The Auditor's Considerations

4.34 Management's responsibility for maintaining the internal control structure was discussed above together with some of the factors that contribute to effective internal controls for government contractors. This section describes some of the factors the independent auditor may consider when performing an audit of a government contractor. As noted previously, the audit procedures described below are presented as a guide to the independent auditor and may or may not be applicable in particular circumstances.

Audit Planning

- **4.35** In planning the audit of a government contractor's financial statements, the independent auditor usually performs a preliminary review of financial data and reviews internal audit reports, reports of examinations by government audit agencies, and related correspondence. SAS No. 22, *Planning and Supervision*, contains general guidance on planning an audit.
- **4.36** Also as part of the planning process, the auditor should apply analytical procedures to financial statement captions, account balances, quarterly financial statements, and so on, although the extent and timing of the procedures will vary from entity to entity. The purpose of such procedures is to identify matters (for example, unusual trends or transactions) that may have financial statement and audit planning ramifications. SAS No. 56, Analytical Procedures, requires the performance of analytical procedures at the planning stage and provides further guidance in this area.

Audit Timing

4.37 The nature, timing, and extent of the audit procedures to be performed and the resulting reports to be issued are determined by the independent auditor based on a number of factors. The independent auditor may determine that a significant amount of the audit can be performed at an interim date.² In such cases, SAS No. 45, *Omnibus Statement on Auditing*

² SAS No. 45, Omnibus Statement on Auditing Standards, "Substantive Tests Prior to the Balance-Sheet Date," identifies factors to be considered in the timing of audit procedures.

Standards—1983, "Substantive Tests Prior to the Balance Sheet Date," paragraph 8 provides guidance on extending audit conclusions to the balance-sheet date and states "substantive tests should be designed to cover the remaining period in such a way that the assurance from those tests and the substantive tests applied to the details of the balance as of an interim date, and any audit assurance provided from the assessed level of control risks, achieve the audit objectives at the balance-sheet date." As discussed later in this chapter, SAS No. 55, Consideration of the Internal Control Structure in a Financial Statement Audit, provides guidance about the timing of tests of controls.

Audit Objectives

4.38 SAS No. 31, *Evidential Matter*, provides the independent auditor with guidance on the third standard of fieldwork, as follows:

In obtaining evidential matter in support of financial statement assertions, the auditor develops specific audit objectives in the light of those assertions. In developing the audit objectives of a particular engagement, the auditor should consider the specific circumstances of the entity, including the nature of its economic activity and the accounting practices unique to its industry.

- **4.39** Most of the independent auditor's work in forming an opinion on financial statements consists of obtaining and evaluating evidential matter regarding management's assertions in financial statements. Assertions are representations by management that are embodied in financial statement components. They can be either explicit or implicit. These assertions can be classified into the five following broad categories:
 - a. Existence or occurrence. Do assets or liabilities of the entity exist at a given date, and have recorded transactions occurred during the given period?
 - b. *Completeness*. Are all transactions and account balances that should be presented in the financial statements included?
 - c. Rights and obligations. Do all assets belong to the entity, and are all liabilities obligations of the entity at a given date?
 - d. Valuation or allocation. Have all asset, liability, revenue, and expense components been included in the financial statements at their appropriate amounts?
 - e. *Presentation and disclosure.* Are components of the financial statements properly classified, described, and disclosed?
- **4.40** Specific audit objectives and procedures that are unique to government contractors and that may be developed to evaluate the evidential matter supporting management's assertions in the financial statements are covered in other sections of this chapter.

Understanding the Contractor's Business

- **4.41** The auditor should obtain an understanding of the contractor's business. The following categories of information should be obtained, as appropriate, and considered by the auditor in planning the engagement:
 - The contractor's products and services, including the relationship of those products and services to major government procurement programs
 - The nature, size, and location of the contractor's operations (for example, principal manufacturing operations and major vendors)
 - Mix of government and commercial business
 - Competition in the industry

- Government agencies representing the contractor's customers (for example, the Department of Defense and the Department of Energy)
- Methods of obtaining contracts (for example, sealed bidding, competitively negotiated procurement, or both)
- Types of contracts (for example, firm fixed-price, fixed-price incentive, and cost-plus-fixed-fee)
- The contractor's contract-related accounting policies and procedures
- Key data for significant contracts, including the following:
 - Government agency or department
 - Type of contract
 - Contract price
 - Revenues, costs, and profit/loss recognized to date
 - Estimated revenues, costs, and profit/loss at completion
 - Incentive, escalation, or other relevant contract provisions
 - Associated balance sheet amounts (for example, receivables, inventories, and reserves)
- Significant government regulations affecting contract accounting, such as the FAR, FAR supplements, and CAS, with which the contractor must comply, including major changes in the current year
- Anticipated changes in government programs or funding levels that may impact the contractor's operations
- The contractor's contract backlog
- Key changes during the current period in operations, systems, or segments (subsidiaries, divisions, and product lines) of the business
- CAS Disclosure Statement and revisions
- Key information-processing systems
- Related-party and interorganizational transactions
- Litigation, claims, and disputes with the government
- Prior audited financial statements
- Prior filings with the SEC, such as Form 10-K, proxy statements, and the like
- Minutes of the meetings of the board of directors and committees of the board of directors
- Federal income tax returns

Consideration of the Internal Control Structure

- **4.42** As noted in paragraph 4.37, SAS No. 55 provides guidance on the independent auditor's consideration of an entity's internal control structure in the planning and conduct of an audit. The internal control structure consists of the policies and procedures established to provide reasonable assurance that specific entity objectives will be achieved and has the three following elements:
 - The control environment
 - The accounting system
 - Control procedures
- **4.43** The control environment has been already discussed with regard to management's responsibility for the internal control structure. The accounting

system consists of the methods and records established to, among other things, identify, classify, and report an entity's transactions and to maintain accountability for an entity's assets and liabilities. Control procedures are those policies and procedures in addition to the control environment and accounting system that are established to provide reasonable assurance that specific objectives will be achieved.

- **4.44** In planning the audit, the auditor should obtain a sufficient understanding of each of the three elements of a contractor's internal control structure. SAS No. 55 describes what constitutes a sufficient understanding and the procedures that may be applied to obtain such an understanding.
- **4.45** After obtaining an understanding of the internal control structure, the auditor assesses control risk ³ in terms of financial statement assertions by evaluating the effectiveness of the internal control structure in preventing or detecting material misstatements in the financial statements. Based on the assessed level of control risk and inherent risk,⁴ the auditor determines the acceptable level of detection risk.⁵ The auditor then uses the acceptable level of detection risk to determine the nature, timing, and extent of the auditing procedures to be used to detect material misstatements in the financial statements.
- **4.46** If the government contractor has an internal audit function, the independent auditor should consult SAS No. 65, *The Auditor's Consideration of the Internal Audit Function in an Audit of Financial Statements.* The types of activities performed by internal auditors at government contractors may include reviews of labor and materials charging practices, allowability of indirect costs, estimating systems and procedures, travel and expense reporting, purchasing systems and procedures, progress billing practices and procedures, accounting for and controlling government-furnished property and material management accounting systems and practices. In planning the audit, the independent auditor should consider the scope and results of the work of internal auditors to help determine the nature, timing, and extent of his or her own procedures.
- **4.47** During the performance of the audit, the independent auditor may become aware of significant deficiencies in the internal control structure. The auditor is required in accordance with SAS No. 60, Communication of Internal Control Structure Related Matters Noted in an Audit, to report such conditions to the audit committee or others, such as the owner of an owner-managed business, who may have engaged the auditor.

Electronic Data Processing

4.48 The use of electronic data processing (EDP) does not affect the objectives of the audit; however, the organizational and control procedures may differ from those used in manual or mechanical data processing, and audit procedures applied to accounting records maintained on EDP equipment may vary from those applied to records maintained manually or on mechanical equipment. This guide does not address the effects of EDP on an audit.

³ Control risk is the risk that a material misstatement that could occur in an assertion, as defined in SAS No. 31, *Evidential Matter*, will not be prevented or detected on a timely basis by the entity's internal control structure policies or procedures.

⁴ Inherent risk is the susceptibility of an assertion to a material misstatement, assuming there are no related internal control structure policies or procedures.

⁵ Detection risk is the risk that the auditor will not detect a material misstatement that exists in an assertion.

4.49 Guidance on auditing records for which electronic data processing is significant is contained in the following documents: (a) SAS No. 70, Reports on the Processing of Transactions by Service Organizations; and (b) AICPA Audit and Accounting Guide Computer-Assisted Audit Techniques.

Audit Risk and Materiality

- **4.50** SAS No. 47, Audit Risk and Materiality in Conducting an Audit, states that the independent auditor should consider audit risk and materiality when planning the audit and designing auditing procedures. It also contains general guidance for the consideration of materiality levels. Cost mischargings and other violations of government regulations that may be immaterial in amount may lead to penalties, criminal charges, and, possibly, suspension or debarment. Thus, any of these actions can significantly affect the contractor's financial statements, as well as its reputation and ability to obtain future business. Therefore, the independent auditor should be aware of the possibility that such violations could occur.
- **4.51** As noted previously, inherent risk and control risk differ from detection risk in that they exist independently of the audit of financial statements, whereas detection risk relates to the independent auditor's procedures and can be changed at his or her discretion. Detection risk should bear an inverse relationship to inherent and control risk. The less the inherent and control risk the independent auditor believes exists, the greater the detection risk he or she can accept. Conversely, the greater the inherent and control risk the independent auditor believes exists, the less the detection risk he or she can accept.
- **4.52** Assessing control risk for a government contractor was addressed in the previous section on consideration of the internal control structure. The following is a discussion of many of the principal risk factors inherent in the government contracting environment and their potential audit impact.

Government Spending

4.53 The elimination or severe reduction in spending on government programs in specific areas can severely affect a contractor's business. This is particularly true for enterprises that are dependent on government work for a significant portion of their business, especially if they depend on a few government programs or have only a small number of contracts. In such cases, the loss of a single contract may result in reduced utilization of personnel and substantial excess capacity and, in some cases, may raise doubts as to the entity's ability to continue as a going concern.

Technology and Obsolescence

4.54 Government contracting, particularly military procurement, often involves activities in which technological advances are frequent. Those contractors unable to keep up with these changes and to stay on the "cutting edge" may find themselves unable to maintain growth and eventually unable to compete for contracts. Although the ultimate risk is failure of the company, short-term realization problems may arise with respect to facilities, equipment, and inventory.

Competition

4.55 The government procurement process is moving steadily away from noncompetitive, sole-source procurements and toward sealed-bid and competitively negotiated procurements. A significant business risk exists if a company, which has been primarily a sole-source supplier, cannot react to this change.

When a contractor does change its method of operation enabling it to compete, a risk may remain, at least initially, that the contractor's estimating systems may be inadequate or that the contractor may accept lower estimated profit margins to gain acceptance of bids on certain contracts. Both of these situations increase the possibility that the contractor will experience cost overruns, which may result in contract losses depending on the nature and terms of the contract.

Laws and Regulations

- **4.56** As discussed previously, contracting with the government requires compliance with the FAR and CAS. These regulations cover, among other things, the proposal process, contract pricing, cost allowability and allocability, and overall contract administration.
- **4.57** In addition, enterprises doing business with the government are subject to various risks unique to the government contracting environments. These risks include partial or full termination of contracts or subcontracts either for the convenience of the government or for default because of unsatisfactory performance. Other examples of risks include changes in government program requirements and budgetary constraints, unilateral changes or modifications to contracts or subcontracts that may result in disputes or claims, increased or unexpected costs causing losses or reduced profits, primarily under fixed-price contracts and time-and-material contracts with cost limitations, and the failure or inability of a contractor to perform under its contract. In addition, the company's contract costs and fees may be subject to adjustment as a result of examination by various government agencies.
- **4.58** Additional risk may also result from the applicability of certain laws that provide for potentially significant penalties to be assessed if the contractor violates them. For example, a contractor that submits a false invoice or a false request for progress payment (that is, a false claim) to the government may be subject to penalties ranging from a monetary penalty for each false claim submitted, to suspension or debarment.

Contract Type

- **4.59** The level of risk to a contractor varies depending on the type of contract. Although all contract situations involve some degree of risk, a firm fixed-price-type contract poses the highest level of risk for a contractor because any overruns directly affect the contractor's profitability. The contractor's ability to estimate costs accurately is especially critical for fixed-price-type contracts. Therefore, the auditor's emphasis for this type of contract should be on the reasonableness of estimated costs and the potential need to provide for future losses.
- **4.60** Cost-type contracts usually require the government to compensate the contractor for allowable costs (generally up to a contractual limit) plus a profit. As a result, the contractor's risk of loss on this type of contract is lower than on a fixed-price-type contract. The audit emphasis for a cost-type contract should be on cost allowability and the determination of whether costs actually recorded and estimated through completion are in excess of cost limitations. If a contractor incurs costs in excess of the cost limitation specified in the contract, recovery of those costs may be doubtful.
- **4.61** An additional risk exists when a contractor has a mix of both fixed-price-type and cost-type contracts. This risk involves the potential for improper allocation of costs among the different types of contracts and is greatest when funding has not been made available for a contract or when a fixed-price-type contract is at or approaching an overrun position. While on the

surface these inherent risks may be high, management's response to these risks in terms of its attitude toward the control environment and the internal control procedures in place can help to significantly mitigate these risks. Consequently, in planning the audit, the independent auditor should consider the effects that the overall internal control structure may have on mitigating these risks when determining the timing, nature, and extent of his or her auditing procedures.

Status of Significant Contracts

- **4.62** Another important audit consideration is the status of significant contracts in process and any problems encountered on those contracts. The following items should be considered as potential risk areas:
 - Pending claims, change orders, or options
 - Performance problems, for example, technical or scheduling problems
 - Incentive provisions
 - Disputes with subcontractors or vendors
 - Realization of precontract or other deferred costs
 - Warranty obligations
 - Unresolved matters related to government compliance audits
 - Termination claims

Accounting Estimates

- **4.63** The use of accounting estimates is an integral part of the preparation of financial statements. Management is responsible for making the accounting estimates used in the financial statements. When auditing accounting estimates, the independent auditor's objective is to obtain sufficient evidence to provide reasonable assurance that all material accounting estimates have been developed, that the accounting estimates are reasonable in the circumstances, and that the accounting estimates are in accordance with applicable accounting principles. SAS No. 57, Auditing Accounting Estimates, provides the independent auditor with guidance on how to achieve this objective.
- **4.64** In the case of government contractors, accounting estimates are used to estimate, among other things, revenues recognized under the percentage-of-completion method, profit or loss at completion of a contract, revenues recognized on contractor claims against the government and the financial exposure, if any, arising from government claims against the contractor. Further guidance on auditing accounting estimates unique to government contractors is included later in this chapter.

Going Concern Considerations

4.65 As part of the audit, the independent auditor is responsible for evaluating whether there is substantial doubt about the entity's ability to continue as a going concern for a reasonable period of time, not to exceed one year beyond the date of the financial statements being audited. The evidence necessary to make this evaluation will usually be obtained through the auditor's planned audit procedures including review of compliance with debt agreements, analytical procedures, review of subsequent events, and so on. If after considering the identified conditions and events in the aggregate, the auditor believes that there is substantial doubt about the ability of an entity to continue as a going concern, he or she should consider management's plans to mitigate the current conditions and events, the effect on the financial

statements and the related disclosures, and the effect on his or her audit report. SAS No. 59, The Auditor's Consideration of an Entity's Ability to Continue as a Going Concern, provides additional guidance in this area. SAS No. 64, Omnibus Statement on Auditing Standards—1990, amends SAS No. 59 to clarify the required language that the auditor should include in an explanatory paragraph that describes his or her substantial doubt about an entity's ability to continue as a going concern.

4.66 When auditing a government contractor, the independent auditor should consider, for example, the impact that reduced government spending, possible fines or penalties (for example, suspension or debarment) resulting from violations of government regulations, or the loss of a significant contract may have on the contractor's ability to continue as a going concern for a reasonable period of time.

Government Compliance Auditing

4.67 Government contractors are subject to examination by the DCAA, GAO, and other agencies or departments of the government. The audit process and the resolution of significant related matters, including disputes between the contractor and the government regarding cost allowability, are often not finalized until several years after cost incurrence or contract completion. As a result, estimating the potential effects of these examinations is difficult and requires the exercise of substantial judgment by the contractor's management and likewise by the independent auditor when reviewing management's judgments and conclusions in this area. Areas of government audit emphasis may change from year to year. In recent years, many contractors have experienced an increase in the frequency and amount of costs questioned by the government. Instances of potential fraud are being increasingly submitted to the U.S. Department of Justice as criminal matters. The independent auditor should review the government's written audit reports and any related correspondence between the contractor and the government regarding the various audit issues. The independent auditor should discuss these matters with management and review management's evaluation of the impact of these matters on the financial statements. Further guidance on the types of procedures to be performed by the independent accountant in this regard can be found in paragraph 4.116 of this chapter and in SAS No. 12, Inquiry of a Client's Lawyer Concerning Litigation, Claims, and Assessments.

Client Representations

4.68 SAS No. 19, Client Representations, requires the auditor to obtain certain written representations from management as part of an audit and provides guidance concerning these representations. The specific written representations to be obtained depend on the circumstances of the engagement and on the nature and basis of presentation of the financial statements. Paragraph 4 of SAS No. 19 lists matters ordinarily included in management's representation letter. Certain other representations related to a government contractor's operations should be considered. They include, but are not necessarily limited to, representations concerning the following:

- Propriety of the method of income recognition used by the contractor
- Profit recognition and accounts receivable related to change orders and claims
- Reasonableness of assumptions underlying estimates at completion
- Profits recognized related to contract incentive clauses

- **4.69** In addition, SAS No. 12 requires the independent auditor to obtain evidential matter relevant to the following factors:
 - a. The existence of a condition, situation, or set of circumstances indicating an uncertainty about the possible loss to an entity arising from litigation, claims, and assessments
 - b. The period in which the underlying cause for legal action occurred
 - c. The degree of probability of an unfavorable outcome
 - d. The amount or range of potential loss
- **4.70** SAS No. 12 also concludes that a "letter of inquiry to the client's lawyer is the [independent auditor's] primary means of obtaining corroboration of the information furnished by management concerning litigation, claims, and assessments." In addition to the matters generally covered in a letter of inquiry contained in paragraph 9 of SAS No. 12, the independent auditor should consider the following inquiries related to government contractors:
 - Claims involving the government and the subcontractors
 - Defective pricing claims
 - Contract terminations
 - The potential impact of any other government reviews or investigations

Auditors' Reports

- **4.71** The types of reports to be issued are based on the scope of services required by the contractor. The independent auditor should establish an understanding with the contractor regarding the services to be performed. The following are some typical services the independent auditor may be engaged to perform:
 - Expressing an opinion with respect to an entity's financial statements
 - Assisting management in fulfilling its responsibilities by performing agreed-upon procedures
 - Reporting on internal control structure
 - Reporting on contractors' codes of ethics
- **4.72** During March 1986, the Auditing Standards Board issued the Statement on Standards for Attestation Engagements, Attestation Standards, which established eleven attestation standards to provide guidance in providing attest services. Paragraph 1 of Attestation Standards defines an attest engagement as "one in which a practitioner is engaged to issue or does issue a written communication that expresses a conclusion about the reliability of a written assertion that is the responsibility of another party." Excluded from the scope of the attest standards are services such as the following:

Service

- Compiling historical or prospective financial statements
- Preparing tax returns
- Rendering tax advice
- Management consulting advice

Reason Excluded

- No assurance provided
- No report issued
- No other-party assertion reported upon
- No assurance provided on client assertion

- 4.73 Similar to SASs, the attestation standards deal with the need for technical competence, independence, due professional care, adequate planning and supervision, sufficient evidence, and appropriate reporting. However, attestation standards are much broader in scope. While the SASs apply to audits of historical financial statements, the Statements on Standards for Accounting and Review Services (SSARSs) apply to the review of historical financial statements, and the Statement on Standards for Accountants' Services on Prospective Financial Information, Financial Forecasts and Projections, applies to examinations and compilations of, and agreed-upon procedures applied to, financial forecasts and projections; the attestation standards conceptually apply to all of these and other services. For example, they apply to such nontraditional services as reports on descriptions of computer software and investment performance statistics. Accordingly, the independent auditor should consider the applicability of the attestation standards to the particular services required by the contractor.
- **4.74** The auditor's standard report on the financial statements of a contractor is the same as that used for other business enterprises. In addition, a number of situations may arise when the issuance of a standard unqualified report may be inappropriate. The types of circumstances that may lead to the addition of explanatory language to the auditor's standard report without affecting the auditor's unqualified opinion, or that may lead to a qualified or adverse opinion or a disclaimer of opinion are described in SAS No. 58, Reports on Audited Financial Statements.
- **4.75** An independent auditor may be involved with information other than the financial statements. SAS No. 52, *Omnibus Statement on Auditing Standards—1987*, "Required Supplementary Information," provides guidance on reporting on supplementary information required by the FASB.
- **4.76** Except for any special requirements of the entity, the independent auditor's responsibility for reporting on information contained in documents outside the basic financial statements that the auditor submits to the client or to others is specified in SAS No. 29, Reporting on Information Accompanying the Basic Financial Statements in Auditor-Submitted Documents. When the auditor's standard report is included in a client-prepared document, and when the independent auditor is not engaged to report on information accompanying the basic financial statements, the independent auditor's responsibility with respect to such information is described in SAS No. 8, Other Information in Documents Containing Audited Financial Statements.
- **4.77** In addition, SAS No. 42, Reporting on Condensed Financial Statements and Selected Financial Data, provides guidance on reporting in a client-prepared document on condensed financial statements and selected financial data that are derived from audited financial data.
- **4.78** In addition, SAS No. 62, Special Reports, applies to independent auditors' reports issued in connection with the following:
 - Financial statements prepared in conformity with a comprehensive basis of accounting other than generally accepted accounting principles
 - Specified elements, accounts, or items of a financial statement
 - Compliance with aspects of contractual agreements or regulatory requirements related to audited financial statements
 - Special-purpose financial presentations to comply with contractual agreements or regulatory provisions
 - Financial information presented in prescribed forms or schedules

- **4.79** An independent auditor may also be engaged to perform only certain specified procedures. If so, the independent auditor should issue a special report in conformity with SAS No. 35, Special Reports—Applying Agreed-Upon Procedures to Specified Elements, Accounts or Items of a Financial Statement, which requires the distribution of the report to be restricted.
- **4.80** A contractor may also request an independent auditor to report on a study and evaluation of the contractor's system of internal accounting control. SAS No. 30,* *Reporting on Internal Accounting Control*, provides guidance for reporting on the contractor's internal control structure in conjunction with a special study.

Errors and Irregularities

- **4.81** SAS No. 53, The Auditor's Responsibility to Detect and Report Errors and Irregularities, provides guidance on the independent auditor's responsibilities for the detection of errors and irregularities in an audit of financial statements. As part of the planning of the audit, the auditor should assess the risk that errors and irregularities may cause the financial statements to contain a material misstatement. Based on that assessment, the auditor should design his or her audit procedures to provide reasonable assurance of detecting errors and irregularities that have a direct and material effect on financial statement line items, including a failure to comply with applicable government regulations that have such an effect.
- **4.82** SAS No. 53 also provides guidance on the various factors to consider when assessing risk, the importance of professional skepticism in performing audit procedures, and the auditor's responsibility to communicate detected matters both within and outside the entity whose financial statements are under audit.

Illegal Acts

- **4.83** SAS No. 54, *Illegal Acts by Clients*, provides guidance on the nature and extent of the considerations the independent auditor should give to the possibility of illegal acts by clients. Illegal acts may vary considerably in their relation to the financial statements. The auditor considers laws and regulations that are generally recognized by auditors to have a direct and material effect on the determination of financial statement amounts. For example, applicable laws and regulations regarding cost allowability and CAS may affect the amount of revenue and costs accrued under government contracts depending on the type of contracts involved. SAS No. 54 provides that the independent auditor's responsibility to detect and report misstatements resulting from illegal acts that have a direct and material effect on the determination of financial statement amounts is the same as that for errors and irregularities as described in SAS No. 53.
- **4.84** Government contractors may also be affected by many other laws or regulations, including those related to securities trading, occupational safety and health, environmental protection, equal employment and price-fixing and other antitrust violations. SAS No. 54 recognizes that these laws and regulations generally relate more to an entity's operating aspects than to its financial and accounting aspects, and their financial statement effect is indirect. Normally, an audit in accordance with generally accepted auditing standards does not include audit procedures specifically designed to detect these types of

^{*} On April 20, 1992, the AICPA's Auditing Standards Board issued an exposure draft of a proposed Statement on Standards for Attestation Engagements, Reporting on an Entity's Internal Control Structure Over Financial Reporting. The statement would supersede SAS No. 30. A final statement is expected to be issued in 1993.

illegal acts. However, the independent auditor may become aware of the possibility of such acts during the course of performing procedures for the purpose of forming an opinion on the financial statements. SAS No. 54 provides guidance with respect to the independent auditor's response to such possible illegal acts.

Audit Committees

- **4.85** SAS No. 61, Communication With Audit Committees, is applicable to (a) entities that either have an audit committee or have otherwise formally designated oversight of the financial reporting process to a group equivalent to an audit committee (such as a finance committee or budget committee) and (b) all Securities and Exchange Commission (SEC) engagements. It provides the independent auditor with guidance on the types of matters related to the scope and results of the audit that should be reported to the audit committee or those of equivalent authority and responsibility. Examples of the types of matters that should be reported to the audit committee include significant accounting policies, management's judgments and accounting estimates, significant audit adjustments, other information in documents containing audited financial statements, disagreements with management, management's consultations with other accountants about auditing and accounting matters, major issues discussed with management prior to initial or recurring retention of the independent accountant, and difficulties encountered in performing the audit.
- **4.86** SAS No. 61 is not intended to restrict the communication of matters other than those described above. The determination of other matters to be reported to the audit committee is a matter of professional judgment.

Major Auditing Procedures for Government Contractors

4.87 This section provides guidance on the more significant auditing procedures that the independent auditor should consider in the audits of government contractors.

Contracts in Process

- **4.88** The primary focus of government contract audits is on the profit centers (usually individual contracts) for recognizing revenues, accumulating costs, and estimating and measuring income. The independent auditor should obtain an understanding of the more significant contracts in process, and the audit procedures should be related to those contracts. Evaluation of the profitability of contracts or profit centers is central to both the audit process and the evaluation of compliance with GAAP.
- **4.89** As noted previously, chapter 3 discusses the general applicability of SOP 81-1 to the unique aspects of government contract accounting and identifies several key determinations required to be made with respect to contracts in process. The following paragraphs discuss those determinations and the relevant auditing considerations and procedures.
- **4.90** Method of accounting. For the contracts covered by SOP 81-1, Accounting for Performance of Construction-Type and Certain Production-Type Contracts, the independent auditor should be guided by the recommendations in paragraphs 21 to 42 in evaluating the acceptability of a contractor's basic policy for income recognition. As discussed in SOP 81-1, the basic policy decision is the choice between the two generally accepted methods: the percentage-of-completion method, including units of delivery, and the completed-contract method. The determination of which of the two methods is preferable should be based on a careful evaluation of circumstances because

the two methods should not be acceptable alternatives for the same circumstances.

- **4.91** The percentage-of-completion method. The independent auditor's primary objectives in examining contracts accounted for by the percentage-of-completion method are to determine that the income recognized during the current period is based (a) on the total profit projected for the contract at completion and (b) on the work performed to date, and that the amount of anticipated losses on uncompleted contracts is recognized in the current period. Total contract profit is generally derived from an estimate of final contract price adjusted for incentive fees and similar provisions (such as economic price adjustment clauses) less contract costs to date and estimated cost to complete. The auditor tests each of those components in connection with the auditing procedures discussed later.
- **4.92** The independent auditor should be satisfied that, in relation to the type of contract, the method used by the contractor to measure progress (for example, measures based on engineering estimates, labor hours, machine hours, units produced or units shipped, or the cost-to-cost method) produces a reasonable measurement of the work performed to date and does not inappropriately combine or segment contracts for profit recognition purposes. Information obtained from contract cost records or correspondence files may be useful in reviewing costs incurred to date when the cost-to-cost method is used. That information may indicate the need to disregard certain costs (for example, advance billings by subcontractors or costs of undelivered or uninstalled materials) to more accurately measure the work performed to date. Occasionally, contract billings to customers may approximate the physical percentage of completion if the contract provisions require that billings be commensurate with progress on the contract.
- **4.93** The completed-contract method. The primary objective of the independent auditor in examining contracts accounted for by the completed-contract method is to determine (a) the proper amount and timing of profit recognition for completed contracts, (b) the amount of anticipated losses on uncompleted contracts, which should be recognized in the current period, and (c) consistency in designating when contracts are considered complete.
- **4.94** The independent auditor should review events, contract costs, and contract billings subsequent to the end of the accounting period to obtain additional assurance that all contract revenues and costs are included in the period in which the contracts are deemed to be substantially complete. As a general rule, a contract may be regarded as substantially complete if remaining cost and potential risks are not significant in relation to total contract costs.
- **4.95** Profit center. The basic presumption should be that each contract is the profit center for revenue recognition, cost accumulation, and income measurement. That presumption may be overcome only if a contract or a series of contracts meets the conditions for combining or segmenting contracts. A group of contracts (combining), and a phase or segment of a single contract or of a group of contracts (segmenting) may be used as a profit center in some circumstances. For those contracts covered by SOP 81-1, the criteria to be satisfied in combining and segmenting contracts are contained in paragraphs 35 to 42 of SOP 81-1. Because income recognition in a given period may be significantly affected by combining or segmenting of contracts, the independent auditor should consider the circumstances, and contract terms, in assessing the contractor's compliance with the provisions of SOP 81-1 covering combining and segmenting contracts. The auditor should determine that the combination or segmentation of contracts by the contractor is supported by

the economics of the contracting transactions and the specific criteria in SOP 81-1 are consistently followed.

- **4.96** In conjunction with the testing of contract revenues, it is common for the independent auditor to also perform his or her auditing procedures on billed and unbilled receivables. Billed and unbilled receivables and the related audit procedures are discussed later in this chapter.
- **4.97** *Determination of income.* The determination of income on a contract requires aggregating the following amounts for each profit center:
 - Accumulated costs to date
 - Estimated costs to complete
 - Estimated revenues at completion
 - Revenues earned to date
- **4.98** The audit considerations involving both the accumulated cost to date and the estimated cost to complete are discussed in the following paragraphs.
- **4.99** Costs incurred to date. The independent auditor should be satisfied that the contractor's costs incurred to date have been properly recorded. In addition, the auditor should be satisfied that accumulated contract costs include identifiable direct and indirect costs and an acceptable and consistent allocation of manufacturing overhead and local (or plant level) G&A costs. Many contractors include local G&A expenses in their allocations to contracts in progress because the allocation of local G&A expenses is generally convenient to do, and these expenses are both recoverable under contracts and considered to be relevant for determining contract results for management purposes. Therefore, many contractors also allocate these expenses to contracts in progress. However, many contractors do not record, in their actual job-cost records, allocated home office G&A expenses. Instead, they reflect those allocations in memorandum records as permitted by FAR and CAS. The auditor should obtain reasonable assurance that the memorandum records are reconciled to the actual cost records. Practice varies for including home office overhead in inventory, but the auditor should focus on the recoverability of those costs. For cost-reimbursement contracts, the independent auditor should be satisfied that the contractor has not recognized unallowable costs in determining contract revenues. The extent of audit testing will depend on the auditor's assessment of control risk.
- **4.100** The following paragraphs discuss some specific considerations for auditing incurred costs.
- **4.101** Labor costs. Labor is often a significant element of contract cost and is often the basis (or the largest element of the base) for allocating indirect costs. Therefore, the proper accounting for labor is critical.
- **4.102** The extent of substantive testing applied to payroll costs is dependent on the auditor's assessment of control risk associated with the contractor's payroll accounting and contract cost accumulation system. Tests of controls in the payroll and contract cost accumulation area should include testing the contractor's procedures for charging labor costs to contracts or other cost objectives, such as independent research and development projects.
- **4.103** In determining the extent of testing of particular categories of labor, consideration should be given to the types of labor when the risk of potential mischarging is higher. For example, the likelihood of nonproduction direct-charge personnel mischarging time between contracts may be greater than production laborers because production laborers are more likely to work on one contract at a time and for longer periods and, therefore, are less likely

to mischarge time. On the other hand, the time of nonproduction direct-charge personnel, for example, engineers and other support functions, may be allocated daily to a number of different contracts. This example, however, is not meant to diminish the potential risks of mischarging by production personnel. These risks must be evaluated on a case-by-case basis giving due consideration to the nature of the contractor's operations and the adequacy and effectiveness of its internal control structure policies and procedures. Control of time card entries also should be given careful consideration.

- **4.104** Material costs. Most materials are purchased for specific contracts. In some cases, materials may be issued from a store or stockroom inventory. The contractor's procedures are reviewed and tested to obtain evidence about whether material is properly received and that material costs are properly allocated to contracts. A comparison of the amounts of the major materials used on a contract with the quantities estimated in the original bid is a useful audit procedure for testing material costs.
- **4.105** The independent auditor should also obtain evidence as to whether material-related variances have been properly accounted for in conformity with generally accepted accounting principles and CAS, if applicable. Furthermore, the interorganizational transfers are, with certain exceptions, required under applicable government regulations to be charged to contracts at the transferor's allowable cost. The auditor should evaluate the contractor's compliance with these regulations where interorganizational transfers are material to the financial statements.
- **4.106** Other direct costs. In addition to direct labor and material, which can be readily identified with a specific contract, there are other types of expenses that may be charged directly to a specific job. These other direct costs include: packaging and packing, consultants' fees, outbound freight, expediting, royalties, and travel.
- **4.107** The independent auditor can usually audit these costs using customary audit techniques and assess the propriety of the charges to specific contracts by reviewing the provisions of the contract.
- **4.108** Overhead and general and administrative expenses. The auditor's considerations with respect to overhead and G&A expenses include the following:
 - The allowability of the costs allocated to government contracts is in conformity with FAR cost principles, other applicable regulations, and contract terms.
 - The methods used to allocate these costs to government contracts, including compliance with CAS, are appropriate.
 - The bases used to apportion indirect costs are appropriate.
 - Policies and procedures are applied consistently among government contracts and other contracts and cost objectives.
 - The computed amount of allocated indirect costs is mathematically accurate.

Also, refer to paragraphs 3.04 through 3.09, where inventoriable costs are discussed further.

- **4.109** Audit procedures related to overhead and G&A expenses may include—
 - Reviewing the composition of the various indirect cost pools to determine that the cost elements included in each pool are allowable

- and logically grouped and have a beneficial and causal relationship reflected by the bases used for allocating such expenses to contracts.
- Selecting for review and analysis specific indirect cost accounts, based on the significance of account balances and the potential for accounts to contain elements of unallowable costs.
- Evaluating the contractor's bases for allocating each of the indirect
 cost pools to operations, inquiring whether any of the contractor's
 bases have been changed since the prior audit and, if so, inquiring
 whether the changes were disclosed in a CAS Disclosure Statement.
- **4.110** In performing these procedures, the independent auditor should refer to CAS, the contractor's CAS Disclosure Statement, and the FAR cost principles, as applicable.
- **4.111** Subcontractors. Most significant government contracts involve the work of subcontractors. The auditor may consider testing significant subcontracts. In certain circumstances, the auditor may need to consider the financial viability of the subcontractor. Tests may include reviewing the accuracy of the cutoff of subcontractors' billings to determine that all billings for work performed have been included in contract costs. The auditor also should consider confirming billings to date and balances due, including retainers, for significant subcontractors.
- **4.112** Another important consideration relates to the prime contractor's general practice of "flowing down" the applicable contract clauses to all subcontractors. In the event that the prime contractor has not effectively transferred the appropriate contract clauses to the subcontractors, the prime contractor may be contingently liable for the actions of the subcontractor. The auditor may examine significant subcontracts to assist in identifying the potential for contingent liabilities.
- **4.113** Estimated-cost-to-complete. The testing of estimated costs to complete is often a complex aspect of auditing government contractors. The estimate, by its very nature, involves expectations of future performance. It is, therefore, highly subjective and involves certain representations of management. Furthermore, the data available to test these representations may be limited. For example, the periods covered in the estimate to complete may extend beyond the contractor's current labor union agreement or the estimates may include management's assumptions with respect to the impact of inflation. In such cases, the auditor must exercise his or her judgment as to whether such estimates are reasonable. The auditor may consider comparing management's estimates with external data, industry, and other projections.
- 4.114 The initial step in reviewing the estimate-to-complete is to assess the relative risk factors of the contracts. This involves assessing both the performance risk and the risk associated with the contract terms. For example, the financial exposure from an inaccurate estimate-to-complete is typically greater for fixed-price-type contracts than for cost-type contracts. In addition, the exposure generally is greater on fixed-price contracts for new, sophisticated products because of the uncertainty of technological feasibility than on contracts for products that the contractor has successfully produced before. The auditor should understand the key factors and assumptions underlying management's estimate and how the estimate was developed. For example, what are the significant assumptions? How sensitive is the estimate to variations in the assumptions? Are the assumptions consistent with or do they deviate from historical patterns? Was the estimate prepared by someone who is knowledgeable of and accountable for contract performance? Does the estimate give consideration to actual experience to date and reasonably anticipated changes

in costs, labor productivity, scrap factors, and so on? Another important consideration is the accuracy of the contractor estimates-to-complete for the current and similar previous contracts.

- **4.115** In determining the extent of substantive tests of the contractor's estimate-to-complete, the independent auditor considers his or her assessment of the inherent risk and control risk associated with the preparation of such estimates. SAS No. 57 provides guidance to the independent auditor in reviewing and testing management's estimating process. A history of estimating accuracy and favorable results of his or her tests of controls may allow the auditor to reduce the level of detailed substantive tests, which may include the following audit procedures:
 - Determine the product design status to effectively evaluate the
 overall estimates-to-complete as well as the specific material and
 labor estimates. The various stages of design completion include
 design not complete, preliminary design complete, preproduction
 units not tested, and production unit tested but major specification
 deviations exist.
 - Inquire of engineers or other contract managers about the status of contract performance. This knowledge will assist the independent auditor in evaluating the reasonableness and reliability of the current engineering estimates and provide background information useful in evaluating the reasonableness of labor, material, and overhead included in the estimate-to-complete. Because of the background information that this evaluation provides, it should probably be one of the first reviews performed.
 - Compare material costs incurred to date, plus estimated material costs-to-complete, with the original bid or proposal estimate, and obtain explanations of unusual variances and changes in trends.
 - For labor hour estimates, compare the actual labor hours experienced on the contract to date with the estimated future labor hours, and obtain explanations for significant variations in labor productivity. For example, management's estimate-to-complete may contemplate improved labor productivity due to learning or other factors. The auditor may review and test learning curve assumptions, and the like, that may be available to assess the reasonableness of the estimate.
 - Review historical labor rate changes as a reasonableness test of expected increases when the labor rates used for the estimate-tocomplete are based on actual rates, adjusted for anticipated wage changes (for example, those changes provided by union contract).
 Where applicable, compare the estimated labor rates to the current union contract schedules.
 - Consider whether all overhead costs (including G&A costs when the contractor's policy is to capitalize such costs) are included in the estimate-to-complete and that projections of future business volume are comparable to production levels used to calculate current overhead rates. In addition, the auditor may consider evaluating the reasonableness of the overhead costs included in the estimate-to-complete by comparing these with the contractor's operating budgets.

- Obtain a summary of work performed and consider whether management's estimate of costs-to-complete includes change orders, price and quantity increases, anticipated penalties for late completion, warranties and similar items that may eventually affect the profitability of the contract.
- Review project engineers' reports and interim financial data, including reports and data issued after the balance sheet date, and obtain explanations for unusual variances from the estimates used in preparing the financial statements.
- Review information received from customers or other third parties in confirmations and in correspondence about disputes, performance problems, and so on, that may affect total contract revenues and estimated cost-to-complete.
- **4.116** In addition, the auditor should consider whether design changes have been included in the bill of materials price for estimate-to-complete purposes. Equally important is the potential for future design changes. Situations when the current performance capability of the product is substantially less than the requirements prescribed by the contract may indicate that substantial design changes will be required. These design changes could have a significant impact on the ultimate contract costs.
- **4.117** The complexity of the contractor's work may require the auditor to consult with specialists, such as engineers and architects, to obtain competent advice or opinions regarding project progress and/or the estimated cost-to-complete. As noted previously, SAS No. 11, *Using the Work of a Specialist*, provides guidance in this area.
- **4.118** Total estimated revenues. The estimate of total contract revenues to be used in conjunction with the estimated cost-at-completion for determination of the estimated profit on the contract will ordinarily include the basic contract price, plus or minus the effects of change orders, claims, contract options, incentives, and award fees. The contract price may also be affected when the contract contains specific provisions for economic price adjustments, which are designed to give at least partial consideration to unanticipated increases or decreases in costs in determining the ultimate contract price. To assess the reasonableness of management's current estimate of contract revenues, the auditor reviews the contract and related correspondence files, giving particular attention to the various clauses and provisions noted above.
- **4.119** Typically, economic price adjustment clauses in government contracts provide for adjustment to the contract price, subject to certain limitations or ranges, if the relevant indices experienced during contract performance change from the indices specified in the contract. To evaluate the effects of the potential adjustments on the estimated total contract revenues, the auditor should be familiar with the applicable clause(s), which describes the method(s) to be used to compute the adjustment.
- **4.120** Many government contracts contain cost- or performance-incentive provisions. The evaluation of whether such incentives or award fees have been or will be earned may have a material effect on the amount and timing of revenue recognized. The auditor should obtain an understanding of the contract incentive provisions and consider whether, based on that understanding and the underlying facts and circumstances as discussed in paragraphs 3.26 through 3.29, the contractor has considered incentives in its estimates of total contract revenues.

- **4.121** Review of earned revenue. Most contractors, particularly those using the percentage-of-completion method, periodically prepare and review internal management reports on the status of significant contracts for the purpose of evaluating earned revenue. In connection with these reviews, the contractor obtains current estimates of percentage-of-completion and revenues, costs, and gross margin. The status of other matters that may potentially impact contract gross margin, such as incentives, award fees, and change orders, also is updated. These data typically are obtained from the personnel responsible for the particular projects and summarized to facilitate management's revenue recognition decisions. The auditor should consider this information in assessing the reasonableness of management's judgments in this area.
- **4.122** To test the contractor's contract status report, the independent auditor should consider performing the following procedures, such as, but not necessarily limited to, the following:
 - Trace the data to their sources, such as contract cost records, engineer's estimates of progress, or project managers' status reports.
 - Compare current results to prior reports for unusual trends.
 - Discuss with project managers and other knowledgeable personnel the status of the project.
 - Compare the contract status reports to other contract records and documentation (for example, correspondence with the government) for consistency.
 - Physically observe the status of the project, that is, visit the project site.
- **4.123** Analysis of gross profit margins. Lastly, the independent auditor should consider analyzing estimated gross profit margins on significant contracts and obtaining explanations for contracts with unusually high or low estimated profit margins in light of present and past experience on similar contracts. Procedures to be considered include comparison of both the profit margins recognized on open contracts with the final results on similar closed contracts and the final profit on closed contracts with the estimated profit on those contracts in the prior year.
- **4.124** Losses on contracts. As noted in chapter 3, anticipated losses on contracts, including contracts on which work has not commenced, should be recognized when they become probable. In addition, the contractor should consider the need for accruals to recognize other contract costs or revenue adjustments, such as warranties, penalties for late completion, loss contracts with firm fixed-price options, and foreseeable losses arising from terminated contracts. The auditor should then evaluate management's decision in view of facts and circumstances.

Accounts Receivable

- **4.125** A government contractor's receivables may include billed and unbilled amounts, retentions, and unapproved change orders and claims. Ordinarily, a contractor's records include separate accounts for each type of receivable. As discussed earlier, each contract will specify the billing terms, which may vary by contract, to be followed by the contractor. The independent auditor's procedures related to billed and unbilled receivables usually are performed as part of his or her testing of contract revenues.
- **4.126** Billed receivables. Billed receivables under government contracts differ from commercial trade receivables in certain respects. Amounts due from the government under a prime contract may ordinarily be considered

collectible or realizable from the standpoint of the customer's ability to pay. Nevertheless, the auditor ordinarily undertakes procedures to determine that the amount included in the contractor's records represents the amount billed to the procurement office but not yet collected under the contract. Because government disbursement offices rarely reply to an auditor's accounts receivable confirmation requests, confirmation is unlikely to be successful. Accordingly, the auditor should consider the use of alternate procedures to satisfy himself or herself regarding the amounts owed the contractor.

- **4.127** An effective alternative to direct confirmation is examination of subsequent payments received from the disbursing office, remittance advices, bank statements, and so forth. It may also be appropriate to compare billed receivables with approved billing documentation, shipping records, delivery schedules, government inspection and acceptance documents, and the like.
- **4.128** In commercial enterprises, these procedures would ordinarily serve to satisfy the auditor that the billed amounts were appropriate because it is reasonable to conclude that confirmation or payment would not be forthcoming from the customer if the receivables were incorrect. This is not always true with the government, however, because confirmation or payment does not necessarily mean the amount is correct but only that the amount has been billed. For example, the contractor may have billed the government using its actual overhead rate when the contract calls for a specific, provisional, agreed-upon rate to be used for billing purposes. In addition, regulations may require contractors to certify that rates used for billing overhead to the government contain no unallowable costs. Accordingly, audit procedures should be considered to obtain reasonable assurance that the billed receivables—
 - Have been billed in accordance with the specific terms of the contract.
 - Include only costs that are allowable and allocable under applicable regulations.
- **4.129** The independent auditor also may consider discussing any other information relevant to assessing the possibility of billing adjustments (for example, contract correspondence and government audit reports) with the contractor's management personnel and, in certain circumstances, the appropriate ACO and DCAA representatives.
- **4.130** For subcontractors, the existence of billed receivables due from prime contractors may generally be evaluated by direct confirmation. In the absence of replies to requests for direct confirmation, alternative procedures should be applied similar to those employed for prime contracts. However, the government's credit standing does not pass to the prime contractor or higher tier subcontractor; therefore, each contractor's creditworthiness must be evaluated independently.
- **4.131** Unbilled receivables. Unbilled receivables arise when sales or revenues have been recorded but not billed currently under the contract terms. The receivables may represent (1) unbilled amounts arising from the use of the percentage-of-completion or other method of recognizing revenue that differs in terms of timing from the contractual billing terms; (2) costs incurred to be billed under cost-type contracts; and (3) differences between provisional overhead billing rates and actual allowable overhead rates.
- **4.132** Because direct confirmation of an unbilled receivable is not possible and because confirmation or payment by the government of a billed receivable would not necessarily mean that the amount is correct but only that the amount has been billed and/or paid, alternative auditing procedures should be applied. In addition to evaluating the unbilled information on the basis of

accumulated cost data, these procedures generally should include examination of subsequent billings and, if applicable, cash collections. The auditor should also evaluate management's consideration and treatment of costs included in billed and unbilled receivables that may be subject to dispute between the contractor and the government and, therefore, may potentially be unrecoverable. The auditor may also consider discussing the status of overhead cost determination and other matters affecting the realizability of unbilled receivables with the appropriate ACO and DCAA representatives. Furthermore, the auditor should consider the length of time the receivable has remained unbilled because this may indicate the existence of disputed costs, potential or unrecorded contract modifications, or other matters affecting ultimate collectibility.

- **4.133** Retentions. Retained amounts may be included in contract provisions permitting the government to withhold a defined amount or percentage of a contract price until certain conditions have been satisfactorily met. These conditions may relate to uncompleted overhead rate negotiations, disposal of government-owned materials, fulfillment of contract guarantees or warranties, or substantial completion of contract performance. In some instances, the duration may be lengthy; therefore, the auditor should understand the basis for significant retentions and identify the conditions giving rise to the retained amounts to evaluate whether the contractor is making sufficient progress in satisfying the conditions necessary to ensure ultimate realization of the retained amounts.
- **4.134** Change orders. There are two broad types of change orders—formal change orders and constructive change orders. A formal change order is a written document issued by the government stating that, pursuant to the changes clause, specific changes to the contract are being made. Because the government acknowledges that a change is being made, only the amount of the equitable adjustment in terms of contract price or delivery schedule is likely to be disputed.
- **4.135** Constructive change orders are often subtle and difficult to identify, document, and quantify because they may represent an informal action, failure to act, or omission on the part of the government. Constructive change orders may be either written or oral directives or requests. Nonetheless, they have the same force and effect as formal change orders. In addition, constructive change orders frequently result in disputes regarding the contractor's right or entitlement to equitable adjustments because the government and the contractor often will disagree that the informal act or omission constitutes a valid contract change.
- **4.136** To evaluate the contractor's estimate of the effect of change orders on both the costs to complete the contract and the amount of profit or loss to be recognized during the period, the auditor may consider
 - a. Evaluating whether the estimated contract revenue and costs are adjusted to reflect approved change orders.
 - b. Evaluating the reasonableness of the estimated costs of performing the change order just as other contract costs are evaluated for reasonableness. Particular attention should be given to impact costs (for example, inefficiencies created by delays and disruptions to the work schedule) that contractors sometimes fail to consider when estimating change order costs.
 - c. Examining the signed change order document for any terms and conditions affecting the contractor's recovery under the change order and note approval of the change by all parties involved.

- **4.137** With respect to unpriced change orders, the appropriate accounting is largely dependent on the probability of cost recovery as measured by the likely occurrence of future events. Some of the factors to be considered in evaluating probability of recovery are—
 - The customer's written approval of the scope of the change order.
 - The separate documentation for identifiable and reasonable change order costs.
 - The contractor's historical experience in negotiating change orders, particularly the specific type of contract and change order being evaluated.
- **4.138** Nonetheless, probability of recovery depends on the unique facts and circumstances of each situation and the following tests should be considered by the independent auditor:
 - a. Inquire as to why the change order remains unpriced. If the price or scope of the change order is formally in dispute, the change order should be evaluated as a claim (see paragraph 4.139).
 - b. Evaluate the probability that change order costs will be reimbursed by the government. The contractor's past recovery experience should be considered in this evaluation, together with the reasonableness, allowability, and allocability of the contractor's actual and estimated costs of the change order.
 - c. Examine documentation, for example, correspondence files, that may provide additional evidence regarding the probability of the contractor's ability to recover the cost of the changed work.
 - d. Inquire about the probability of recovery with appropriate contractor personnel and legal counsel.
- **4.139** Claims. Accounting for and auditing contractor claims against the government (or a subcontractor's claim against a prime contractor) is a complex matter that requires the exercise of substantial judgment by both contractors and independent auditors. The factors affecting the realization of claimed amounts recorded by a contractor often are very complex. Disputed matters may take several years to resolve, during which time management may make decisions regarding settlement, litigation strategy, and so forth. This may result in recovery of amounts sometimes substantially different from those originally anticipated and recorded by the contractor.
- **4.140** Claims process. A claim against the government generally arises from some action, failure to act, or omission on the part of the government that the contractor perceives as requiring the performance of work different from the original contract and that results in the contractor's incurring costs in excess of those contemplated under the original contract. In effect, a claim is a disputed change order. Furthermore, claims often develop from constructive change orders. The dispute may concern, among other things, the contractor's legal entitlement to an equitable adjustment in contract price or delivery schedule.
- **4.141** The document submitted to the government in support of the contractor's claim should be well-organized and prepared in an objective manner. The facts should be presented in sufficient detail to allow for a full understanding of the basis of the claim, and all information contained in the claim should be verifiable. A typical claim document is generally organized in the following manner:
 - a. Summary of the claim

- b. Description of the original contract requirements
- Description of actions, failures to act, or omissions of the government resulting in the claim
- d. Description of the additional work performed by the contractor
- e. Summary of the increased costs of performing the additional work
- **4.142** The pricing of the claim should be consistent with the description of the additional work performed by the contractor. Detailed working papers and other documentation should be prepared and maintained by the contractor in support of the amounts claimed.
- 4.143 The typical government contract includes a changes clause and a disputes clause. As previously discussed, the changes clause entitles the contractor to an equitable adjustment in contract price or delivery schedule for the work the government directs—either formally or constructively—the contractor to perform differently from the original contract requirements. The disputes clause provides the mechanism for resolving disputes regarding the contractor's right to an equitable adjustment. Therefore, the major determinant in evaluating the probability of claim recovery is the contractor's legal entitlement to recovery of its increased costs pursuant to the changes clause or other applicable clauses. Legal entitlement depends principally on the contractor's ability to prove that the government changed the original contract requirements. Whether the contractor is able to meet its burden of proof in this regard is a legal matter; therefore, the independent auditor should consult with, and obtain written representation from, the contractor's legal counsel, as discussed in the section on client representations.
- **4.144** In addition to entitlement, the reasonableness of the pricing methodology used and the accuracy of the amounts claimed by the contract are critical factors in determining the realizability of the contractor's claim.
- **4.145** Although the appropriateness of the contractor's pricing methodology will depend on the applicable regulations and the facts and circumstances of each case, acceptable claim pricing is also determined, to a large extent, by a vast body of case law.
- **4.146** Recognition of claim revenues and costs. As discussed in chapter 3, accounting for the recognition of claim revenues is covered in paragraphs 65 through 67 of SOP 81-1. Specifically, paragraph 65 of SOP 81-1 concludes that recognition of "contract revenue relating to claims is appropriate only if it is probable that the claim will result in additional contract revenue and if the amount can be reliably estimated." Those two requirements are generally satisfied by the existence of all four conditions specified in paragraph 65 and discussed below.
 - Condition 1—The contract or other evidence provides a legal basis for the claim; or a legal opinion has been obtained, stating that under the circumstances there is a reasonable basis to support the claim. An effective means of obtaining evidence about management's compliance with this criterion is to obtain from the contractor's legal counsel an opinion on both the legal basis of the claim and the probability of recovery. Other evidence that may contribute to satisfying this criterion will depend on the circumstances of each case but may include explicit provisions of the contract, information obtained by the contractor during the course of discovery in the case, and other relevant data. The existence of the changes clause in the contract does not provide an absolute legal basis for a claim.

- Condition 2—Additional costs are caused by circumstances that were unforeseen at the contract date and are not the result of deficiencies in the contractor's performance. The contractor is generally considered responsible for cost increases caused simply by underestimating the original work, contractor inefficiencies, and similar factors that are not the government's responsibility and, therefore, generally do not provide a basis for a claim against the government. The additional costs mentioned in this condition are generally costs incurred because of constructive or formal change orders issued by the government.
- Condition 3—Costs associated with the claim are identifiable or otherwise determinable and are reasonable in view of the work performed. Once those changes giving rise to a claim are recognized, contractors should attempt to segregate the costs associated with changes in contract scope or method of performance. If the formal accounting system does not permit this segregation, memorandum records should be used. In some cases, however, the basic nature of the change may be identified, but its impact may be so pervasive that easy identification of the related increased costs is very difficult. This is particularly true in the case of certain constructive changes, including defective government specifications, which often require the contractor to remove or alter work previously performed or change the sequence in which work is to be performed. In these circumstances, the contractor would have to estimate or reconstruct the costs of the changed work, including delay and disruption costs, using the cost records, man-hour estimates by the employees who performed the changed work, and quantitative methods, such as learning curve analyses.
- Condition 4—The evidence supporting the claim is objective and verifiable, not based on management's "feel" for the situation or on unsupported representations. In assessing the contractor's satisfaction of this condition, the independent auditor should consider the factors discussed previously in connection with the first three conditions. The specificity of the information contained in the claim document and the adequacy and completeness of the working papers and other documentation underlying the claim are critical to this process. The independent auditor's knowledge of the government contracting industry and the contractor's performance history with respect to contracts of this type are among the additional factors to be considered in evaluating the proper recognition of claim revenue.
- **4.147** Auditing procedures. The procedures to be performed in evaluating whether the four conditions cited above have been met vary depending on the circumstances. Following are some of the procedures likely to be performed by the independent auditor (the conditions of paragraph 65 of SOP 81-1 to which the procedures relate are noted parenthetically).
 - Read the contractor's claim document submitted to the government to obtain an understanding of the basis for the claim and the pricing methodology used. Evaluate whether the document is well-organized, describes the legal basis for the claim, appears to contain all relevant information, and appears to be capable of audit by the

government. Determine whether the claim has been properly certified by the contractor as required by the Contract Disputes Act (41 USC 601). If the claim is not properly certified and exceeds \$50,000, it is generally not a claim under the law; therefore, the validity of the claim should be resolved before it is included in revenues (Conditions 1 through 4).

- Make inquiries of the contractor's legal counsel regarding the contractor's entitlement to recovery and an estimate of such a recovery. The contractor's legal entitlement to an equitable adjustment is based primarily on the ability to prove that the government altered the contract requirements. Because this is principally a legal issue, an opinion from legal counsel is essential. A written opinion generally should be obtained with respect to all material claims, and the independent auditor should be prepared to justify any departures from this procedure (Conditions 1 and 2).
- Through discussions with legal counsel, determine the stage of the disputes process the claim is in and review the related documentation, for example, the contracting officer's final decision and decisions by the Board of Contract Appeals and the U.S. Claims Court. Although the contractor is entitled to pursue his or her rights through the appeals process, the independent auditor should consider the rulings and decisions issued by these boards and courts in assessing the probability of the contractor's recovery of claimed amounts. Furthermore, consideration should be given to the likelihood that the government may prevail in an appeal of a favorable decision on behalf of the contractor. As previously noted, the auditor may wish to consult a specialist in these types of matters (Conditions 1 and 4).
- Review the contract terms to identify the specific provisions of the contract relating to matters involved in the claim. Consider the effect of contract terms precluding the contractor's filing a claim under certain circumstances or specifically excluding certain costs, for example, consequential damages and general administrative expenses (Condition 1).
- Review the pricing methodology and supporting documentation underlying the claim. As previously mentioned, the lack of early identification of constructive change orders generally will preclude the segregation of changed work costs as they occur. In many cases, the claim pricing documentation may include working papers and analyses that must be reconcilable to the contractor's formal contract-cost records. In evaluating the appropriateness of the pricing methodology and related documentation, consider consulting with specialists knowledgeable with the acceptable methods of pricing claims and the strengths or weaknesses of various methods, for example, the disadvantage of the so-called total cost approach to claim pricing (Conditions 3 and 4).
- Evaluate the claim pricing for compliance with the FAR cost principles and CAS (Conditions 3 and 4).

4.148 If the independent auditor concludes that it is appropriate for the contractor to recognize revenue related to the claim, the auditor should

determine that the revenue recognized is limited to contract costs incurred in connection with the claim. (See the section on contract claims in chapters 2 and 3.) In evaluating the amount of revenue to be recorded, the auditor should recognize that claims, in particular claims for constructive change orders, are routinely negotiated and settled with the government on a basis that differs from, sometimes significantly, the original amount claimed. Furthermore, the auditor should recognize that negotiations are often involved in the claims settlement process and that appropriate reserves against claims receivable may be necessary to reflect the estimated net realizable amount even if the claim is adequately supported from a cost standpoint. The contractor's past history in negotiating similar claims should be considered in this regard. The auditor also should determine that the recorded amounts, if material, are disclosed in the notes to the financial statements.

Progress Payments

4.149 The government typically finances contractor performance of fixed-price-type contracts by means of progress payments. (See the section on contract financing in chapter 1.) Audit procedures performed in this area may include a review of—

- Subsequent cash receipts, including a comparison of requests for payment with the terms of the contract.
- The contractor's progress payment requests to obtain reasonable assurance that costs included in the billings were actually paid by the contractor in accordance with government regulations before billing to the government.
- Activity in the progress payment accounts, including analysis of progress billings by the contractor, progress payments received from the government, and liquidation of the progress payment account upon shipment or other appropriate basis. In some cases, the independent auditor may consider confirming specific progress payments.
- The contractor's estimate of cost at completion included in the request for progress payment. This should approximate closely management's most current estimate of cost at completion for revenue recognition purposes.

4.150 The government recoups progress payments from contractors through a process known as liquidation. The amount of the liquidation is generally calculated as the contract price of delivered items multiplied by the liquidation rate prescribed in the contract. This amount is then deducted from the contractor's invoices for delivered items. The liquidation rate is usually, but not always, the same as the progress payment rate. While a contract is in process, a balance of unliquidated progress payments usually exists. Audit procedures ordinarily performed to test the reasonableness of the balance of unliquidated progress payments include the following:

- Reviewing and vouching progress payments received during the year
- Reviewing and vouching payments received for completed contract items and recomputing the liquidation amounts
- Reconciling the balance of unliquidated progress payments for a contract to the most recent request for progress payment

Property and Equipment

4.151 As discussed earlier, contractors may use company-owned property and equipment and property furnished by the government. For property owned by the contractor, customary audit procedures should be followed. However, when the contractor uses government-furnished property, the independent auditor should consider obtaining evidence as to whether assets of the government are excluded from the contractor's financial statements.

Contract-Related Liabilities

- **4.152** Contract-related liabilities typically include payables to vendors and subcontractors (including retained amounts), advance payments received from the government, and guaranteed loans. Amounts due to subcontractors, like other accounts payable, usually are evidenced by invoices and other appropriate documentation. In some instances, contractors retain a portion of amounts due subcontractors until work is completed and accepted. The retained amount may be a percentage of the subcontract price or a fixed amount, as provided in the subcontract. In these cases, the independent auditor should consider confirming those amounts directly with the subcontractor
- **4.153** The contractor may also establish other reserves for known or contingent liabilities, for example, government claims, contract terminations, and subcontractor claims. The specific audit procedures relating to these types of liabilities are discussed below. In addition, the independent auditor may also consider discussing the status of claims, disputes, or audit findings directly with the appropriate ACO and the contract auditor(s).

Government Claims

- **4.154** Government claims generally involve one of the following five issues:
 - 1. Unallowable costs
 - 2. Mischarged costs
 - Defective pricing
 - 4. Contract terminations
 - False claims
- **4.155** Cost allowability is governed by the applicable procurement regulations, and the interpretation of these regulations has been a significant source of disputes between contractors and the government. Cost mischarging occurs when costs are not properly allocated to contracts or other cost objectives. Defective pricing arises when the contractor has failed to comply with the Truth in Negotiations Act.
- **4.156** For each of these issues, asserted and unasserted claims may have a significant effect on a contractor's financial statements. Management is responsible for evaluating the likelihood of an unfavorable outcome and the amount or range of potential loss relating to asserted and unasserted claims. The independent auditor should review management's evaluation for reasonableness in light of the particular facts and circumstances. The independent auditor's procedures to be performed in making this review are discussed in SAS No. 12. Additional guidance is provided in SAS No. 57, Auditing Accounting Estimates. In some cases, the auditor's review may also include issues of a legal or contract nature that will require the use of lawyers or other specialists.
- **4.157** In addition, asserted and unasserted claims by the government against the contractor may involve illegal acts, errors, or irregularities, and in

such cases, the independent auditor should follow the guidance in SAS Nos. 53 and 54 in evaluating the impact, if any, that these matters have on the financial statements and his or her report.

- **4.158** The independent auditor should also be assured that the contractor's audit committee, or others with equivalent authority and responsibility, is adequately informed of any illegal acts or irregularities of which the auditor becomes aware during the audit unless such matters are clearly inconsequential.
- **4.159** The following paragraphs discuss each of the areas dealing with the identification and evaluation of unasserted claims.
- **4.160** Unallowable costs. Historically, government contractors may have evaluated unasserted claims for unallowable costs based largely on their past experience plus consideration of specifically identified or disputed items. The independent auditor should assess the continuing reasonableness of this approach in light of such factors as changes in the contractor's procedures for accumulating and reporting allowable and unallowable contract costs. In some cases, the auditor may conclude that increased testing of specific elements of contract cost is necessary to obtain sufficient evidence about their allowability under the applicable cost regulations if the risk of disallowance of such costs is significant.
- **4.161** *Mischarged costs.* Although the risk can vary depending on the company and the nature of its operations, perhaps the greatest exposure for cost mischarging is in the labor area, although the potential for mischarging in the areas of material cost and overhead allocation may also be substantial.
- **4.162** Because of this exposure, the auditor obtains sufficient evidence as to whether costs have not been incorrectly charged in amounts material to the financial statements by (a) considering the effectiveness of the internal control structure policies and procedures that management has established to ensure that costs are charged to the appropriate contracts and other cost objectives and (b) performing substantive tests of recorded costs.
- **4.163** Defective pricing. Defective pricing may result in a reduction in the price of the contract in question and result in the imposition of interest charges and penalties; therefore, the independent auditor should be aware of the possibility that defective pricing may have occurred. Procedures applied for the purpose of forming an opinion on the financial statements may raise concerns that defective pricing has occurred. When the independent auditor becomes aware of information concerning asserted or unasserted defective pricing, the auditor should obtain an understanding of the nature of the act, the circumstances in which it occurred, and other sufficient information to evaluate the effect on the financial statements. For asserted claims, the procedures performed generally are similar to those associated with the audit procedures applied to other contingencies.
- **4.164** If the independent auditor's inquiries indicate that the internal control structure policies and procedures are not designed to provide reasonable assurance that defective pricing will be prevented or detected on a timely basis, then the auditor should consider making additional inquiries, such as—
 - An inquiry about significantly lower actual cost of individual items and cost elements vis-à-vis amounts included in the contractor's proposal.
 - An inquiry about operations not actually performed or items of cost not incurred, although included in the contractor's proposal.

- An inquiry about items of direct cost included in the contract pricing proposal at prices higher than appear to be justified based on the contractor's actual cost experience either before or after agreement on contract price. In this regard, the contract price is not defective solely because subsequent market price declines enabled the contractor to obtain, for example, lower material prices than the quotations available at the date of agreement with the government on contract price. Likewise, actual costs as experienced prior to agreement on contract price that are less than the estimated costs included in the contractor's pricing proposal and disclosed to the government are not necessarily determinative of the existence of defective pricing.
- A review of records of management decisions prior to agreement on price, for example, minutes of meetings of the board of directors and special committees, that have a significant effect on contract costs, and subsequent to award, and an inquiry about whether the results of those decisions were communicated to the government.
- A consultation with the contractor's legal counsel, as appropriate.
- **4.165** Contract termination. In the event that a contract is terminated for the convenience of the government, the independent auditor should review the status of costs and revenues on the contract to obtain reasonable assurance that revenue has been recorded in the proper periods. Audit procedures and considerations for termination claims against the government are similar to those enumerated in the preceding section on claims.
- **4.166** A contract terminated for the convenience of the government does not typically result in a substantial loss to the contractor because the government is responsible for the payment of the contractor's costs incurred plus a reasonable profit on the work performed before termination. However, a contract terminated for default by the contractor will generally result in a loss to the contractor. Therefore, the auditor should obtain sufficient evidence as to whether appropriate accruals have been made to recognize the following items:
 - Unrecoverable costs incurred under the contract
 - Reprocurement costs incurred or to be incurred by the government and reimbursed by the contractor
- **4.167** Subcontractor claims. Auditors of prime contractors should be alert for, and consider the financial statement effect of, claims by subcontractors. These claims should be reviewed by the auditor to evaluate the likelihood of an unfavorable outcome and the amount or range of potential loss, if any, to the prime contractor.

CAS Disclosure Statement

- **4.168** As previously discussed, contractors meeting certain criteria are required to file with the government a CAS Disclosure Statement that describes their cost accounting practices on CAS-covered contracts. Not all contractors subject to CAS are required to file a Disclosure Statement; however, those contractors that may be required to file more than one Disclosure Statement and must update each one as changes occur in their cost accounting practices. Additionally, they must inform the government of the cost impact of such changes.
- **4.169** Failure to consistently follow the disclosed cost accounting practices in pricing contract proposals and in accumulating and reporting contract cost

data, may result in a downward adjustment to contract prices. Accordingly, the independent auditor should consider reviewing the contractor's Disclosure Statement for consistency with his or her understanding of the contractor's accounting policies and practices.

Independent Research and Development (IR&D) and Bid and Proposal (B&P) Costs

4.170 Because IR&D and B&P costs are recovered from the government up to ceiling amounts, there are two important issues that may have a direct and material effect on the amounts reported in the contractor's financial statements. These issues are as follows:

- Contract requirements. Costs related to activities required in connection with an existing contract must not be allocated to IR&D and B&P. This distinction is often difficult to make and has frequently been the subject of disputes between contractors and the government. The independent auditor should be aware of contract activities closely related to IR&D and B&P, and should consider performing tests to obtain evidence as to whether contract-specific and IR&D and B&P activities are properly accounted for by the contractor.
- Proper expense identification. IR&D and B&P costs must be accurately charged. Other indirect costs that are closely related but not the same must be properly segregated, for example, selling costs, manufacturing, and production engineering costs.

Classified Contracts

- **4.171** Government contractors may have contracts involving classified government programs. Access to certain financial and other data about classified contracts generally requires some level of security clearance from the government. Consequently, in auditing the financial statements of government contractors that have significant classified contracts, the independent auditor generally seeks appropriate security clearance. Because the length of time to obtain such clearance varies from as little as a few months to more than a year, it is advisable to arrange for clearance as early in the engagement as possible, and if available, obtain assistance from internal auditors with appropriate clearances in audits of sensitive areas.
- **4.172** The independent auditor should review the contractor's internal control structure policies and procedures with respect to classified programs and accounting for the financial consequences of such contracts in accordance with generally accepted accounting principles. The control environment should include the following:
 - Senior management having the requisite access and clearance to classified contracts to provide appropriate review and oversight
 - Appropriate access and clearance by financial accounting and internal audit personnel
 - A system to communicate contract financial status information, such as cost and technical performance, award performance, or incentive fee data
- **4.173** If the independent auditor obtains clearance, he or she performs the same types of auditing procedures to test classified contracts that are used to test nonclassified contracts. If, however, clearance cannot be obtained in time

to perform the audit, or clearance is denied, the procedures are likely to be limited to inquiry of management about the classified contracts.

- **4.174** The independent auditor's decision about the effect of this scope limitation on the auditor's report depends on the auditor's assessment of the materiality of, and audit risk associated with, classified contracts. In assessing materiality and audit risk, the auditor may consider the following:
 - a. Management's representations about matters indicative of the materiality of classified contracts, such as amounts awarded, revenues, and profitability
 - Management's representations about matters indicative of inherent risk associated with classified contracts, such as contract type (cost or fixed-price), existence of claims, or incentive or award fee provisions
 - c. Matters affecting the risk of management misrepresentation about classified contracts, such as the contractor's control environment
 - d. Results of other auditing procedures designed to provide evidence corroborating management's representations about classified contracts, such as (1) analysis of cost flow to contract or other cost objectives for which access to underlying supporting documentation has been denied, (2) inquiry of contract auditor(s) and other government or customer personnel who monitor the contractor's performance of classified contracts and (3) inquiry of internal auditors
- **4.175** The procedures described in the preceding paragraph are intended to provide a basis for assessing materiality and audit risk associated with classified contracts. The performance of these procedures alone would not provide sufficient, competent audit evidence about classified contracts that are material to the financial statements. If the independent auditor concludes that the results of these procedures do not provide a sufficient basis for assessing the materiality of classified contracts or the audit risk associated with them, he or she should modify the auditor's report with either a qualified opinion or a disclaimer of opinion, as appropriate, because of a scope limitation. Even if the independent auditor does have a basis for assessing materiality and audit risk of classified contracts, he or she generally would modify the report because of a scope limitation, unless that basis clearly indicates that they are immaterial.

Appendix A

SECURITIES AND EXCHANGE COMMISSION, ACCOUNTING SERIES RELEASE NO. 138 OF JANUARY 12, 1973

Notice of Adoption of Amendments to Forms 8-K, 10-K, 12-K, S-1, S-7, S-8, S-9, S-11, 10 and 12 Requiring Increased Disclosure of Unusual Charges and Credits to Income.

The Securities and Exchange Commission today adopted amendments to its registration and reporting forms to require more detailed and timely reporting, and timely review by independent accountants of extraordinary or material unusual charges and credits to income or material provisions for losses effected by registrants. Proposals to amend these forms, as well as Forms 7-Q and 10-Q, for these purposes were published for comment in Securities Act Release No. 5313 (Securities Exchange Act Release No. 9801) on October 2, 1972. Form 8-K is the form for reporting certain specified material events and transactions pursuant to Sections 13 and 15(d) of the Securities Exchange Act of 1934 (Exchange Act); Forms 10-K and 12-K are the forms for annual reports pursuant to those sections of the Exchange Act; Forms S-1, S-7, S-8, S-9, and S-11 are forms for registration of securities pursuant to the Securities Act of 1933; and Forms 10 and 12 are forms for registration of securities pursuant to the Exchange Act.

The Commission noted when it proposed amendments to these forms that it had observed an increasing number of large charges to income which often appeared without warning and were not generally understood by investors. The Commission is concerned that this trend seems to have accelerated in recent months. While many of such charges result from an identifiable event, many also appear to be made on the basis of a discretionary decision to dispose of marginal facilities or operations or to write off deferred development or excess production costs. In the latter situations, where facilities or operations gradually deteriorate or the outlook for a contract or program gradually worsens to the point where a write-off is deemed necessary, registrants have an obligation to forewarn public investors of the deteriorating conditions which unless reversed may result in a subsequent write-off. This includes an obligation to provide information regarding the magnitude of exposure to loss.

The Commission, therefore, reiterates its view that registrants should make special efforts to recognize incipient problems that might lead to such charges and to identify them clearly at the earliest possible time in financial statements and other forms of public disclosure, including public reports filed with the Commission, so that public investors may recognize the risks involved. In this connection, registrants should consider disclosure of the investment involved in divisions operating at a loss; the undepreciated cost of plant and equipment currently considered to be obsolete or of marginal utility; the extent of deferred research and development costs incurred in connection with products whose success is not reasonably assured; and other similar items where significant uncertainties exist as to realization.

The Commission has previously urged more comprehensive disclosure of progress and problems encountered in defense and other long-term contracts which may also give rise to major charges against income (Securities Act Release No. 5263 dated June 22, 1972) and has urged greater diligence in the

release of quarterly and other interim reports of operations (Securities Exchange Act Release No. 9559 dated April 5, 1972).

In addition to disclosure of incipient problems, the Commission believes that substantial additional disclosure in regard to extraordinary items and material unusual charges and credits to income or major provisions for loss is necessary to enable public investors to assess the impact of such items. This would include transactions that are classified as extraordinary items under generally accepted accounting principles and other unusual or nonrecurring material transactions or provisions for loss, such as (but not restricted to) material write-downs of inventories, receivables, or deferred research and development costs, provisions for loss on major long-term contracts or purchase commitments, and losses on disposition of assets or business segments. The release of October 2 (33-5313 and 34-9801) contained proposals for such disclosure. The comments received on these proposals have been given careful consideration in determining the amendments to adopt.

The Commission has determined not to adopt the proposed amendment calling for pro forma statements to reflect allocation of charges and credits to prior years since, on the basis of comments received, it concluded that the proposed pro forma disclosure might leave the improper implication that past historical statements were in error as well as imposing substantial clerical burdens on registrants. The amendments adopted herein call for disclosure of the years in which the costs being included in the charge were or are expected to be incurred and the amount of cost in each year by major category of cost.

The Commission has further determined not to adopt the proposed amendments to Forms 7-Q and 10-Q and other related amendments which would have required an estimate of losses by quarters and a subsequent quarterly reconciliation of reserves provided. Comments indicated that quarterly estimates and reconciliations would be difficult to make within acceptable limits of accuracy, would not supply significant data for investors, and would impose a clerical burden on registrants. The amendments adopted herein require an estimate of losses by year and a subsequent annual explanation of differences between estimated and actual amounts and a reconciliation of any reserve provided.

In addition, the Commission has determined to omit the definition of "material" contained in the proposed note to Item 10(a) of Form 8-K. Comments indicated that a definition which relates materiality to a criterion based on separate reporting of an item to stockholders might have the effect of discouraging such disclosure rather than improving the quality thereof. Materiality, therefore, must be considered within the context of the definition contained in Rule 1-02 of Regulation S-X.

The text of the amendments follows:

A. Form 8-K

- I. The caption of Item 10 and paragraph (a) have been amended as follows:
- Item 10. Extraordinary Item Charges and Credits, Other Material Charges and Credits to Income of an Unusual Nature, Material Provisions for Loss, and Restatements of Capital Share Account.
- (a) If there have been any extraordinary item charges or credits, any other material charges or credits to income of an unusual nature, or any material provisions for loss, the following shall be furnished for each such charge, credit, or provision:

- (1) The date of the registrant's determination to make the charge, credit, or provision;
- (2) A statement of the reasons for making the charge, credit, or provision;
- (3) An analysis of the components (in dollar amounts) of the charge, credit, or provision, which includes
 - (i) A description of the various types of items written down or off;
 - (ii) A description of any provision for losses on liquidation of assets or for other losses including a detailed schedule showing the components of any losses provided for, which schedule shows the amount of administrative and fixed costs, if any, allocated to the loss:
 - (iii) A description of any estimated recoveries or costs netted against the charge or credit;
- (4) A statement setting forth the years in which costs being reflected in the charge (or net credit) being described were or are expected to be incurred and the amount of cost for each year by major category (e.g., fixed assets, research and development costs, operating losses);
- (5) A statement setting forth the estimated amount of net cash outlays (or in-flows) associated with the charge (or credit) in the year the charge (or credit) is made and in each subsequent year in which such estimate of the cash amount differs from the amount of total costs stated in part (4) for that year;
- (6) A description of the accounting principles or practices followed and any changes therein or in the methods of applying such principles or practices which was made in connection with the transaction; and
- (7) A report from the registrant's independent accountants in which they state that they have read the description in the Form 8-K of the facts set forth therein and of the accounting principles applied and whether they believe that on the basis of the facts so set forth that such accounting principles are fairly applied in conformity with generally accepted accounting principles or, if not, the respects in which they believe the principles do not conform to generally accepted accounting principles.
- II. The following new instruction 8 has been added under <u>EXHIBITS</u> of Form 8-K.
- 8. Reports from the independent accountants furnished pursuant to Item 10.

B. Form 10-K

A new instruction (6) has been added to the instructions to Item 2, Summary of Operations, as follows:

(6) For any event subsequent to January 31, 1973, which was required to be reported pursuant to Item 10(a) of Form 8-K in which an amount of cost was estimated to be incurred in the fiscal year being reported on or the prior fiscal year, summarize such transaction and state the amounts of such estimated cost and the amounts of the actual cost incurred in such periods, the reasons for differences between estimated and actual amounts, if any, and provide a detailed reconciliation showing all charges and credits to any reserve provided.

C. Form 12-K

A new instruction 6 has been added to the INSTRUCTIONS AS TO EXHIBITS, as follows:

6. For any event subsequent to January 31, 1973, which was required to be reported pursuant to Item 10(a) of Form 8-K in which an amount of cost was estimated to be incurred in the fiscal year being reported on or the prior fiscal year, summarize such transaction and state the amounts of such estimated cost and the amounts of the actual cost incurred in such periods, the reasons for differences between estimated and actual amounts, if any, and provide a detailed reconciliation showing all charges and credits to any reserve provided.

D. Form S-1

A new instruction 7 has been added to Item 6, Summary of Earnings, as follows:

7. For any event subsequent to January 31, 1973, which was required to be reported pursuant to Item 10(a) of Form 8-K in which an amount of cost was estimated to be applicable to any of the fiscal years being reported on, summarize such transaction and state the amounts of such estimated cost and the amounts of the actual cost incurred in such periods, the reasons for differences between estimated and actual amounts, if any, and provide a detailed reconciliation showing all charges and credits to any reserve provided. If the issuer was not a registrant prior to the filing of this registration statement, this instruction shall apply to any transaction subsequent to January 31, 1973 which would have been required to be reported pursuant to Item 10(a) of Form 8-K had the issuer been a registrant and in which an amount of cost was estimated to be applicable to the fiscal years being reported on.

E. Form S-7

Instruction 8 of Item 6, Statement of Income, has been changed to number 9 and a new instruction 8 has been added, as follows:

8. For any event subsequent to January 31, 1973, which was required to be reported pursuant to Item 10(a) of Form 8-K in which an amount of cost was estimated to be applicable to any of the fiscal years being reported on, summarize such transaction and state the amounts of such estimated cost and the amounts of the actual cost incurred in such periods, the reasons for differences between estimated and actual amounts, if any, and provide a detailed reconciliation showing all charges and credits to any reserve provided.

F. Form S-8

Instruction 4 of Item 19, Summary of Earnings, has been changed to number 5 and a new instruction 4 has been added, as follows:

4. For any event subsequent to January 31, 1973, which was required to be reported pursuant to Item 10(a) of Form 8-K in which an amount of cost was estimated to be applicable to any of the fiscal years being reported on, summarize such transaction and state the amounts of such estimated cost and the amounts of the actual cost incurred in such periods, the reasons for differences between estimated and actual amounts, if any, and provide a detailed reconciliation showing all charges and credits to any reserve provided.

G. Form S-9

Instruction 6 to part (a) of Item 3, Statements of Income, has been changed to number 7 and a new instruction 6 has been added, as follows:

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6. For any event subsequent to January 31, 1973, which was required to be reported pursuant to Item 10(a) of Form 8-K in which an amount of cost was estimated to be applicable to any of the fiscal years being reported on, summarize such transaction and state the amounts of such estimated cost and the amounts of the actual cost incurred in such periods, the reasons for differences between estimated and actual amounts, if any, and provide a detailed reconciliation showing all charges and credits to any reserve provided.

H. Form S-11

A new instruction 7 has been added to part (a) of Item 6, $\underline{\underline{\text{Summary Financial}}}$ Data, as follows:

7. For any event subsequent to January 31, 1973, which was required to be reported pursuant to Item 10(a) of Form 8-K in which an amount of cost was estimated to be applicable to any of the fiscal years being reported on, summarize such transaction and state the amounts of such estimated cost and the amounts of the actual cost incurred in such periods, the reasons for differences between estimated and actual amounts, if any, and provide a detailed reconciliation showing all charges and credits to any reserve provided. If the issuer was not a registrant prior to the filing of this registration statement, this instruction shall apply to any transaction subsequent to January 31, 1973 which would have been required to be reported pursuant to Item 10(a) of Form 8-K had the issuer been a registrant and in which an amount of cost was estimated to be applicable to the fiscal years being reported on.

I Form 10

A new instruction 5 has been added to Item 2, Summary of Operations, as follows:

5. For any event subsequent to January 31, 1973, which was required to be reported pursuant to Item 10(a) of Form 8-K in which an amount of cost was estimated to be applicable to any of the fiscal years being reported on, summarize such transaction and state the amounts of such estimated cost and the amounts of the actual cost incurred in such periods, the reasons for differences between estimated and actual amounts, if any, and provide a detailed reconciliation showing all charges and credits to any reserve provided. If the issuer was not a registrant prior to the filing of this registration statement, this instruction shall apply to any transaction subsequent to January 31, 1973 which would have been required to be reported pursuant to Item 10(a) of Form 8-K had the issuer been a registrant and in which an amount of cost was estimated to be applicable to the fiscal years being reported on.

J. Form 12

A new instruction 9 has been added to the <u>INSTRUCTIONS AS TO EXHIBITS</u>, as follows:

9. For any event subsequent to January 31, 1973, which was required to be reported pursuant to Item 10(a) of Form 8-K in which an amount of cost was estimated to be applicable to any of the fiscal years being reported on, summarize such transaction and state the amounts of such estimated cost and the amounts of the actual cost incurred in such periods, the reasons for differences between estimated and actual amounts, if any, and provide a detailed reconciliation showing all charges and credits to any reserve provided. If the issuer was not a registrant prior to the filing of this registration

statement, this instruction shall apply to any transaction subsequent to January 31, 1973 which would have been required to be reported pursuant to Item 10(a) of Form 8-K had the issuer been a registrant and in which an amount of cost was estimated to be applicable to the fiscal years being reported on.

* * * * *

The foregoing amendments are adopted pursuant to Sections 6, 7, 8, 10 and 19(a) of the Securities Act of 1933 and Sections 13, 15(d) and 23(a) of the Securities Exchange Act of 1934. The amendments shall be effective with respect to reports on Form 8-K and registration statements on Forms S-1, S-7, S-8, S-9, S-11, 10 and 12, and with respect to annual reports on Forms 10-K and 12-K filed on or after February 28, 1973.

By the Commission.

Ronald F. Hunt

Secretary

Appendix B

SECURITIES AND EXCHANGE COMMISSION, ACCOUNTING SERIES RELEASE NO. 164 OF NOVEMBER 21, 1974

Notice of adoption of amendments to Regulation S-X to provide for improved disclosures related to defense and other long-term contract activities.

A. INTRODUCTION

The Securities and Exchange Commission has long been concerned about the quality of disclosures made by registrants engaged in defense and other long-term contract activities because these activities involve inventories and receivables with unique risk and liquidity characteristics. After initially urging corporate managers to review their disclosure policies with respect to such contracting activities, the Commission published for comment proposed amendments to Rules 5-02.3 and 5-02.6 of Regulation S-X.²

As noted in its release proposing these amendments, the Commission believes that it is necessary and appropriate to expand these Rules to require disclosure of greater detail in certain critical areas of long-term contract activity, particularly with respect to the nature of costs accumulated in inventories, the effect of cost accumulation policies on cost of sales, and the effect of revenue recognition practices on receivables and inventories.

The proposed amendments elicited numerous letters of comment which have been duly considered by the Commission in the formulation of the amendments specifically adopted in this release. The following discussion outlines the Commission's responses to certain of these comments as reflected in the adopted rules on receivables and inventories.

Comments on Disclosure of Receivables—Rule 5-02.3

Paragraph (b). Several commentators pointed out that the proposed amendment could be broadly construed to require additional disclosure for receivables other than those arising from long-term contract activities. At the present time the Commission intends only to improve disclosures related to long-term contract activities. Consequently, the amendment to this paragraph has been deleted and the proposed disclosure of collection expectations has been incorporated in the amendments addressed specifically to receivables arising from such activities.

Paragraph (e). Some commentators suggested that the retainage disclosure should be limited to amounts not expected to be collected within one year. Due to the unique liquidity characteristics of retainage, the Commission believes that any material amount of retainage should be disclosed no matter when such amount is expected to be collected. However, the Commission also believes that the significant uncertainties which often affect the determination of a mutually satisfactory contract completion may cause the estimates of amounts to be collected within specific years to become progressively less reliable. Consequently, the amendment as adopted requires the isolation of

Securities Act Release No. 5263, Securities Exchange Act Release No. 9650, June 22, 1972.
 Securities Act Release No. 5492, Securities Exchange Act Release No. 10775, May 6, 1974.

only the aggregate amount of retainage expected to be collected after one year. However, registrants are encouraged to provide estimated collections by year if their experience or other factors enable them to do so with reasonable accuracy.

Several commentators suggested that the amendment should be modified to provide for amounts retained by contractors pursuant to the provisions of subcontracts. The Commission believes that this is unnecessary because Rule 5-02.25 can be interpreted to require separate disclosure of significant amounts of retentions payable to subcontractors.

Paragraph (f). Numerous commentators pointed out that a literal interpretation of the proposed amendment would call for disclosures regarding all accrued receivables rather than just those related to long-term contracts and might also result in a duplication of disclosures made under paragraph (g). The Commission recognizes the validity of these comments and the amendment has been modified accordingly.

The amendment as adopted also calls for disclosure of the amounts of receivables not billed or billable that are expected to be collected after one year. The Commission believes that disclosure of the timing of expected collections provides investors with meaningful liquidity and risk information.

It should be noted that the amendment is not directed at items which are "unbilled" at the balance sheet date merely because the necessary paperwork has not been processed in accordance with the normal operation of a billing system. Such items would generally be considered "billable" for purposes of this Rule.

Paragraph (g). Many commentators argued that the proposed amendment was too broad since it would require the disclosure of amounts which could be determined with reasonable certainty under express contractual escalation or change order clauses and which would be virtually assured of realization. The Commission has concluded that amounts due under routine change orders and escalation features commonly found in the terms of contracts are typically not subject to such uncertainty that separate disclosure is required. On the other hand, it believes that disclosure is necessary when amounts are recorded which are not reasonably determinable under the specific terms of existing contracts. Accordingly, the text of this rule has been amended to require disclosure where the amounts included in receivables, whether billed or unbilled, are either claims or other similar items subject to uncertainty concerning their determination or ultimate realization.

Several commentators questioned the meaning of the term "components" as used in the requirement for footnote disclosure of the principal items comprising the aggregate of claims and other similar items subject to uncertainties. In response, the Commission has used the terms "nature and status" to more accurately reflect its intentions and has expanded the attached Exhibit to provide examples of disclosure envisioned by these terms.

Comments on Disclosure of Inventories—Rule 5-02.6

Paragraph (b). In response to numerous comments, this amendment has been modified in several significant ways. First, in recognition of the recently adopted Statement of Financial Accounting Standards No. 2, the Commission has deleted the requirements for disclosure of the amounts of research and development costs incurred during the period or remaining in inventory. Compliance with that Statement will obviate the need for the disclosure of these amounts. However, the amendment still contemplates a description of such costs being carried in inventory in compliance with the new Statement.

Second, the Commission recognizes that some registrants may find it impracticable to determine the actual amount of general and administrative costs remaining in inventory at the balance sheet dates. However, the Commission believes that registrants can provide reasonable estimates of such remaining costs determined, for example, on the assumption that costs related to a particular contract or program have been removed from inventory on a basis proportional to the totals of the various cost elements expected to be charged to cost of sales for that contract or program. The assumptions used to develop these estimates should be described in a note to the financial statements.

Third, the Commission expects that the description of the cost elements included in inventory will appropriately disclose the existence of items not typically included in inventoried costs in a usual manufacturing operation. Described items may include, for example, retained costs representing the excess of manufacturing or production costs over the amounts charged to costs of sales for delivered or in-process units, initial tooling and other deferred start-up costs, general and administrative costs, or research and development under contractual arrangements. In general, the Commission believes that the accounting treatment of such costs is sufficiently unique to warrant the disclosure of their existence and, to the extent noted below, their magnitude.

Paragraph (c). This paragraph contains the last sentence of Rule 5-02.6(b) as it existed prior to the amendments adopted in this release. However, the requirements of this paragraph may be amended by the proposal published in Securities Act Release No. 5427. Comments on that proposal are still being considered.

Paragraph (d). Numerous commentators pointed out that the proposed definition would include supply or service contracts expected to be in process for more than one year even though such contracts may not involve the unique risk and liquidity characteristics associated with long-term manufacturing and construction contracts or programs. The Commission believes that the proposed definition was susceptible to an overly broad interpretation. Consequently, the Commission has modified the definition to deal explicitly with all contracts or programs accounted for on either a percentage of completion or a completed contract basis provided that any such contract or program has associated with it material amounts of inventories or unbilled receivables and has been or is expected to be performed over a period of more than twelve months.

Paragraph (d)(i). Many commentators argued that the amounts reported under this proposed amendment would not be mutually exclusive from the amounts reported under subparagraph (iii). To eliminate this problem, the Commission has modified proposed subparagraphs (i) and (iii) and now deals with these matters in one subparagraph which requires disclosure of (1) the aggregate amount of (a) manufacturing or production costs which have been carried forward under a "learning curve" concept and (b) any related costs which have been deferred for allocation to future production, and (2) the portion of such aggregate amount which would not be absorbed in cost of sales based on existing firm orders. The amendment also calls for the isolation of the cost elements included in the costs carried forward if it is practicable for the registrant to provide this detail. The Commission believes that these disclosures will provide investors with meaningful information concerning the nature of costs accumulated in inventories.

Paragraph (d)(ii). Many of the comments noted above under proposed Rule 5-02.3(g) were also directed to this amendment. The Commission has modified this subparagraph to reflect those comments. This amendment recog-

nizes that certain registrants classify amounts representing claims or other similar items subject to uncertainties as inventories rather than as receivables reportable under Rule 5-02.3(g). Regardless of where such amounts are classified, the Commission believes that material amounts must be disclosed together with an appropriate description of the nature and status of the principal items comprising such amounts. In this connection, the Commission has expanded the accompanying Exhibit to provide helpful examples of the type of disclosure envisioned by this Rule.

Paragraph (d)(v). Numerous commentators expressed the view that the concept of "title" is fraught with substantial difficulties of legal interpretation and that in any event it would be unduly burdensome to attempt such an analysis of the items included in inventory. The Commission accepts these comments and accordingly has deleted this proposal.

The subject rules, as amended herein, apply to disclosure in financial statements filed with the Commission. Registrants and their independent public accountants must make the determination as to what information regarding such matters is required to constitute satisfactory financial statement disclosure under generally accepted accounting principles.

B. AMENDMENTS

Rules 5-02.3 and 5-02.6 of Regulation S-X are amended as follows (amendments underlined)—

Rule 5-02-3. Accounts and notes receivable.—

- (a) through (d) (No change)
- (e) If receivables include amounts representing balances billed but not paid by customers under retainage provisions in contracts, state the amount thereof either in the balance sheet or in a note to the financial statements. In addition, state the amounts, if any expected to be collected after one year. If practicable, state by years when the amounts are expected to be collected.
- (f) If receivables include amounts (other than amounts reportable under paragraph (g) below) representing the recognized sales value of performance under long-term contracts (see Rule 5-02.6(d)) and such amounts had not been billed and were not billable to customers at the date of the balance sheet, state separately in the balance sheet or in a note to the financial statements, the amount thereof and include a general description of the prerequisites for billing. In addition, state the amount, if any, expected to be collected after one year.
- (g) If receivables include amounts under long-term contracts (see Rule 5-02.6(d)), whether billed or unbilled, representing claims or other similar items subject to uncertainty concerning their determination or ultimate realization, state separately in the balance sheet or in a note to the financial statements, the amount thereof and include a description of the nature and status of the principal items comprising such amount. In addition, state the amount, if any, expected to be collected after one year.

Rule 5-02.6 Inventories.—(a) State separately here, or in a note referred to herein, if practicable, the major classes of inventory such as (1) finished goods; (2) inventoried costs relating to long-term contracts or programs (see (d)

below and Rule 3-11); (3) work in process (see Rule 3-11); $\underline{(4)}$ raw materials; and (5) supplies.

(b) The basis of determining the amounts shall be stated.

If "cost" is used to determine any portion of the inventory amounts, describe the method of determining cost. This description shall include the nature of the cost elements included in inventory.

If "market" is used to determine any portion of the inventory amounts, describe the method of determining "market" if other than current replacement cost.

The method by which amounts are removed from inventory (e.g., "average cost," "first-in, first out," "last-in, first-out," "estimated average cost per unit") shall be described. If the estimated average cost per unit is used as a basis to determine amounts removed from inventory under a total program or similar basis of accounting, the principal assumptions (including, where meaningful, the aggregate number of units expected to be delivered under the program, the number of units delivered to date and the number of units on order) shall be disclosed.

If any general and administrative costs are charged to inventory, state in a note to the financial statements the aggregate amount of the general and administrative costs incurred in each period and the actual or estimated amount remaining in inventory at the date of each balance sheet.

- (c) If the LIFO <u>inventory</u> method is used, the excess of replacement or current cost over stated LIFO value shall, if material, be stated parenthetically or in a note to the financial statements. (Note: Paragraph (c) as proposed in Securities Act Release 5427 would modify this requirement. Comments on that proposal continue under consideration.)
- (d) For purposes of Rules 5-02.3 and 5-02.6, long-term contracts or programs include (1) all contracts or programs for which gross profits are recognized on a percentage-of-completion method of accounting or any variant thereof (e.g., delivered unit, cost to cost, physical completion) and (2) any contracts or programs accounted for on a completed contract basis of accounting where, in either case, the contracts or programs have associated with them material amounts of inventories or unbilled receivables and where such contracts or programs have been or are expected to be performed over a period of more than twelve months. Contracts or programs of shorter duration may also be included, if deemed appropriate.

For all long-term contracts or programs, the following information, if applicable, shall be stated in a note to the financial statements:

(i) The aggregate amount of manufacturing or production costs and any related deferred costs (e.g., initial tooling costs) which exceeds the aggregate estimated cost of all in-process and delivered units on the basis of the

estimated average cost of all units expected to be produced under long-term contracts and programs not yet complete, as well as that portion of such amount which would not be absorbed in cost of sales based on existing firm orders at the latest balance sheet date. In addition, if practicable, disclose the amount of deferred costs by type of cost (e.g., initial tooling, deferred production, etc.).

- (ii) The aggregate amount representing claims or other similar items subject to uncertainty concerning their determination or ultimate realization, and include a description of the nature and status of the principal items comprising such aggregate amount.
- (iii) The amount of progress payments netted against inventory at the date of the balance sheet.

* * * * * *

The amendments to Regulation S-X have been adopted pursuant to authority conferred on the Commission by the Securities Act of 1933, particularly Sections 6, 7, 8, 10 and 19(a) thereof and the Securities Exchange Act of 1934, particularly Sections 12, 13, 15(d) and 23(a) thereof.

The above amendments to Regulation S-X shall be applicable to financial statements for periods ending on or after December 20, 1974. Such disclosure is recommended but not required for financial statements for fiscal periods ending prior to December 20, 1974.

By the Commission.

George A. Fitzsimmons

Secretary

C. EXHIBIT

The following hypothetical example is furnished to illustrate the character and detail of the disclosures which might be furnished in response to Rules 5-02.3 and 5-02.6 of Regulation S-X as amended by the accompanying release. The illustration is provided to assist in understanding and evaluating the amendments.

* * * * * * *

XYZ Company and Subsidiaries Consolidated Balance Sheets At December 31.

	1974	1973
	(000 omitted)	
ASSETS		
CURRENT ASSETS:		
Cash	\$ 438	\$ 627
Accounts receivable: Trade and other receivables, net of allowance for uncollectible accounts of \$38,000 in 1974 and		
\$36,000 in 1973 Long-term contracts and programs (notes	2,846	2,396
1 and 2)	18,985	19,036
Total accounts receivable Inventories and costs relating to long-term contracts and programs in process, net of progress payments	21,831	21,432
(notes 1 and 3) Prepaid expenses	6,278 46	6,257 27
Total current assets	\$28,593	\$28,343

Note 1—SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Revenue Recognition. Sales of commercial products under long-term contracts and programs are recognized in the accounts as deliveries are made. The estimated sales value of performance under Government fixed-price and fixed-price incentive contracts in process is recognized under the percentage of completion method of accounting whereunder the estimated sales value is determined on the basis of physical completion to date (the total contract amount multiplied by percent of performance to date less sales value recognized in previous periods) and costs (including general and administrative, except as described below) are expensed as incurred. Sales under cost-reimbursement contracts are recorded as costs are incurred and include estimated earned fees in the proportion that costs incurred to date bear to total estimated costs. The fees under certain Government contracts may be increased or decreased in accordance with cost or performance incentive provisions which measure actual performance against established targets or other criteria. Such incentive fee awards or penalties are included in sales at the time the amounts can be determined reasonably.

Inventories. Inventories, other than inventoried costs relating to long-term contracts and programs, are stated at the lower of cost (principally first-in, first-out) or market. Inventoried costs relating to long-term contracts and programs are stated at the actual production cost, including factory overhead, initial tooling and other related non-recurring costs, incurred to date reduced by amounts identified with revenue recognized on units delivered or progress completed. General and administrative costs applicable to cost-plus Government contracts are also included in inventories. Inventoried costs relating to long-term contracts and programs are reduced by charging any amounts in excess of estimated realizable value to cost of sales. The costs attributed to units delivered under long-term commercial contracts and programs are based on the estimated average cost of all units expected to be produced and are determined under the learning curve concept which anticipates a predictable decrease in unit costs as tasks and production techniques become more efficient through repetition.

In accordance with industry practice, inventories include amounts relating to contracts and programs having production cycles longer than one year and a portion thereof will not be realized within one year.

Note 2—ACCOUNTS RECEIVABLE

The following tabulation shows the component elements of accounts receivable from long-term contracts and programs:

	1974	1973	
Wala	(000 or	(000 omitted)	
U.S. Government: Amounts billed Recoverable costs and accrued profit	\$ 7,136	\$ 6,532	
on progress completed—not billed Unrecovered costs and estimated profits subject to future negotiation—	4,173	3,791	
not billed	1,468	1,735	
	12,777	12,058	
Commercial Customers:			
Amounts billed	1,937	3,442	
Recoverable costs and accrued profit on units delivered—not billed Retainage, due upon completion of	1,293	364	
contracts	2,441	2,279	
Unrecovered costs and estimated profits subject to future negotiation—			
not billed	537	893	
	\$18,985	\$19,036	

The balances billed but not paid by customers pursuant to retainage provisions in construction contracts will be due upon completion of the contracts and acceptance by the owner. Based on the Company's experience with similar contracts in recent years, the retention balances at December 31, 1974 are expected to be collected as follows: \$270,000 in 1975, \$845,000 in 1976 and the balance in 1977.

AAG-FGC APP B

Recoverable costs and accrued profit not billed comprise principally amounts of revenue recognized on contracts for which billings had not been presented to the contract owners because the amounts were not billable at balance sheet date. It is anticipated such unbilled amounts receivable from the U.S. Government at December 31, 1974 will be billed over the next 60 days as units are delivered. The unbilled accounts receivable applicable to commercial customers are billable upon completion of performance tests which are expected to be completed in September 1975.

Unrecovered costs and estimated profits subject to future negotiation, the principal amount of which is expected to be billed and collected within one year, consist of the following elements:

	1974	1973
	(000 omitted)	
U.S. Government Contracts: Excess of estimated or proposed over provisional price Amounts claimed for incremental costs	\$ 190	\$ 15 <i>7</i>
arising from customer occasioned contract delays	1,278	1,578
	1,468	1,735
Commercial Contracts: Unrecovered costs and estimated profit relating to work not specified in		
express contract provisions	537	893
	\$2,005	\$2,628

NOTE 3—INVENTORIES

Inventories and inventoried costs relating to long-term contracts and programs are classified as follows:

	December 31,	
	1974	1973
	(000 omitted)	
Finished goods	\$3,562	\$3,435
Inventoried costs relating to long-term contracts and programs, net of amounts		
attributed to revenues recognized to date	2,552	2,638
Work in process	738	947
Raw materials	453	383
Supplies	112	71
	7,417	7,474
Deduct progress payments related to		
long-term contracts and programs	1,139	1,217
	\$6,278	\$6,257

The following tabulation shows the cost elements included in inventoried costs related to long-term contracts:

	Decem	December 31,	
	1974	1973	
	(000 or	mitted)	
Production costs of goods currently in process	\$1,184	\$ 960	
Excess of production cost of delivered units over the estimated average cost of all units expected to be produced	647	893	
Unrecovered costs subject to future negotiation	280	310	
General and administrative costs Initial tooling and other non-recurring	260	27 0	
costs	181	205	
	\$2,552	\$2,638	

The inventoried costs relating to long-term contracts and programs includes unrecovered costs of \$280,000 and \$310,000 at December 31, 1974 and 1973, respectively, which are subject to future determination through negotiation or other procedures not complete at balance sheet dates. Of such amounts, \$260,000 and \$280,000 are in respect to contracts under which all goods have been delivered at December 31, 1974 and 1973, respectively. The unrecovered amount at December 31, 1973 consisted of three items, one of which was settled during 1974. The amount remaining at December 31, 1974 is represented principally by a claim asserted against a customer for amounts incurred as a result of faulty materials furnished by the customer which in turn caused delays in performance under the contract. In the opinion of management these costs will be recovered by contract modification or litigation. It is expected that the negotiations which are being conducted currently with the customer, will be successfully concluded during the next twelve months. If this expectation is not realized, the matter will be referred to the Armed Services Board of Contract Appeals, with the consequence that settlement could be delayed for an indeterminate period.

The actual per unit production cost of the NX-4C aircraft produced during the most recent fiscal year was less than the estimated average per unit cost of all units expected to be produced under the program. Prior to 1974, the Company's NX-4C commercial aircraft program was in the early high cost period. During the initial years of the program, the cost of units produced exceeded the sales price of the delivered units and the estimated average unit cost of all units to be produced under the program. At December 31, 1974, inventories included costs of \$647,000 representing the excess of costs incurred over estimated average costs per aircraft for the 117 aircraft delivered through the year end. The estimated average unit cost is predicated on the assumption that 250 planes will be produced and that production costs (principally labor and materials) will decrease as the project matures and efficiencies associated with increased volume, improved production techniques and the performance of repetitive tasks (the learning curve concept) are realized. (Note: The amount by which the production costs of the equivalent finished units in process at the date of the latest balance sheet exceeds the cost of such units on the basis of the estimated average unit cost of all units expected to be produced under the program should be stated. Since, as stated above, the

actual per unit production cost is currently less than the estimated average per unit cost of all units expected to be produced under the program, no such excess is assumed in this example.)

Recovery of the deferred production, initial tooling and related non-recurring costs is dependent on the number of aircraft ultimately sold and actual selling prices and production costs associated with future transactions. Sales significantly under estimates or costs significantly over estimates could result in the realization of substantial losses on the program in future years. Realization of approximately \$421,000 of the gross commercial aircraft inventories at December 31, 1974 is dependent on receipt of future firm orders.

Based on studies made by and on behalf of the Company, management believes there exists for this aircraft a market for over 250 units, including deliveries to date, with production and deliveries continuing at a normal rate to at least 1980. At December 31, 1974, 117 aircraft had been delivered under the program, and the backlog included 64 firm unfilled orders and options for 43 units.

The aggregate amounts of general and administrative costs incurred during 1974 and 1973 were \$2,251,000 and \$2,238,000, respectively. As stated in Note 1, the Company allocates general and administrative costs to certain types of Government contracts. The amounts of general and administrative costs remaining in inventories at December 31, 1974 and 1973 are estimated at \$260,000 and \$270,000, respectively. Such estimates assume that costs have been removed from inventories on a basis proportional to the amounts of each cost element expected to be charged to cost of sales.

* * * * * * *

Appendix C

Statement of Position

81-1

Accounting for Performance of Construction-Type and Certain Production-Type Contracts

July 15, 1981

Proposal to the Financial Accounting Standards Board

Issued by Accounting Standards Division

American Institute of Certified Public Accountants

AICPA

Note: Statement of Position 81-1, Accounting for Performance of Construction-Type and Certain Production-Type Contracts, has been modified by the AICPA staff to include certain changes necessary due to the issuance of authoritative pronouncements since it was originally issued. The changes are identified in a schedule in Appendix D of the statement.

NOTICE TO READERS

Statements of Position of the Accounting Standards Division present the conclusions of at least a majority of the Accounting Standards Executive Committee, which is the senior technical body of the AICPA authorized to speak for the Institute in the areas of financial accounting and reporting. Statement on Auditing Standards No. 69, The Meaning of Present Fairly in Conformity With Generally Accepted Accounting Principles in the Independent Auditor's Report, identifies AICPA Statements of Position as sources of established accounting principles that an AICPA member should consider if the accounting treatment of a transaction or event is not specified by a pronouncement covered by Rule 203 of the AICPA Code of Professional Conduct. In such circumstances, the accounting treatment specified by this Statement of Position should be used or the member should be prepared to justify a conclusion that another treatment better presents the substance of the transaction in the circumstances. However, an entity need not change an accounting treatment followed as of March 15, 1992 to the accounting treatment specified in this Statement of Position.

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Accounting for Performance of Construction-Type and Certain Production-Type Contracts

Introduction

1. This statement of position provides guidance on the application of generally accepted accounting principles in accounting for the performance of contracts for which specifications are provided by the customer for the construction of facilities or the production of goods or for the provision of related services. Changes in the business environment have increased significantly the variety and uses of those types of contracts and the types of business enterprises that use them. In the present business environment, diverse types of contracts, ranging from relatively simple to highly complex and from relatively short- to long-term, are widely used in many industries for construction, production, or provision of a broad range of goods and services. However, existing principles related to accounting for contracts were written in terms of long-term construction-type contracts, and they are not stated in sufficient detail for the scope of activities to which they presently are applied. Those activities range far beyond the traditional construction-type activity (the design and physical construction of facilities such as buildings, roads, dams, and bridges) to include, for example, the development and production of military and commercial aircraft, weapons delivery systems, space exploration hardware, and computer software. The accounting standards division believes that guidance is now needed in this area of accounting.

The Basic Accounting Issue

2. The determination of the point or points at which revenue should be recognized as earned and costs should be recognized as expenses is a major accounting issue common to all business enterprises engaged in the performance of contracts of the types covered by this statement. Accounting for such contracts is essentially a process of measuring the results of relatively long-term events and allocating those results to relatively short-term accounting periods. This involves considerable use of estimates in determining revenues, costs, and profits and in assigning the amounts to accounting periods. The process is complicated by the need to evaluate continually the uncertainties inherent in the performance of contracts and by the need to rely on estimates of revenues, costs, and the extent of progress toward completion.

Present Accounting Requirements and Practices

3. The pervasive principle of realization and its exceptions and modifications are central factors underlying accounting for contracts. APB Statement No. 4 * states:

Revenue is generally recognized when both of the following conditions are met: (1) the earnings process is complete or virtually complete, and (2) an exchange has taken place. [paragraph 150]

Revenue is sometimes recognized on bases other than the realization rule. For example, on long-term construction contracts, revenue may

^{*}Statement of Position 93-3, Rescission of Accounting Principles Board Statements, rescinds APB Statement No. 4. FASB Concepts Statement No. 5, Recognition and Measurement in Financial Statements of Business Enterprises, discusses matters similar to those in APB Statement No. 4.

be recognized as construction progresses. This exception to the realization principle is based on the availability of evidence of the ultimate proceeds and the consensus that a better measure of periodic income results. [paragraph 152]

The exception to the usual revenue realization rule for long-term construction-type contracts, for example, is justified in part because strict adherence to realization at the time of sale would produce results that are considered to be unreasonable. The judgment of the profession is that revenue should be recognized in this situation as construction progresses. [paragraph 174]

- 4. Accounting Research Bulletin No. 45 (ARB 45), *Long-Term Construction-Type Contracts*, issued by the AICPA Committee on Accounting Procedure in 1955, describes the two generally accepted methods of accounting for long-term construction-type contracts for financial reporting purposes:
 - The percentage-of-completion method recognizes income as work on a contract progresses; recognition of revenues and profits generally is related to costs incurred in providing the services required under the contract
 - The completed-contract method recognizes income only when the contract is completed, or substantially so, and all costs and related revenues are reported as deferred items in the balance sheet until that time.

The units-of-delivery is a modification of the percentage-of-completion method of accounting for contracts.

• The units-of-delivery method recognizes as revenue the contract price of units of a basic production product delivered during a period and as the cost of earned revenue the costs allocable to the delivered units; costs allocable to undelivered units are reported in the balance sheet as inventory or work in progress. The method is used in circumstances in which an entity produces units of a basic product under production-type contracts in a continuous or sequential production process to buyers' specifications.

The use of either of the two generally accepted methods of accounting involves, to a greater or lesser extent, three key areas of estimates and uncertainties: (a) the extent of progress toward completion, (b) contract revenues, and (c) contract costs. Although the ultimate amount of contract revenue is often subject to numerous uncertainties, the accounting literature has given little attention to the difficulties of estimating contract revenue.

5. ARB No. 45, paragraph 15, describes the circumstances in which each method is preferable as follows:

The committee believes that in general when estimates of costs to complete and extent of progress toward completion of long-term contracts are reasonably dependable, the percentage-of-completion method is preferable. When lack of dependable estimates or inherent hazards cause forecasts to be doubtful, the completed-contract method is preferable.

Both of the two generally accepted methods are widely used in practice. However, the two methods are frequently applied differently in similar circumstances. The division believes that the two methods should be used in specified circumstances and should not be used as acceptable alternatives for the same circumstances. Accordingly, identifying the circumstances in which either of the methods is preferable and the accounting that should be followed in the application of those methods are among the primary objectives of this statement of position. This statement provides guidance on the application of ARB 45 and does not amend that bulletin.

6. In practice, methods are sometimes found that allocate contract costs and revenues to accounting periods on (a) the basis of cash receipts and payments or (b) the basis of contract billings and costs incurred. Those practices are not generally accepted methods of accounting for financial reporting purposes. However, those methods are appropriate for other purposes, such as the measurement of income for income tax purposes, for which the timing of cash transactions is a controlling factor. Recording the amounts billed or billable on a contract during a period as contract revenue of the period, and the costs incurred on the contract as expenses of the period, is not acceptable for financial reporting purposes because the amounts billed or billable on a contract during a period are determined by contract terms and do not necessarily measure performance on the contract. Only by coincidence might those unacceptable methods produce results that approximate the results of the generally accepted method of accounting for contracts that are appropriate in the circumstances.

Other Pronouncements and Regulations Affecting Contract Accounting

- 7. Accounting Research Bulletin No. 43, chapter 11, "Government Contracts," prescribes generally accepted principles in three areas of accounting for government contracts. Section A of that chapter deals with accounting problems arising under cost-plus-fixed-fee contracts. Section B deals with certain aspects of the accounting for government contracts and subcontracts that are subject to renegotiation. Section C deals with problems involved in accounting for certain terminated war and defense contracts. Those pronouncements govern accounting for contracts in the areas indicated.
- 8. The pricing and costing of federal government contracts are governed by cost principles contained in procurement regulations such as the Federal Procurement Regulation (FPR) and the Defense Acquisition Regulation (DAR). Also, most major government contractors are subject to cost accounting standards issued by the Cost Accounting Standards Board (CASB). CASB standards apply to the cost accounting procedures that government contractors use to allocate costs to contracts; CASB standards are not intended for financial reporting.
- 9. Accounting for contracts for income tax purposes is prescribed by the Internal Revenue Code and the related rules and regulations. The methods of accounting for contracts under those requirements are not limited to the two generally accepted methods for financial reporting. For numerous historical and practical reasons, tax accounting rules and regulations differ from generally accepted accounting principles. Numerous nonaccounting considerations are appropriate in determining income tax accounting. This statement deals exclusively with the application of generally accepted accounting principles to accounting for contracts in financial reporting. It does not apply to income tax accounting and is not intended to influence income tax accounting.

Need for Guidance

10. Because of the complexities and uncertainties in accounting for contracts, the increased use of diverse types of contracts for the construction of facilities, the production of goods, or the provision of related services, and present conditions and practices in industries in which contracts are performed for those purposes, additional guidance on the application of generally accepted accounting principles is needed. This statement of position provides that guidance. Appendix A contains a schematic chart showing the organization of the statement.

Scope of Statement of Position

11. This statement of position applies to accounting for performance of contracts for which specifications are provided by the customer for the construction of facilities or the production of goods or the provision of related services that are reported in financial statements prepared in conformity with generally accepted accounting principles.¹ Existing authoritative accounting literature uses the terms "long-term" and "construction-type" in identifying the types of contracts that are the primary focus of interest. The term "long-term" is not used in this statement of position as an identifying characteristic because other characteristics are considered more relevant for identifying the types of contracts covered. However, accounting for contracts by an entity that primarily has relatively short-term contracts is recommended in paragraph 31 of this statement. The scope of the statement is not limited to construction-type contracts.

Contracts Covered

- 12. Contracts covered by this statement of position are binding agreements between buyers and sellers in which the seller agrees, for compensation, to perform a service to the buyer's specifications. Contracts consist of legally enforceable agreements in any form and include amendments, revisions, and extensions of such agreements. Performance will often extend over long periods, and the seller's right to receive payment depends on his performance in accordance with the agreement. The service may consist of designing, engineering, fabricating, constructing, or manufacturing related to the construction or the production of tangible assets. Contracts such as leases and real estate agreements, for which authoritative accounting literature provides special methods of accounting, are not covered by this statement.
- 13. Contracts covered by this statement include, but are not limited to, the following:
 - Contracts in the construction industry, such as those of general building, heavy earth moving, dredging, demolition, design-build contractors, and specialty contractors (for example, mechanical, electrical, or paving).
 - Contracts to design and build ships and transport vessels.

¹ This statement is not intended to apply to "service transactions" as defined in the FASB's October 23, 1978 Invitation to Comment, Accounting for Certain Service Transactions. However, it applies to separate contracts to provide services essential to the construction or production of tangible property, such as design, engineering, procurement, and construction management (see paragraph 13 for examples).

² Specifications imposed on the buyer by a third party (for example, a government or regulatory agency or a financial institution) or by conditions in the marketplace are deemed to be "buyer's specifications."

- Contracts to design, develop, manufacture, or modify complex aerospace or electronic equipment to a buyer's specification or to provide services related to the performance of such contracts.
- Contracts for construction consulting service, such as under agency contracts or construction management agreements.
- Contracts for services performed by architects, engineers, or architectural or engineering design firms.
- 14. Contracts not covered by this statement include, but are not limited to, the following:
 - Sales by a manufacturer of goods produced in a standard manufacturing operation, even if produced to buyers' specifications, and sold in the ordinary course of business through the manufacturer's regular marketing channels if such sales are normally recognized as revenue in accordance with the realization principle for sales of products and if their costs are accounted for in accordance with generally accepted principles of inventory costing.
 - Sales or supply contracts to provide goods from inventory or from homogeneous continuing production over a period of time.
 - Contracts included in a program and accounted for under the program method of accounting. For accounting purposes, a program consists of a specified number of units of a basic product expected to be produced over a long period in a continuing production effort under a series of existing and anticipated contracts.^[3]
 - Service contracts of health clubs, correspondence schools, and similar consumer-oriented organizations that provide their services to their clients over an extended period.
 - Magazine subscriptions.
 - Contracts of nonprofit organizations to provide benefits to their members over a period of time in return for membership dues.

15. Contracts covered by this statement may be classified into four broad types based on methods of pricing: (a) fixed-price or lump-sum contracts, (b) cost-type (including cost-plus) contracts, (c) time-and-material contracts, and (d) unit-price contracts. A fixed-price contract is an agreement to perform all acts under the contract for a stated price. A cost-type contract is an agreement to perform under a contract for a price determined on the basis of a defined relationship to the costs to be incurred, for example, the costs of all acts required plus a fee, which may be a fixed amount or a fixed percentage of the costs incurred. A time-and-material contract is an agreement to perform all acts required under the contract for a price based on fixed hourly rates for some measure of the labor hours required (for example, direct labor hours) and the cost of materials. A unit-price contract is an agreement to perform all acts required under the contract for a specified price for each unit of output. Each of the various types of contracts may have incentive, penalty, or other provisions that modify their basic pricing terms. The pricing features of the various types are discussed in greater detail in Appendix B.

Definition of a Contractor

16. The term "contractor" as used in this statement refers to a person or entity that enters into a contract to construct facilities, produce goods, or

^[3] Footnote deleted.

render services to the specifications of a buyer either as a general or prime contractor, as a subcontractor to a general contractor, or as a construction manager.

Definition of a Profit Center

17. For the purpose of this statement, a "profit center" is the unit for the accumulation of revenues and costs and the measurement of income. For business enterprises engaged in the performance of contracts, the profit center for accounting purposes is usually a single contract; but under some specified circumstances it may be a combination of two or more contracts, a segment of a contract or of a group of combined contracts. This statement of position provides guidance on the selection of the appropriate profit center. The accounting recommendations, usually stated in terms of a single contract, also apply to alternative profit centers in circumstances in which alternative centers are appropriate.

Application and Effect on Existing Audit Guides and SOPs

- 18. This statement of position presents the division's recommendations on accounting for contracts (as specified in paragraphs 11 to 17) in all industries. The recommendations in this statement need not be applied to immaterial items. Two existing AICPA Audit and Accounting Guides, Construction Contractors and Audits of Federal Government Contractors, provide additional guidance on the application of generally accepted accounting principles to the construction industry and to federal government contracts, respectively. The recommendations in this statement take precedence in those areas.
- 19. The guidance on contract accounting and financial reporting in Audits of Federal Government Contractors is essentially consistent with the recommendations in this statement. Since the recommendations in this statement provide more comprehensive and explicit guidance on the application of generally accepted accounting principles to contract accounting than does the guide, Audits of Federal Government Contractors, the guide incorporates this statement as an appendix. The provisions of that guide should be interpreted and applied in the context of the recommendations in this statement.
- 20. This statement is not intended to supersede recommendations on accounting in other AICPA industry accounting or audit guides or in other statements of position.

The Division's Conclusions

Determining a Basic Accounting Policy for Contracts

21. In accounting for contracts, the basic accounting policy decision is the choice between the two generally accepted methods: the percentage-of-completion method including units of delivery and the completed-contract method. The determination of which of the two methods is preferable should be based on a careful evaluation of circumstances because the two methods should not be acceptable alternatives for the same circumstances. The division's recommendations on basic accounting policy are set forth in the sections on "The Percentage-of-Completion Method" and "The Completed-Contract Method," which identify the circumstances appropriate to the methods, the bases of applying the methods, and the reasons for the recommendations. The recommendations apply to accounting for individual contracts and to accounting for other profit centers in accordance with the recommendations in the section on "Determining the Profit Center." As a result of evaluating individual contracts and profit centers, a contractor should be able to establish a basic policy

that should be followed in accounting for most of his contracts. In accordance with the requirements of APB Opinion No. 22, Disclosure of Accounting Policies, a contractor should disclose in the note to the financial statements on accounting policies the method or methods of determining earned revenue and the cost of earned revenue including the policies relating to combining and segmenting, if applicable. Appendix C contains a summary of the disclosure requirements in this statement.

The Percentage-of-Completion Method

22. This section sets forth the recommended basis for using the percentage-of-completion method and the reasons for the recommendation. Under most contracts for construction of facilities, production of goods, or provision of related services to a buyer's specifications, both the buyer and the seller (contractor) obtain enforceable rights. The legal right of the buyer to require specific performance of the contract means that the contractor has, in effect, agreed to sell his rights to work-in-progress as the work progresses. This view is consistent with the contractor's legal rights; he typically has no ownership claim to the work-in-progress but has lien rights. Furthermore, the contractor has the right to require the buyer, under most financing arrangements, to make progress payments to support his ownership investment and to approve the facilities constructed (or goods produced or services performed) to date if they meet the contract requirements. The buyer's right to take over the workin-progress at his option (usually with a penalty) provides additional evidence to support that view. Accordingly, the business activity taking place supports the concept that in an economic sense performance is, in effect, a continuous sale (transfer of ownership rights) that occurs as the work progresses. Also under most contracts for the production of goods and the provision of related services that are accounted for on the basis of units delivered, both the contractor and the customer obtain enforceable rights as the goods are produced or the services are performed. As units are delivered, title to and the risk of loss on those units normally transfer to the customer, whose acceptance of the items indicates that they meet the contractual specifications. For such contracts, delivery and acceptance are objective measurements of the extent to which the contracts have been performed. The percentage-of-completion method recognizes the legal and economic results of contract performance on a timely basis. Financial statements based on the percentage-of-completion method present the economic substance of a company's transactions and events more clearly and more timely than financial statements based on the completed-contract method, and they present more accurately the relationships between gross profit from contracts and related period costs. The percentage-of-completion method informs the users of the general purpose financial statements of the volume of economic activity of a company.

Circumstances Appropriate to the Method

- 23. The use of the percentage-of-completion method depends on the ability to make reasonably dependable estimates. For the purposes of this statement, "the ability to make reasonably dependable estimates" relates to estimates of the extent of progress toward completion, contract revenues, and contract costs. The division believes that the percentage-of-completion method is preferable as an accounting policy in circumstances in which reasonably dependable estimates can be made and in which all the following conditions exist:
 - Contracts executed by the parties normally include provisions that clearly specify the enforceable rights regarding goods or services to

- be provided and received by the parties, the consideration to be exchanged, and the manner and terms of settlement.
- The buyer can be expected to satisfy his obligations under the contract.
- The contractor can be expected to perform his contractual obligations.
- 24. For entities engaged on a continuing basis in the production and delivery of goods or services under contractual arrangements and for whom contracting represents a significant part of their operations, the presumption is that they have the ability to make estimates that are sufficiently dependable to justify the use of the percentage-of-completion method of accounting.⁴ Persuasive evidence to the contrary is necessary to overcome that presumption. The ability to produce reasonably dependable estimates is an essential element of the contracting business. For a contract on which a loss is anticipated, generally accepted accounting principles require recognition of the entire anticipated loss as soon as the loss becomes evident. An entity without the ability to update and revise estimates continually with a degree of confidence could not meet that essential requirement of generally accepted accounting principles.
- 25. Accordingly, the division believes that entities with significant contracting operations generally have the ability to produce reasonably dependable estimates and that for such entities the percentage-of-completion method of accounting is preferable in most circumstances. The method should be applied to individual contracts or profit centers, as appropriate.
 - a. Normally, a contractor will be able to estimate total contract revenue and total contract cost in single amounts. Those amounts should normally be used as the basis for accounting for contracts under the percentage-of-completion method.
 - b. For some contracts, on which some level of profit is assured, a contractor may only be able to estimate total contract revenue and total contract cost in ranges of amounts. If, based on the information arising in estimating the ranges of amounts and all other pertinent data, the contractor can determine the amounts in the ranges that are most likely to occur, those amounts should be used in accounting for the contract under the percentage-of-completion method. If the most likely amounts cannot be determined, the lowest probable level of profit in the range should be used in accounting for the contract until the results can be estimated more precisely.
 - c. However, in some circumstances, estimating the final outcome may be impractical except to assure that no loss will be incurred. In those circumstances, a contractor should use a zero estimate of profit; equal amounts of revenue and cost should be recognized until results can be estimated more precisely. A contractor should use this basis only if the bases in (a) or (b) are clearly not appropriate. A change

⁴ The division recognizes that many contractors have informal estimating procedures that may result in poorly documented estimates and marginal quality field reporting and job costing systems. Those conditions may influence the ability of an entity to produce reasonably dependable estimates. However, procedures and systems should not influence the development of accounting principles and should be dealt with by management as internal control, financial reporting, and auditing concerns.

from a zero estimate of profit to a more precise estimate should be accounted for as a change in an accounting estimate.

An entity using the percentage-of-completion method as its basic accounting policy should use the completed-contract method for a single contract or a group of contracts for which reasonably dependable estimates cannot be made or for which inherent hazards makes estimates doubtful. Such a departure from the basic policy should be disclosed.

Nature of Reasonable Estimates and Inherent Hazards

- 26. In practice, contract revenues and costs are estimated in a wide variety of ways ranging from rudimentary procedures to complex methods and systems. Regardless of the techniques used, a contractor's estimating procedures should provide reasonable assurance of a continuing ability to produce reasonably dependable estimates.⁵ Ability to estimate covers more than the estimating and documentation of contract revenues and costs; it covers a contractor's entire contract administration and management control system. The ability to produce reasonably dependable estimates depends on all the procedures and personnel that provide financial or production information on the status of contracts. It encompasses systems and personnel not only of the accounting department but of all areas of the company that participate in production control, cost control, administrative control, or accountability for contracts. Previous reliability of a contractor's estimating process is usually an indication of continuing reliability, particularly if the present circumstances are similar to those that prevailed in the past.
- 27. Estimating is an integral part of contractors' business activities, and there is a necessity to revise estimates on contracts continually as the work progresses. The fact that circumstances may necessitate frequent revision of estimates does not indicate that the estimates are unreliable for the purpose for which they are used. Although results may differ widely from original estimates because of the nature of the business, the contractor, in the conduct of his business, may still find the estimates reasonably dependable. Despite these widely recognized conditions, a contractor's estimates of total contract revenue and total contract costs should be regarded as reasonably dependable if the minimum total revenue and the maximum total cost can be estimated with a sufficient degree of confidence to justify the contractor's bids on contracts.
- 28. ARB 45 discourages the use of the percentage-of-completion method of accounting in circumstances in which inherent hazards make estimates doubtful. "Inherent hazards" relate to contract conditions or external factors that raise questions about contract estimates and about the ability of either the contractor or the customer to perform his obligations under the contract. Inherent hazards that cause contract estimates to be doubtful usually differ from inherent business risks. Business enterprises engaged in contracting, like all business enterprises, are exposed to numerous business risks that vary from contract to contract. The reliability of the estimating process in contract accounting does not depend on the absence of such risks. Assessing business risks is a function of users of financial statements.
- 29. The present business environment and the refinement of the estimating process have produced conditions under which most business entities

⁵ The type of estimating procedures appropriate in a particular set of circumstances depends on a careful evaluation of the costs and benefits of developing the procedures. The ability to produce reasonably dependable estimates that would justify the use of the percentage-of-completion method as recommended in paragraph 25 does not depend on the elaborateness of the estimating procedures used.

engaged in contracting can deal adequately with the normal, recurring business risks in estimating the outcome of contracts. The division believes that inherent hazards that make otherwise reasonably dependable contract estimates doubtful involve events and conditions that would not be considered in the ordinary preparation of contract estimates and that would not be expected to recur frequently, given the contractor's normal business environment. Such hazards are unrelated to, or only incidentally related to, the contractor's typical activities. Such hazards may relate, for example, to contracts whose validity is seriously in question (that is, which are less than fully enforceable). to contracts whose completion may be subject to the outcome of pending legislation or pending litigation, or to contracts exposed to the possibility of the condemnation or expropriation of the resulting properties. Reasonably dependable estimates cannot be produced for a contract with unrealistic or illdefined terms or for a contract between unreliable parties. However, the conditions stated in paragraph 23 for the use of the percentage-of-completion method of accounting, which apply to most bona fide contracts, make the existence of some uncertainties, including some of the type described in ARB 45, paragraph 15, unlikely for contracts that meet those conditions. Therefore, the division believes that there should be specific, persuasive evidence of such hazards to indicate that use of the percentage-of-completion method on one of the bases in paragraph 25 is not preferable.

The Completed-Contract Method

30. This section sets forth the recommended basis for using the completed-contract method and the reasons for the recommendation. Under the completed-contract method, income is recognized only when a contract is completed or substantially completed. During the period of performance, billings and costs are accumulated on the balance sheet, but no profit or income is recorded before completion or substantial completion of the work. This method precludes reporting on the performance that is occurring under the enforceable rights of the contract as work progresses. Although the completed-contract method is based on results as finally determined rather than on estimates for unperformed work, which may involve unforeseen costs and possible losses, it does not reflect current performance when the period of a contract extends beyond one accounting period, and it therefore may result in irregular recognition of income. Financial statements based on this method may not show informative relationships between gross profit reported on contracts and related period costs.

Circumstances of Use

31. The completed-contract method may be used as an entity's basic accounting policy in circumstances in which financial position and results of operations would not vary materially from those resulting from use of the percentage-of-completion method (for example, in circumstances in which an entity has primarily short-term contracts). Although this statement does not formally distinguish on the basis of length between long-term and short-term contracts, the basis for recording income on contracts of short duration poses relatively few problems. In accounting for such contracts, income ordinarily is recognized when performance is substantially completed and accepted. Under those circumstances, revenues and costs in the aggregate for all contracts would be expected to result in a matching of gross profit with period overhead or fixed costs similar to that achieved by use of the percentage-of-completion method. For example, the completed-contract method, as opposed to the percentage-of-completion method, would not usually produce a material difference in net income or financial position for a small plumbing contractor that performs primarily relatively short-term contracts during an accounting period; performance covers such a short span of time that the work is somewhat analogous to the manufacture of shelf production items for sale. An entity using the completed-contract method as its basic accounting policy should depart from that policy for a single contract or a group of contracts not having the features described in paragraph 31 and use the percentage-of-completion method on one of the bases described in paragraph 25. Such a departure should be disclosed.

- 32. The completed-contract method is preferable in circumstances in which estimates cannot meet the criteria for reasonable dependability discussed in the section on the percentage-of-completion method or in which there are inherent hazards of the nature of those discussed in that section. An entity using the percentage-of-completion method as its basic accounting policy should depart from that policy and use the completed-contract method for a single contract or a group of contracts only in the circumstances described in paragraph 25.
- 33. The use of the completed-contract method is recommended for the circumstances described in paragraphs 31 and 32. However, for circumstances in which there is an assurance that no loss will be incurred on a contract (for example, when the scope of the contract is ill-defined but the contractor is protected by a cost-plus contract or other contractual terms), the percentageof-completion method based on a zero profit margin, rather than the completed-contract method, is recommended until more precise estimates can be made. The significant difference between the percentage-of-completion method applied on the basis of a zero profit margin and the completedcontract method relates to the effects on the income statement. Under the zero profit margin approach to applying the percentage-of-completion method, equal amounts of revenue and cost, measured on the basis of performance during the period, are presented in the income statement; whereas, under the completed-contract method, performance for a period is not reflected in the income statement, and no amount is presented in the income statement until the contract is completed. The zero profit margin approach to applying the percentage-of-completion method gives users of general purpose financial statements an indication of the volume of a company's business and of the application of its economic resources.

Determining the Profit Center

34. The basic presumption should be that each contract is the profit center for revenue recognition, cost accumulation, and income measurement. That presumption may be overcome only if a contract or a series of contracts meets the conditions described for combining or segmenting contracts. A group of contracts (combining), and a phase or segment of a single contract or of a group of contracts (segmenting) may be used as a profit center in some circumstances. Since there are numerous practical implications of combining and segmenting contracts, evaluation of the circumstances, contract terms, and management intent are essential in determining contracts that may be accounted for on those bases.

Combining Contracts

35. A group of contracts may be so closely related that they are, in effect, parts of a single project with an overall profit margin, and accounting for the contracts individually may not be feasible or appropriate. Under those circumstances, consideration should be given to combining such contracts for profit recognition purposes. The presumption in combining contracts is that revenue and profit are earned, and should be reported, uniformly over the performance of the combined contracts. For example, a group of construction-type contracts

may be negotiated as a package with the objective of achieving an overall profit margin, although the profit margins on the individual contracts may vary. In those circumstances, if the individual contracts are performed and reported in different periods and accounted for separately, the reported profit margins in those periods will differ from the profit margin contemplated in the negotiations for reasons other than differences in performance.

- 36. Contracts may be combined for accounting purposes only if they meet the criteria in paragraphs 37 and 38.
- 37. A group of contracts may be combined for accounting purposes if the contracts
 - a. Are negotiated as a package in the same economic environment with an overall profit margin objective. Contracts not executed at the same time may be considered to have been negotiated as a package in the same economic environment only if the time period between the commitments of the parties to the individual contracts is reasonably short. The longer the period between the commitments of the parties to the contracts, the more likely it is that the economic circumstances affecting the negotiations have changed.
 - b. Constitute in essence an agreement to do a single project. A project for this purpose consists of construction, or related service activity with different elements, phases, or units of output that are closely interrelated or interdependent in terms of their design, technology, and function or their ultimate purpose or use.
 - c. Require closely interrelated construction activities with substantial common costs that cannot be separately identified with, or reasonably allocated to, the elements, phases, or units of output.
 - d. Are performed concurrently or in a continuous sequence under the same project management at the same location or at different locations in the same general vicinity.
 - e. Constitute in substance an agreement with a single customer. In assessing whether the contracts meet this criterion, the facts and circumstances relating to the other criteria should be considered. In some circumstances different divisions of the same entity would not constitute a single customer if, for example, the negotiations are conducted independently with the different divisions. On the other hand, two or more parties may constitute in substance a single customer if, for example, the negotiations are conducted jointly with the parties to do what in essence is a single project.

Contracts that meet all of these criteria may be combined for profit recognition and for determining the need for a provision for losses in accordance with ARB 45, paragraph 6. The criteria should be applied consistently to contracts with similar characteristics in similar circumstances.

38. Production-type contracts that do not meet the criteria in paragraph 37 or segments of such contracts may be combined into groupings such as production lots or releases for the purpose of accumulating and allocating production costs to units produced or delivered on the basis of average unit costs in the following circumstances:^[6]

^[6] Footnote deleted.

- a. The contracts are with one or more customers for the production of substantially identical units of a basic item produced concurrently or sequentially.
- b. Revenue on the contracts is recognized on the units-of-delivery basis of applying the percentage-of-completion method.

Segmenting a Contract

- 39. A single contract or a group of contracts that otherwise meet the test for combining may include several elements or phases, each of which the contractor negotiated separately with the same customer and agreed to perform without regard to the performance of the others. If those activities are accounted for as a single profit center, the reported income may differ from that contemplated in the negotiations for reasons other than differences in performance. If the project is segmented, revenues can be assigned to the different elements or phases to achieve different rates of profitability based on the relative value of each element or phase to the estimated total contract revenue. A project, which may consist of a single contract or a group of contracts, with segments that have different rates of profitability may be segmented if it meets the criteria in paragraph 40, paragraph 41, or paragraph 42. The criteria for segmenting should be applied consistently to contracts with similar characteristics and in similar circumstances.
- 40. A project may be segmented if all the following steps were taken and are documented and verifiable:
 - a. The contractor submitted bona fide proposals on the separate components of the project and on the entire project.
 - b. The customer had the right to accept the proposals on either basis.
 - c. The aggregate amount of the proposals on the separate components approximated the amount of the proposal on the entire project.
- 41. A project that does not meet the criteria in paragraph 40 may be segmented only if it meets all the following criteria:
 - a. The terms and scope of the contract or project clearly call for separable phases or elements.
 - b. The separable phases or elements of the project are often bid or negotiated separately.
 - c. The market assigns different gross profit rates to the segments because of factors such as different levels of risk or differences in the relationship of the supply and demand for the services provided in different segments.
 - d. The contractor has a significant history of providing similar services to other customers under separate contracts for each significant segment to which a profit margin higher than the overall profit margin on the project is ascribed.⁷
 - e. The significant history with customers who have contracted for services separately is one that is relatively stable in terms of pricing policy rather than one unduly weighted by erratic pricing decisions

 $^{^{7}}$ In applying the criterion in paragraph 41(d), values assignable to the segments should be on the basis of the contractor's normal historical prices and terms of such services to other customers. The division considered but rejected the concept of allowing a contractor to segment on the basis of prices charged by other contractors, since it does not follow that those prices could have been obtained by a contractor who has no history in the market.

- (responding, for example, to extraordinary economic circumstances or to unique customer-contractor relationships).
- f. The excess of the sum of the prices of the separate elements over the price of the total project is clearly attributable to cost savings incident to combined performance of the contract obligations (for example, cost savings in supervision, overhead, or equipment mobilization). Unless this condition is met, segmenting a contract with a price substantially less than the sum of the prices of the separate phases or elements would be inappropriate even if the other conditions are met. Acceptable price variations should be allocated to the separate phases or elements in proportion to the prices ascribed to each. In all other situations a substantial difference in price (whether more or less) between the separate elements and the price of the total project is evidence that the contractor has accepted different profit margins. Accordingly, segmenting is not appropriate, and the contracts should be the profit centers.
- g. The similarity of services and prices in the contract segments and services and the prices of such services to other customers contracted separately should be documented and verifiable.
- 42. A production-type contract that does not meet the criteria in paragraphs 40 or 41 may also be segmented and included in groupings such as production lots or releases for the purpose of accumulating and allocating production costs to units produced or delivered on the basis of average unit cost under the conditions specified in paragraph 38.

Measuring Progress on Contracts

43. This section describes methods of measuring the extent of progress toward completion under the percentage-of-completion method and sets forth criteria for selecting those methods and for determining when a contract is substantially completed. Meaningful measurement of the extent of progress toward completion is essential since this factor is used in determining the amounts of estimated contract revenue and estimated gross profit that will be recognized as earned in any given period.

Methods of Measuring Extent of Progress Toward Completion

- 44. In practice, a number of methods are used to measure the extent of progress toward completion. They include the cost-to-cost method, variations of the cost-to-cost method, efforts-expended methods, the units-of-delivery method, and the units-of-work-performed method. Those practices are intended to conform to ARB 45, paragraph 4.8 Some of the measures are sometimes made and certified by engineers or architects, but management should review and understand the procedures used by those professionals.
- 45. Some methods used in practice measure progress toward completion in terms of costs, some in terms of units of work, and some in terms of values

⁸ ARB 45, paragraph 4, states:

The committee recommends that the recognized income [under the percentage-of-completion method] be that percentage of estimated total income, either:

⁽a) that incurred costs to date bear to estimated total costs after giving effect to estimates of costs to complete based upon most recent information, or

⁽b) that may be indicated by such other measure of progress toward completion as may be appropriate having due regard to work performed.

Costs as here used might exclude, especially during the early stages of a contract, all or a portion of the cost of such items as materials and subcontracts if it appears that such an exclusion would result in a more meaningful periodic allocation of income.

added (the contract value of total work performed to date). All three of these measures of progress are acceptable in appropriate circumstances. The division concluded that other methods that achieve the objective of measuring extent of progress toward completion in terms of costs, units, or value added are also acceptable in appropriate circumstances. However, the method or methods selected should be applied consistently to all contracts having similar characteristics. The method or methods of measuring extent of progress toward completion should be disclosed in the notes to the financial statements. Examples of circumstances not appropriate to some methods are given within the discussion of input and output measures.

Input and Output Measures

- 46. The several approaches to measuring progress on a contract can be grouped into input and output measures. Input measures are made in terms of efforts devoted to a contract. They include the methods based on costs and on efforts expended. Output measures are made in terms of results achieved. They include methods based on units produced, units delivered, contract milestones, and value added. For contracts under which separate units of output are produced, progress can be measured on the basis of units of work completed. In other circumstances, progress may be measured, for example, on the basis of cubic yards of excavation for foundation contracts or on the basis of cubic yards of pavement laid for highway contracts.
- 47. Both input and output measures have drawbacks in some circumstances. Input is used to measure progress toward completion indirectly, based on an established or assumed relationship between a unit of input and productivity. A significant drawback of input measures is that the relationship of the measures to productivity may not hold, because of inefficiencies or other factors. Output is used to measure results directly and is generally the best measure of progress toward completion in circumstances in which a reliable measure of output can be established. However, output measures often cannot be established, and input measures must then be used. The use of either type of measure requires the exercise of judgment and the careful tailoring of the measure to the circumstances.
- 48. The efforts-expended method is an input method based on a measure of the work, such as labor hours, labor dollars, machine hours, or material quantities. Under the labor-hours method, for example, extent of progress is measured by the ratio of hours performed to date to estimated total hours at completion. Estimated total labor hours should include (a) the estimated labor hours of the contractor and (b) the estimated labor hours of subcontractors engaged to perform work for the project, if labor hours of subcontractors are a significant element in the performance of the contract. A labor-hours method can measure the extent of progress in terms of efforts expended only if substantial efforts of subcontractors are included in the computation. If the contractor is unable to obtain reasonably dependable estimates of subcontractors' labor hours at the beginning of the project and as work progresses, he should not use the labor-hours method.
- 49. The various forms of the efforts-expended method generally are based on the assumption that profits on contracts are derived from the contractor's efforts in all phases of operations, such as designing, procurement, and management. Profit is not assumed to accrue merely as a result of the acquisition of material or other tangible items used in the performance of the contract or the awarding of subcontracts. As previously noted, a significant drawback of efforts-expended methods is that the efforts included in the measure may not all be productive.

- 50. Measuring progress toward completion based on the ratio of costs incurred to total estimated costs is also an input method. Some of the costs incurred, particularly in the early stages of the contract, should be disregarded in applying this method because they do not relate to contract performance. These include the costs of items such as uninstalled materials not specifically produced or fabricated for the project or of subcontracts that have not been performed. For example, for construction projects, the cost of materials not unique to the project that have been purchased or accumulated at job sites but that have not been physically installed do not relate to performance.⁹ The costs of such materials should be excluded from costs incurred for the purpose of measuring the extent of progress toward completion. Also, the cost of equipment purchased for use on a contract should be allocated over the period of its expected use unless title to the equipment is transferred to the customer by terms of the contract. For production-type contracts, the complement of expensive components (for example, computers, engines, radars, and complex "black boxes") to be installed into the deliverable items may aggregate a significant portion of the total cost of the contract. In some circumstances, the costs incurred for such components, even though the components were specifically purchased for the project, should not be included in the measurement before the components are installed if inclusion would tend to overstate the percentage of completion otherwise determinable.
- 51. The acceptability of the results of input or output measures deemed to be appropriate to the circumstances should be periodically reviewed and confirmed by alternative measures that involve observation and inspection. For example, the results provided by the measure used to determine the extent of progress may be compared to the results of calculations based on physical observations by engineers, architects, or similarly qualified personnel. That type of review provides assurance somewhat similar to that provided for perpetual inventory records by periodic physical inventory counts.

Completion Criteria Under the Completed-Contract Method

52. As a general rule, a contract may be regarded as substantially completed if remaining costs and potential risks are insignificant in amount. The overriding objectives are to maintain consistency in determining when contracts are substantially completed and to avoid arbitrary acceleration or deferral of income. The specific criteria used to determine when a contract is substantially completed should be followed consistently and should be disclosed in the note to the financial statements on accounting policies. Circumstances to be considered in determining when a project is substantially completed include, for example, delivery of the product, acceptance by the customer, departure from the site, and compliance with performance specifications.

Income Determination—Revenue Elements

- 53. Estimating the revenue on a contract is an involved process, which is affected by a variety of uncertainties that depend on the outcome of a series of future events. The estimates must be periodically revised throughout the life of the contract as events occur and as uncertainties are resolved.
- 54. The major factors that must be considered in determining total estimated revenue include the basic contract price, contract options, change

⁹ The cost of uninstalled materials specifically produced, fabricated, or constructed for a project should be included in the costs used to measure extent of progress. Such materials consist of items unique to a project that a manufacturer or supplier does not carry in inventory and that must be produced or altered to meet the specifications of the project.

orders, claims, and contract provisions for penalties and incentive payments, including award fees and performance incentives. All those factors and other special contract provisions must be evaluated throughout the life of a contract in estimating total contract revenue to recognize revenues in the periods in which they are earned under the percentage-of-completion method of accounting.

Basic Contract Price—General

- 55. The estimated revenue from a contract is the total amount that a contractor expects to realize from the contract. It is determined primarily by the terms of the contract and the basic contract price. Contract price may be relatively fixed or highly variable and subject to a great deal of uncertainty, depending on the type of contract involved. Appendix B describes basic contract types and major variations in the basic types. The total amount of revenue that ultimately will be realized on a contract is often subject to a variety of changing circumstances and accordingly may not be known with certainty until the parties to the contract have fully performed their obligations. Thus, the determination of total estimated revenue requires careful consideration and the exercise of judgment in assessing the probabilities of future outcomes.
- 56. Although fixed-price contracts usually provide for a stated contract price, a specified scope of the work to be performed, and a specified performance schedule, they sometimes have adjustment schedules based on application of economic price adjustment (escalation), price redetermination, incentive, penalty, and other pricing provisions. Determining contract revenue under unit-price contracts generally involves the same factors as under fixed-price contracts. Determining contract revenue from a time-and-material contract requires a careful analysis of the contract, particularly if the contract includes guaranteed maximums or assigns markups to both labor and materials; and the determination involves consideration of some of the factors discussed below in regard to cost-type contracts.

Basic Contract Price—Cost-Type Contracts

- 57. Cost-type contracts have a variety of forms (see Appendix B). The various forms have differing contract terms that affect accounting, such as provisions for reimbursable costs (which are generally spelled out in the contract), overhead recovery percentages, and fees. A fee may be a fixed amount or a percentage of reimbursable costs or an amount based on performance criteria. Of Generally, percentage fees may be accrued as the related costs are incurred, since they are a percentage of costs incurred, and profits should therefore be recognized as costs are incurred. Cost-type contracts often include provisions for guaranteed maximum total reimbursable costs or target penalties and rewards relating to underruns and overruns of predetermined target prices, completion dates, plant capacity on completion of the project, or other criteria.
- 58. One problem peculiar to cost-type contracts involves the determination of the amounts of reimbursable costs that should be reflected as revenue. Under some contracts, particularly service-type contracts, a contractor acts solely in the capacity of an agent (construction manager) and has no risks associated with costs managed. This relationship may arise, for example, if an owner awards a construction management contract to one entity and a construction contract to another. If the contractor, serving as the construction

¹⁰ Cost-type government contracts with fees based on a percentage of cost are no longer granted under government regulations.

manager, acts solely as an agent, his revenue should include only the fee and should exclude subcontracts negotiated or managed on behalf of the owner and materials purchased on behalf of the owner.

59. In other circumstances, a contractor acts as an ordinary principal under a cost-type contract. For example, the contractor may be responsible to employees for salaries and wages and to subcontractors and other creditors for materials and services, and he may have the discretionary responsibility to procure and manage the resources in performing the contract. The contractor should include in revenue all reimbursable costs for which he has risk or on which his fee was based at the time of bid or negotiation. In addition, revenue from overhead percentage recoveries and the earned fee should be included in revenue.

Customer-Furnished Materials

60. Another concern associated with measuring revenue relates to materials furnished by a customer or purchased by the contractor as an agent for the customer. Often, particularly for large, complex projects, customers may be more capable of carrying out the procurement function or may have more leverage with suppliers than the contractor. In those circumstances, the contractor generally informs the customer of the nature, type, and characteristics or specifications of the materials required and may even purchase the required materials and pay for them, using customer purchase orders and checks drawn against the customer's bank account. If the contractor is responsible for the nature, type, characteristics, or specifications of material that the customer furnishes or that the contractor purchases as an agent of the customer, or if the contractor is responsible for the ultimate acceptability of performance of the project based on such material, the value of those items should be included as contract price and reflected as revenue and costs in periodic reporting of operations. As a general rule, revenues and costs should include all items for which the contractor has an associated risk, including items on which his contractual fee was based.

Change Orders

61. Change orders are modifications of an original contract that effectively change the provisions of the contract without adding new provisions. They may be initiated by either the contractor or the customer, and they include changes in specifications or design, method or manner of performance, facilities, equipment, materials, site, and period for completion of the work. Many change orders are unpriced; that is, the work to be performed is defined, but the adjustment to the contract price is to be negotiated later. For some change orders, both scope and price may be unapproved or in dispute. Accounting for change orders depends on the underlying circumstances, which may differ for each change order depending on the customer, the contract, and the nature of the change. Change orders should therefore be evaluated according to their characteristics and the circumstances in which they occur. In some circumstances, change orders as a normal element of a contract may be numerous, and separate identification may be impractical. Such change orders may be evaluated statistically on a composite basis using historical results as modified by current conditions. If such change orders are considered by the parties to be a normal element within the original scope of the contract, no change in the contract price is required. Otherwise, the adjustment to the contract price may be routinely negotiated. Contract revenue and costs should be adjusted to reflect change orders approved by the customer and the contractor regarding both scope and price.

- 62. Accounting for unpriced change orders depends on their characteristics and the circumstances in which they occur. Under the completed-contract method, costs attributable to unpriced change orders should be deferred as contract costs if it is probable that aggregate contract costs, including costs attributable to change orders, will be recovered from contract revenues. For all unpriced change orders, recovery should be deemed probable if the future event or events necessary for recovery are likely to occur. Some of the factors to consider in evaluating whether recovery is probable are the customer's written approval of the scope of the change order, separate documentation for change order costs that are identifiable and reasonable, and the entity's favorable experience in negotiating change orders, especially as it relates to the specific type of contract and change order being evaluated. The following guidelines should be followed in accounting for unpriced change orders under the percentage-of-completion method.
 - a. Costs attributable to unpriced change orders should be treated as costs of contract performance in the period in which the costs are incurred if it is *not* probable that the costs will be recovered through a change in the contract price.
 - b. If it is probable that the costs will be recovered through a change in the contract price, the costs should be deferred (excluded from the cost of contract performance) until the parties have agreed on the change in contract price, or, alternatively, they should be treated as costs of contract performance in the period in which they are incurred, and contract revenue should be recognized to the extent of the costs incurred.
 - c. If it is probable that the contract price will be adjusted by an amount that exceeds the costs attributable to the change order and the amount of the excess can be reliably estimated, the original contract price should also be adjusted for that amount when the costs are recognized as costs of contract performance if its realization is probable. However, since the substantiation of the amount of future revenue is difficult, revenue in excess of the costs attributable to unpriced change orders should only be recorded in circumstances in which realization is assured beyond a reasonable doubt, such as circumstances in which an entity's historical experience provides such assurance or in which an entity has received a bona fide pricing offer from a customer and records only the amount of the offer as revenue.
- 63. If change orders are in dispute or are unapproved in regard to both scope and price, they should be evaluated as claims (see paragraphs 65 to 67).

Contract Options and Additions

- 64. An option or an addition to an existing contract should be treated as a separate contract in any of the following circumstances:
 - a. The product or service to be provided differs significantly from the product or service provided under the original contract.
 - b. The price of the new product or service is negotiated without regard to the original contract and involves different economic judgments.
 - c. The products or services to be provided under the exercised option or amendment are similar to those under the original contract, but the

contract price and anticipated contract cost relationship are significantly different.

If an option or addition to an existing contract does not meet any of the above conditions, it may be combined with the original contract if it meets the criteria in paragraph 37 or 38. Exercised options or additions that do not meet the criteria for treatment as separate contracts or for combining with the original contracts should be treated as change orders on the original contracts.

Claims

- 65. Claims are amounts in excess of the agreed contract price (or amounts not included in the original contract price) that a contractor seeks to collect from customers or others for customer-caused delays, errors in specifications and designs, contract terminations, change orders in dispute or unapproved as to both scope and price, or other causes of unanticipated additional costs. Recognition of amounts of additional contract revenue relating to claims is appropriate only if it is probable that the claim will result in additional contract revenue and if the amount can be reliably estimated. Those two requirements are satisfied by the existence of all the following conditions:
 - a. The contract or other evidence provides a legal basis for the claim; or a legal opinion has been obtained, stating that under the circumstances there is a reasonable basis to support the claim.
 - b. Additional costs are caused by circumstances that were unforeseen at the contract date and are not the result of deficiencies in the contractor's performance.
 - c. Costs associated with the claim are identifiable or otherwise determinable and are reasonable in view of the work performed.
 - d. The evidence supporting the claim is objective and verifiable, not based on management's "feel" for the situation or on unsupported representations.

If the foregoing requirements are met, revenue from a claim should be recorded only to the extent that contract costs relating to the claim have been incurred. The amounts recorded, if material, should be disclosed in the notes to the financial statements. Costs attributable to claims should be treated as costs of contract performance as incurred.

- 66. However, a practice such as recording revenues from claims only when the amounts have been received or awarded may be used. If that practice is followed, the amounts should be disclosed in the notes to the financial statements.
- 67. If the requirements in paragraph 65 are not met or of those requirements are met but the claim exceeds the recorded contract costs, a contingent asset should be disclosed in accordance with FASB Statement No. 5, paragraph 17.

Income Determination—Cost Elements

68. Contract costs must be identified, estimated, and accumulated with a reasonable degree of accuracy in determining income earned. At any time during the life of a contract, total estimated contract cost consists of two components: costs incurred to date and estimated cost to complete the contract. A company should be able to determine costs incurred on a contract with a relatively high degree of precision, depending on the adequacy and effectiveness of its cost accounting system. The procedures or systems used in accounting for costs vary from relatively simple, manual procedures that

produce relatively modest amounts of detailed analysis to sophisticated, computer-based systems that produce a great deal of detailed analysis. Despite the diversity of systems and procedures, however, an objective of each system or of each set of procedures should be to accumulate costs properly and consistently by contract with a sufficient degree of accuracy to assure a basis for the satisfactory measurement of earnings.

Contract Costs

- 69. Contract costs are accumulated in the same manner as inventory costs and are charged to operations as the related revenue from contracts is recognized. Contract costs generally include all direct costs, such as materials, direct labor, and subcontracts, and indirect costs identifiable with or allocable to the contracts. However, practice varies for certain types of indirect costs considered allocable to contracts, for example, support costs (such as central preparation and processing of job payrolls, billing and collection costs, and bidding and estimating costs).
- 70. Authoritative accounting pronouncements require costs to be considered period costs if they cannot be clearly related to production, either directly or by an allocation based on their discernible future benefits.
- 71. Income is recognized over the term of the contract under the percentage-of-completion method or is recognized as units are delivered under the units-of-delivery modification and is deferred until performance is substantially complete under the completed-contract method. None of the characteristics peculiar to those methods, however, require accounting for contract costs to deviate in principle from the basic framework established in existing authoritative literature applicable to inventories or business enterprises in general.
- 72. A contracting entity should apply the following general principles in accounting for costs of construction-type and those production-type contracts covered by this statement. The principles are consistent with generally accepted accounting principles for inventory and production costs in other areas, and their application requires the exercise of judgment.
 - All direct costs, such as material, labor, and subcontracting costs, should be included in contract costs.
 - b. Indirect costs allocable to contracts include the costs of indirect labor, contract supervision, tools and equipment, supplies, quality control and inspection, insurance, repairs and maintenance, depreciation and amortization, and, in some circumstances, support costs, such as central preparation and processing of payrolls. For government contractors, other types of costs that are allowable or allocable under pertinent government contract regulations may be allocated to contracts as indirect costs if otherwise allowable under GAAP.¹¹ Methods of allocating indirect costs should be systematic and rational. They include, for example, allocations based on direct labor

¹¹ The AICPA audit and accounting guide, Audits of Federal Government Contractors, states, "Practice varies among government contractors concerning the extent to which costs are included in inventory. Some contractors include in inventory all direct costs and only certain indirect costs. . . . Other contractors record as inventory all costs identified with the contract, including an allocation of general and administrative . . . expenses." The guide points out that many accountants believe that the practice of allocating general and administrative expenses to contract costs, which is permitted under the completed-contract method by ARB 45, paragraph 10, may appropriately be extended to government contracts because they believe that "costs incurred pursuant to a government contract are associated directly with the contract's revenue, and both should be recognized in the same period."

- costs, direct labor hours, or a combination of direct labor and material costs. The appropriateness of allocations of indirect costs and of the methods of allocation depend on the circumstances and involve judgment.
- General and administrative costs ordinarily should be charged to С. expense as incurred but may be accounted for as contract costs under the completed-contract method of accounting 12 or, in some circumstances, as indirect contract costs by government contractors.13
- d Selling costs should be excluded from contract costs and charged to expense as incurred unless they meet the criteria for precontract costs in paragraph 75.
- Costs under cost-type contracts should be charged to contract costs e. in conformity with generally accepted accounting principles in the same manner as costs under other types of contracts because unrealistic profit margins may result in circumstances in which reimbursable cost accumulations omit substantial contract costs (with a resulting larger fee) or include substantial unallocable general and administrative costs (with a resulting smaller fee).
- f. In computing estimated gross profit or providing for losses on contracts, estimates of cost to complete should reflect all of the types of costs included in contract costs.
- Inventoriable costs should not be carried at amounts that when g. added to the estimated cost to complete are greater than the estimated realizable value of the related contracts.

Interest costs should be accounted for in accordance with FASB Statement No. 34, Capitalization of Interest Cost.

Precontract Costs

73. In practice, costs are deferred in anticipation of future contract sales in a variety of circumstances. The costs may consist of (a) costs incurred in anticipation of a specific contract that will result in no future benefit unless the contract is obtained (such as the costs of mobilization, engineering, architectural, or other services incurred on the basis of commitments or other indications of interest in negotiating a contract), (b) costs incurred for assets to be used in connection with specific anticipated contracts (for example, costs for the purchase of production equipment, materials, or supplies), (c) costs incurred to acquire or produce goods in excess of the amounts required under a contract in anticipation of future orders for the same item, and (d) learning, start-up, or mobilization costs incurred for anticipated but unidentified contracts.

74. Learning or start-up costs are sometimes incurred in connection with the performance of a contract or a group of contracts. In some circumstances, follow-on or future contracts for the same goods or services are anticipated. Such costs usually consist of labor, overhead, rework, or other special costs that

ment Contractors, in footnote 11.

¹² Paragraph 10 of ARB 45, Long-Term Construction-Type Contracts, states

When the completed-contract method is used, it may be appropriate to allocate general and administrative expenses to contract costs rather than to periodic income. This may result in a better matching of costs and revenues than would result from treating such expenses as period cost, particularly in years when no contracts were completed.

13 See the discussion of the AICPA Audit and Accounting Guide, Audits of Federal Govern-

must be incurred to complete the existing contract or contracts in progress and are distinguished from research and development costs. ¹⁴ A direct relationship between such costs and the anticipated future contracts is often difficult to establish, and the receipt of future contracts often cannot reasonably be anticipated.

- 75. The division recommends the following accounting for precontract costs:
 - a. Costs that are incurred for a specific anticipated contract and that will result in no future benefits unless the contract is obtained should not be included in contract costs or inventory before the receipt of the contract. However, such costs may be otherwise deferred, subject to evaluation of their probable recoverability, but only if the costs can be directly associated with a specific anticipated contract and if their recoverability from that contract is probable.
 - b. Costs incurred for assets, such as costs for the purchase of materials, production equipment, or supplies, that are expected to be used in connection with anticipated contracts may be deferred outside the contract cost or inventory classification if their recovery from future contract revenue or from other dispositions of the assets is probable.
 - c. Costs incurred to acquire or produce goods in excess of the amounts required for an existing contract in anticipation of future orders for the same items may be treated as inventory if their recovery is probable.
 - d. Learning or start-up costs incurred in connection with existing contracts and in anticipation of follow-on or future contracts for the same goods or services should be charged to existing contracts.^[15]
 - e. Costs appropriately deferred in anticipation of a contract should be included in contract costs on the receipt of the anticipated contract.
 - f. Costs related to anticipated contracts that are charged to expenses as incurred because their recovery is not considered probable should not be reinstated by a credit to income on the subsequent receipt of the contract.

Cost Adjustments Arising from Back Charges

76. Back charges are billings for work performed or costs incurred by one party that, in accordance with the agreement, should have been performed or incurred by the party to whom billed. These frequently are disputed items. For example, owners bill back charges to general contractors, and general contractors bill back charges to subcontractors. Examples of back charges include charges for cleanup work and charges for a subcontractor's use of a general contractor's equipment.

- 77. A common practice is to net back charges in the estimating process. The division recommends the following procedures in accounting for back charges:
 - Back charges to others should be recorded as receivables and, to the
 extent considered collectible, should be applied to reduce contract
 costs. However, if the billed party disputes the propriety or amount

¹⁴ FASB Statement No. 2, Accounting for Research and Development Costs, requires that research and development costs be charged to expense when incurred.
[15] Footnote deleted.

- of the charge, the back charge is in effect a claim, and the criteria for recording claims apply.
- Back charges from others should be recorded as payables and as additional contract costs to the extent that it is probable that the amounts will be paid.

Estimated Cost to Complete

78. The estimated cost to complete, the other component of total estimated contract cost, is a significant variable in the process of determining income earned and is thus a significant factor in accounting for contracts. The latest estimate may be determined in a variety of ways and may be the same as the original estimate. Practices in estimating total contract costs vary, and guidance is needed in this area because of the impact of those practices on accounting. The following practices should be followed:

- a. Systematic and consistent procedures that are correlated with the cost accounting system should be used to provide a basis for periodically comparing actual and estimated costs.
- b. In estimating total contract costs, the quantities and prices of all significant elements of cost should be identified.
- c. The estimating procedures should provide that estimated cost to complete includes the same elements of cost that are included in actual accumulated costs; also, those elements should reflect expected price increases.
- d. The effects of future wage and price escalations should be taken into account in cost estimates, especially when the contract performance will be carried out over a significant period of time. Escalation provisions should not be blanket overall provisions but should cover labor, materials, and indirect costs based on percentages or amounts that take into consideration experience and other pertinent data.
- e. Estimates of cost to complete should be reviewed periodically and revised as appropriate to reflect new information.

Computation of Income Earned for a Period Under the Percentage-of-Completion Method

79. Total estimated gross profit on a contract, the difference between total estimated contract revenue and total estimated contract cost, must be determined before the amount earned on the contract for a period can be determined. The portion of total revenue earned or the total amount of gross profit earned to date is determined by the measurement of the extent of progress toward completion using one of the methods discussed in paragraphs 44 to 51 of this statement. The computation of income earned for a period involves a determination of the portion of total estimated contract revenue that has been earned to date (earned revenue) and the portion of total estimated contract cost related to that revenue (cost of earned revenue). Two different approaches to determining earned revenue and cost of earned revenue are widely used in practice. Either of the alternative approaches may be used on a consistent basis. 16

¹⁶ The use of Alternative A in the discussion and in the presentation of some of the provisions of this statement is for convenience and consistency and is not intended to imply that Alternative A is the preferred approach.

Alternative A

- 80. The advocates of this method believe that the portion of total estimated contract revenue earned to date should be determined by the measurement of the extent of progress toward completion and that, in accordance with the matching concept, the measurement of extent of progress toward completion should also be used to allocate a portion of total estimated contract cost to the revenue recognized for the period. They believe that this procedure results in reporting earned revenue, cost of earned revenue, and gross profit consistent with the measurement of contract performance. Moreover, they believe that, if there are no changes in estimates during the performance of a contract, the procedure also results in a consistent gross profit percentage from period to period. However, they recognize that a consistent gross profit percentage is rarely obtained in practice because of the need to be responsive in the accounting process to changes in estimates of contract revenues, costs, earned revenue, and gross profits. In accordance with this procedure, earned revenue, cost of earned revenue, and gross profit should be determined as follows:
 - a. Earned Revenue to date should be computed by multiplying total estimated contract revenue by the percentage of completion (as determined by one of the acceptable methods of measuring the extent of progress toward completion). The excess of the amount over the earned revenue reported in prior periods is the earned revenue that should be recognized in the income statement for the current period.
 - b. Cost of Earned Revenue for the period should be computed in a similar manner. Cost of earned revenue to date should be computed by multiplying total estimated contract cost by the percentage of completion on the contract. The excess of that amount over the cost of earned revenue reported in prior periods is the cost of earned revenue that should be recognized in the income statement for the current period. The difference between total cost incurred to date and cost of earned revenue to date should be reported on the balance sheet.
 - c. Gross Profit on a contract for a period is the excess of earned revenue over the cost of earned revenue.

Alternative B

81. The advocates of this method believe that the measurement of the extent of progress toward completion should be used to determine the amount of gross profit earned to date and that the earned revenue to date is the sum of the total cost incurred on the contract and the amount of gross profit earned. They believe that the cost of work performed on a contract for a period, including materials, labor, subcontractors, and other costs, should be the cost of earned revenue for the period. They believe that the amount of costs incurred can be objectively determined, does not depend on estimates, and should be the amount that enters into the accounting determination of income earned. They recognize that, under the procedure that they advocate, gross profit percentages will vary from period to period unless the cost-to-cost method is used to measure the extent or progress toward completion. However, they believe that varying profit percentages are consistent with the existing authoritative literature when costs incurred do not provide an appropriate measure of the extent of progress toward completion. In accordance with

Alternative B, earned revenue, cost of earned revenue, and gross profit are determined as follows:

- a. Earned Revenue is the amount of gross profit earned on a contract for a period plus the costs incurred on the contract during the period.
- b. Cost of Earned Revenue is the cost incurred during the period, excluding the cost of materials not unique to a contract that have not been used for the contract and costs incurred for subcontracted work that is still to be performed.
- c. Gross Profit earned on a contract should be computed by multiplying the total estimated gross profit on the contract by the percentage of completion (as determined by one of the acceptable methods of measuring extent of progress toward completion). The excess of that amount over the amount of gross profit reported in prior periods is the earned gross profit that should be recognized in the income statement for the current period.

Revised Estimates

- 82. Adjustments to the original estimates of the total contract revenue, total contract cost, or extent of progress toward completion are often required as work progresses under the contract and as experience is gained, even though the scope of the work required under the contract may not change. The nature of accounting for contracts is such that refinements of the estimating process for changing conditions and new developments are continuous and characteristic of the process. Additional information that enhances and refines the estimating process is often obtained after the balance sheet date but before the issuance of the financial statements; such information should result in an adjustment of the unissued financial statements. Events occurring after the date of the financial statements that are outside the normal exposure and risk aspects of the contract should not be considered refinements of the estimating process of the prior year but should be disclosed as subsequent events.
- 83. Revisions in revenue, cost, and profit estimates or in measurements of the extent of progress toward completion are changes in accounting estimates as defined in APB Opinion No. 20, Accounting Changes.¹⁷ That opinion has been interpreted to permit the following two alternative methods of accounting for changes in accounting estimates:
 - Cumulative Catch-up. Account for the change in estimate in the period of change so that the balance sheet at the end of the period of change and the accounting in subsequent periods are as they would have been if the revised estimate had been the original estimate.
 - Reallocation. Account for the effect of the change ratably over the period of change in estimate and subsequent periods.

Although both methods are used in practice to account for changes in estimates of total revenue, total costs, or extent of progress under the percentage-of-completion method, the cumulative catch-up method is more widely used. Accordingly, to narrow the areas of differences in practice, such changes should be accounted for by the cumulative catch-up method.

¹⁷ Paragraph 31 of APB Opinion No. 20, Accounting Changes, requires that "the effect of a change in accounting estimate should be accounted for in (a) the period of change if the change affects that period only or (b) the period of change and future periods if the change affects both."

84. Although estimating is a continuous and normal process for contractors, the second sentence of APB Opinion No. 20, paragraph 33, recommends disclosure of the effect of significant revisions if the effect is material.¹⁸

Provisions for Anticipated Losses on Contracts

- 85. When the current estimates of total contract revenue and contract cost indicate a loss, a provision for the entire loss on the contract should be made. Provisions for losses should be made in the period in which they become evident under either the percentage-of-completion method or the completed-contract method. If a group of contracts are combined based on the criteria in paragraph 37 or 38, they should be treated as a unit in determining the necessity for a provision for a loss. If contracts are segmented based on the criteria in paragraph 40, 41, or 42 of this statement, the individual segments should be considered separately in determining the need for a provision for a loss.
- 86. Losses on cost-type contracts, although less frequent, may arise if, for example, a contract provides for guaranteed maximum reimbursable costs or target penalties. In recognizing losses for accounting purposes, the contractor's normal cost accounting methods should be used in determining the total cost overrun on the contract, and losses should include provisions for performance penalties.
- 87. The costs used in arriving at the estimated loss on a contract should include all costs of the type allocable to contracts under paragraph 72 of this statement. Other factors that should be considered in arriving at the projected loss on a contract include target penalties and rewards, nonreimbursable costs on cost-plus contracts, change orders, and potential price redeterminations. In circumstances in which general and administrative expenses are treated as contract costs under the completed-contract method of accounting, the estimated loss should include the same types of general and administrative expenses.
- 88. The provision for loss arises because estimated cost for the contract exceeds estimated revenue. Consequently, the provision for loss should be accounted for in the income statement as an additional contract cost rather than as a reduction of contract revenue, which is a function of contract price, not cost. Unless the provision is material in amount or unusual or infrequent in nature, the provision should be included in contract cost and need not be shown separately in the income statement. If it is shown separately, it should be shown as a component of the cost included in the computation of gross profit.
- 89. Provisions for losses on contracts should be shown separately as liabilities on the balance sheet, if significant, except in circumstances in which related costs are accumulated on the balance sheet, in which case the provisions may be deducted from the related accumulated costs. In a classified balance sheet, a provision shown as a liability should be shown as a current liability.

¹⁸ APB Opinion No. 20, paragraph 33, states,

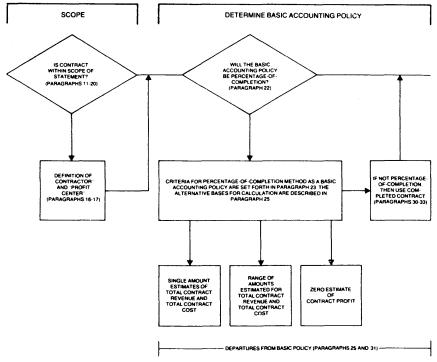
The effect on income before extraordinary items, net income and related per share amounts of the current period should be disclosed for a change in estimate that affects several future periods, such as a change in service lives of depreciable assets or actuarial assumptions affecting pension costs. Disclosure of the effect on those income statement amounts is not necessary for estimates made each period in the ordinary course of accounting for items such as uncollectible accounts or inventory obsolescence; however, disclosure is recommended if the effect of a change in the estimate is material.

Transition

- 90. An accounting change from the completed-contract method or from the percentage-of-completion method to conform to the recommendations of this statement of position should be made retroactively by restating the financial statements of prior periods. The restatement should be made on the basis of current information if historical information is not available. If the information for restatement of prior periods is not available on either a historical or current basis, financial statements and summaries should be restated for as many consecutive prior periods preceding the transition date of this statement as is practicable, and the cumulative effect on the retained earnings at the beginning of the earliest period restated (or at the beginning of the period in which the statement is first applied if it is not practicable to restate any prior periods) should be included in determining net income for that period (see paragraph 20 of APB Opinion No. 20, Accounting Changes).
- 91. Accounting changes to conform to the recommendations of this statement of position, other than those stated in paragraph 90, should be made prospectively for contracting transactions, new contracts, and contract revisions entered into on or after the effective date of this statement. The division recommends the application of the provisions of this statement for fiscal years, and interim periods in such fiscal years, beginning after June 30, 1981. The division encourages earlier application of this statement, including retroactive application to all contracts regardless of when they were entered into. Disclosures should be made in the financial statements in the period of change in accordance with APB Opinion No. 20, paragraph 28.

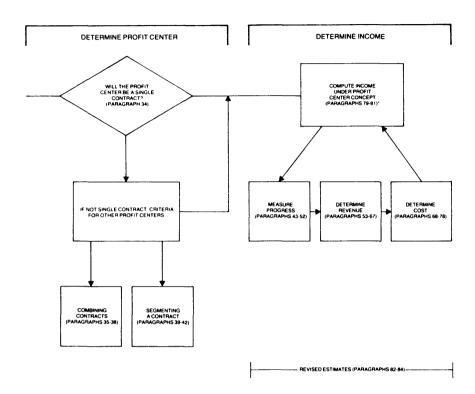
APPENDIX A

Schematic Chart of SOP Organization



NOTE: ALL PARAGRAPH NUMBERS ABOVE REFER TO TEXT OF SOP

"If computation results in a loss, see paragraphs 85-89



APPENDIX B

Types of Contracts

Four basic types of contracts are distinguished on the basis of their pricing arrangements in paragraph 15 of this statement: (a) fixed-price or lump-sum contracts, (b) time-and-material contracts, (c) cost-type (including cost-plus) contracts, and (d) unit-price contracts. This appendix describes the basic types of contracts in greater detail and briefly describes common variations of each basic type.

Fixed-Price or Lump-Sum Contracts

A fixed-price or lump-sum contract is a contract in which the price is not usually subject to adjustment because of costs incurred by the contractor. Common variations of fixed-price contracts are

- 1. Firm fixed-price contract—A contract in which the price is not subject to any adjustment by reason of the cost experience of the contractor or his performance under the contract.
- 2. Fixed-price contract with economic price adjustment—A contract which provides for upward or downward revision of contract price upon the occurrence of specifically defined contingencies, such as increases or decreases in material prices or labor wage rates.
- 3. Fixed-price contract providing for prospective periodic redetermination of price—A contract which provides a firm fixed-price for an initial number of unit deliveries or for an initial period of performance and for prospective price redeterminations either upward or downward at stated intervals during the remaining period of performance under the contract.
- 4. Fixed-price contract providing for retroactive redetermination of price—A contract which provides for a ceiling price and retroactive price redetermination (within the ceiling price) after the completion of the contract, based on costs incurred, with consideration being given to management ingenuity and effectiveness during performance.
- 5. Fixed-price contract providing for firm target cost incentives—A contract which provides at the outset for a firm target cost, a firm target profit, a price ceiling (but not a profit ceiling or floor), and a formula (based on the relationship which final negotiated total cost bears to total target cost) for establishing final profit and price.
- 6. Fixed-price contract providing for successive target cost incentives—A contract which provides at the outset for an initial target cost, an initial target profit, a price ceiling, a formula for subsequently fixing the firm target profit (within a ceiling and a floor established along with the formula, at the outset), and a production point at which the formula will be applied.
- 7. Fixed-price contract providing for performance incentives—A contract which incorporates an incentive to the contractor to surpass stated performance targets by providing for increases in the profit to the extent that such targets are surpassed and for decreases to the extent that such targets are not met
- 8. Fixed-price level-of-effort term contract—A contract which usually calls for investigation or study in a specific research and development area. It obligates

the contractor to devote a specified level of effort over a stated period of time for a fixed dollar amount.¹

Time-and-Material Contracts

Time-and-material contracts are contracts that generally provide for payments to the contractor on the basis of direct labor hours at fixed hourly rates (that cover the cost of direct labor and indirect expenses and profit) and cost of materials or other specified costs. Common variations of time and material contracts are

- 1. Time at marked-up rate.
- 2. Time at marked-up rate, material at cost.
- 3. Time and material at marked-up rates.
- 4. Guaranteed maximum cost—labor only or labor and material.

Cost-Type Contracts

Cost-type contracts provide for reimbursement of allowable or otherwise defined costs incurred plus a fee that represents profit. Cost-type contracts usually only require that the contractor use his best efforts to accomplish the scope of the work within some specified time and some stated dollar limitation. Common variations of cost-plus contracts are

- 1. Cost-sharing contract—A contract under which the contractor is reimbursed only for an agreed portion of costs and under which no provision is made for a fee.
- 2. Cost-without-fee contract—A contract under which the contractor is reimbursed for costs with no provision for a fee.
- 3. Cost-plus-fixed-fee contract—A contract under which the contractor is reimbursed for costs plus the provision for a fixed fee.
- 4. Cost-plus-award-fee contract—A contract under which the contractor is reimbursed for costs plus a fee consisting of two parts: (a) a fixed amount which does not vary with performance and (b) an award amount based on performance in areas such as quality, timeliness, ingenuity, and cost-effectiveness. The amount of award fee is based upon a subjective evaluation by the government of the contractor's performance judged in light of criteria set forth in the contract.
- 5. Cost-plus-incentive-fee contract (Incentive based on cost)—A contract under which the contractor is reimbursed for costs plus a fee which is adjusted by formula in accordance with the relationship which total allowable costs bear to target cost. At the outset there is negotiated a target cost, a target fee, a minimum and maximum fee, and the adjustment formula.
- 6. Cost-plus-incentive-fee contract (Incentive based on performance)—A contract under which a contractor is reimbursed for costs plus an incentive to surpass stated performance targets by providing for increases in the fee to the extent that such targets are surpassed and for decreases to the extent that such targets are not met.²

¹ AICPA Audit and Accounting Guide, Audits of Federal Government Contractors (New York: American Institute of Certified Public Accountants, 1990), paragraphs 1.27-1.35.

² AICPA Audit and Accounting Guide, Audits of Federal Government Contractors, paragraphs 1.41-1.42.

Unit-Price Contracts

Unit-price contracts are contracts under which the contractor is paid a specified amount for every unit of work performed. A unit-price contract is essentially a fixed-price contract with the only variable being units of work performed. Variations in unit-price contracts include the same type of variations as fixed-price contracts. A unit-price contract is normally awarded on the basis of a total price that is the sum of the product of the specified units and unit prices. The method of determining total contract price may give rise to unbalanced unit prices because units to be delivered early in the contract may be assigned higher unit prices than those to be delivered as the work under the contract progresses.

APPENDIX C

Summary of Disclosure Recommendations in Statement of Position

SOP Par.	Nature of Disclosure
21	Accounting policy—methods of reporting revenue
45	Method or methods of measuring extent of progress toward completion
52	Criteria for determining substantial completion
65-67	Information on revenue and costs arising from claims
84	Effects of changes in estimates on contracts
90-91	Effects of accounting changes to conform to SOP

APPENDIX D

Schedule of Changes Made to Statement of Position 81-1, Accounting for Performance of Construction-Type and Certain Performance-Type Contracts

Reference	Change	Date
Paragraph 3	Note reference to supersession of APB Statement No. 4 added.	May, 1993
Paragraph 4	Reference to Industry Audit Guide, Audits of Government Contractors, deleted.	October, 1990
Paragraph 14	Footnote deleted.	October, 1990
Paragraphs 18 and 19	References to Industry Audit Guide, Audits of Government Contractors, has been changed to Audit and Accounting Guide, Audits of Federal Government Contractors.	October, 1990
Paragraph 38	Footnote deleted.	October, 1990
Paragraph 72	References in footnotes 11 and 13 to Industry Audit Guide, Audits of Government Contractors, has been changed to Audit and Accounting Guide, Audits of Federal	
	Government Contractors.	October, 1990
Paragraph 75	Footnote deleted.	October, 1990
Appendix A	References in footnotes 1 and 2 to Industry Audit Guide, Audits of Government Contractors, has been changed to Audit and Accounting Guide, Audits of Federal Government Contractors.	October, 1990

Appendix D

Cost Accounting Standards Summary (Incorporated into FAR Part 30)

Disclosure Statement (Form No. CASB 1)

A written, complete, accurate, and current description of cost accounting practices and procedures is required upon award of a single CAS-covered contract exceeding \$10 million or when awards of CAS-covered contracts and subcontracts exceed \$10 million in a contractor's prior fiscal year.

401—Consistency in Estimating, Accumulating and Reporting Costs

Cost accounting practices used to estimate costs must be consistent with cost accounting practices used to accumulate and report contract costs.

402—Consistency in Allocating Costs Incurred for the Same Purpose

Each type of cost shall be allocated only once and on only one basis to any contract or other cost objective.

403—Allocation of Home-Office Expenses to Segments

Home-office expenses shall be allocated directly to segments to the maximum extent practicable. Expenses not directly allocated shall be grouped in homogeneous expense pools to the extent practical and allocated to segments based on a measurable causal or beneficial relationship. Residual expenses shall be allocated to all segments on a base representative of total activity (3-factor formula, if significant).

404—Capitalization of Tangible Assets

Capitalization policies must be established and must satisfy certain criteria; such as minimum service life not to exceed two years and minimum acquisition cost not to exceed \$1,500.

405—Accounting for Unallowable Costs

Unallowable costs must be identified in the accounts and, if expressly or agreed upon as unallowable, excluded from cost billings, claims and proposals related to Government contracts.

406—Cost Accounting Period

The cost accounting period shall be the contractor's fiscal year except under specified circumstances. The same period will be used for accumulation of base amounts as used for expense pools.

407—Use of Standard Costs for Direct Material and Direct Labor

Standard costs for direct material and labor must be entered into the books of account; accounted for, together with related variances, at the production unit level; and based on consistently followed written policy.

408—Accounting for Costs of Compensated Personal Absence

Costs must be accrued in the period of qualifying services, unless obligation is not established or the amount cannot be estimated, and allocated pro rata on an annual basis to final cost objectives.

409—Depreciation of Tangible Capital Assets

Depreciation of tangible capital assets shall reflect the pattern of consumption of services over the life of the asset. Supporting records are required to

show age experience. Gain or loss on disposition shall be assigned to the period of disposition.

410—Allocation of Business Unit G&A Expense to Cost Objectives

Cost of overall management and administration shall be grouped in a separate pool and allocated to final cost objectives by means of a cost-input base representing the best measure of total activity of the business unit. Criteria is specified for selecting either a (1) cost-input, (2) value-added cost input, or (3) single element cost-input base.

411—Accounting for Acquisition Cost of Material

There must be consistently applied written statements of accounting policies and practices for accumulating and allocating the cost of materials to cost objectives.

412—Composition and Measurement of Pension Cost

In determining and measuring pension cost, actuarial cost methods used must measure separately (1) the normal cost, (2) a part of any unfunded actuarial liability, (3) an interest equivalent on the unamortized portion of any unfunded actuarial liability, and (4) an adjustment for any actuarial gains and losses. Each actuarial assumption used to measure pension cost must be separately identified and the amount of pension cost computed for a cost accounting period is assignable only to that period.

413—Adjustment and Allocation of Pension Cost

Actuarial gains and losses shall be calculated annually and assigned to the cost accounting period for which the actuarial valuation is made and subsequent periods. The valuation of pension fund assets shall be determined under a method that considers unrealized appreciation and depreciation of pension fund assets.

414—Cost of Money as an Element of the Cost of Facilities Capital

A cost-of-money rate, to be periodically determined by the Secretary of the Treasury, shall be applied to facilities capital allocated in accordance with specific criteria.

415—Accounting for Cost of Deferred Compensation

Cost shall be assigned to the period in which the obligation to compensate the employee is incurred. The amount shall be the present value of the future benefit to be paid.

416—Accounting for Insurance Costs

Insurance cost assigned to the cost accounting period is the projected average loss for that period plus administration expenses. Allocation of insurance costs to cost objectives shall reflect beneficial or causal relationships.

417—Cost of Money as an Element of the Cost of Capital Assets Under Construction

An investment amount for each asset under construction shall be determined each accounting period. The cost-of-money rate used is the one determined by the Secretary of the Treasury.

418—Allocation of Direct and Indirect Costs

Requires written policies for classifying costs as direct or indirect and requires that such policies be consistently followed. Requires homogeneous

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pools and allocation of indirect costs based on beneficial/causal relationships.

419—Not used.

420—Accounting for IR&D/B&P Costs

IR&D/B&P costs are to be accumulated by project using the same criteria for direct and indirect cost application as for direct contract activity. Projects pooled at the home-office level are to be allocated to segments using the CAS 403 residual expense allocation base; projects pooled at the business-unit level are to be allocated using the CAS 410 base.

Note: This very abbreviated paraphrasing of the cost accounting standards is provided as a quick reference to the subject as a whole. The complete standards should be reviewed to assure appropriate implementation of the applicable requirements.

Appendix E

Schedule of Changes Made to Audits of Federal Government Contractors

Reference	Change	Date
Paragraph 4.46	Reference to SAS No. 9 changed to SAS No. 65.	April, 1992
Paragraph 4.49	Reference to AICPA Audit and Accounting Guide Audits of Service- Center Produced Records deleted.	November, 1991
Paragraph 4.49	Reference to SAS No. 44 changed to SAS No. 70.	May, 1993
Paragraph 4.65	Reference to SAS No. 64 added.	April, 1992
Paragraph 4.80	Note reference to proposed SSAE added.	May, 1993
Appendix C	Notice to Readers revised to reflect SAS No. 69.	April, 1992

- accumulating costs. Collecting cost data in an organized manner, such as through a system of accounts. (CAS 400.1 and FAR 31.001)
- actual cost. An amount determined on the basis of cost incurred as distinguished from forecasted cost. Includes standard cost adjusted for applicable variance. (CAS 400.1 and FAR 31.001)
- administrative contracting officer (ACO). Specialized contracting officer responsible for contract administration. (FAR 2.101)
- advance agreement. An agreement between a contractor and the government pertaining to the treatment of cost items. Negotiated before the incurrence of the cost covered by the agreement. (FAR 31.109)
- **advance payment.** Monetary advance made by the government to a contractor before, but in anticipation of, contract performance. Special accountability and controls are required. (FAR 32.4)
- **allocable cost.** A cost assignable or chargeable to one or more cost objectives in accordance with the relative benefits received or other equitable relationship, giving consideration to applicable regulatory cost accounting principles and standards.
- 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. (CAS 400.1 and FAR 31.001)
- **allowable cost.** Any cost that contract terms and applicable regulations permit to be included in prices, cost reimbursements, or settlements under the contract to which it is allocable.
- Armed Services Board of Contract Appeals (ASBCA). The board authorized to consider and determine appeals by contractors from decisions of DoD contracting officers on disputed questions. (DFARS Appendix A)
- bid and proposal (B&P) cost. The cost incurred in preparing, submitting, or supporting any bid or proposal neither sponsored by a grant nor required in the performance of a contract and, therefore, an indirect cost. (CAS 400.1 and FAR 31.205-18)
- bid protest. An unsuccessful bidder's protest against the award of a government contract.
- boards of contract appeals (BCA). Quasijudicial administrative boards established by the various government procuring agencies to hear and decide government contract disputes. Also a legal citation to BCA decisions published by Commerce Clearing House, Inc. (FAR 33.203)
- **business unit.** Any segment of an organization or an entire business organization not divided into segments. (CAS 400.1 and FAR 31.001)
- **change order.** A written order signed by the contracting officer, directing the contractor to make changes that the "changes" clause of the contract authorizes the contracting officer to make without the consent of the contractor.
- **changes clause.** A contract clause authorizing the contracting officer to revise the general scope of the contract. (FAR 52.243)
- **compensated personal absence.** Any absence from work for reasons such as illness, vacation, holidays, jury duty, military training, or personal activi-

- ties, for which an employer pays compensation directly to an employee in accordance with a plan or custom of the employer. (CAS 400.1 and FAR 31.001)
- competitive negotiation. A type of procurement that (1) is initiated by a request for proposal that sets out the government's requirements and the criteria for evaluation of offers, (2) contemplates the submission of timely proposals by the maximum number of possible offerors, (3) usually provides discussion with those offerors found to be within the competitive range, and (4) concludes with the award of a contract to the one offeror whose offer, price, and other factors are deemed to be most advantageous to the government.
- completed-contract method. This method of accounting defers recognition of revenues while a contract is in progress. On completion or substantial completion of a contract, aggregate revenues and costs associated with the contract are recognized.
- constructive change order. A constructive change results from any act or failure to act by the government or its authorized employees that (1) has the effect of requiring the contractor to perform additional work or incur added costs and (2) is not included in a formal change order.
- contingency. An existing condition, situation, or set of circumstances involving uncertainty about possible gain or loss to an enterprise that will ultimately be resolved when one or more future events occur or fail to occur. Resolution of the uncertainty may confirm the acquisition of an asset or the reduction of a liability or the loss or impairment of an asset or the incurrence of a liability.
- contract administration. The function of dealing with the contractor during contract performance rather than the proposal and negotiation stages leading to a contract award. Performed by government organizations such as Defense Contract Administration Services (DCAS); Air Force Contract Administration Division (AFCAD); and Navy Supervisors of Shipbuilding, Conversion, and Repair (SUPSHIPS).
- contract auditor. Professional auditor representing the government who is responsible for, among other things, examining or reviewing the incurred and estimated costs of contractors.
- contract modification. Any unilateral or bilateral written alteration in the specification, delivery point, rate of delivery, contract period, price, quantity, or other provision of an existing contract, accomplished in accordance with a contract clause—for example, change order, notice of termination, supplemental agreement, and exercise of a contract option.
- contract pricing proposal. The instrument required of an offeror for the submission or identification of cost or pricing data when negotiation is planned. The basic standard form (SF) 1411 (formerly DD Form 633, "Contract Pricing Proposal") is the general-purpose form, providing a standard format by which an offeror submits to the government a summary of estimated or, in some instances, incurred costs, referenced to supporting data suitable for detailed review and analysis.
- contracting officer (CO). An employee of a government procuring agency with authority to legally bind the government in contract matters (FAR 2.101).
- cost accounting. A system of accounting analysis and reporting on costs of production of goods or services, or of operation of programs, activities, functions, or organizational units. The system may embrace cost estimat-

- ing, determination of cost standards based on engineering data, and comparison of actual and standard costs for the purpose of aiding cost control.
- cost accounting standards (CAS). The set of rules on cost accounting for government contracts promulgated by the Cost Accounting Standards Board and continued in effect, although the Cost Accounting Standards Board has been terminated. These rules, found in volume 4 of the Code of Federal Regulations, together with the cost principles in contracts, represent the primary criteria for the government's determination of acceptable contract costs, whether actual or estimated.
- Cost Accounting Standards Board (CASB). An agency established by Congress to develop the Cost Accounting Standards and implement regulations during the 1970s. Terminated in 1980. Reestablished within the Office of Management and Budget—Office of Federal Procurement Policy in 1989.
- cost analysis. The review and evaluation of a contractor's cost and pricing data and the judgment used in projecting from the data to the estimated costs. The analysis is employed to form an opinion on the degree to which the contractor's proposed costs represent what contract performance should cost, assuming reasonable economy and efficiency.
- cost estimating. The process of forecasting the cost of a future event, based on available information.
- cost input. For contract costing purposes, the cost, except G&A expenses, allocable to the production of goods and services during a cost accounting period. (CAS 400.1)
- cost objective. A function, organizational subdivision, contract, or other work unit for which management desires cost data and for which provision is made to accumulate and measure the cost of processes, products, jobs, capitalized projects (that is, self-constructed assets), and so on. (CAS 400.1 and FAR 31.001)
- cost or pricing data. All facts as of the date of contract price agreement that prudent buyers and sellers would reasonably expect to affect price negotiations significantly. (FAR 15.801)
- cost principles. Any of the numerous sets of regulations that establish rules and policies relating to the general treatment of costs, particularly the allowability of costs. Although there are many different sets of special cost principles, the ones of paramount importance in the government contracting environment are those found in the Federal Acquisition Regulation (FAR), formerly in DAR section XV and FPR part 1—15. The FAR cost principles and CAS represent the primary criteria for the government's determination of acceptable contract costs, whether actual or estimated.
- cost/schedule control system (C/SCS). Many major contracts contain clauses requiring an approved C/SCS for performance measurement. The primary purposes of C/SCS are to obtain continuing visibility of expected final costs to the government, and to identify deviations from planned objectives in a timely manner to permit tradeoffs between cost, schedule, and technical aspects.
- cost/schedule control system criteria (C/SCSC). U.S. Department of Defense criteria for evaluating contractors' cost/schedule control systems required by contract.

- cost-type contract. Basic category of government contract in which the pricing arrangement involves the government's payment of allowable costs incurred by the contractor during performance. (FAR 16.301)
- costs incurred. Costs identified through the use of the accrual method of accounting and reporting. Generally include direct labor, materials, and services identified with and necessary for the performance of a contract as well as indirect costs, recorded in the contractor's books, that are allocated and allowable under applicable procurement regulations.
- **debarment.** Action taken to exclude a contractor from government contracting and government-approved subcontracting for a specified period. (FAR 9.4)
- defective cost or pricing data. Certified cost or pricing data subsequently found not to be accurate, complete, or current as of the effective date of the certificate, thus entitling the government to an adjustment of the negotiated price, including profit or fee, to exclude any significant sum by which price was increased because of the defective data.
- **Defense Acquisition Regulation (DAR).** Formerly known as Armed Services Procurement Regulation (ASPR).
- Defense Contract Audit Agency (DCAA). Separate and independent entity within the DoD providing contract cost audits and financial advisory services to DoD components and other departments on a reimbursable basis
- Defense Contract Management Command (DCMC). Largest government contract management activity, operated by the Defense Logistics Agency.
- delay or disruption costs. Costs incurred by the contractor resulting principally from a delay or disruption of work. The work may be that of the contractor or the subcontractor. Examples of such costs include loss of labor efficiency, loss of learning, idle labor or equipment, ripout and rework, and cost escalation during the period of delay.
- direct cost. Any cost identified specifically with a particular cost objective. Direct costs are not limited to items incorporated in the end product as material or labor. (CAS 400.1 and FAR 31.202)
- directly associated cost. Any cost that is generated solely as a result of the incurrence of another cost, and which would not have been incurred had not the other cost been incurred. (CAS 400.1 and FAR 31.001)
- disapproved (unallowable) cost. Under the provisions of any pertinent law, regulation, or contract, any cost that cannot be included in prices, cost reimbursements, or settlements under a government contract to which it is allocable.
- **disbursing officer.** A government representative responsible for paying amounts due to contractors and for collecting debts owed by contractors.
- disclosure statement (Form CASB-DS-1 and CASB-DS-2). Designed to meet the Cost Accounting Standards requirements of P.L. 91-379. Persons or firms required to complete and submit the statement describe their contract cost accounting practices by providing data responsive to the law's requirements. The disclosure statement is required for all defense contractors who (1) together with their subsidiaries, received net awards of negotiated national defense prime contracts and subcontracts subject to CAS totaling more than \$10 million in their most recent cost account-

- ing period or (2) received a single national defense contract award subject to CAS for \$10 million or more. (CAS 351.40)
- discovery. The process of obtaining information concerning an opposing litigant's case by means of depositions, interrogatories, requests for admissions, and requests for production. Used in board-of-contract appeals cases as well as in judicial proceedings.
- disputes procedures. The administrative procedure of a government procuring agency, generally prescribed by the contract's "disputes" clause, for processing a contract dispute. It usually involves a decision by the contracting officer that may be appealed to a contract appeals board or to the U.S. Claims Court.
- entitlement. An employee's right, whether conditional or unconditional, to receive a determinable amount of compensated personal absence, or pay in lieu thereof.
- equitable adjustment. An adjustment in the contract price generally prescribed by a contract clause to compensate a contractor under particular conditions described in the clause—for example, the "changes" clause provides for equitable adjustments to contractors who perform changed work.
- **estoppel.** A bar or impediment to asserting or denying a fact because of prior contrary words or acts. May be a significant factor in contract disputes.
- expressly unallowable cost. A particular item or type of cost that, under the express provisions of an applicable law, regulation, or contract, is specifically named and stated to be unallowable for reimbursement. (CAS 400.1 and FAR 31.001)
- **Federal Acquisition Regulation (FAR).** The primary regulation used by federal agencies in the acquisition of supplies and services.
- final cost objective. A cost objective that has allocated to it both direct and indirect costs. In the contractor's accumulation system, it is one of the final cost accumulation points. (CAS 400.1 and FAR 31.001)
- fixed-price contract. Basic category of government contracts with a firm price set at the time of contract award.
- formal change order. A formal change results when (under the terms of the "changes" clause) a written order is issued by the contracting officer or the authorized representative.
- General Accounting Office (GAO). Government agency headed by the U.S. Comptroller General and charged with the responsibility for settling and adjusting claims by and against the government. In the government contract costs area, the GAO renders advance opinions for government disbursement officers and audits their accounts. A function of the legislative branch of the U.S. Government.
- general and administrative (G&A) expense. Any management, financial, and other expense incurred by or allocated to a business unit 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 other than a cost-input base representing the total activity of a business unit during a cost accounting period. (CAS 400.1 and FAR 31.001)

- General Services Administration (GSA). The government agency responsible for publishing the Federal Acquisition Regulation and general regulations for management of government supplies and property.
- government-owned, contractor-operated (GOCO) facilities. Property owned by the government that is operated by a contractor on a cost-plusfee basis. (FAR 45.3) Examples include munitions plants, airfields and cafeterias.
- home office. An office responsible for directing or managing two or more, but not necessarily all, segments of an organization. It usually performs managemental, supervisory, or administrative functions, and may also perform service functions in support of the operations of the various segments. An organization that has intermediate levels, such as groups, may have several home offices reporting to a common home office; an intermediate organization may be both a segment and a home office. (CAS 400.1 and FAR 31.001)
- improvement curve. See learning curve.
- independent research and development (IR&D) cost. The cost of effort neither sponsored by a grant nor required in the performance of a contract and falling within any of the following three areas: (1) basic and applied research, (2) development, and (3) systems and other concept formulation studies. (CAS 400.1 and FAR 31.001)
- 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. (CAS 400.1)
- indirect cost pool. A grouping of incurred costs identified with two or more objectives but not identified specifically with any final cost objective. FAR regulations contain a similar definition for indirect cost pools. (CAS 400.1)
- Inspector General (IG). An oversight organization within each government department, created by the Inspector General Act of 1978, and responsible for contract audits, internal audits, inspections, and criminal and civil investigations regarding compliance with laws affecting the respective department's responsibilities and activities.
- invitation for bid (IFB). Government request for price from contractors for items to be procured under formally advertised procurement procedures.
- learning curve. A tool of calculation used primarily to project resource requirements, in terms such as direct manufacturing labor hours or the quantity of material required for a production run. Used interchangeably with the term *improvement curve*. The concept of a learning curve was adopted from the observation that individuals who perform repetitive tasks exhibit a rate of improvement because of increased manual dexterity, ongoing refinements in the manufacturing process, and the like.
- letter contract. A written preliminary contractual instrument that authorizes the immediate commencement of activity under its terms and conditions, pending the definition of a fixed-price or cost-reimbursement contract for the work to be done. It must specify the maximum liability of the government and be superseded by a definitive contract within a specified time. Not used except when a written determination is made that no other type of contract is suitable.
- motivational budget. A managemental goal-setting technique intended to motivate performance. In this budgeting technique, management estab-

lishes tight budget targets for subordinate operating elements by holding back a part of the resources that are expected to be available and/or required.

- national defense contract. A mutually binding legal relationship obligating the contractor to furnish the supplies or services (including construction) and the government to pay for them in connection with any activity related to programs for military or atomic energy production or construction, military assistance to any foreign nation, stockpiling, or space. It includes all types of commitments that obligate the government to an expenditure of appropriated funds and that, except as otherwise authorized, are in writing. In addition to bilateral instruments, contracts include (but are not limited to) awards and notices of awards; job orders or task letters issued under basic ordering agreements; letter contracts; orders, such as purchase orders, under which the contract becomes effective by written acceptance or performance; and bilateral contract modifications. Contracts do not generally include grants and cooperative agreements.
- negotiated national defense contract. A negotiated contract for any activity related to programs for military or atomic energy production or construction, military assistance to any foreign nation, stockpiling, or space. (FAR 2.101)
- negotiated procurement. The statutory procedure for purchasing under which contractors submit proposals that are not publicly disclosed. Bargaining may take place between the government and contractors (on both price and technical requirements) after submission of proposals, and award is made to the contractor whose final proposal is most advantageous to the government. (FAR 15.102)
- Office of Federal Procurement Policy (OFPP). Government agency responsible for providing overall direction to the procurement process and formulating procurement policy.
- operating budget. A document that contains cost estimates of a contractor's planned performance (generally by month and year) for the ensuing one-or two-year periods.
- percentage-of-completion method. An accounting method that recognizes contract revenues and income on work as a contract progresses. It provides for recognition on a periodic basis rather than on a completed-contract basis.
- precontract costs. Costs incurred before the effective date of a contract directly pursuant to the negotiation and in anticipation of the contract award when such incurrence is necessary to comply with the proposed contract delivery schedule.
- **preproduction costs.** Costs incurred before the time that production under the contract begins. Examples may include engineering, employee training, purchasing, and plant conversion.
- **price analysis.** The process of examining and evaluating a prospective price without evaluation of the separate cost elements and proposed profit of the offeror whose price is being evaluated.
- **procurement contracting officer (PCO).** A contracting officer assigned the responsibility for contract formulation *vis-a-vis* contract administration and termination settlement. (FAR 2.101)

- production scheduling and control. The contractor's system for planning, scheduling, and controlling manufacturing operations and coordinating the material, labor, and facilities required.
- profit. The extent to which contract revenue exceeds contract costs. In government use of the term, "costs" are the amounts deemed allowable under terms of the contract and applicable regulations. Contractors' use of the term includes all allocable costs, whether or not allowable.
- profit-analysis factors. The factors normally used by contracting officers in establishing the profit objective. They include contractor effort, contract-cost risk, federal socioeconomic programs, capital investments, cost control, past accomplishments, and recognition of independent development effort. (FAR 15.905)
- **profit center.** The smallest organizational segment of a company charged by management with profit and loss responsibilities.
- profit objective. The part of the contract price negotiation objective that the negotiator allots to profit as contrasted with estimated allowable costs. The government and contractor may differ on estimated costs and, therefore, have different profit objectives at a given contract price.
- **progress payment.** A payment made as work progresses under a contract on the basis of percentage-of-completion or at a particular stage of completion.
- **proposal.** Any offer or other submission from a prospective contractor used as a basis for pricing a contract, contract modification, or termination settlement, or for securing payments thereunder.
- **protest.** A formal complaint by a prospective contractor that certain procurement actions violate the applicable rules (see also **bid protest**).
- **questioned costs.** Those amounts on which contract audit action has been completed and that are not considered acceptable by the DCAA auditor as contract costs.
- **reasonable cost.** A cost not generally exceeding what would be incurred by an ordinarily prudent person in the conduct of competitive business.
- request for proposals (RFP). A solicitation document used in negotiated procurements. When an RFP so states, the government reserves the right to award a contract based on initial offers received without any written or oral discussion with offerors. (FAR 15.4)
- request for quotation (RFQ). A solicitation document used in planning negotiated procurements. There may be no intention to award a contract on the basis of the solicitation. Responses are not offers and may not be accepted by the government to create a contract. (FAR 15.4)
- research and development (R&D). For financial statement purposes, may be sponsored by a grant or contract (direct cost) or may be IR&D either funded in whole, part, or not at all by the government.
- sealed bidding. The contracting method using well-publicized invitations for bids, submission of sealed bids, public opening of bids at a designated time, and award to the responsible bidder with the bid most advantageous to the government, considering only price. (FAR 14.101)
- segment. A division, product department, plant, or other subdivision of an organization reporting directly to a home office, usually identified with responsibility for profit or producing a product or service. The term includes government-owned, contractor-operated (GOCO) facilities, joint

- ventures, and subsidiaries (domestic and foreign) in which the organization has a majority ownership. The term also includes those enterprises in which the organization has less than a majority of ownership, but over which it exercises significant influence. (CAS 400.1 and FAR 31.001)
- should-cost team reviews. A method of contract cost analysis that employs an integrated team of government procurement, contract administration, contract audit, and engineering representatives to conduct a coordinated, in-depth cost analysis at the contractor's plant. It is a specialized approach to the establishment of a fair and reasonable price based on what a contract (normally a major production contract) should cost in the environment and under the conditions predicted for contract performance. (FAR 15.810)
- **standard form (SF).** A set of standard contract provisions, or other standard procurement documents, issued by the General Services Administration for use by all government agencies.
- suspense account (suspense amount). A device used to record an amount, the disposition of which awaits the occurrence of some future event(s). It permits the equitable transition to a new cost accounting standard by a contractor who used a different cost accounting practice before becoming subject to the standard. For examples, see CAS 408, accounting for compensated personal absence; and CAS 410, allocation of business unit G&A expenses to final cost objectives.
- **suspension.** Action taken to disqualify a contractor temporarily from government contracting and government-approved subcontracting. (FAR 9.4)
- termination contracting officer (TCO). Specialized contracting officer responsible for supervising contract settlement after termination. (FAR 2.101)
- **termination for convenience.** A contract termination ordered at the government's discretion for which the government provides equitable compensation to the contractor.
- termination for default. A contract termination resulting from failure of the contractor to perform in accordance with the terms of the contract. May cause severe financial penalties to the contractor.
- Truth-In-Negotiations Act (Public Law 87-653). This act requires the submission (either actually or by specific identification in writing) of cost or pricing data and certification of their accuracy, completeness, and currency for the award of any negotiated contract expected to exceed \$100,000. Certain exceptions apply that are tied to adequate price competition or other conditions reflecting a competitive marketplace.
- two-step sealed bidding. A special procurement method. Under step one, technical proposals (without prices) are submitted in response to government performance specifications. Under step two, those whose technical proposals were acceptable submit sealed bids.
- unsupported costs. Those amounts for which the contractor does not furnish sufficient evidential matter to enable the DCAA auditor to reach a definitive conclusion regarding allowable costs.

Bibliography

This bibliography contains selected works that the members of the committee believe readers of this guide will find useful in gaining a basic understanding of government contracting, for keeping abreast of current developments in the area, and for researching problems confronted by government contractors (and their independent accountants).

Books

Alston, Frank M., Franklin R. Johnson, Margaret M. Worthington, Louis P. Goldsman, and Frank J. DeVito. Contracting With the Federal Government. New York: Ronald Press (a division of John Wiley & Sons, Inc.), 1984

Presents detailed coverage of the laws and regulations with which government contractors are confronted. All facets of the accounting issues facing government contractors are reviewed, from the proposal phase through the contract settlement

Anderson, Lane K. Accounting for Government Contracts—Cost Accounting Standards. New York: Matthew Bender, 1981.

Analysis for implementing and complying with cost accounting standards for federal government procurement contracts. This book was first published in 1981 and is updated annually.

Anderson, Lane K. Accounting for Government Contracts—Federal Acquisition Regulations. New York: Matthew Bender, 1985.

This book covers all aspects of government contract accounting with particular emphasis placed on the FAR. This book is updated annually.

Bedingfield, James P., and Louis I. Rosen. Government Contract Accounting. 2d ed. Washington, D.C.: Federal Publications, Inc., 1985.

Focuses on the accounting regulations of the Federal Acquisition Regulation (FAR) and the Cost Accounting Standards (CAS) Board. It includes discussion of significant boards of contract appeals and federal court decisions involving accounting issues. Also included is coverage of the relationship of financial accounting and cost accounting to the FAR cost principles and the CAS. The book is published in loose-leaf form for future updating.

Rishe, Melvin. Government Contract Costs. Washington, D.C.: Federal Publications, Inc., 1984.

Presents a detailed review of the existing procurement regulations, concentrating on FAR cost principles and the related CAS. Particular attention is devoted to precedent boards of contract appeals and federal court cases. The book is published in loose-leaf form to permit periodic updates.

Trueger, Paul M. Accounting Guide for Government Contracts. 9th ed. Chicago, IL: Commerce Clearing House, Inc., 1988.

Reviews the laws and regulations affecting government contractors, with particular emphasis on accounting regulations—for example, FAR cost principles and CAS. The book contains a detailed table of contents, topical index, and multiple appendixes.

Periodicals

Federal Contracts Report. Washington, D.C.: Bureau of National Affairs, Inc.

A weekly publication that reports on current developments in the government contracting environment. The topics covered range from legislative actions by the Congress and reports of congressional committees and independent commissions to actions by administrative agencies, such as revision of regulations. Also reported are major boards of contract appeals decisions, Comptroller General decisions, and federal court decisions.

The Government Contractor. Washington, D.C.: Federal Publications, Inc.

A biweekly publication that reports the latest changes in laws and agency regulations, as well as important decisions of the boards of contract appeals, the Comptroller General, and the federal courts. The series is indexed semiannually to facilitate the researching of topics.

Manuals and Series

Armed Services Pricing Manual (1986 ed.). Chicago, IL: Commerce Clearing House, Inc.

This manual was written by the DoD for the guidance of DoD personnel engaged in the analysis and negotiation of contract pricing. It covers topics that relate accounting to the pricing, administration, and settlement of contracts. Although originally published by the U.S. Government Printing Office, it is currently available through Commerce Clearing House, Inc.

Boards of Contract Appeals Decisions. Chicago, IL: Commerce Clearing House, Inc.

This series is composed of bound volumes of all decisions of the boards of contract appeals. Currently, the number of volumes published each year depends on the quantity of decisions rendered.

Code of Federal Regulations (CFR). Office of the Federal Register, National Archives and Records Service, General Services Administration.

The regulations of all federal agencies are annually compiled in the CFR. The following titles are of interest to individuals involved in government contracting:

- Title 4, chapter III—Cost Accounting Standards Board
- Title 32, chapter I—Defense Acquisition Regulation
- Title 41, subtitle A—Federal Procurement Regulation
- Title 48—Federal Acquisition Regulation (including all Agency Supplements)

The entire CFR or individual volumes can be purchased from the U.S. Government Printing Office.

Cost Accounting Standards Guide. Chicago, IL: Commerce Clearing House, Inc.

A single-volume loose-leaf series that is updated periodically as government agencies' actions and boards of contract appeals and federal court decisions warrant. It contains the text of all CAS Board pronouncements, commentary thereon, related agency regulations, and citation of significant boards-of-contract appeals and court cases.

Defense Contract Audit Agency. DCAA Contract Audit Manual. Washington, D.C.: Superintendent of Documents, U.S. Government Printing Office.

This manual contains comprehensive coverage of all areas of the contractorauditor interface. Because the manual is primarily intended for guidance to DCAA personnel, it provides useful insights into approaches to and positions on many contract audit and accounting issues. This manual is updated semiannually.

Government Contracts Reporter. Chicago, IL: Commerce Clearing House, Inc.

A loose-leaf series that is updated weekly. It includes the text of all current regulations, interpretive discussion thereof, and citations to precedent boards-of-contract appeals and to Comptroller-General and federal court decisions. The *Reporter* is extensively indexed.