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Report to the Congress; by Elmer B. Staats, Comptroller General.

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Congressional Relevance: House Committee on Armed Services; Senate Committee on Armed Services; Congress.
Authority: Employee Retirement Income Security Act of 1974. P.L. 91-379. Internal Revenue Code of 1954, as amended.

The Government incurred pension plan costs that were inequitable and too high because the Department of Defense permitted actuarial assumptions or unjustified changes in actuarial cost methods. Findings/Conclusions: Government controls and surveillance over contractors' pension plan practices were not adequate considering the costs involved. Establishing effective controls and surveillance over these practices could save the Government millions of dollars. Department of Defense auditing and contracting activities also lacked personnel with actuarial skills to evaluate pension plan costs. Properly implementing the existing requirements of the Cost Accounting Standards Board and the proposed standard on pension plan costs should prevent the increased costs. Recommendations: The Secretary of Defense should have the Armed Services Procurement Regulation (ASPR) revised to require that pension plan costs charged to the Government (1) are equitably distributed between Government and commercial work when different actuarial cost methods are used, (2) reflect allocation of pension fund assets in proportion to contributions, and (3) are allocated by using assumptions based on division or cost center experience instead of companywide experience. The ASPR should also be revised to require that any changes in the policies and procedures affecting allocation of pension plan costs be completely disclosed. (Author/SC)

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REPORT TO THE CONGRESS

BY THE COMPTROLLER GENERAL OF THE UNITED STATES

Contractor Pension Plan Costs: More Control Could Save Department Of Defense Millions

The Government incurred pension plan costs that were inequitable and too high because it permitted questionable actuarial assumptions or unjustified changes in actuarial cost methods.

Government controls and surveillance over contractors' pension plan practices were not adequate considering the costs involved. Establishing effective controls and surveillance over these practices could save the Government millions of dollars.

Properly implementing the existing requirements of the Cost Accounting Standards Board and the proposed standard on pension plan costs should prevent the increased costs.

PSAD-77-100

MAY 19, 1977

COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-146991

To the President of the Senate and the
Speaker of the House of Representatives

This report is the first of a series of reports on the Government's controls and surveillance over contractors' pension plan practices and costs reimbursed under Government contracts. It describes instances where the Government has incurred excessive and inequitable amounts of pension plan costs. Our review was undertaken because of the nationwide concern over pensions and the large amount of pension plan costs reimbursed to contractors by the Government.

Our review was made pursuant to the Budget and Accounting Act, 1921 (31 U.S.C. 53), the Accounting and Auditing Act of 1950 (31 U.S.C. 67), and the authority of the Comptroller General to examine contractors' records, as set forth in 10 U.S.C. 2313(b).

Copies of this report are being sent to the Director, Office of Management and Budget; and the Secretary of Defense.

Elmer B. Staats

Comptroller General
of the United States

COMPTROLLER GENERAL'S REPORT TO THE CONGRESS

CONTRACTOR PENSION PLAN COSTS: MORE CONTROL COULD SAVE DEPARTMENT OF DEFENSE MILLIONS

D I G E S T

The Department of Defense has relied on actuaries selected by contractors to calculate, on the basis of factors developed by them and the contractors, the pension plan costs allocated to Government contracts.

Nine Department of Defense prime contractors had over $100 million (see app. II) of questionable pension plan costs, excluding profits, that were, or may be, charged to Government contracts because

--unrealistic actuarial assumptions were used in computing annual pension plan contributions, resulting in higher costs when pension plan contributions were reimbursed by the Government (see p. 9);

--allocation of pension plan costs between Government and commercial business was inequitable to the Government (see p. 26);

--changes in actuarial cost methods have increased the cost of Government procurement (see p. 36); and

--Department of Defense auditing and contracting activities lacked personnel with actuarial skills to evaluate pension plan cost. (See p. 43.)

The actuarial cost method selected in determining pension plan contributions has no effect on long-range plan contributions. However, pension plan costs of an accounting period can vary greatly with the method selected. Some methods will generate the highest accounting period cost in the early life of a pension plan. Other methods will project costs so that greater contributions are required toward the latter part of the plan. Still other methods tend to level annual pension plan costs over the entire plan life.

Other important factors in determining annual pension plan costs are the actuarial assumptions about future events, such as annual increases in employee salaries, investment income, and employee turnover rates. The choice of assumptions can have a tremendous effect on periodic pension plan costs.

The regulations of the Cost Accounting Standards Board on consistency in accounting practices and the standards on pension plan cost practices it has issued or proposed should help (1) prevent increased costs, resulting from use of questionable assumptions or unjustified changes in actuarial cost methods, from recurring (see pp. 24 and 41) and (2) make sure that pension plan costs will be equitably assigned to accounting periods and cost centers. (See p. 26.)

GAO recommends that the Secretary of Defense have the Armed Services Procurement Regulation revised to

--require that pension plan costs charged to the Government (1) are equitably distributed between Government and commercial work when different actuarial cost methods are used, (2) reflect allocation of pension fund assets in proportion to contributions, and (3) are allocated by using assumptions based on division or cost center experience instead of companywide experience (see p. 35);

--require any changes in the policies and procedures affecting allocation of pension plan costs to be completely disclosed. (See p. 35.)

GAO also recommends that the Secretary of Defense

--seek recovery or appropriate credit as soon as possible for pension plans overfunded due to unrealistic actuarial assumptions or improper allocation of pension plan costs (see pp. 25 and 35);

--determine if changes in actuarial cost methods (1) are justified, (2) are in accordance with prudent business practices, and (3) will result in reasonable and equitable costs to the Government on future contracts (see p. 42);

--reinstate the military services' and the Defense Contract Administration Services' reviews of contractors' pension plan practices and costs (see p. 50);

--obtain additional staff with actuarial skills to (1) help determine if pension plan costs are reasonable and equitably allocated to Government contracts and (2) determine compliance with the Armed Services Procurement Regulation and the Cost Accounting Standards Board guidelines (see p. 50); and

--initiate training programs in pension plan accounting and computation to enable audit and contract personnel to review adequately the contractors' pension plan practices. (See p. 51.)

The Department of Defense stated that it had known about many of the matters discussed in the report and that action had been taken on them. Defense also pointed out that a large portion of the questioned costs was attributable to one contractor. Although Defense generally accepted the report findings, it questioned GAO's interpretation of some provisions of the Armed Services Procurement Regulation and suggested that GAO should have considered certain offsetting factors when evaluating questionable pension plan costs. (See pp. 58, 69 and 62.)

Nevertheless, the Department of Defense stated that it will consider GAO's observations in future reviews of contractors' pension plan practices. Defense also believed that current and proposed cost accounting standards should improve management in the pension area. However, it plans no further efforts concerning staffing at this time, and believes its staffs are being sufficiently trained to cope with these matters. (See pp. 71, 75, 77 and 81.)

GAO points out that the report recognizes corrective actions taken by the Department of Defense but that there were other instances where Defense did not act or failed to adequately review contractor pension costs. (See p. 46.) A large portion of the quentioned costs was attributable to one contractor; however, GAO believes that this is not a true measure since the report also discusses instances where the dollar impact of questionable pension plan practices was not determined. (See pp. 19, 23, 32, and 38.)

GAO is aware of the problems of interpreting the Armed Services Procurement Regulation and recommends clarification and improvements in the regulation. On pages 15 and 16, GAO discusses a case where the Defense activities agreed that their interpretation of the regulation was limited and effected recovery of excess pension plan contributions based on GAO's position.

Where appropriate, GAO considered offsetting factors in evaluating questionable pension plan costs and in some cases found that the offsetting factors obscured the increased costs of changes in contractors' pension plan practices. (See pp. 37 and 41.)

In view of the report findings, GAO still believes that the Department of Defense must improve and extend its capability to review contractors' pension plan practices.

Contents

ABBREVIATIONS

ASPR	Armed Services Procurement Regulation
CASB	Cost Accounting Standards Board
CWAS	contractor-weighted-average-share-in-cost-risk program
DCAA	Defense Contract Audit Agency
DCAS	Defense Contract Administration Services, Defense Logistics Agency
DOD	Department of Defense
ERISA	Employee Retirement Income Security Act of 1974
GAO	General Accounting Office
IRS	Internal Revenue Service

GLOSSARY

Abnormal forfeitures	When an employee withdraws from a pension plan or terminates employment for reasons other than retirement or death, employer contributions made to that date on his behalf, plus interest, are forfeited by the employee to the extent that his benefits are not vested. Abnormal forfeitures are generated when the contractor abruptly reduces his work force by separating a large number of employees who have not completed their vesting requirements. Abnormal forfeitures are a form of actuarial gain resulting from actual termination experience differing from anticipated experience.
Actuarial assumptions	A prediction of future conditions affecting pension cost; for example, mortality rate, employee turnover, compensation levels, investment earnings, etc.
Actuarial cost method	A technique which uses actuarial assumptions to measure the present value of future pension benefits and pension fund administrative expenses, and which assigns the cost of such benefits and expenses to cost accounting periods.
Accrued-benefit cost method	An actuarial cost method under which units of benefit are assigned to each cost accounting period and are valued as they accrue--that is, based on the services performed by each employee in the period involved. The measure of normal cost under this method for each cost accounting period is the present value of the units of benefit deemed to be credited to employees for service in that period. The measure of the actuarial liability at a plan's inception date is the present value of the units of benefit credited to employees for service prior to that date. (This method is also known as the unit credit cost method.)

Projected benefit cost method	Any of the several actuarial cost methods which distribute the estimated total cost of all the employees' prospective benefits over a period of years, usually their working careers.

The principal projected methods are:

1. Individual-level cost method with supplemental liability. The most common form of this method is known as the entry age normal method. Normal costs under this method are computed on the assumption that (1) every employee entered the plan at the time of employment or at the earliest time he would have been eligible if the plan had been in existence and (2) contributions have been made on this basis--from entry age to the date of actuarial valuation. The annual contributions under this method consist of the level normal cost and an amount for past service cost.

2. Individual-level cost method without supplemental liability. The cost of each employee's pension is computed on the basis of funding from the inception date of the plan (or the date of his entry into the plan, if later) to his retirement date. Thus, past service cost is not computed separately, but is included as normal cost. In principle, this method is similar to an ordinary life insurance policy.

3. Aggregate-level cost with supplemental liability. This method has separate normal costs and supplemental liability payments. Annual cost accruals are compiled for the plan as a whole rather than for the individual participants. The future benefits, excluding the supplemental liability, are funded on some form of level cost basis over the future working lives of the active employees, while the supplemental liability is amortized over a selected period not exceeding 40 years. When the supplemental liability is derived by assuming contributions from date of employment, this method is also referred to as the entry age normal method.

4. Aggregate-level cost without supplemental liability. All projected benefits are paid for over the future working lives of the active employees.

Costs are for the plan as a whole, and past service is not determined separately, but included as normal cost.

Actuarial gain and loss	The effect on pension cost resulting from differences between actuarial assumptions and actual experience.
Actuarial liability	Pension cost attributable, under the actuarial cost method in use, to years prior to the date of a particular actuarial valuation. As of such date, the actuarial liability represents the excess of the present value of the future benefits and administrative expenses over the present value of future contributions for the normal cost for all plan participants and beneficiaries. The excess of the actuarial liability over the value of the assets of a pension plan is the unfunded actuarial liability.
Actuarial valuation	The process by which an actuary estimates the present value of benefits to be paid under a pension plan and calculates the amounts of employer contributions or accounting charges for pension cost.
Actuary	A person professionally trained in the technical aspects of insurance and related fields, particularly in the mathematics of insurance.
Advance funding	A financing policy under which contributions are made to a pension fund during the active service lives of employees under one of several actuarial cost methods.
Annuity	A contract that provides an income for a specified period of time, such as a number of years or for life. The person receiving the payment is called an annuitant.
Cost	As an actuarial term, it refers to contributions for funding future benefit payments specified in a pension plan.

Determination of periodic costs for accounting purposes may involve the same or differing considerations.

Fund	Used as a verb, it means to pay over to a funding agency. Used as a noun, it refers to assets accumulated in the hands of a funding agency for the purpose of meeting retirement benefits when they become due.
Funding agency (mediums)	An organization or individual, such as a specific corporate or individual trustee or an insurance company, which provides facilities for the accumulation of assets to be used for the payment of benefits under a pension plan; an organization, such as a specific life insurance company, which provides facilities for the purchase of such benefits.
Investment income	The return, earned or to be earned, on funds invested or to be invested to provide for future pension benefits. It includes interest on debt securities, dividends on equity securities, rentals on real estate, and realized and unrealized gains or (as offsets) losses on fund investments.
Liability	The term is used to describe the actuarial cost of a category of benefits and is not intended to suggest that there is necessarily any legal liability.
Normal cost	The annual cost assigned, under the actuarial cost method in use, to years subsequent to the inception of a pension plan or to a particular valuation date. (See past service cost, prior service cost.)
Overfunding	A pension plan is overfunded under IRS criteria if the value of the fund's assets exceeds the actuarial liability.
Participant	An employee, employer, or former employee or employer, who may become eligible to receive, or is receiving, benefits under the plan as a result of his credited service.

Past service cost — Pension cost assigned, under the actuarial cost method in use, to years prior to the inception of a pension plan. (See normal cost, prior service cost.)

Pay-as-you-go — An actuarial cost method under which pension costs are recognized only when benefits are paid to retired employees.

Pension plan — A deferred compensation plan established and maintained by one or more employers to provide systematically for the payment of benefits to plan participants after their retirement (provided that the benefits are paid for life or are payable for life at the option of the employees). Additional benefits, such as permanent and total disability and death payments and survivorship payments to beneficiaries of deceased employees, may be an integral part of a pension plan.

Present value (actuarially computed value) — The current worth of an amount or series of amounts payable or receivable in the future. Present value is determined by discounting the future amount or amounts at a predetermined rate of interest. In pension plan valuations, actuaries often combine arithmetic factors representing probability (e.g., mortality, withdrawal, future compensation levels) with arithmetic factors representing discount (interest). Consequently, to actuaries, determining the present value of future pension benefits may mean applying factors of both types.

Prior-service cost — Pension cost assigned, under the actuarial cost method in use, to years prior to the date of a particular actuarial valuation. Prior service cost includes any remaining past service cost. (See normal cost, past service cost.)

Qualified plan — A plan which the IRS approves as meeting the requirements of Section 401(a) of the 1954 Code. Such a plan receives distinct tax advantages.

Service	Employment taken into consideration under a pension plan. Years of employment before the inception of a plan constitute an employee's past service; years thereafter are classified in relation to the particular actuarial valuation being made or discussed. Years of employment (including past service) prior to the date of a particular valuation constitute prior service; years of employment following the date of the valuation constitute future service.
Supplemental cost	The term for any liability treated as an element of actuarial cost separate from normal cost. Past service cost would be a supplemental cost.
Terminal funding	An actuarial cost method under which funding for future benefit payments is made only at the end of an employee's period of active service.
Termination (turnover)	The voluntary or involuntary withdrawal of employees from the work force other than by death, disability, and retirement.
Unfunded actuarial liability	The excess of the actuarial pension liability, under the actuarial cost method in use, over the present value of the assets of a pension plan.
Vesting	A plan may provide that a participant will, after meeting certain requirements, retain a right to the benefits he has accrued, or some portion of them even though his service with the employer terminates before retirement. A participant who has met such requirements is said to have a vested right. Note that vesting is in the form of future annuity benefits, not the cash paid to purchase the benefits.

CHAPTER 1

INTRODUCTION

BRIEF HISTORY OF PENSIONS

Private pension plans expanded in popularity during the 1930s and World War II. The idea was to provide employees with retirement income to insure economic independence in later years. As a corollary, employers hoped to generate increased employee loyalty and goodwill, provide added incentives for quality work performance, and improve the ability to recruit and retain qualified personnel.

Statistics for 1974 show that private pension plans have acquired assets of about $194 billion covering approximately 43 million active workers, or about one-half of the private labor force. Annual private pension fund contributions are currently about $26 billion, of which an estimated $1 billion is charged to Department of Defense (DOD) contracts.

Spurred by citations of inadequate funding, vesting, coverage, and fiduciary standards, pressure for pension system reform grew and culminated in the Employee Retirement Income Security Act of 1974 (ERISA). The provisions of ERISA did not directly affect our review of the reasonableness of pension plan costs charged to DOD contracts because the costs were calculated before ERISA was passed. The act, however, does have a major impact on certain pension plans. ERISA highlights include:

- --Minimum age and service requirements for employees to be covered under retirement plans.
- --Minimum acceptable periods during which participating employees must acquire vested interests in the benefits provided under such plans.
- --An increase in plans' disclosure requirements regarding conditions and operations and the addition of stringent standards for plan fiduciaries to insure that participants' pension interests are better protected.
- --Minimum funding standards for promised benefits under such plans.

--Tax incentives for those individuals not covered by an employer plan, to encourage them to save for retirement needs.

--An insurance program to guarantee that certain vested benefits are paid to participants of plans that are terminated.

ADVANCE FUNDING

Most companies finance their pension plans by periodically making contributions to pension funds in advance of actual payments to retirees. These funding arrangements are generally preferred because (1) amounts set aside can be listed as expenses for income tax purposes, within limitations, (2) earnings of the accumulated fund are not taxed at the time they are earned, (3) financing can be spread over a period of years, (4) proper accounting generally requires that costs be recognized at the time services are rendered by the employees, and (5) they protect employees' benefits.

In contrast, under pay-as-you-go and terminal funding methods, pension plan costs were not recognized until employees retired. Funding requirements of ERISA apparently preclude the use of pay-as-you-go and terminal funding methods.

FUNDING AGENCIES

There are two types of funding agencies available for private pension plans. A pension plan that uses a trust as its funding agency is called a trust fund pension plan. These plans are generally set up under an agreement between an employer and a bank or trust company that is to act as trustee. Cash and securities and the collection of income and disbursements for trust purposes are usually handled by the trustee.

Under a trust fund plan, contributions are made to the pension trust and earnings thereon reduce future contributions. The fund's assets are used to provide pensions or other benefits for employees. Retirement benefits and expenses may be paid by the trust during the period of retirement, or an annuity may be purchased for the employee upon his retirement, thus transferring the obligation to an insurance company.

When an insurance company is used as an alternative funding agency, this method of funding is called an insured plan. Some pension plans are partly insured and partly trust funded.

Pension plan liabilities

Generally, an employer's payments into the pension fund are composed of three parts: normal costs which cover benefits currently being earned by employees, periodic payments which amortize the unfunded actuarial liability, and adjustments for any actuarial gains and losses. Unfunded actuarial liabilities can arise for a variety of reasons, including benefit credits for service before the effective date granted to employees when a plan is first established, retroactive benefit increases, and changes in actuarial assumptions.

In all types of actuarial valuation, the existing fund, future payments into the fund, and earnings of the fund should be sufficient to pay future benefits. To estimate future costs realistically, companies and actuaries make assumptions regarding sucn items as employee turnover and mortality rates, future wage increases, age at retirement, and e rate of return on pension fund assets. Differences between these assumptions and actual events result in actuarial gains or losses.

COMPUTATION OF PENSION PLAN COSTS

Contractors generally hire a consulting actuary to calculate the amount of the annual contribution to the pension fund. To determine the amount, the actuary prepares an estimate of the ultimate cost of the pension plan, which is based on the total pension benefits expected to be paid to employees during their retirement or on their behalf at their death.1/ The present value of these benefits equals the sum of the amount in the fund, the unfunded actuarial liability, and the present value of future normal costs. Future normal costs and the unfunded actuarial liability can be distributed in various ways according to the actuarial cost method selected.

Pension cost determinations (using actuarial cost methods and assumptions) are long range in nature. The actuaries we spoke to emphasized that their most important

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1/May not apply to the accrued benefit method because frequently no projection is involved.

concern was the overall financial position of the pension fund over many years rather than the accuracy or equity of a single year's contribution. Such pension plan cost determinations often do not coincide with the objectives of Defense contract cost principles, which are designed to insure that costs assigned to Government work are reasonable and as closely related as possible to the specific time the work was performed.

Actuarial cost methods

Of primary importance in making these computations is the actuarial cost method used. A number of acceptable methods have been developed to determine future annual pension plan payments. Some of these are:

1. Accrued benefit cost method.

2. Projected benefit cost methods.

   a. Individual-level cost method with supplemental liability.

   b. Individual-level cost method without supplemental liability.

   c. Aggregate-level cost method with supplemental liability.

   d. Aggregate-level cost method without supplemental liability.

The actuarial cost method selected to determine pension plan contributions has no effect on the long-range cost of a plan. However, pension plan costs of an accounting period can vary significantly with the method selected. Some methods will generate the highest accounting period cost in the early part of the life of a plan. Other methods will project costs so that greater contributions are required later. Still other methods tend to level annual pension plan costs over the entire plan life.

Actuarial assumptions

Another important factor in determining pension plan costs for an accounting period is the actuarial assumptions. These assumptions amount to forecasts of future events, and any unrealistic assumptions can have a tremendous effect on periodic pension plan costs.

Actuarial assumptions deal with

--annual increases in employees' salaries;

--investment income of the pension fund, including method of valuing assets;

--employee turnover rate;

--employee mortality rate; and

--employees' ages at retirement.

Actual events seldom coincide with assumptions, and differences result in actuarial gains or losses. As conditions change, assumptions concerning the future may become invalid and need to be revised to reflect actual experience and reasonable expectations for the future.

The choice of assumptions can materially affect pension plan costs for any given year. For example, a 1-percent increase in the investment income assumption can reduce the pension plan contribution by 20 percent or more, depending on the specific circumstances.

ROLE OF THE ACCOUNTING PRINCIPLES BOARD

Opinion Number 8 of the Accounting Principles Board, American Institute of Certified Public Accountants, issued in November 1966, clarified the accounting principles and established the practices applicable to accounting for the cost of pension plans. The opinion concerned determining the pension plan cost for financial accounting purposes, and recognized that the annual pension plan cost was not necessarily the same as the amount to be funded for the year.

As part of the opinion, the Board

--identified acceptable actuarial cost methods;

--stated that the effect on cost of changes in methods, as well as other costs, should be applied prospectively to the cost of the current and future years; and

--stated that financial statements should disclose the nature and effect of significant matters affecting comparability for all periods presented, such as changes in accounting methods (actuarial cost method, etc.), changes in circumstances (actuarial assumptions, etc.), or adoption or amendment of a plan.

GOVERNMENTAL POLICIES AND PROCEDURES CONCERNING PENSION PLAN COSTS

Internal Revenue Service (IRS)

The basic Federal tax requirement affecting private pension plans is contained in the Internal Revenue Code of 1954, as amended, and the implementing income tax regulations and rulings. The code provides certain tax advantages to qualified plans. Employer contributions are deductible, within limitations, as business expenses in the year in which they are funded or paid and are not taxable as income to employees until benefits are received. Also, earnings of the pension fund are tax free at the time they are earned.

To be qualified, several general requirements must be met: (1) the plan must be in writing, (2) it must be communicated to the employees, (3) it must not discriminate in either contributions or benefits favoring officials or highly paid employees, and (4) the employer's contributions must be irrevocable.

Under ERISA, IRS is required to certify the qualifications of plans with respect to participation, vesting, and funding.

Department of Labor

ERISA gave the Department of Labor the principal enforcement responsibilities in the areas of reporting, disclosure, fiduciary standards, and protection of employee pension rights in the areas of participation, vesting, and funding.

Department of Defense

The Armed Services Procurement Regulation (ASPR) allows payments to qualified pension plans to be charged to Government contracts to the extent that the pension plan cost, with all other compensation, is allocable and reasonable in amount and is deductible for the same year for Federal income tax purposes. Another ASPR provision requires timely payments into pension funds. Normal costs of qualified plans which are not funded in the year in which they are incurred are not allowable in subsequent years. Amortization of unfunded actuarial liabilities is allowed if distributed over a period of 10 to 40 years and if started after the effective date of the ASPR change. (ERISA requires the amortization period for new plans to be no more than 30 years for single employer plans.)

In DOD, the administrative contracting officer is responsible for determining compliance with ASPR regulations and contract provisions, including those related to pension plans.

COST ACCOUNTING STANDARDS BOARD

The Cost Accounting Standards Board (CASB) was established by the Congress in August 1970 (Public Law 91-379), to issue cost accounting standards designed to achieve uniformity in accounting practices and consistency in accounting treatment of costs by contractors. Its standards, once finalized, are published in the Federal Register and sent to the Congress. The standards are generally applicable to Defense contractors having individual negotiated contracts in excess of $500,000.

The law also authorizes the CASB to make, promulgate, amend, and rescind rules and regulations for implementing the standards. One regulation that CASB has issued requires that contractors describe their cost accounting practices by submitting a disclosure statement to contracting officers and to the CASB and that they follow these practices uniformly for all covered contracts. This disclosure statement includes a section dealing with pension costs which provides, among other things, for a description of the contractors' actuarial cost methods.

On September 24, 1975, CASB promulgated a standard for the composition and measurement of pension plan costs (standard 412) and proposed a standard on February 3, 1977, on the adjustment and allocation of pension plan costs. Standard 412 suggests that the amount of the pension plan cost of a cost accounting period be determined by the accrued benefit cost method or by a projected benefit cost method, which separately identifies normal costs, unfunded actuarial liabilities, and actuarial gains and losses. The standard allows other cost methods as long as the contractor accumulates supplementary data for actuarial gains and losses and develops an alternative computation to disclose any overfunding.

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This report discusses the results of our review of pension plan practices of nine DOD prime contractors and our findings relative to questionable charges in excess of $100 million paid or to be paid by the Government. Some of these contractors also had prime contracts with the National Aeronautics and Space Administration.

CHAPTER 2

UNREALISTIC ACTUARIAL ASSUMPTIONS CAUSED EXCESSIVE PENSION PLAN COSTS WITHOUT APPROPRIATE GOVERNMENT CREDIT

Use of unrealistic actuarial assumptions in computing annual pension plan costs has increased the cost of Government procurement by many millions of dollars. Actuarial assumptions should represent the best estimate of future events, taking into account past experience and reasonable expectations.

Before the Cost Accounting Standards Board standard for pension plan costs was issued on September 24, 1975, contractors were not required to separately identify or justify the actuarial assumptions used to compute their annual pension plan cost. Actuaries for some of the contractors we reviewed acknowledged that certain assumptions, for example, projected investment income and salary increase rates, were unrealistic when compared to past experience. When we requested details on actual experience in prior years, the actuaries either had no such data or said that it was too difficult and costly to accumulate.

Following is a discussion of cases involving abnormal employee terminations and other unrealistic actuarial assumptions.

ABNORMAL EMPLOYEE TERMINATIONS

One of the assumptions made by actuaries in computing annual pension plan costs deals with the number of employees whose employment will be terminated before earning a vested right to receive retirement benefits. If actual terminations exceed those projected, then the pension plan costs will be higher than they should have been.

The termination of employees who have not attained a vested interest in the pension plan benefits releases the employer's liability for their pension benefits. Consequently, a pension fund surplus is created by funding the pension liability on behalf of such employees. At five contractors we reviewed, the Government had not received appropriate credits for at least $45.6 million of actuarial gains resulting from terminations in excess of those estimated by the actuarial assumptions used in the valuations.

The contract cost principles section of the Armed Services Procurement Regulation requires that abnormal forfeitures of pension rights due to significant and foreseeable reductions in employment levels shall be reflected by an adjustment in allowable costs. When abnormal forfeitures were not taken into account previously, that is, forfeitures were unforeseeable or were foreseeable but no cost reductions were made, ASPR requires an appropriate credit to the Government. ASPR also states that the applicable portion of any income, rebate, allowance, and other credit relating to any allowable cost, received by or accruing to the contractor, shall be credited to the Government either as a cost reduction or by cash refund, as appropriate.

COSTS NOT REDUCED IN ACCORDANCE WITH REDUCTIONS IN EMPLOYMENT LEVELS

At five of the contractors we reviewed, there were considerable reductions in employment levels (terminations) which were not adequately provided for by the contractors' actuaries. As a result, the Government was charged excessive amounts for pension plan costs, as summarized in the following table.

Contractor	Employment level before reductions	Estimated net reduction in personnel		Government share of excess pension plan costs
		Number	Percent	(millions)
G	29,500	24,000	81	$40.9
J	31,146	21,780	70	3.5
B	1,406	1,206	86	0.6
E	3,849	2,266	59	0.6
D	2,829	1,349	48	(a)
	68,730	50,601		$45.6

a/Termination gain not computed.

A brief explanation of each case follows.

Contractor G

Since 1963 contractor G's employment level has decreased from 29,500 to 5,500 employees. By 1974 a cumulative gain of about $42 million (about $41 million Government related) was realized by the pension fund because of the forfeitures of benefits by employees terminated without vested rights. No changes were made in the turnover rates used in computing annual pension plan costs during the 18-year period when abnormally high employee terminations occurred. Until 1969 Government participation in the company's pension plan costs was about 99 percent. From 1969 to 1974 this participation dropped to 86 percent.

Since 1965 the DOD contract administration and audit activities reviewing contractors' pension plan costs have been critical of the low actuarial turnover and investment income rates used, but apparently were unable to have the contractor change the assumptions. The parent company stated in its proxy statement when it acquired the remaining stock in this contractor that the pension fund surplus might be available to reduce pension plan costs of its other operations. Because of this, the administrative contracting officer notified the contractor in November 1972 that the surplus had resulted from charges to DOD and other Government contracts and that proper credits should be given to Government contracts.

The parent company contended that no contractual or legal basis existed for a claim against the surplus simply because some of the contributions were reimbursed under Government contracts. It also contended that the surplus resulted from very favorable investment experience and from an unforeseeable employment reduction--both of which are presently reversing and reducing the surplus.

In a November 1973 report to the administrative contracting officer, the Defense Contract Audit Agency (DCAA) resident auditor computed the amount of overfunding due the Government through 1971 as $16.4 million. In November 1973 the administrative contracting officer advised the contractor that the proposed agreement did not insure that the Government would receive credit for its allocable share in the surplus. He requested a direct refund or credit against cost in the amount of $16.4 million pursuant to ASPR as the only method for satisfying the Government's equitable right in the surplus.

In a December 1974 report to the administrative contracting officer, the DCAA resident auditor stated that since the overfunded condition was a direct result of contributions made in the years when Government work comprised nearly 100 percent of the contractor's business, the Government should share in the credits at the same ratio. DCAA recommended that the contractor and the Government negotiate a refund for the excess funding. No formal action was taken by the administrative contracting officer to resolve the issues raised in the report.

In February 1975 the contractor responded to the administrative contracting officer's demand letters of November 1972 and November 1973. The contractor proposed to continue its present policy of not charging for pension plan costs until the surplus funding was liquidated, with no foreseeable plans to use any part of the surplus for any other of the parent company's operations. However, the contractor is in part dissipating the surplus by not making contributions for pension plan costs of a commercial subsidiary acquired in 1972.

The administrative contracting officer advised us that no further action was to be taken on the Government's interest in the pension fund surplus. He stated that reducing the pension fund surplus for future pension costs would insure that the Government receives its appropriate credits.

We believe that because the percentage of Government business has declined in recent years, the Government may not have shared the credits in the same proportion that the pension costs were reimbursed. Furthermore, the continued use of the surplus to reduce future pension plan costs does not insure that the Government will share equitably in future credits.

In our opinion, the Government may assert a right to a credit for both foreseeable and unforeseeable abnormal forfeitures on the basis that the contractor has beneficially received or accrued credits, income, or rebates. We believe that under ASPR the contractor can be required to give the Government an appropriate credit, either as a cost reduction or as a cash refund.

Contractor and agency comments

The contractor did not question these facts and submitted no formal reply.

The Defense Contract Administrative Services (DCAS) stated that benefits from the surplus continue to accrue to the Government in that no contributions are being made to the pension funds by the contractor.

GAO comments

The fact that no contributions have been made does not necessarily mean that surplus is decreasing. The surplus is so large and the actuarial assumptions are so unrealistic that the interest earned on the surplus and the actuarial gains are likely to be greater than the accrued pension cost. In addition, the decreasing percentage of Government business will result in the Government not receiving its fair share of earlier overpayments.

For the reasons previously stated, we are recommending that the contracting officer establish the amount of credit due the Government and recover it.

Under the section "Other Unrealistic Actuarial Assumptions," we discuss the contractor's use of unrealistic investment income assumptions and furnish additional comments on the overfunded condition of contractor G's pension plan fund.

Contractor J

From 1969 through 1974, employment in one of contractor J's divisions decreased from 31,146 to 9,366, a net reduction of 21,780. Because of the abnormal employee turnover previously experienced and the anticipated future abnormal employee terminations for the division, the Air Force Contract Management Division requested in 1971 a modification in the actuarial assumptions used in computing pension plan costs to recognize the anticipated abnormal terminations. ASPR provides that foreseeable abnormal forfeitures of pension plan benefits because of employee terminations should be reflected by an adjustment of otherwise allowable costs.

In response to the Air Force request, the contractor used special actuarial assumptions in determining pension plan costs for active employees at the division for the 3-year period 1971 through 1973 to reflect anticipated employee terminations. This special valuation procedure was discontinued in 1974 when the employee population stabilized. A comparison of pension plan costs under the special and regular valuation procedures indicated that the special valuation procedures reduced pension plan costs by about $11.7 million, of which the Government's share was about $9.6 million.

The Air Force and the contractor took a forward-looking approach in using a special valuation technique to recognize the anticipated abnormal termination gains. However, we feel that the amount of excess contributions the Government made before 1971 was not recognized. Also, no consideration was given to the lower proportion of Government work after 1971. Our actuaries, using the contractor's data, calculated that the amount of the adjustment was $3.5 million less than it should have been as of December 25, 1975. We believe that the contracting officials should seek an appropriate contract price adjustment.

Contractor comments

The contractor does not agree with our position principally because

--the executed agreement between the contracting parties allowed special actuarial assumptions,

--it believed that GAO incorrectly interpreted the related ASPR sections, and

--the fact that contributions based on actual employment data versus anticipated employment levels indicated that its pension plans were actually underfunded by as much as $4 million (during the period of the special valuation).

GAO comments

On the first point, the Air Force Office of General Counsel believes that the executed agreement is not binding. We agree, and believe that equitable adjustments should be obtained. Regarding the second point, ASPR 15.205.6 states that

"abnormal forfeitures, due to significant reduction in the contractor's level of employment, that are foreseeable and which can be currently evaluated with reasonable accuracy, by actuarial or other sound computation, shall be reflected by an adjustment of costs otherwise allowable; where abnormal forfeitures were not taken into account previously, appropriate credit shall be given to the Government."

We believe the circumstances noted in this case clearly fall within the limit of this section of ASPR.

Finally, our calculation of $3.5 million distributed the large gain equitably between the contractor's commercial and Government business based on the respective contributions before the gain. In our calculations we gave full credit to contractor J for the lower contributions made in 1971-73.

The Air Force advised that our recommendation for appropriate contract price adjustment is under review.

Contractor B

Two pension plans were created in 1970 for hourly employees--union and nonunion--at contractor B's facility referred to as plant 2 in chapter 3. (See p. 31.) For both plans, the actuary used termination rates identical to those being used for the contractor's basic hourly plan at other plants. In recent years, however, the contractor had a much larger and more stable work force at other locations.

We found that 1,251 hourly employees were terminated at plant 2 between September 1, 1970, and September 1, 1974, and had not been reemployed by the latter date. Since the facility was not established until early 1968 and vesting occurs after 10 years of credited service, none of these employees had acquired a vested right to a pension benefit. Accordingly, all contributions made on their behalf remained in the pension fund. Because the actual rate of terminations was much higher than the assumed rate of terminations for these years, both pension plans became overfunded. No cash contributions were required in either pension plan for 1973 and 1974.

During 1970-72, Government work at the facility ranged from 96 to 100 percent. Since 1972, however, the work performed for the Government has dropped considerably and is expected to be about 50 to 60 percent during the 1975-77 period. If this condition continues, the Government will not share in credits against future years' pension plan costs in the same proportion that it absorbed the costs.

We estimated that about $533,000 in abnormal forfeitures reverted to the pension funds when the liabilities for the

1,251 plan participants were released by termination of their employment. Considering the effect of interest at the actuarially assumed rate of 5 percent, compounded annually, this amount was increased to about $598,000 (September 1974), of which about $592,000 was paid for by charges to Government contracts during plan years 1970 through 1972.

In 1972 DCAA advised the Army that the facility might be closed and that a substantial pension fund surplus would revert to the contractor. Based on DCAA's advice, the Army and the contractor agreed that appropriate credit be given to the Government should the facility be closed.

Discussions with local DCAA and Army officials revealed that they had never considered applying the ASPR provision for abnormal forfeitures to an ongoing operation even though they were aware that substantial abnormal forfeitures had occurred in the facility's hourly plans. These officials had apparently interpreted the provision as being applicable only to those situations in which both a plant closing and pension plan termination occurred.

Contractor comments

> The contractor believes that the abnormal forfeitures provision of ASPR applies only when a plan or operation terminates.

GAO comments

> We believe that ASPR is quite clear, stating that
>
> "* * *abnormal forfeitures, due to significant reductions in the contractor's level of employment * * * shall be reflected by an adjustment of costs* * *"

This regulation applies to both major reductions in employment as well as to plant closures.

The Army agreed with our position, and has recouped $135,000 of these costs through disallowance of all pension plan costs in negotiation of forward pricing rates for 1973 and 1974. The Army will continue this procedure in subsequent years. We support this method of recovering termination gains.

Contractor E

As previously noted, ASPR requires that abnormal forfeitures due to significant reductions in employment levels be reflected by an adjustment in allowable costs.

Contractor E experienced a large number of employee terminations at its two plants (referred to as plants 1 and 2) from 1969 through 1973. These plants had a net decrease of 749 and 1,517 personnel, respectively, or 2,266 combined.

At our request, the contractor's consulting actuaries calculated an actuarial gain of $667,000 for the salaried plan employees at plant 1, but no gain for the hourly plan employees at plant 2. We estimated the actuarial gain at plant 1, allocable to the Government, to be $590,000, which is being amortized over a 15-year period. As of January 1975 the unamortized amount allocable to the Government was estimated to be $514,000. There was no gain at plant 2 because the actuary correctly anticipated the terminations in determining annual pension plan costs.

Contractor and agency comments

The contractor does not believe that the Government is entitled to an immediate credit for the actuarial gain, but that the 15-year amortization of the actuarial gain is consistent with ASPR.

The contractor also believes that the termination gains in question, including those arising from commercial operations, are being appropriately credited to Government contracts. It was also suggested that we did not consider the business mix (commercial versus Government) at the plant discussed and the type of contracts involved (fixed price, cost reimbursement, etc.). Following the receipt of formal comments, the contractor's actuary advised us that the termination gain calculation considered all employees at this plant as being terminated, including a group being transferred to another plant. He also felt that if the continuing liability for pension benefits for the transferred employees had been considered in the calculation, the termination gain would have been less.

DCAS has taken the position that while the Government has a legal right to recover abnormal forfeiture gains, it has participated in such gains from commercial plants comparable to those from Government plants. Therefore, credits allocated to the Government as of December 31, 1975, are considered equitable, and DCAS considers this case closed. However, in its follow-on insurance/pension review of this contractor, DCAS is again checking into the allowability of pension plan costs and the handling of abnormal forfeiture gains.

GAO comments

We do not agree that amortization of termination gains over a 15-year period is appropriate since these gains are usually generated over a much shorter period. Requirements under the regulation are stated on page 10 of this report and we believe that such gain should be credited to the Government either as a cost reduction or as a cash refund, as appropriate. Contrary to the contractor's view, our computation of potential credit considered the mix of business and types of contracts.

As noted in the case of contractor B on page 16, the Army is seeking recovery of the termination gains through credits offsetting subsequent years' funding requirements. We believe that such procedure should also be followed in this case.

In view of the statement made by the contractor's actuary about the possible oversight in computing actual termination gain, a recalculation should be made to determine the appropriate credit, considering the statement about Government participation in commercial abnormal forfeiture gains.

Contractor D

Historically, Government business has been the major part of contractor D's total sales. However, through expansion and acquisition of more commercial business in recent years, Government sales have declined from 73 percent in 1969 to 41 percent in 1973.

We noted a big difference in actual number of terminations among divisions, with the predominant decreases in Government-oriented divisions. During 1969-73 the Government divisions experienced a decline of 1,349 people, while the total company had a net decline of 926.

During the 5 years the basically companywide pension plan had 187 terminations with vesting and 146 retirees added to the statistics. Even if all 333 were employed in Government divisions, there were 1,016 employees terminated from these divisions without vesting. Therefore, the resulting termination gains should be applied to the Government divisions. Since a single termination scale was used for the entire company and Government sales have declined, the Government has not shared in the credits (gains) on the same basis as it paid pension plan contributions in earlier years.

These matters were discussed with the contractor's actuary and officials, and we requested data regarding the terminations by divisions during this time. We were advised that although the data was available, it would be difficult and expensive to compile. We found, however, that the cost of making an actuarial study of another similar case was relatively small when compared to the excess credit due the Government.

Contractor and agency comments

> The contractor indicated that while emphasis has been given to the termination assumption, equal attention should be afforded to other assumptions, such as salary scale losses.
>
> DCAS stated that the situation of abnormal forfeitures (terminations) is not a deficiency in this case since employment levels increased rather than decreased. However, in its next visit it will review the points made in our report and make appropriate recommendations.

GAO comments

As previously stated and confirmed in the contractor's reply, detailed supporting data for actuarial assumptions was not provided for an analysis. In this connection, CASB Standard 412, effective September 1975, requires that each actuarial assumption represent the contractor's best estimate but validity of the assumptions may be evaluated on an aggregate basis. In addition, if the proposed CASB standard, dated February 3, 1977, is adopted, it will require termination assumptions to be representative of experience for each segment (division). The purpose of this requirement is to insure that termination gains remain in the division generating the gain rather than subsidize plan costs of the contractor's other operations, including commercial work.

In our opinion, DCAS should seek an appropriate credit if the Government did not share in termination credits on the same basis as it made pension plan contributions.

Regarding the DCAS comment on employment levels, the DCAS figures appear to be based on total employment data while our finding relates to those persons enrolled in the pension plan. In addition, the actuarial reports do not support the DCAS position. In any case, even if an increase in total employment occurred, this does not by itself preclude the possibility of a termination gain during the period in question.

OTHER UNREALISTIC ACTUARIAL ASSUMPTIONS

Contractor G

Previously we discussed contractor G's use of an unrealistic actuarial assumption for employee turnover (termination) rates. We also found that the contractor used unrealistically low actuarial assumptions regarding investment income when compared with historical data. From 1952 to 1974, the actuarial investment income rate used was 2.5, 3.0, and 3.5 percent. The actual investment yield ranged from 1.02 percent to 17.64 percent under the hourly plan and from 0.47 percent to 12.49 percent for the salary plan. During this period the excess investment yield over interest rate assumptions amounted to about $53.8 million. During the same period, gains of $42.4 million were realized when actual employee terminations exceeded the assumed rate of terminations. (See apps. III and IV.) These gains contributed to a substantially overfunded position in the pension plans. A portion of these excess funds has been offset by omitting pension plan contributions, including the Government's share, since 1969. However, as of November 30, 1974, the pension plans were still overfunded by about $26.2 million, resulting directly from excessive pension plan contributions, the bulk of which was charged to Government contracts.

Contractor and agency comments

The contractor did not formally reply to our preliminary report. DCAS stated that since no pension plan costs were being charged to Government contracts, and have not been for several years, any change in actuarial assumptions would not affect Government contract costs. DCAS also felt that GAO computations did not show the following actions which reduced contractor contributions to the pension plan: (1) commencing in 1960, contributions were reduced by prior year actuarial gains, (2) no contributions were made to the salary plan after 1965, and (3) contributions to hourly plan were reduced by 50 percent starting in 1966 with none after 1968. Therefore, GAO computations were grossly overstated.

GAO comments

We agree with the DCAS position pending resumption of Government contributions. In addition, our actuarial staff made a special study of the hourly plan of contractor G. This study revealed that the contractor could have made contributions equal to 44 percent of the actual contributions in every year from 1952 to 1969, and the plan still would have been fully funded in 1969 when actual contributions ceased. In other words, 56 percent of actual contributions were unnecessary. This study dramatizes the effect of unrealistic actuarial assumptions that resulted in unreasonable contract costs.

Contractor C

Contractor C's pension plan costs were overstated by projecting investment income considerably lower than actual. Until January 1, 1972, the contractor funded the pension plan through an insurance company which guaranteed a minimum return of 4.5 percent on investments. Actual earnings averaged more than 6.2 percent for the 3-year period ended in 1973, but the contractor continued to use the guaranteed minimum of 4.5 percent as its actuarial assumption.

In 1972 the contractor changed its funding for a large portion of the pension benefits from an insurance arrangement to a trust fund arrangement. One reason for the change, according to the contractor's officials, was to increase investment income. Even though actual earnings under the insured plan exceeded the guaranteed rate and the contractor expected still higher earnings under the trust fund plan, it continued to use 4.5 percent for valuation purposes.

Because of the low-investment income assumption, the contractor's annual pension plan costs were overstated, resulting in increased costs to the Government.

Contractor comments

The contractor advised us that interest rates used were common for pension plan valuations and that any favorable investment return was immediately credited to pension plan costs, reducing the expense allocated to Government contracts and, therefore, there has been no overstatement of pension plan costs.

GAO comments

We do not concur. We believe that this conclusion was reached because the operation of the actuarial cost method used by the contractor's actuary was not fully understood. Crediting of excess interest compensates for the incorrect interest assumption during that particular year. However, the present value of future benefits for all following years (the basic starting point of projected benefit actuarial valuations) will still be significantly overstated. Contrary to the contractor's comment, a valuation using a 4.5-percent interest assumption and with a 2-percent investment gain will generally produce higher annual pension plan costs than an actuarial valuation with a 6.5-percent interest assumption and no actuarial gain for interest.

The CASB standard on pension plan costs states that each assumption should be separately identified and should represent the contractor's best estimates of anticipated experience, taking into account past experience and reasonable expectations. The validity of the assumptions used may be evaluated in the aggregate. If the actuarial assumptions in the aggregate are not reasonable, the contractor should identify the major causes for the resultant gains and losses and the basis and rationale for retaining or revising each such assumption.

Contractor D

Contractor D, in a disclosure statement, reported that the actuary kept all the data on calculations of pension plan costs. The actuary expected that changes in the actuarial assumptions would be recommended periodically as material deviations were experienced or anticipated. In 1973 the contractor made important changes in the actuarial assumptions which its actuary considered to be overdue.

Since the overdue changes had the net effect of reducing annual pension plan costs, it appeared that before 1973 the actuarial assumptions were unrealistic and resulted in higher pension plan costs. When requested to provide an analysis of actuarial gains and losses, the actuary stated that no such records were kept even in the aggregate. He had no information about the total gain or loss, nor about gains or losses broken down by types of assumptions.

Contractor and agency comments

The contractor advised us that the compelling reason for the change in assumptions was a revision in the basis for computing basic retirement benefits from a career-average (total earnings divided by work years) to a final-average plan (average earnings during the last few years before retiring). Although the contractor conceded that for a number of years assumptions were not realistic, it believed they were reasonable in the aggregate.

DCAS also found that there was no analysis of actuarial gains and losses and that no such records were maintained even in the aggregate. However, it concluded that the assumptions used were reasonable when compared with those generally used in industry.

GAO comments

As noted in the CASB standard 412, each assumption

"* * * shall represent the contractor's best estimates of anticipated experience* * * taking into account past experience and reasonable expectations."

In our opinion, a benefit change is unrelated to the periodic need to reconcile or adjust unrealistic assumptions. In addition, no disclosure of the effect of any individual assumption was ever made by the contractor.

We also question DCAS' basis for concluding that the contractor's assumptions were reasonable by comparing them with those used by industry. We believe that using industry averages of actuarial assumptions does not reliably indicate the circumstances of an individual company, especially employee termination rates and investment income assumptions.

We were advised that DCAS is currently conducting an insurance/pension review at this contractor, and will assure compliance with applicable standards.

General agency comments

DCAS stated that notwithstanding the above comments, it agreed that Defense contractors should be required to comply with standard 412 with respect to identifying and justifying actuarial assumptions. To that end, its insurance/pension specialists have been evaluating compliance with the standard since it became effective January 1, 1976. In an overall comment, DOD felt that current and proposed standards would improve management in the composition, measurement, adjustment, and allocation of pension plan costs.

CONCLUSIONS

ASPR provides for cost adjustments in cases in which employment reductions result in abnormal termination gains. However, at five of the contractors we reviewed, the Government had received neither an adjustment nor a credit for about $46 million of such gains that were found.

In our opinion, the Government is entitled to a credit for large termination gains when estimated pension benefits paid for by the Government will not be paid to employees that performed work on Government contracts. We believe that ASPR should be revised to furnish clear guidelines for recovering DOD's share of gains caused by significant employee reductions.

While DCAS believes that the provision in ASPR on abnormal forfeitures is reasonably clear, we believe that ASPR should be revised to furnish clear guidelines for recovering DOD's share of gains caused by significant employee reductions. DCAS agreed, however, to consider our comments.

The CASB standard provides a means for the Government to evaluate the propriety of the assumptions used by its contractors and the mechanics to evaluate each assumption. We believe that this standard should help prevent the recurrence of the findings noted in this chapter.

We conclude that, in the cases cited in this chapter, the contractors and their actuaries increased pension plan costs to the Government by using actuarial assumptions which were unrealistic when compared to actual experience or for which they had no documentation or rationale. We believe that while actuarial assumptions should consider reasonable expectations, they should be heavily influenced by prior experience and should be documented to facilitate reviews by contracting officials.

RECOMMENDATIONS

We recommend that the Secretary of Defense determine in the cases cited in this report the increased costs to the Government resulting from abnormal forfeitures, and negotiate appropriate credits for those pension plan contributions reimbursed under Government contracts which are now excessive. We also recommend that ASPR be clarified to implement this recommendation for application in all instances where contractors experience abnormal terminations.

The recoveries should be made as soon as possible rather than permit amortization over a number of years, since the gains are usually generated over a much shorter period.

In the case of contractor G, and in similar cases, we also recommend that the Secretary of Defense determine and obtain an appropriate credit for the Government, since use of unrealistic assumptions resulted in unreasonable contract costs. The amount to be recovered should be an equitable share of prior overfunding, consistent with the funding requirements of the Employee Retirement Income Security Act of 1974.

CHAPTER 3

REASONABLENESS AND ALLOCABILITY OF PENSION PLAN COSTS

The Armed Services Procurement Regulation (ASPR) states that a cost is an allowable contract charge provided the tests of reasonableness and allocability are met and that generally accepted accounting principles are followed. A cost is considered reasonable if it is one that would be incurred by an ordinarily prudent person in the conduct of a competitive business. Further, a cost should be allocated between Government contracts and other work in reasonable proportion to the benefits received.

As mentioned previously, in September 1975 the Cost Accounting Standards Board issued standard 412, and on February 3, 1977, the Board proposed a second standard that deals with the allocation of pension plan costs to segments or divisions covered by a contractor's pension plan. Cost Accounting Standard 412 sets the stage for improved management in effectively controlling pension plan costs charged to Government contracts. The proposed standard is needed to clarify the Government's role as well as to provide guidance when the mix of Government and commercial work varies from year to year and from cost center to cost center. The proposed standard is also designed to assure that pension plan costs are calculated on a segment (division) basis when appropriate and are equitably assigned to periods and to cost centers.

In other chapters we describe how an actuary, by selecting various actuarial cost methods and by using liberal or conservative assumptions, can calculate widely varying annual pension plan costs. Following are examples of excessive allocations of pension plan costs to Government contracts through inequitable funding techniques and allocation practices.

INEQUITABLE FUNDING TECHNIQUES

Contractor F

ASPR provides that contributions for unfunded past service costs shall not exceed, for any year, an amount required to systematically amortize the unfunded past service costs over not less than 10 or more than 40 years.

In 1973 contractor F's actuary changed the funding of the locally hired employee pension plans at the Government-owned, contractor-operated plant to conform to the ASPR requirement. However, the entire past service costs of employees transferring to the Government-owned, contractor-operated plant from other contractors' divisions continued to be funded in a single year, contrary to ASPR. In this case the amount involved was $156,000.

Contractor and agency comments

> The contractor stated that the unfunded amount has always been paid immediately to insure full funding upon completion of the contract.
>
> This situation was brought to the attention of the Army and action has been initiated to amortize the $156,000 over a 10-year period.

Contractor F

Contractor F's estimated pension plan costs for 1974 included increased past service liability resulting from a change in benefits which recognized additional past service periods for salaried employees. In 1960, however, the Army agreed to accept only the pension plan costs for employee service after March 1, 1951. In view of this agreement, we questioned whether the Army should absorb the costs of pension plan benefit changes applicable to pre-1951 service, amounting to $195,000.

The contractor did not address this issue in response to the preliminary report. However, the Army notified us that the contracting officer has determined that the past service charges of $195,000 have not been reimbursed by the Government; the matter is now in litigation.

INEQUITABLE ALLOCATION OF PENSION FUND ASSETS

Contractor B

Contractor B's subsidiary has been computing annual pension plan costs by location; however, to do this, the assets held in common trust must be divided annually by location. In this case, two plant locations were involved.

For each year since 1968, the subsidiary has been allocating trust fund assets in proportion to the actuarial liability for pension plan benefits, a method that does not recognize net capital contributions by the respective sites each year. Further, each location does not share equitably in the capital growth of pension fund investments.

An equitable and more commonly used method of allocating assets for each year is the net contribution method. After the initial allocation of assets, each site or cost center is assigned a portion of fund assets based on prior contributions, income, benefit payments, and expenses. Use of this method produces results identical to those attainable when separate trust funds are maintained for each cost center but pooled for investment purposes. Each cost center receives full credit for its cash input to the fund, including capital growth, and bears only those annual pension expenses it generates.

The method this contractor used to allocate assets between the two plants caused plant 2, which does predominately Government work, to absorb a disproportionate share of the annual pension plan costs. If the assets were reallocated between the two sites on a net contribution basis, plant 2's portion of the pension fund would have reached a surplus condition by the 1973 actuarial valuation date, thereby eliminating the need for additional contributions for plan year 1973 and requiring only minimal contributions for plan year 1974.

Our actuary recomputed annual pension contributions using the net contribution method of allocating assets between the two plants. The results of the calculation are summarized in the following table.

	Pension cost	Government share
Amount overcontributed by plant 2	$243,000	$218,000
Amount undercontributed by plant 1	(99,000)	(57,000)
Overpayment by Government		$161,000

Contractor and agency comments

The contractor maintained that it was questionable whether the actuarial liability method or the net contribution method is either preferable or equitable. Both methods are acceptable by the Internal Revenue

Service and ASPR. The Army felt that the contractor's method was equally equitable and in compliance with a subsequently promulgated cost accounting standard on pension plan costs.

GAO comments

We do not agree that using the actuarial liability method is equitable since contributions made for plant 2 employees, as well as their earnings, were far greater than the assets assigned to plant 2 under that method. Furthermore, the reduction in the actuarial liability due to terminations at plant 2, being apparently greater than at plant 1, resulted in the assignment of a lesser share of the assets to plant 2 under the actuarial liability method instead of the net contribution method. Although the procedure the contractor used may be acceptable under Internal Revenue Service Regulations, this does not imply that it meets the Government procurement regulation pertaining to equitable cost allocation.

We understand that the proposed CASB standard, dated February 3, 1977, requires the net contribution method to be applied on asset allocation whenever feasible. The actuarial liability method the contractor used would be allowable only as an alternative, when the preferred method was not feasible.

We believe that the contracting officer should recover the amount due the Government and the contractor should be required to adopt an equitable method for allocating pension fund assets between the two plants.

Contractor G

At contractor G a commercial subsidiary which was acquired in 1972 is not making pension fund contributions. Instead, the pension fund surplus (see p. 12) is used to fund the subsidiary's pension plan costs. Since the pension fund surplus was accumulated mainly through Government reimbursements that exceeded the amounts required, the Government's proportional share of the surplus has been diluted by the annual pension plan costs of this commercial subsidiary.

This subsidiary became a division in April 1973, and the contractor's pension benefits were then extended to cover the division's employees. This division's pension plan costs amounted to $42,600 for 1973. The 1974 costs were not available at the time of our review. Although these additional employees have earned pension benefits for 1973 and 1974, no contributions were made by the contractor because its pension plan was overfunded.

Since the funding surplus was identified, Government contracts have been receiving credits by the application of the excess funding to succeeding years' pension plan costs. However, the use of the surplus to fund the pension benefits of the commercial division employees was not justified since there were no prior contributions to the pension fund by this division.

Contractor and agency comments

> Contractor G officials informally stated, and Defense Contract Administrative Services (DCAS) advised us, that the pension plan costs associated with the commercial division were not likely to be significant.
>
> DCAS felt that inclusion of a commercial division in the allocation of benefits from excess pension plan costs previously allocated to Government contracts did appear inequitable.
>
> DCAS also felt that considering the complexities of this contractor's pension plans, the elimination of annual funding for several years, the size of the surplus funds involved, and the percent of flexibly priced Government contracts, the extent of the inequity to the Government was insignificant.

GAO comments

We believe that it is inequitable for the contractor's commercial operations to benefit from excessive pension plan costs allocated to prior Government contracts.

We also believe that the 1973 commercial subsidiary's pension plan cost of $42,600, while not significant in relation to total pension costs, is important enough to be reported. We also believe that the contractor should be required to pay the Government the amount of contributions to the fund which it should have made and should make in the future for its commercial operations. This procedure, which will amortize more rapidly the overfunded condition caused by excessive charges to Government contracts, is suggested since pension fund assets are placed in an irrevocable trust; that is, the funds cannot be withdrawn to refund excess contributions.

INEQUITABLE COST CENTER ALLOCATION PRACTICES

When a single pension plan is used to cover Government and commercial operations, cost can be calculated in total and allocated to cost centers, or calculated by individual cost centers. When pension plan costs are allocated, there are opportunities to inequitably shift pension plan costs from one cost center to another. One of the common methods is to use the same employee termination assumption for all cost centers even though terminations of employees not fully vested in pension benefits are generally much more prevalent in cost centers doing Government work. In effect, actuarial gains applicable largely or solely to Government work are spread over all of the contractor's business. A discussion follows of this and several other methods of shifting pension plan costs from one cost center to another.

Contractor B

The parent company used the same employee termination assumptions for contractor B's plants 1 and 2 in computing the salaried pension plan contributions even though the terminations at plant 2 were far greater than those at plant 1. Plant 2, with a larger percentage of Government business than that of plant 1, had a decrease in salaried employees from 216 to 119 between 1971 and 1973, while plant 1 increased from 2,845 to 2,904. By using the same termination assumption, plant 2 made excessive contributions for the pension plan costs as computed by profit center (plant). The excessive contributions resulted in an actuarial gain, which normally serves to reduce future years' contributions. However, as explained on page 28, the assets that were generated by plant 2's contributions were assigned to plant 1 by using a questionable asset allocation technique, further increasing costs to the Government.

Contractor comments

The contractor stated that Government business fluctuates, and although some inequities exist periodically, the overall costs to the Government have been equitable.

GAO comments

The general statement that overall costs to the Government have been equitable was made without factual support. An analysis of the effect of the termination assumption will show the amount of excess contributions and the need for the contracting officer to obtain credit for any overpayments.

Contractor D

Contractor D is another example of the Government-oriented cost center bearing more than its share of the costs. Until 1973 the pension plan costs for its one plan were calculated using corporate-wide assumptions. However, we noted considerable differences in the rates of employee terminations among divisions, with higher termination rates in Government-oriented divisions. Overall the company had a net decline of 926 employees from 1969 to 1973. The major Government group (two divisions), however, experienced a decline of 1,349 employees, which was partially offset by net increases in other divisions. The cost to the Government would have been much less in those years if the differences in termination experience had been recognized.

We requested data regarding the terminations by divisions for the last 5 years, but the contractor's actuary cited the difficulty and expense of compiling this data.

Contractor comments

> The contractor stated that while inaccuracies in termination assumptions may have resulted in increased costs, other assumptions have had the opposite effect and should be viewed accordingly.

GAO comments

As noted earlier, the method used by the actuary to calculate annual pension costs did not identify gains or losses. Also, the contractor formally advised us that it was too costly to provide detailed data on termination gains or losses.

The existing cost accounting standard requires that all assumptions should be separately identified. The proposed standard would provide additional specificity in that the assumptions have to be quantified on a segment (division) basis rather than on a plan or contractor basis.

This was not done by contractor D. Although the events in question occurred before the effective date of the standards noted, we believe that DOD should seek a price adjustment under the abnormal forfeitures section of ASPR.

DCAS stated that its records showed a net increase in contractor's employment, but agreed in its next visit to review the points made in this report and make appropriate recommendations.

Contractor A

Before October 1970 two wholly owned subsidiaries of contractor A were members of the contractor's salaried pension plan but accounted for and assigned their pension plan costs separately. In addition to funding normal cost, the two subsidiaries had an unfunded past service cost of $614,177 as of January 1, 1970.

In October 1970 the contractor reorganized its corporate structure to include one of these subsidiaries as a division. In the following year this division's pension plan costs for salaried employees were included as part of the contractor's pension plan costs. In 1972 similar treatment was given to the other subsidiary.

For 1971 and 1972, past service costs for the former subsidiaries allocated to other divisions of the contractor totaled about $104,000, with the Government contracts receiving about $89,000. Assuming that the ratio of Government business to commercial business remains about the same, an additional $909,000 will be allocated to the other divisions of the contractor, with the Government absorbing about $727,000 during the estimated 15-year amortization period.

Since these former subsidiaries had little if any Government work during the time when the past service costs were accrued, there appears to be no basis for charging this cost to Government contracts.

Contractor comments

The contractor stated that it is improper to evaluate pension plan costs on a specific issue basis; the merger in question incorporated a number of fringe benefit items and the costs should be viewed accordingly.

GAO comments

Our position--supported by ASPR--is that cost should be allocated between Government contracts and other work in reasonable proportion to the benefits received. This was not complied with.

In answer to our inquiry, DCAS negotiated an agreement which eliminates the amortization of $1,092,138 for past service costs of the former subsidiaries from contractor overhead commencing in 1973 with savings of about $874,000 accruing to the Government. The actual figure negotiated is greater than the amount stated above due to more current data.

CONCLUSIONS

ASPR cost principles provide that cost is an allowable charge if the tests of reasonableness and allocability are met. More specifically, a cost is considered reasonable if it is one that would be incurred by an ordinarily prudent person in the conduct of competitive business. Further, a cost should be allocated between Government contracts and other work in reasonable proportion to the benefit received.

It is important that pension plan costs follow these principles and be equitably assigned to periods and to cost centers because the mix of Government and commercial work often varies from year to year and from cost center to cost center.

We have noted that Government divisions were being charged more for pension plan costs

--than commercial work because different actuarial cost methods were used,

--because pension fund assets were not allocated in proportion to contributions, and

--because pension plan costs were calculated on a companywide basis instead of by divisions or cost centers.

In addition, the Government's share of excess pension fund credits is being dissipated by pension plan costs applicable to commercial operations not being reimbursed to the fund.

In summary, we believe that in some cases the Government is bearing a disproportionate share of pension plan costs because contractors have taken advantage of the wide latitude in acceptable actuarial funding techniques, asset allocation procedures, and cost center groupings.

We believe that when conditions demonstrate a wide variance in experience--for example, terminations--contractors should calculate pension plan contributions by cost centers. We noted that some contractor locations do follow this procedure.

RECOMMENDATIONS

We recommend that the Secretary of Defense have the Armed Services Procurement Regulation revised to

--require that pension plan costs charged to the Government (1) are equitably distributed between Government and commercial work when different actuarial cost methods are used, (2) reflect allocation of pension fund assets in proportion to contributions, and (3) are allocated by using assumptions based on division or cost center experience instead of companywide experience, and

--fully disclose any changes in the policies and procedures affecting allocation of pension plan costs.

We also recommend that the Secretary of Defense seek appropriate credit for those improper allocations of pension plan costs noted in these cases.

CHAPTER 4

NEED TO IMPROVE CONTROLS OVER THE SELECTION AND REVISION OF ACTUARIAL COST METHODS

Changes in actuarial cost methods have increased the cost of Government procurement. Actuarial cost methods are designed to spread costs over the life of the pension plan. Some methods tend to distribute costs evenly to each year while others produce uneven distributions.

Before July 1972 contractors were able to increase the cost of existing contracts by changing their cost accounting practices, including pension plan accounting practices. Since July 1972 Cost Accounting Standards Board regulations prohibit changes in contractors' cost accounting practices from increasing costs to the Government under existing contracts subject to cost accounting standards. The only exception is when the change is required by a cost accounting standard.

Actuarial cost methods are considered to be cost accounting practices. Therefore, if they are changed, the contractor must bear any increased costs applicable to contracts which are subject to standards and which are being performed at the time of the change.

COSTS TO THE GOVERNMENT INCREASED BY CHANGES IN ACTUARIAL COST METHODS

We noted three instances in which contractors changed actuarial cost methods and increased costs to Government contracts before the 1972 CASB requirement for consistency in accounting practices became effective. These types of changes are still permitted, but increased costs from them are not to be charged to the Government under existing contracts covered by CASB requirements. However, we are bringing these cases to the attention of contracting and auditing activities that review pricing proposals, or future contract costs, to determine if changes in actuarial cost methods (1) are justified, (2) are in accordance with prudent business practices, and (3) will result in reasonable and equitable costs to the Government on future contracts.

Contractor C

At contractor C, effective January 1972, the actuarial cost method for computing the cost of the early retirement benefit was changed.

Under a former method, all costs--including past service costs--were funded over the average future working lives of the employees (approximately 17 years). Using the newer method, the past service cost was being funded over 13 years. The result is a probable increase in costs to Government contracts estimated at $1.9 million during the first 13 years after changing the method. Shortening the amortization period for past service costs resulted in increasing the pension plan cost during the early years, although the present value of future pension plan costs was not affected by the changes.

Contractor and agency comments

The contractor stated that the change in the method of calculating the pension plan costs was to comply with an Internal Revenue Service requirement and that our conclusion that the change probably resulted in increased Government costs is inappropriate. The contractor also maintained that the amortization period used was (1) in accordance with its principles of funding past service liabilities and (2) within the limits allowed under ASPR which allows an amortization period of 10 to 40 years.

The Navy stated that the increase in the pension plan costs due to the change in actuarial cost method was partially offset by the increase in the investment income assumption and the change in asset valuation to recognize market value. The Navy also felt that since the net cost of all the changes was considered reasonable and the change was made before the effective date of the CASB regulations (July 1, 1972,), no recovery can be made.

GAO comments

We were subsequently advised by an official of the contractor that the change in actuarial cost methods was not made to comply with a requirement of the Internal Revenue Service Code, but was made to facilitate determining annually whether the pension fund was overfunded. We believe that this reason was not a justifiable basis for accelerating the funding of the pension plan through increased charges to the Government.

We also disagree with the Navy evaluation of the reasonableness of the increased cost of the change in the actuarial cost method since the change in the investment income assumption and recognition of increased market value of pension fund assets would have been made regardless of the change in the actuarial cost method. We do recognize, however, that this change occurred before the issuance of a cost accounting standard dealing with changes in actuarial cost methods, and therefore, we are not suggesting a refund.

Contractor F

At contractor F the use of varying actuarial cost methods resulted in additional costs to the Government. Certain employees of the Government-owned, contractor-operated plant are members of a corporatewide pension plan in contrast to the division plan for hourly workers. Pension plan costs for all corporatewide employees were computed on the basis of an actuarial cost method that provided for relatively low annual pension plan costs. Beginning in 1966, however, without seeking Army approval, the contractor's actuary made a separate calculation of pension plan costs for the Government-owned, contractor-operated plant members by using an actuarial cost method that generated higher annual pension plan costs. The actuary continued to use the actuarial cost method producing lower annual contributions for all members of the corporatewide pension plan, while claiming reimbursement at the higher rate for the members of the same plan employed at the Government-owned, contractor-operated plant.

The actuary stated that different actuarial cost methods are used under the portions of the plan to (1) give relatively low annual pension plan costs to contractor F commercial divisions on the assumption that enough time will be available to fund the contractor's portion of the plan and (2) recognize the Government cost at a faster rate on the assumption that the contract will have a relatively short life. As a result, the Government has been allocated a disproportionate share of the contractor's corporatewide pension plan costs.

Contractor and agency comments

The contractor stated that the use of different actuarial cost methods is not precluded by ASPR and is consistent with the objectives of the CASB-proposed standard on the adjustment and allocation of pension plant costs.

The contractor also explained the adoption of a new actuarial cost method in 1966 by the fact that the old method resulted in a cost increase from 5.0 percent of payroll in 1962 to 6.3 percent in 1965 with no change in the plan. The contractor maintained that the second method change did not materially affect the pension plan costs but merely shifted some liability from future service cost, where it is funded over the average remaining working lifetime of the membership, to past service cost, where it is funded over 10 years. The contractor also stated that its objective for funding pension plans was to provide reasonable assurance of full funding at the termination of the contract work.

The Army felt that since a maximum of 40 employees at this plant location were under the corporate-wide pension plan, it was questionable that inordinate costs were absorbed by the Government.

GAO comments

While ASPR does not specifically preclude the use of different actuarial cost methods, the principle of reasonableness of benefits received to costs incurred must be recognized.

The proposed CASB standard cited by the contractor, however, shows that where pension cost is separately calculated for one or more segments, the actuarial cost method used for a plan shall be the same for all segments.

Further, we do not agree that the change in actuarial cost methods had no material effect on pension plan costs. The new method, while producing a level cost pattern, resulted in much higher annual costs during the first few years following the change. It is during this early period that the annual pension plan costs are accelerated and the Government costs are increased. This practice is in line with the contractor's stated objective of full funding at the termination of contract work. This concept of full funding for accrued liability, when applied to Government and not to commercial work, is inequitable to the Government. If Government work declines or is terminated, the pension fund applicable to Government work may well be overfunded in terms of the liability accruing to the plan participants that will either be laid off or transferred to commercial work. The future commercial work would then benefit from the previously overfunded plan assets by not having to fund the pension plan until the excess of Government pension plan contributions is absorbed.

Regarding the DOD contention that costs may not have increased, our calculations show that the difference may total $130,000 each year.

Since a consistent and equitable actuarial cost method should be applied to all of the contractor's divisions, we believe that the Army should determine the amount of excess contributions and seek recovery.

Contractor A

In 1970 contractor A changed the actuarial cost methods for its salaried plan. The effect was to accrue more cost in the current year (1970) than would normally have been accrued under the former method. In its 1970 financial statement, the contractor stated that

> "Certain plans were amended to provide increases in retirement benefits * * * as well as revisions in certain actuarial assumptions and an actuarial cost method. These changes accounted for most of the increased pension costs in 1970."

Since no actuarial report was made for 1970 showing the effect of the change in the actuarial cost method, we prepared a mathematical model to demonstrate its effect. On the basis of this model, we estimated that pension plan costs for 1970 increased by about $2 million solely as a result of the change in the actuarial cost method. The Government's share of the increase was estimated to be about $1.6 million. The costs for several years after 1970 would be similarly increased.

Contractor and agency comments

> Contractor A stated that our analysis also should have considered changes in benefits, investment income assumption, and asset valuations. While not questioning our conclusion that changing the funding method increased costs, the contractor believed that the net cost of the new plan installed in 1970, with all of its attendant

changes, was less costly to itself and its customers by approximately $1.7 to $1.9 million each year. The contractor also considered the change in funding method as necessary to meet requirements of the Accounting Principles Board Opinion Number 8.

DCAS felt that changes in the investment income assumption and asset valuation partially offset the increased pension plan costs resulting from changing the actuarial cost method. However, the net effect was an overall increase in pension plan costs.

GAO comments

The changes in benefits, investment income assumptions, and asset valuations were necessitated by changes in the program and investment earnings in excess of the assumptions and would have been necessary even if the contractor did not change the actuarial method. The change in the actuarial cost method was made at the contractor's option, and, as stated previously, increased Government costs by about $1.6 million for 1970. The fact that the net cost of the new plan with the new actuarial method is not greater than the old plan under the old method shows how important it is to have a thorough review of contractor pension plan costs by people with actuarial expertise who can analyze the effect of actuarial method changes.

Accounting Principles Board Opinion Number 8 does not require a company to change its actuarial cost method, but simply requires disclosure if the actuarial cost method is changed.

CONCLUSIONS

Before the July 1972 CASB regulations, the contractors were able to increase contract costs by changing their cost accounting practices. In some cases, contractors changed to actuarial cost methods which increased the costs of existing Government contracts. Because of the CASB regulations, such increased costs on existing contracts may not be borne by the Government. However, the costs applicable to any contracts entered into after the change can be increased.

RECOMMENDATION

We recommend that the Secretary of Defense require contracting and auditing activities, when reviewing pricing proposals or future contract costs, to determine if the changes in actuarial costs methods (1) are justified, (2) are in accordance with prudent business practices, and (3) will result in reasonable and equitable costs to the Government on future contracts.

CHAPTER 5

NEED FOR THE DEPARTMENT OF DEFENSE TO INCREASE ITS EXPERTISE IN THE AUDIT, REVIEW, AND EVALUATION OF CONTRACTORS' PENSION PLAN COSTS

Although contracting and auditing activities have made large recoveries or reductions in pension plan costs charged to the Government, we believe much more needs to be done. DOD has provided only limited staffing and expertise for review and evaluation of the allowability, reasonableness, and allocability of pension plan costs charged to Government contracts. None of the staffs included actuaries. Instead, reliance is placed on Armed Services Procurement Regulation, general knowledge of industry pension plan practices, contacts with or hiring of actuaries as consultants, and comparisons of pension plan practices among contractors. Even with limited staffing, effort, and expertise, some important recoveries or adjustments to contract costs were realized by DOD personnel during reviews of contractors' pension plar costs.

Notwithstanding the success of its limited reviews, DOD in May 1975 issued a directive suspending reviews by the military services and by the Defense Contract Administration Services of contractors' pension plan costs charged to Government contracts when contractors met certain exemption criteria.

DOD REVIEW OF CONTRACTORS' PENSION PLAN COSTS

Defense Contract Administration Services

Late in 1968 the Defense Contract Administration Services (DCAS) established a special activity to examine insurance and pension programs of Defense contractors to determine the allowability, reasonableness, and allocability of costs for those programs. The need for such special cost analysis arose because cost patterns, especially for pension programs, were increasing substantially. Sporadic determinations before 1968 by isolated audits indicated cost problems, particularly when substantial employee layoffs occurred in connection with Government work. The need for pension specialists was recognized, and DCAS established activities in New York, Chicago, and Los Angeles to specifically examine Defense contractors' pension plan and insurance practices and costs.

DCAS currently nas 12 specialists conducting these reviews nationwide. Contracting officers request that these specialists examine pension plan and insurance costs of Defense contractors when DCAS has cognizance. These reviews are generally biennial and were performed originally only when the contractor had $5 million or more of noncompetitive awards. This threshold was raised to $10 million, imposing additional limitations on the scope of pension plan reviews. Reviews covering both pension and insurance practices are conducted mostly at corporate headquarters' offices. DCAS personnel spent an average of about 5 working days reviewing pension and insurance practices and costs at a contractor's office. Even with the somewhat limited reviews and lack of actuarial expertise, from 1[illegible] to June 30, 1975, the DCAS staff has brought about $40 million in recoveries or reductions of pension plan costs charged to the Government. This amount does not include continuing savings beyond June 30, 1975.

Defense Contract Audit Agency

The Defense Contract Audit Agency (DCAA) had no specialized field staff trained to review a contractor's pension plan practices. Its reviews of contractor pension plan costs usually consist of verifying whetner the amount is (1) the same as that calculated by the actuary and accepted by the IRS for income tax purposes and (2) properly included in the overhead for allocation to Defense contracts. If any questions of a contractor's pension plan practices arose, DCAA contacted DCAS or the Air Force pension representative for assistance or followup. For example, DCAA observed a situation involving pension plan cost overaccrual. This situation was brought to the attention of the Air Force pension and overhead cost review representatives who determined the amount involved. As a result, an agreement was entered into with the contractor for amortization of the pension cost overaccrual of $91 million.

Air Force

The Air Force Contract Management Division had one individual making annual reviews of pension plans and insurance costs of 11 major Air Force contractors, 1 of which was recently transferred to DCAS for contract administration. This individual retired in December 1975. The Air Force was working on an agreement for DCAS to review contractors' pension plan practices at the request of Air Force contracting representatives. Since 1967 the reviews by the Air Force specialist have resulted in refunds, decreases in pension plan costs, and amortization of pension plan cost over-accruals totaling about $67 million. In addition, he has brought about large reductions in pension plan costs included in contractors' pricing proposals.

Army

An Army headquarters representative stated that the Army relies on DCAA to make pension plan reviews. He stated, however, that DCAA did not have sufficient capabilities to review contractors' pension plan practices in detail. He also stated that DCAS may be called on to make pension plan reviews for the Army.

Navy

A Navy representative stated that the Navy has no pension plan specialists but relies on DCAS or DCAA to look into pension plan problems at its request. Recently the Navy arranged for DCAS to perform, on request by its contracting officers, pension plan reviews of contractors under Navy cognizance for contract administration.

COMMENTS ON DOD REVIEWS OF CONTRACTORS' PENSION PLAN COSTS

While DOD has responsibility for assuring that pension plan costs are reasonable, the cognizant audit and contracting activities are generally accepting the amounts computed by the contractor's actuary. We also found that there is insufficient review by DCAA and contracting officials of the allocation of pension plan costs to their proper periods and cost centers. As a result, millions of dollars of pension plan costs were allocated to Government contracts without question by DOD audit and contracting activities.

A primary cause for inadequate surveillance appears to have been the inability of DOD to obtain the information needed to make meaningful evaluations. However, the cost accounting standards (including the proposed standard) on pension plan costs contain requirements designed to enhance the visibility and verifiability of contractors' pension plan accounting practices and actuarial assumptions. These requirements should help the Government in making meaningful reviews of contractors' pension plan practices.

Another cause for the inadequate surveillance is that DOD does not have enough skilled staff--especially in pension accounting and actuarial computation--to adequately evaluate whether pension plan costs are being properly computed and charged to Government contracts. Despite the fact that pension plan costs are a large percentage of the total contract cost, it appears that DCAA places a low staffing priority on indepth analysis. Also, DCAS now reviews the pension plans of only those contractors who have received noncompetitive awards in excess of $10 million in a year, and even in that category certain contractors are exempted from pension reviews, as discussed in the next section.

Following are instances in which the propriety of pension plan costs was not questioned or insufficient action was taken by contracting and auditing activities to resolve the issues.

At contractor D, (discussed on p. 22) neither the DCAA resident auditor nor the DCAS Region pension specialist reviewed or questioned the actuarial assumptions. Similarly, at contractor C, (discussed on page 21) the DCAS Region review did not question the use of the investment income rate guaranteed by the insurance company, which was lower than actual income earned. At contractor A, (see pp. 40 and 33) DCAA did not question the change in the actuarial cost method or the amortization of two commercial subsidiaries' unfunded past service costs as a charge to Government contracts.

At contractor G, (see p. 11) we did note that the Air Force, DCAA, and DCAS questioned the overfunding of a pension plan. The administrative contracting officer's position was that a reduction of future pension plan costs would insure an appropriate credit to the Government; however, this method may not be equitable since the contractor's Government business has declined in recent years.

At contractor H, both DCAA and DCAS Region identified a potential credit because of a major reduction of employees. In this case we believe that a reduction of future pension plan costs provides an appropriate credit to the Government as long as the Government/commercial mix of business remains stable. The administrative contracting officer agreed.

CURTAILMENT OF DOD PENSION PLAN REVIEWS

Even though limited reviews of contractors' pension plan costs have resulted in important accomplishments, the

Acting Assistant Secretary of Defense, Installation and Logistics in a May 5, 1975, memorandum directed the military services and the Defense Supply Agency to immediately suspend the requirement for conducting employee compensation systems reviews and insurance/pension reviews at contractor locations that were qualified under the contractor-weighted-average-share-in-cost risk (CWAS) program.

This program was set up as a management tool to limit Government surveillance over its contractors. It is based on the assumption that contractors with a large percentage of competitive, firm fixed-price Government contracts and non-Government business have sufficient competitive motivation to minimize costs. The basic assumption has never been tested by DOD to our knowledge. If the basic tests of allowability and allocability are met, the Government would assume that certain selected costs are reasonable at the CWAS-qualified locations. A contractor qualifies under CWAS if it has met the threshold of 75 percent of total costs being commercial and competitive fixed-price costs.

DOD's reason for the May 5, 1975 directive was to reduce contract administrative costs. A CWAS evaluation group evaluated the effectiveness of the revised CWAS procedure, and its recommendations are now being considered for incorporation in a revised directive dealing with the review of activities of CWAS-qualified contractors.

We questioned DOD on the practicality of suspending reviews of contractors' pension plan practices in view of our findings and the success of pension plan reviews performed by DCAS and the Air Force. Furthermore, as previously discussed, these activities spend only a limited time at contractors' plants reviewing both insurance and pension plan practices. A DOD representative maintained that the Government's interest would still be adequately protected since the contractors' pension plan costs charged to the Government would still be reviewed for allocability by DCAA.

We believe that the types of findings discussed in our report, as well as those developed by DCAS and the Air Force, probably would not have been questioned during a routine review of pension costs. DCAS and Air Force representatives also felt that certain of their findings would not have been observed with only a passing knowledge of pension plan practices.

DCAS advised us that to comply with the above directive it had to suspend reviews of insurance/pension practices of 16 contractors.

CONCLUSIONS

Notwithstanding the success of its limited reviews, DOD exempted in May 1975 certain qualified contractors from military services and DCAS reviews of their pension plan practices and costs.

At the contractors reviewed, we noted that questionable actuarial assumptions were being made, actuarial cost methods were being changed, and inequitable allocations procedures were being used--all increasing costs to the Government--that were not adequately evaluated by contracting activities or by DCAA because of limited staffing and actuarial experience.

We believe that the cost accounting standards--including the proposed standard--contain requirements to make the contractors' pension plan accounting practices and actuarial determinations visible and verifiable. These requirements should help the Government in making meaningful reviews of contractors' pension plan practices.

We also believe DOD should have personnel with actuarial skills to evaluate pension plan costs. The value of developing this capability is even more apparent with the issuance of CASB pension plan cost standards. Reviews of pension plan costs should include the impact of actuarial cost methods and assumptions, funding techniques, and allocation of costs by cost centers as well as by periods so that the Government is charged an equitable share of the pension plan costs.

We also believe that DOD should reinstate the military services and DCAS reviews of certain contractors' pension plan practices and costs. The findings discussed in this report and the findings of DCAS and the Air Force indicate that the time these groups spent reviewing contractors' pension plan practices and costs was relatively small compared to the realized and potential accomplishments.

DOD comments

DOD's comments on our findings are incorporated in the body of the report under each contractor, as appropriate. In addition, DOD offered comments in two principal areas that

--the $110 million in questioned costs should reflect that $92 million relates to one contractor dated back to 1952 and

--many of the findings were already noted by DOD representatives, existing expertise and surveillance in pension matters are sufficient, and that outside actuaries are occasionally utilized.

GAO comments

DOD is correct that one finding accounts for most of the dollars. However, this report also shows instances where the dollar impact of questionable contractors' pension plan practices was not determined. With respect to the case referred to as contractor G, the buildup of actuarial gains began in 1952 and continued to as late as 1974. About 93 percent of the gains developed in the last 11 years. Dating the finding back to 1952 illustrates the long and continued need for realistic actuarial assumption for terminations and interest rather than an outdated or obsolete set of assumptions. The present overfunded amount of $26 million was charged to Government contracts for employees who terminated with no vested rights, and for an unrealistic interest assumption that was used over a number of years. We believe that this demonstrates the lack of close scrutiny by DOD.

Regarding our conclusion that more technical expertise and training is needed, DOD stated that it has 13 highly qualified insurance/pension specialists who have identified many of the deficiencies in this report. DOD also stated that:

> "The auditors' expertise in pension matters is sufficient to disclose situations where the assistance of actuaries may be necessary, and * * * procurement officials, auditors and contract administrators are afforded sufficient training * * * to cope with these matters."

The fact that DOD review and audit organizations did not question certain deficiencies discussed in this report indicates the need for more expertise and training as well as additional surveillance. An example of the need for more DOD involvement is indicated in its reply to our finding that contractor D used unrealistic actuarial assumptions, resulting in increased costs to the Government. In this case, DOD also found that it was unable to evaluate the assumptions on an individual basis, and simply compared the contractor's assumption with those used in industry, concluding that the results were reasonable. DOD did not evaluate each assumption independently.

This report is designed to improve the type of analysis that DOD performed in this case. The actuarial experience of an individual contractor does not necessarily follow those of industry, and to evaluate in this manner is inappropriate. For example, a contractor's termination experience is peculiar to the company. In this example the transition from nearly full Government work to a majority of commercial work necessitated periodic evaluation of the termination assumptions.

We believe the DOD position that the assumptions were reasonable--without considering actual experience--supports our conclusion that more expertise is needed to fully evaluate pension costs.

The type of analysis we applied to this contractor's actuarial assumptions is now required by CASB Standard 412 and in more specific terms by the proposed Standard 413 on allocations of pension costs.

Finally, with reference to curtailing pension surveillance in favor of qualifying this type of cost under contractor-weighted-average-share-in-cost risk (CWAS) program, DOD stated in its reply to our preliminary report that the curtailment was a temporary change. An evaluation of the CWAS program is underway, and our observations will be considered.

RECOMMENDATIONS

We recommend that the Secretary of Defense reinstate the military services and DCAS reviews of contractors' pension plan practices. In addition, we recommend that the Secretary have DOD obtain additional staff with the needed technical skills to

--assist in determining if pension plan costs are reasonable and equitably allocated to Government contracts and

--determine compliance with ASPR requirements and CASB standards.

We also recommend that the Secretary of Defense initiate training programs in pension plan accounting and computation to enable contracting and auditing personnel to review adequately the contractors' pension plan practices.

CHAPTER 6

SCOPE OF REVIEW

Our review was directed at the allowability, reasonableness, and allocability of pension plan costs reimbursed to contractors under Government-negotiated contracts. Specific attention was given to the procedures and practices the contractors and their actuaries used in computing and allocating pension plan costs. Generally, we did not verify the actuarial calculations or the data base. Our computations of questionable pension plan costs used in this report were based on data the contractors and their actuaries supplied.

We examined pertinent regulations and guidelines issued by Government agencies and reviewed actuarial reports, trustee agreements, and related data affecting pension plan costs. This review included contacting actuarial consulting firms as well as an insurance company.

The nine DOD prime contractors selected for review were engaged in work related to electronics; missiles and space systems; ammunition; and aerospace, including manufacturers of airframes, airframe components, aircraft engines, and helicopters. Some contractors worked with more than one of these commodity groups. One of the contractors reviewed operates a Government-owned plant.

APPENDIX I

SUMMARY OF FINDINGS

Findings	Contractor A	B	C	D	E	F	G	H	J
Unrealistic actuarial assumptions caused excessive pension plan costs without appropriate Government credit:								NONE	
Abnormal terminations		(a)		(a)	(a)		(a)		(a)
Other unrealistic assumptions			(a)	(a)			(a)		
Reasonableness and allocability of pension plan costs:									
Inequitable funding techniques						(a)			
Inequitable allocation of pension fund assets		(a)					(a)		
Inequitable cost center allocation practices	(a)	(a)		(a)					
Need to improve controls over the selection and revision of actuarial cost methods:									
changes in actuarial cost methods	(a)		(a)			(a)			

a/Denotes finding noted in report.

LIST OF FINDINGS

AND QUESTIONABLE PENSION PLAN COSTS

Findings	Specific problem	Questionable pension plan costs: Overall	Questionable pension plan costs: Government
Unrealistic actuarial assumptions caused excessive pension plan costs without appropriate Government credit:			
Contractor G	Abnormal terminations	$ 42,441,512	$ 40,950,063
Contractor J	Abnormal terminations	(a)	b/3,500,000
Contractor B	Abnormal terminations--Plant 2 hourly plan	597,600	592,000
Contractor E	Abnormal terminations	667,000	589,918
Contractor D	Abnormal terminations	(a)	(a)
Contractor G	Unrealistic interest rate	53,783,915	51,197,065
Contractor C	Guaranteed interest rate of insurance company used for valuation purposes	(a)	(a)
Contractor D	Assumptions not adequately disclosed	(a)	(a)
Contractors C, D	Actuarial assumptions--partially offset by other incorrect assumptions	(a)	(a)
Contractors A, B	Unrealistic actuarial assumptions offset by erroneous assumptions	-	-
Reasonableness and allocability of pension plan costs:			
Inequitable funding techniques:			
Contractor F	Funding of past service costs for transferees not in compliance with ASPR	156,300	156,300
	Charge for past service pension plan costs to the Government not in accordance with agreement	195,500	195,500
Inequitable allocation of pension fund assets:			
Contractor B	Under salaried plan method of asset allocation for actuarial valuation inequitable to Government	243,364 (99,414)	c/217,824 d/(56,504)
Contractor G	Pension cost of commercial cost center met with surplus funds accumulated through charges to Government contracts	e/42,600	e/42,600
Inequitable cost center allocation practices:			
Contractors B, D	Pension plan cost not calculated on division or cost center basis	(a)	(a)
Contractor A	Supplemental cost of commercial subsidiaries spread to all divisions when subsidiaries added to plan	1,092,138	874,000

Findings	Specific problem	Questionable pension plan costs Overall	Government
Need to improve controls over the selection and revision of actuarial cost methods:			
Contractor C	Change from aggregate level cost method without supplemental liability to individual level cost method with supplemental liability for early retirement provision	f/19,000,000	1,900,000
Contractor F	Change from accrued benefit method to projected methods	(a)	(a)
Contractor A	Change from accrued benefit cost method to aggregate method, for its salaried plan	1,956,300	1,625,685
	Total	$120,076,815	$101,784,451

a/Not computed.

b/Net gain applicable to abnormal terminations experienced brought forward to 1975 was computed to be $6 million. Credit for reduced Government contributions brought forward with interest was computed to be $2.5 million leaving a balance of $3.5 million.

c/Contractor B's Plant 2 overcontribution

d/Contractor B's Plant 1 undercontribution

e/Pension plan cost for 1973 only; 1974 and future years costs not determined.

f/Increase in supplemental cost only. Change in normal costs not readily indentifiable.

ACTUARIAL INTEREST ASSUMPTION RATES NOT

IN ACCORDANCE WITH EXPERIENCE CONTRACTOR G

Pension year	Actuarial interest rate	Hourly plan: Investment yield rate	Hourly plan: Excess yield over actuarial assumption rate	Hourly plan: Excess investment yield over assumption	Salary plan: Investment yield rate	Salary plan: Excess yield over actuarial assumption rate	Salary plan: Excess investment yield over assumption
1952	2.5	2.42	(.08)	$ (107)	2.22	(.28)	$ (261)
1953	2.5	2.75	.25	704	2.75	.25	798
1954	2.5	3.06	.56	1,126	2.92	.42	3,181
1955	2.5	[No actuarial report]			2.70	.20	1,854
1956	2.5	2.81	.31	1,971	2.68	.18	2,875
1957	2.5	2.82	.32	6,491	2.44	(.06)	a/7,907
1958	2.5	4.79	2.29	77,201	3.45	.95	40,420
1959	2.5	10.50	8.00	460,563	9.43	6.93	293,252
1960	2.5	5.30	2.80	225,560	4.37	1.87	126,860
1961	3.0	12.46	9.46	938,029	12.49	9.49	825,518
1962	3.0	1.02	(1.98)	(362,275)	.47	(2.53)	(362,438)
1963	3.0	5.58	2.58	293,364	6.11	3.11	434,965
1964	3.0	5.97	2.97	632,684	5.21	2.21	405,340
1965	3.0	10.08	7.08	2,090,488	10.41	7.41	1,846,264
196'	3.0	5.97	2.97	1,041,211	10.45	7.45	2,210,803
196	3.0	15.24	12.24	4,967,318	7.60	4.60	1,697,249
1968	3.0	17.64	14.64	6,988,000	9.36	6.36	2,534,000
1969	3.0	9.70	6.70	3,755,000	10.54	7.54	3,276,000
1970	3.5	4.44	.94	573,000	5.36	1.86	896,000
1971	3.5	7.51	4.01	2,544,000	6.22	2.72	1,378,000
1972	3.5	8.62	5.12	3,456,000	6.82	3.32	1,78C,000
1973	3.5	5.39	1.89	,782,0'0	4.80	1.30	710,000
1974	3.5	9.16	5.66	3,882,600	8.31	4.81	2,321,000
Excess investment earnings				33,354,328			20,429,587
Actual investment earnings				53,804,394			37,056,448
Actuarial expected investment earnings				$20,450,066			$16,626,861
Total excess investment earnings							$53,783,915

a/Although the effective rate of earning of 2.44% was less than the assumed rate of 2.5%, it was sufficient to produce a gain from interest of $7,907. The gain was due to employee contributions being credited with only 2% per year.

GAINS REALIZED WHEN ACTUAL EMPLOYEE TERMINATIONS EXCEEDED THE ASSUMED RATE OF TERMINATIONS

CONTRACTOR G

Pension year	Hourly plan	Salary plan Fixed	Salary plan Variable
1952	$ 58,717	$ 18,046	
1953	765	3,389	
1954	a/(14,338)	1,404	
1955	No report	8,796	
1956	48,775	41,735	
1957	84,709	116,910	
1958	118,670	35,407	$ 21,408
1959	139,995	13,348	72,334
1960	177,741	88,722	209,460
1961	226,432	33,580	378,130
1962	301,432	19,840	271,548
1963	278,239	50,778	466,549
1964	370,146	348,855	1,730,970
1965	1,168,295	749,003	3,706,274
1966	2,108,472	685,492	2,385,544
1967	1,999,316	318,318	1,941,306
1968	701,000	538,000	2,985,000
1969	1,762,000	433,000	2,401,000
1970	2,259,000	265,000	1,530,000
1971	1,728,000	216,000	1,771,000
1972	1,417,000	111,000	932,000
1973	972,000	101,000	680,000
1974	587,000	a/(42,000)	310,000
Total	$16,493,366	$4,155,623	$21,792,523

Grand total $42,441,512

a/Actuarial loss when actual employee terminations were less than the assumed rate.

ASSISTANT SECRETARY OF DEFENSE
WASHINGTON, D.C. 20301

INSTALLATIONS AND LOGISTICS

21 OCT 1976

Mr. R. W. Gutmann
Director, Procurement and
Systems Acquisition Division
U. S. General Accounting Office
Washington, D. C. 20548

Dear Mr. Gutmann:

This is in reply to your letter of July 16, 1976 to Secretary Rumsfeld forwarding for comment a draft report entitled, "Need for Effective Control Over Pension Plan Costs Charged to Negotiated Contracts." (OSD Case #4409)

We have reviewed this draft report and detailed comments regarding the General Accounting Office (GAO) findings and recommendations are attached. This is a complex subject, and our comments are intended to be constructive. Many of the matters discussed in the draft report were previously known by Department of Defense (DoD) activities, and action has been taken on them.

We noted that of the questioned pension plan costs of about $110 million relating to Government Contracts, $92 million relate to one contractor. This one case is based on computations made by GAO for 22 years, 1952 through 1974, a rather extensive period. Defense Contract Administration Services (DCAS) has contract administration responsibility for this contractor. They have advised, as reflected further in the attached comments, that commencing in 1960 contractor contributions to the pension plans were reduced and after 1968 eliminated. Pension costs are not being charged to Government contracts. As noted on page 16 of the draft report, a significant portion of these excess funds was offset by not collecting from the Government its share of the annual pension plan costs. Therefore, the GAO estimate of questioned costs may be significantly overstated.

However, this pension plan still remains in an overfunded condition. DCAS is being requested to initiate a review to identify what part of the overfunded surplus is due the Government. If the surplus cannot be offset against Government business over the next several years, a direct refund or credit adjustment will be sought.

We appreciate this opportunity to comment on the draft report.

Sincerely,

FRANK A. SHRONTZ
Assistant Secretary of Defense
(Installations and Logistics)

Enclosure
a/s

 APPENDIX V

Department of Defense

Comments

on

General Accounting Office

Draft Report

Need for Effective Control Over
Pension Plan Costs Charged
Negotiated Contracts

OSD Case #4409

NEED TO IMPROVE CONTROLS OVER THE SELECTION AND REVISION OF ACTUARIAL COST METHODS AND ASSUMPTIONS (Report chapter 2 Pages 20-24 and chapter 4 Pages 36-42).

GAO Findings:

Changes in actuarial cost methods and unrealistic actuarial assumptions have increased the cost of Government procurement by millions of dollars.

1. Changes in Actuarial Cost methods Increased Costs to the Government. Contractors A, F and C (Report, Pages 36-42)

2. Unrealistic Actuarial Assumptions Increased Cost to the Government. Contractors D, G and C (Report, Pages 20-24)

GAO Recommendations:

1. We recommend that the Secretary of Defense determine the increased costs to the government resulting from changes in actuarial cost methods discussed in this report and negotiate an appropriate refund with the affected contractors. We recommend also that the Secretary require that the consistency provisions of the Cost Accounting Standards Board's regulations be enforced with regard to changes in actuarial cost method.

2. We recommend that the Secretary of Defense ensure compliance with the CASB standard, especially in the area of evaluating actuarial assumptions.

Note: Names of contractors have been deleted ( ).

DoD Comments:

1. Changes in Actuarial Cost Methods.

Contractor A is under the Defense Contract Administration Services (DCAS) for contract administration. DCAS advises that A changed its actuarial costs method for funding its salaried pension plan in 1970 prior to the Cost Accounting Standard (CAS) of 1972. This standard does not allow increased costs to existing contracts resulting from such a change. The GAO report does not mention that, concurrent with the change in actuarial cost method that increased pension plan costs, the interest assumption rate was raised from 3 1/2% to 7%, and the asset valuation was changed to recognize market value. These latter changes partially offset the increased pension costs resulting from changing the actuarial method. However, the net effect was an overall increase in pension plan costs. Since changing the actuarial cost method was acceptable in 1970 and the resulting cost of all the changes was considered reasonable, there is no basis for attempting to negotiate a refund.

Contractor F is under the Department of Army for contract administration. The Army advises that a maximum of 40 employees at this plant location were under the corporate-wide pension plan. Considering that total employment reached 9000 by 1967 during the SEA conflict, it is questionable that any inordinate cost was absorbed by the Government for those employees covered by the corporate-wide pension plan.

Contractor C is under the Department of Navy for contract administration. The Navy advises relative to the finding:

"There may have been an increase in costs to the Government because of a change in actuarial cost methods. This is being investigated. Either way, there may be no basis for recovering any such cost because it was not until Cost Accounting Standards (CAS) in July 1972, that regulations came into being which prevent such changes from increasing costs on existing contracts. The (C) change was made in January 1972."

In light of the above comments we believe appropriate action is being taken on the cases cited. As to consistency of treatment of pension plan costs in accordance with Cost Accounting Standards (CAS), we are adhering to these standards. However, we do not interpret CAS 412 on the Composition and Measurement of Pension Cost as inhibiting appropriate changes in actuarial assumptions when required but rather that these changes be known, valid and effected in appropriate accounting periods.

2. Unrealistic Actuarial Assumptions.

Contractor D is under DCAS for contract administration. DCAS advises relative to this finding:

"With respect to (D), the GAO report indicates there was no analysis of actuarial gains and losses and that no such records were maintained even in the aggregate. We also found this to be true in our reviews. Consequently, our analysis of the assumptions used was limited to comparisons with those generally used in industry. On the basis of this limited evaluation, we found the assumptions used to be reasonable. Our review was made prior to the effective date (January 1, 1976) of CAS #412. This standard requires furnishing of separate accounting for actuarial gains and losses and in subsequent reviews this information should be available to the DCAS insurance/pension review team. The GAO report states: Since the overdue changes had the net effect of reducing annual pension plan costs, it appears that prior to 1973 the actuarial assumptions were unrealistic and resulted in higher pension plan costs. An actuarial assumption according to CAS Board Standard #412 . . . should reflect long-term trends so as to avoid distortions caused by short-term fluctuations. In view of this concept, it is frequently difficult to determine at what particular time a change in assumptions becomes overdue. However, DCAS is currently conducting an insurance pension review of this contractor, and will assure compliance with applicable standards."

Contract G is under DCAS for contract administration. DCAS advises relative to this finding:

"With respect to (G), the GAO computations (Appendix III and IV) of realized actuarial gains from 1952 through 1974 of $53.8 million due to a low assumed turn over rate, assume annual payments to the funds based on these actuarial assumptions. Several events occurred to significantly reduce the contractor contributions to the plans which are not apparent in the GAO computations such as: (1) commencing in 1960, contributions were reduced by prior year actuarial gains; (2) no contractor contributions were made to the salary plan after 1965; (3) contributions to the hourly plan were reduced by 50% starting in 1966; and (4) no contractor contributions were made to the hourly plan after 1968. Therefore, the GAO estimated $58.3 million and the $42.4 million figures appear to be grossly overstated. Further, since no pension fund costs are being charged to Government contracts and have not been for several years, any change in the actuarial assumptions would currently not affect Government contract costs.

"Notwithstanding the above comments, we agree that defense contractors should be required to comply with CAS #412 with respect to identifying and justifying actuarial assumptions. To this end, our insurance/pension specialists have been evaluating compliance with CAS #412 since it became effective, 1 January 1976."

Contractor C is under the Department of Navy for contract administration. While GAO cited this case as an example of unrealistic assumptions no questionable costs were computed. The Navy advises, "that no cost recovery action is involved."

While the discussion above of the findings indicates a significantly different perspective, we have and will continue to adhere to the CAS standards as they are issued.

ABNORMAL EMPLOYEE TERMINATION CAUSED EXCESSIVE PENSION PLAN COSTS WITHOUT APPROPRIATE GOVERNMENT CREDIT
(Report Chapter 2 Pages 9-20)

GAO Findings:

At five contractors (G, J, B, E and D) reviewed, the Government had not received appropriate credits for at least $45.6 million of actuarial gain, resulting from termination in excess of those predicted by the actuarial assumptions in the valuations.

GAO Recommendations:

We recommend that the DoD seek appropriate credits for those pension plan contributions reimbursed under Government contracts which, due to abnormal forfeitures, are now excessive. Contracting authorities should enter into negotiations for recovery of these amounts. The ASPR provision dealing with abnormal forfeitures should be clarified and strengthened so that the contracting authority have a clear direction for recovery of excessive costs charged to the government.

DoD Comments:

Contractor G is under DCAS for contract administration. DCAS advises relative to this finding:

"With respect to (G), there has been considerable action by the ACO and his team regarding the overfunding of the pension plans. To illustrate, in October 1972, (G) and (the Corporate Headquarters) were considering merging and consolidating the pension plans. This was unacceptable to the ACO and (G) was so notified, as the (G) pension plans were overfunded and the (Corporate Headquarters) plans were not. In May of 1973, an advance agreement was proposed to (G) to protect the Government's interest in the pension plan surplus. In July 1973, the contractor submitted a draft of an agreement of the ACO which was unacceptable. In November 1973, the ACO requested a refund of $16.4 million from the contractor as the Government's share of the surplus. In January 1974, the ACO submitted a follow-up to his November 1973 demand letter. In September 1974, the contractor informally advised the ACO they could not provide a cash refund. In December 1974, (G) orally advised the ACO that the merger with (Corporated Headquarters) had been dropped and except for (a subsidiary) which was participating in the fund, no commercial divisions would be added. In regard to the GAO comment concerning a December 1974 DCAA report, 'No action was taken by the ACO to resolve the issues raised in this report,' the ACO on 12 December 1974 orally requested clarification of several points in the DCAA report. In February 1975, the contractor formally notified the ACO that the merger with (Corporate Headquarters) had been dropped. The ACO's May 1975 acknowledgement of the contractor's February letter reaffirmed the ACO's concern that the Government's share of the surplus not be diluted. Since this letter did imply acceptance of the existing procedure for recapture of the Government's share of the surplus, no further action was taken to determine the amount of the credit still due the Government. Benefits from the surplus continue to accure to the Government in that no contributions are being made to the pension funds by the contractor."

Contractor J is under the Department of Air Force for contract administration. The Air Force advises relative to this finding that GAO's recommended recovery is currently under review.

Contractor B refers to a subsidiary of this company. The plants of the subsidiary are under the Department of Army for contract administration. The Army advises relative to this finding:

"GAO concludes that the Government's share of excess pension plan cost resulting from significant reduction in employment levels amounted to $592,000. This amount is based on GAO's estimated funding from 1970 through 1972. GAO further states Army officials never considered applying the provisions of ASPR 15-205.6(f) regarding reversionary pension credits to an ongoing operation but only in situations where the plant was closing.

"While we agree with the GAO report that a credit is due, the possibility of receiving a lump sum credit appears remote from a contracting point of view because the only types of contracts awarded this cost center during this period were Firm Fixed-Price and Time and Materials with firm fixed-price rates. Provisions of ASPR do not allow for redetermination of overhead costs in these types of contracts. It appears therfore that the only basis that exists for recovery of these excess pension costs is through credits offsetting subsequent years funding requirements.

"This, in fact, is being done. The GAO report does not reflect the fact that approximately $135,000 of these costs have been recouped through the disallowance of all pension costs in the negotiations of the forward pricing rates for calendar years 1973 and 1974. This process will continue in subsequent years."

Contractor E is under DCAS for contract administration. DCAS advises relative to this finding:

"In regard to (E), the Government has participated in abnormal forfeiture gains from commercial plants comparable to those from Government plants. Therefore, the credits allocated to the Government are considered equitable. The total gain for the period 1960 to 1971 was $666,574. During this 11 year period sales to the Government under flexibly-priced contracts amounted to 12.3 percent of total sales. Since the Government has a legal right to recover abnormal forfeitures under flexibly-priced contracts only, the total recoverable amount is $81,989 (12.3% x $66,574). As of December 31, 1975, the Government has recovered $82,041, therefore, DCAS considers this case closed. DCAS is currently performing a follow-on insurance/pension review of this contractor and allowability of pension costs will again be reviewed including the area of abnormal forfeiture gains."

Contractor D is under DCAS for contract administration. DCAS advises relative to this finding:

"With respect to (D), we did not find evidence of 'abnormal forfeitures' occurring in (D) during the period 1969 to 1973. Our records indicate the company had a net increase in employment of about 200 during this period instead of a decline of 926 indicated by CAO. In our next review of (D), we will review the points made in the GAO report and make appropriate recommendations."

We believe the above discussion clearly illustrates that DoD activities were aware of the problems in most instances and have or are taking appropriate corrective action. While we believe the provision in the Armed Services Procurement Regulation (ASPR) on abnormal forfeitures is reasonably clear, we will consider carefully the comments in your report on this matter.

REASONABLENESS AND ALLOCABILITY OF PENSION PLAN COSTS
(Report Chapter 3, Pages 26-35)

GAO Findings:

Excessive allocation of pension plan costs to Government contracts results from:

1. Inequitable Funding Techniques.

Contractors F (Report pages 26-27)

2. Inequitable Allocation of Pension Fund Assets.

Contractors B and G (Report pages 27-31)

3. Inequitable Cost Center Allocation Practices.

Contractors B, D and A (Report pages 31-34)

[See GAO note on p. 81.]

GAO Recommendations:

We recommend that the Secretary of Defense have the Armed Services Procurement Regulation provision concerning the determination of contractor overhead rates revised to require contractors to:

--ensure that pension plan costs charged to the Government are equitable, and

--require full disclosure on any changes in the policies and/or procedures affecting allocation of pension plan costs.

We also recommend that the Secretary of Defense seek appropriate credit for those improper allocations of pension plan costs noted in these cases.

DoD Comments:

1. Inequitable Funding Techniques.

[See GAO note on p. 81 .]

Contractor F is under the Department of Army for contract administration. The Army advises relative to this finding:

"GAO states contractor funded past service pension costs for employees transferring into the GOCO in a single year in violation of ASPR XV. As indicated in the report (page 27), action has been initiated to amortize the $156,000 in question over a 10-year period.

"The $195,000 of past service pension costs for employee service earned prior to 1951 has not been reimbursed by the Army. This matter is now presently before the Armed Services Board of Contract Appeals."

2. Inequitable Allocation of Pension Fund Assets.

Contractor B in this case involves a subsidiary which is under the Department of Army for contract administration. The Army advises relative to this finding:

"GAO maintains that (B's) method of allocating pension fund assets in accordance with the actuarial liability for pension plan benefits is inequitable and they would recommend a 'net contribution method.' The Army does not concur. As we understand it, the contractor's method is equally as equitable and is in compliance with the subsequently promulgated Cost Accounting Standard on pension cost. Conversely, the GAO recommended method would contravene this Standard."

Contractor G is under DCAS for contract administration. DCAS advises relative to this finding:

"With respect to (G), the inclusion of a commercial division in the allocation of benefits from excess pension plan costs previously allocated to Government contracts does appear inequitable. However, considering the complexities of this contractor's pension plans, the elimination of annual funding for several years, the size of the surplus funds involved, and the percent of flexibly-priced Government contracts, the extent of the inequity to the Government can be considered insignificant."

3. Inequitable Cost Center Allocation Practices.

Contractor B in this case involves a subsidiary which is under the Department of Army for contract administration. Our comments as to this contractor under 2. above are also applicable here.

Contractor D is under DCAS for contract adminstration. DCAS advises relative to this finding:

"With respect to (D), during the period 1969 to 1973, our records indicate the company had a net increase in employment of about 200 instead of a decline of 926 indicated by GAO. In our next review of (D), we will review the points made in the GAO report and make appropriate recommendations."

Contractor A is under DCAS for contract administration. DCAS advises relative to this finding:

"With respect to (A), as stated in the draft report, this issue has been settled by an agreement between the Government and (A) which eliminates the amortization of $1,092,138 contractor overhead commencing in 1973. The actual figure negotiated is greater than stated in the GAO report due to more current data. The $89,000 for years 1971 and 1972 was included in the corporate overhead which has been negotiated by the CACO. DCAS does not agree that action should be taken to recover these funds."

[See GAO note on p. 81.]

We believe the above comments reflect that DoD activities have or are taking action on the cases cited in the draft report. The purpose of the recommendation concerning revisions to the ASPR provision relating to "the determination of contractor overhead rates", is not totally clear to us. However, we believe that Section XV of ASPR lays out the basis for allowability of this cost. Further, CAS 412 concerning Composition and Measurement of Pension Cost sets the stage for improved management in this area. Your draft report notes that the Cost Accounting Standards Board is currently developing a standard dealing with adjustment and allocation of pension costs. When this standard is issued, further improvement in the management of this area will result.

NEED FOR THE DEPARTMENT OF DEFENSE TO INCREASE ITS EXPERTISE IN THE AUDIT, REVIEW AND EVALUATION OF CONTRACTORS' PENSION PLAN COSTS (Report Chapter 5, Pages 43-51)

GAO Findings:

At the contractors reviewed, we noted that questionable actuarial assumptions were being made, actuarial cost methods were being changed, and inequitable allocations procedures were being used--all increasing costs to the Government--that were not adequately evaluated by contracting activities or by DCAA because of limited staffing and actuarial experience.

We also believe that DoD should reinstate the reviews of certain contractors' pension plan practices and costs by the Military Services and DCAS. The findings discussed in this report together with the findings by DCAS and the Air Force indicate that the time spent by these groups in reviewing contractors' pension plan practices and costs is relatively insignificant when compared to the realized and potential accomplishments.

GAO Recommendations:

We recommend that the Secretary of Defense reinstate the reviews of contractors' pension plan practices by the Military Services and DCAS. In addition, we recommend that DoD obtain additional staff with the need technical skills:

--to assist in determining if pension plan costs are reasonable and equitably allocated to Government contracts, and

--to determine compliance with ASPR requirements and CASB standards.

We also recommend that the Secretary of Defense initiate training programs in pension plan accounting and computation to enable contracting and audit personnel to review adequately the contractors' pension plan practices.

DoD Comments:

As your draft report notes pension reviews were curtailed with regard to contractors that met the threshold of competitive and non-Government business to qualify under the Contractor Weighted Average Share in Cost Risk (CWAS) program. This curtailment was a temporary change intended to exempt CWAS qualified contractors from certain recurring reviews. An evaluation of CWAS changes is underway and the GAO observations will be considered.

As to the recommendation concerning additonal staff, pension plan cost is only one of many elements involved in the costing and pricing of contracts. While the individual Military Departments and Defense Agencies are responsible for their contracting, substantial reliance is placed on the Defense Contract Audit Agency (DCAA) and DCAS to perform reviews of the reasonableness of pension plan costs. DCAS has 13 highly qualified insurance/pension specialists in its field activities. These specialists, through the DCAS contractor insurance/pension review program, have identified many of the deficiencies included in the GAO report and have obtained substantial credits from contractors as the result of identifying these deficiencies. DCAS as well as the Army are both endeavoring to recruit an actuary. DCAA with regard to these matters states:

> "Sufficient expertise is available within DCAA to carry out audit responsibilities for determining allowability, reasonableness, and allocability of pension costs; these are basic audit tasks not peculiar to the audit of pension plans."

> "The auditors' expertise in pension matters is sufficient to disclose situations where the assistance of actuaries may be necessary. We have availed ourselves of assistance in DoD and occasionally used outside actuaries. The fact that DCAA does not have actuaries on its own staff does not mean that such specialized expertise is not available or will not be obtained when necessary."

DCAA further states:

"In chapter 5 (page 45), GAO concludes there is insufficient review by DCAA of the allocation of pension plan costs to their proper periods and cost centers. It should be noted that our auditors, in fact, observed, questioned, and recommended action to resolve many of the items mentioned in the GAO draft report. GAO's statement on page 46 (also page 33) that DCAA did not question (A's) amortization of unfunded past service costs of two commercial subsidiaries as a charge to Government contracts needs clarification. For 1971 the contractor had group insurance and other fringe benefit costs that we considered as an offset to the questionable past service costs. Excess pension contributions were cited in audit reports for 1972 and 1973."

We plan no further efforts with regard to staffing at this time.

With regard to the recommendation concerning training, we are strong advocates of education and training. However, we believe our procurement officials, auditors and contract administrators are afforded sufficient training to enhance their analytical business skills to cope with these matters. To the extent that very specialized skills are needed such as acturial capability we would rely on the Military Departments, and Defense Agencies to obtain the necessary skills as well as the appropriate training and education.

GAO note: References to matters not included in this report have been deleted from the DOD reply. Also, report references have been revised.

PRINCIPAL OFFICIALS RESPONSIBLE FOR ADMINISTERING

ACTIVITIES DISCUSSED IN THIS REPORT

	Tenure of office	
	From	To
DEPARTMENT OF DEFENSE		
SECRETARY OF DEFENSE:		
Harold Brown	Jan. 1977	Present
Donald H. Rumsfeld	Nov. 1975	Jan. 1977
James R. Schlesinger	July 1973	Nov. 1975
William P. Clements, Jr. (acting)	May 1973	June 1973
Elliot L. Richardson	Jan. 1973	Apr. 1973
Melvin R. Laird	Jan. 1969	Jan. 1973
Clark M. Clifford	Mar. 1968	Jan. 1969
SECRETARY OF THE ARMY:		
Clifford M. Alexander, Jr.	Feb. 1977	Present
Martin R. Hoffman	Aug. 1975	Feb. 1977
Howard H. Callaway	May 1973	Aug. 1975
Robert F. Froehlke	July 1971	Apr. 1973
Stanley R. Resor	July 1965	June 1971
SECRETARY OF THE NAVY:		
Graham Claytor, Jr.	Feb. 1977	Present
J. William Middendorf	June 1974	Feb. 1977
J. William Middendorf (acting)	Apr. 1974	June 1974
John W. Warner	May 1972	Apr. 1974
John H. Chafee	Jan. 1969	May 1972
Paul R. Ignatius	Sept. 1967	Jan. 1969
SECRETARY OF THE AIR FORCE:		
John C. Stetson	Apr. 1977	Present
Thomas Reed	Jan. 1976	Apr. 1977
John L. McLucas	May 1973	Jan. 1976
Robert C. Seamans, Jr.	Jan. 1969	Apr. 1973
Harold Brown	Oct. 1965	Jan. 1969
DIRECTOR, DEFENSE LOGISTICS AGENCY:		
Lieutenant General W. W. Vaughan	Jan. 1976	Present
Lieutenant General Wallace H. Robinson, Jr.	Aug. 1971	Dec. 1975
Lieutenant General Early C. Hedlund	July 1967	July 1971

 APPENDIX VI

	Tenure of office	
	From	To
COST ACCOUNTING STANDARDS BOARD		
EXECUTIVE SECRETARY:		
Arthur Schoenhaut	Mar. 1971	Present