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Opportunities for Improving Army Oversight of Pension Plans at Government-Owned, Contractor-Operated Ammunition Plants. PSAD-78-85; B-146991. April 18, 1978. 5 pp. + 2 appendices (21 pp.).

Report to Secretary, Department of the Army; by Richard W. Gutmann, Director, Procurement and Systems Acquisition Div.

Issue Area: Federal Procurement of Goods and Services: Reasonableness of Prices Under Negotiated Contracts and Subcontracts (1904).
Contact: Procurement and Systems Acquisition Div.
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Congressional Relevance: House Committee on Armed Services; Senate Committee on Armed Services.
Authority: Employee Retirement Income Security Act of 1974.

The Army Armament Command manages a complex of 25 Government-owned, contractor-operated (GOCO) ammunition plants. The contractors are responsible for employing the work force and establishing wage rates, pension programs, and other fringe benefits. About 48 pension plans covered eligible employees at 21 GOCO ammunition plants; there were no pension plans at the remaining 4 plants. The Government's share of pension plan contributions at all the plants since the plans began has exceeded $100 million. Findings/Conclusions: One of the primary causes of the Government's making excess contributions to contractors' pension funds at GOCO plants has been the large reductions in employment levels before employees attained vested rights to pension benefits. These reductions resulted in abnormal termination gains representing excess credits due the Government. To avoid making excess contributions, the Army used a deferred funding procedure in some cases. Because this procedure is now considered inconsistent with the Employee Retirement Income Security Act of 1974, another funding technique is required. The use of unrealistic actuarial assumptions and other questionable pension plan practices by the contractors generally resulted in increased pension plan costs to the Government. There was no specific provision in the Armed Services Procurement Regulations on the use of actuarial assumptions except for dealing with abnormal terminations and valuation of pension fund assets. The Army was not effectively monitoring and evaluating contractor pension programs because it did not require sufficient data or adequately review data, and it lacked skilled staff. Recommendations: Army contracting personnel should: see that GOCO contractors use employee termination assumptions sufficiently high to prevent abnormal termination gains; determine and recover the credit amounts due

the Government from significant contractor employment reductions; use advance agreements under present and future GOCO contracts to require Government determination and recoupment of credit due because of excess employee terminations, provide for orderly transfer of pension plan assets for transferred employees, and provide for recovery of excess contributions when contracts are terminated; and check to see that contractors follow applicable cost accounting and procurement regulations. The Army should develop an effective system to review, monitor, and evaluate pension plan practices of contractors and explore the use of Defense Contract Administration Services specialists to support monitoring functions. (HTW)

REPORT BY THE U.S.

General Accounting Office

Opportunities For Improving Army Oversight Of Pension Plans At Government-Owned, Contractor-Operated Ammunition Plants

A GAO assessment of Army oversight of pension plans for contractor employees at Government-owned, contractor-operated plants revealed weaknesses which contributed to excess Government reimbursements.

The Army

--has not established an effective system nor acquired expertise to monitor and evaluate contractors' pension plan practices and their effect on costs charged to the Government;

--has not required contractors to report on their pension plan practices; and

--should check that contractors follow applicable cost accounting standards and procurement regulations in determining pension plan costs.

UNITED STATES GENERAL ACCOUNTING OFFICE

PSAD-78-85

APRIL 18, 1978

UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

PROCUREMENT AND SYSTEMS
ACQUISITION DIVISION

B-146991

The Honorable
The Secretary of the Army

Dear Mr. Secretary:

This report discusses Army oversight of contractor pension plan practices and costs at Government-owned, contractor-operated (GOCO) ammunition plants. This is the second report on our review of defense contractor pension plan practices and costs. Our initial report to the Congress (PSAD-77-100) entitled "Contractor Pension Plan Costs: More Control Could Save Department of Defense Millions" covered pension plan practices of eight defense contractors producing a variety of commodities in privately-owned plants, and one contractor operating a GOCO plant.

We reviewed Army oversight of GOCO contractor pension plan practices at six plants with nine pension plans, finding there were weaknesses which contributed to excess Government reimbursement. (See app. I.) Specific opportunities for improving Army oversight of pension plan practices are (1) requiring contractor actuaries to recognize widely fluctuating employment levels when computing pension plan costs at GOCO plants to minimize termination gains, (2) eliminating contractor practices resulting in questionable pension plan costs, such as using companywide actuarial assumptions, not recognizing asset appreciation or depreciation as required by regulations and understating investment income assumptions, (3) improving reporting of pension plan practices by contractors, and (4) increasing the number of personnel having skills to make actuarial studies and cost evaluations of contractor pension plan practices.

NEED TO RECOGNIZE WIDELY FLUCTUATING EMPLOYMENT LEVELS AT GOCO PLANTS TO MINIMIZE TERMINATION GAINS

One of the primary causes of the Government making excess contributions to contractors' pension funds at GOCO plants has been the large reductions in employment levels before employees attained vested rights to pension benefits.

Such reductions resulted in abnormal termination gains representing excess credits due the Government. Under current law and regulation, recovery of these credits could be delayed for substantial periods of time since contributions are made to irrevocable trusts unless a contractor agrees to refund them quicker.

To avoid making excess contributions, the Army was using a deferred funding procedure in some cases. Because this procedure is now considered inconsistent with the Employee Retirement Income Security Act of 1974, another funding technique is required that (1) eliminates unnecessary Government contributions to contractors' pension funds, (2) minimizes abnormal termination gains, (3) curtails cumbersome negotiations to settle claims when operating contracts are terminated, (4) eliminates the problems of the Government receiving equitable shares of excess pension fund credits from pension funds, and (5) reduces the possibility of inequitable allocations to Government contracts of costs resulting from contractors increasing benefits or reducing eligibility requirements. Appendix I (see p. 2) further discusses this matter.

Recommendations

We recommend that Army contracting personnel see that GOCO contractors use employee termination assumptions sufficiently high to prevent abnormal termination gains while complying with applicable laws, standards, or regulations. Otherwise the Army should limit, by contractual agreement, reimbursements of contractor pension plan costs to those costs based on Army-developed assumptions, thereby minimizing abnormal termination gains.

Army contracting officials should also determine and recover, in the cases cited in the appendix to this report, and in other Army GOCO plants, the credit amounts due the Government from significant contractor employment reductions.

We also recommend that Army contracting officials use advance agreements under present and future GOCO contracts to (1) require Government determination and recoupment from the contractor of any credit due because of excess GOCO plant employees terminations, (2) provide in compliance with the Employee Retirement Income Security Act for orderly transfer of pension plan assets for employees transferred from one GOCO plant operating contractor to another, and (3) provide for recovery of excess contributions due the Government when GOCO plant operating contracts are terminated.

OTHER PENSION PLAN PRACTICES OF CONTRACTORS MAY RESULT IN QUESTIONABLE COSTS TO THE GOVERNMENT

The use of unrealistic actuarial assumptions and other questionable pension plan practices by GOCO plant contractors generally resulted in increased pension plan costs to the Government. As detailed in appendix I (see p. 9) contractors (1) used companywide actuarial assumptions in computing GOCO plant pension plan costs at the Lake City Army Ammunition Plant, resulting in an inequitable allocation of pension plan costs to Government contracts, (2) understated expected investment income at the Iowa and Lone Star Army Ammunition Plants, increasing Government contributions, and (3) did not recognize pension fund asset appreciation as required by the Armed Services Procurement Regulation (ASPR) at the Lake City and Radford/Sunflower Army Ammunition Plants.

ASPR had no specific provisions on the use of actuarial assumptions except for dealing with abnormal terminations and valuation of pension fund assets. Contract costs are allowable if allocated to Government contracts in reasonable proportion to benefits received. Cost accounting standards now provide that contractors, when computing and allocating pension plan costs to covered contracts, must (1) use actuarial assumptions that are reasonable in the aggregate, (2) allocate pension plan costs equitably to organizational segments, and (3) recognize appreciation and depreciation in pension fund assets.

Recommendations

We recommend that the contracting personnel responsible for Army GOCO activities check to see that contractors follow the applicable cost accounting standards and procurement regulation in

--developing and using actuarial assumptions based on experience at a GOCO plant if such experience is at variance with that of other plants of the contractor,

--recognizing appreciation or depreciation in the value of pension fund assets, and

--using reasonable income assumptions in computing pension plan costs.

We also recommend that the Army require contracting activities to determine and recover, in the cases cited in the appendix and in other Army GOCO plants with similar situations, credit due the Government.

NEED FOR IMPROVING REVIEW OF CONTRACTOR PENSION PLAN COSTS

We determined that the Army is not effectively monitoring and evaluating contractor pension programs because it (1) did not require sufficient pension plan data from contractors, (2) made only a limited review of such data, and (3) lacked skilled staff to make actuarial studies. The Army was therefore not able to determine adequately the reasonableness and equity of pension plan costs reimbursed under Government contracts. Details regarding these findings are in appendix I. (See p. 15.)

Recommendations

We recommend that the Army:

--Develop an effective system and acquire expertise to review, monitor, and evaluate the pension plan practices of GOCO plant contractors. This would include (1) establishing requirements for contractors to periodically report information on their pension plan practices and on the actuarial and financial condition of their plans and (2) seeing that contractors comply with applicable cost accounting standards and procurement regulations in computing and allocating pension plan costs to Government contracts.

--Explore the use of Defense Contract Administration Services insurance and pension specialists to support Army monitoring functions, particularly if it is unable to acquire the necessary expertise.

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As you know, section 236 of the Legislative Reorganization Act of 1970 requires the head of a Federal agency to submit a written statement on actions taken on our recommendations to the Senate Committee on Governmental Affairs and the House Committee on Government Operations not later than 60 days after the date of the report and to the House and Senate

Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.

We are sending copies of this report to the Director, Office of Management and Budget; to the Secretary of Defense; to the Directors of the Defense Logistics Agency and Defense Contract Audit Agency; to the Commander, Army Armament Command; and to appropriate congressional committees.

Sincerely yours,

R. W. Gutmann
Director

OPPORTUNITIES FOR IMPROVING ARMY OVERSIGHT OF PENSION PLANS AT GOVERNMENT-OWNED, CONTRACTOR-OPERATED AMMUNITION PLANTS

BACKGROUND AND SCOPE

The U.S. Army Armament Command, Rock Island, Illinois, a major subordinate of the U.S. Army Material Development and Readiness Command, is responsible for life-cycle management of Army weapons and ammunition. It centrally manages a complex of 25 Government-owned, contractor-operated (GOCO) ammunition plants which are classified as (1) propellant and explosives, (2) load, and assemble and pack, (3) small arms, or (4) metal parts plants. The types of contracts between the Government and the various operating contractors are both cost type and fixed-price type. The contractors are responsible for employing the work force and establishing wage rates, pension programs, and other fringe benefits.

About 48 pension plans covered eligible employees at 21 GOCO ammunition plants, with no pension plans at the remaining 4 plants. Some of the pension plans were companywide while others were exclusively for contractor employees at the GOCO plants. We reviewed Army oversight of GOCO contractors' pension plan practices at the following six plants with nine pension plans (of which some were companywide).

--Lake City Army Ammunition Plant, Independence, Missouri

--Iowa Army Ammunition Plant, Burlington, Iowa

--Radford Army Ammunition Plant, Radford, Virginia

--Holston Army Ammunition Plant, Kingsport, Tennessee

--Indiana Army Ammunition Plant, Charleston, Indiana

--Lone Star Army Ammunition Plant, Texarkana, Texas.

The Government's share of pension plan contributions at all Army GOCO plants since the plans began has exceeded $100 million. In a recent year, the Government's share of contributions totaled $12.2 million for about 32,300 eligible active contractor employees. About $8 million, or 66 percent, represented the Government's share for about 21,900 active employees at the six plants we reviewed.

NEED TO RECOGNIZE WIDELY FLUCTUATING EMPLOYMENT AT GOCO PLANTS TO MINIMIZE TERMINATION GAINS

Reductions in employment before employees attained vested rights to pension benefits have been one of the primary reasons for the Government making excess contributions to contractors' pension funds at GOCO ammunition plants. Because these contributions are made to irrevccable trusts, recovery of excess credits due the Government, which may be substantial, could be delayed for substantial periods of time. Termination gains may also result from excess employment terminations of participants whose benefits are fully vested. This is due primarily to projected increases in salaries and wages which will not take place.

The Army established a deferred funding procedure to avoid making excess contributions to contractors' pension plans. Although this procedure was initially believed to be an acceptable funding technique, it is now considered inconsistent with the Employees Retirement Income Security Act of 1974.

Fluctuating employment

Employment at Army GOCO plants has fluctuated because of changes in ammunition requirements. The following table shows that contractor employees at the 25 plants decreased by about 105,100 in 8 years, a reduction of about 87 percent.

As of January 31	Employment levels
1969	121,100
1970	89,100
1971	54,900
1972	38,700
1973	42,000
1974	32,400
1975	27,100
1976	15,100
1977	16,000

In the following paragraphs, we discuss cases in which employment fluctuated widely.

Lake City Army Ammunition Plant

The Remington Arms Company, an affiliate of E.I. du Pont de Nemours and Company, operates the Lake City Army Ammunition Plant. The plant employment decreased from 7,817 in January 1, 1969, to 2,557 at January 1, 1975, a reduction of

5,260 employees, or 67 percent. The contractor assumed that many employees would terminate their employment without vesting. Nevertheless, with a vesting requirement of 10 years of service, even more employees than estimated were terminated without vested pension rights, giving rise to potential significant excess credit in the pension fund. This credit may have been even greater since the contractor used companywide actuarial assumptions rather than those experienced at the GOCO plant.

Contractor officials indicated that an actuarial analysis would be necessary to determine the amount of excess credit due the Government as a result of Lake City employee termination gains. Under a separate section, we discuss the inequity to the Government of the contractor using companywide actuarial assumptions.

Iowa Army Ammunition Plant

The Mason and Hanger-Silas Mason Company is the operating contractor for the Iowa Army Ammunition Plant, the Energy Research and Development Administration--now Department of Energy--plant at Burlington, Iowa, and for other GOCO plants. Separate pension plans are maintained for bargaining (union) and nonbargaining employees. The pension plan for union employees is a trust arrangement and includes employees at both plants. The pension plan for nonbargaining employees is an insured plan and covers all employees in all GOCO plants operated by the contractor. Total employment levels at the plants decreased from 7,295 to 1,383--a reduction of 5,912 employees, or 81 percent--during a 6-year period ended January 31, 1975.

The number of employees considered by the actuary in computing annual pension plan costs for the union employee plan has steadily decreased from 4,020 for the 1969 valuation to 1,370 for the 1974 valuation. During this 6-year period, the number of vested employees remained fairly stable.

In the absence of an analysis of actuarial gains and losses, the amount of termination gains generated during the period is unknown. The annual actuarial reports indicated only that the normal pension plan cost percentage of salary was decreasing. The actuary felt that the decrease in normal pension plan costs was due to the expiration of recall rights of terminated employees.

The Defense Contract Audit Agency (DCAA) reviewed both pension plans and their related costs during late 1970. For the union employee plan, DCAA noted:

"We * * * consider the assumptions of probability of remaining in active service extremely unrealistic when compared to experience. It is our opinion that funding requirements have been based on a personnel level which is much too high, considering the number of employees who can reasonably be expected to remain long enough (10 years) to attain vested rights. In our opinion, the use of more realistic estimates of the number of employees anticipated to receive pensions would reduce the annual contributions."

From 1969 to 1972 the nonbargaining employees' pension plan was overfunded about $489,000 for the entire plan with $256,000 pertaining to Iowa Army Ammunition Plant employees. The overfunded condition was due to use of unrealistic assumptions for employee terminations and investment income. One of the reasons why the plan was not overfunded in 1973 was that a revised actuarial valuation technique was used to measure the liability for spouse's benefits which increased the unfunded accrued liability by $400,000. Since a higher portion of the employees at that time were engaged in nondefense work then when the overfunding arose, the Government did not receive an equitable adjustment. This example illustrates how a change in the method of computing pension plan costs can be used to offset prior excess funding due the Government.

<u>Radford Army Ammunition Plant/
Sunflower Army Ammunition Plant</u>

Hercules, Incorporated, operated the Radford/Sunflower Army Ammunition Plants. The pension plan, administered at the corporate level, provides uniform benefits for Hercules employees but with a separate pension trust fund for GOCO plant employees. In 1974 a full vesting only provision was changed to permit partial vesting after 5 years of service, increasing to full vesting after 10 years. Government contributions to the contractors' pension fund totaled approximately $9,111,000 for both plants.

Employment levels at Radford/Sunflower increased from 2,700 in 1966 to a peak of over 12,000 employees in 1969 and then declined yearly to about 3,700 at January 31, 1975--a reduction of over 8,300 employees during the 6-year period. Experience showed that periods of peak employment were less than 5 years and that employment of a large proportion of employees was terminated before obtaining vested right to pension benefits. Recognizing the need to prevent overfunding of the pension trust fund if contributions were based on abnormally high employment levels, the Government and contractor agreed that contributions beginning with 1967 should be on a reduced basis. Annual contributions were determined and agreed upon by the Army, DCAA, and the contractor, based on the actuary's recommendations and considering current employment levels, experience, and anticipated employment levels.

Although satisfied with the method being followed to evaluate contributions on a year-to-year basis, DCAA suggested and the Army and the contractor initiated a special valuation procedure in computing contributions for the years 1970 through 1973. The special valuation procedure considered funding pension benefits only for those employees with 5 or more years of service rather than total employment as used by the actuary. Even though funding levels were reduced by about $5 million as a result of the change, there were still termination gains in excess of $7 million. This case demonstrates the difficulty of properly projecting pension fund requirements when dynamic changes occur in employment levels.

We also found that the contractor combined the termination gains with actuarial losses, changes in the pension benefits, and actuarial assumptions that increased unfunded liability. The contractor then proceeded to amortize the net liability over 30 years (previously 10 years). In this connection, the Army Services Procurement Regulation (ASPR) requires that abnormal termination gains should be credited to the Government either as a cost reduction or cash refund, as appropriate. We do not believe that amortizing the termination gains over a 30-year period is in the best interest of the Government.

Lone Star Army Ammunition Plant

Day and Zimmerman, Inc., operates the Lone Star Army Ammunition Plant with separate pension plans for hourly and salaried employees. The GOCO pension plan costs were separately calculated and deposited in separate insured funds. The employees obtain vested pension benefits after 10 years of service. During the period 1969 to 1975, total employment levels at the plant decreased from 11,273 to 2,237--a reduction of 9,036, or 80 percent.

Prior to 1973, the contractor funded pension plan benefits for new hourly employees before they became eligible under the plan. Because of the large turnover rate for employees with less than 3 years of service, this practice resulted in actuarial gains of $556,307 and $507,095 in 1969 and 1970, respectively. These gains were applied against the following year's cost. The continued use of an inaccurate termination assumption, however, resulted in an actuarial gain of $541,032 for 1971. With proper oversight, Government officials could have prevented this situation. The contractor discontinued the funding practice in 1973.

A deferred funding procedure was initiated in 1973 for hourly plan employees because large reductions in employment levels caused large actuarial gains. Under this funding technique, the contractor did not fund pension plan costs for those employees with less than 3 years of pension plan eligibility.

A deferred funding approach was not initiated for salary plan employees because they were a fairly stable work force. Some termination gains, however, occurred before 1972 because the actuary neglected to consider that salaried employees would terminate employment.

DCAA reviewed contractor pension plans and related costs at the Lone Star plant in 1970. In its memorandum dated December 11, 1970, DCAA stated,

> "* * *it is felt that some of the actuarial assumptions as to interest earnings, employee turnover, and retirement age are too conservative and that consideration should be given to adjusting the assumptions."

Contributions for the hourly plan during the period 1969 to 1974 were about $3.8 million. These contributions, however, reflected subsequent adjustments for net actuarial gains of over $2.4 million over the same period. The size and recurrence of these gains were clear indications that insufficient action was taken to revise the assumptions as recommended by DCAA in 1970.

ARMY INITIATION OF DEFERRED FUNDING PROCEDURE

The Army established deferred funding to prevent overfunding situations similar to those that occurred after the Korean conflict. Under deferred funding, pension plan costs are not recognized or funded at the time an employee becomes eligible under the plan, but are deferred for several years or until the employees acquired full or partially vested pension rights. This practice was initiated to eliminate or minimize the amount of non-vested termination gains, reduce the chances of overfunding the plan and thus limit cumbersome negotiations to recapture excess pension plan payments generated during periods of fluctuating employment levels. At the time of our review, Army GOCO contractors were using some type of deferred funding for 11 of the 48 pension plans in effect.

Although the use of deferred funding had been considered a legal and acceptable funding technique for many of the cases discussed in this report, a ruling was issued by the Internal Revenue Service on September 21, 1977, that the practice is inconsistent with the minimum funding requirement of the Employee Retirement Income Security Act of 1974. Much of the objective of using deferred funding can be accomplished, however, by establishing realistic termination assumptions. Some cases where deferred funding was used are discussed below to give an indication of the potential savings that can be obtained through the use of more realistic assumptions.

One contractor's pension plan costs would have been $3.1 million--more than 500 percent greater--had the contractor used current funding for a 3-year period, as shown below.

	Annual pension plan costs		
Year	Deferred funding	Current funding	Difference
1972	$113,610	$ 687,429	$ 573,819
1973	184,369	1,380,478	1,196,109
1974	282,609	1,579,651	1,297,042
Total	$580,588	$3,647,558	$3,066,970

At the end of 1974, nonvested employees comprised 78 percent of the total active plan participants. It should be noted that long-term pension plan costs are not necessarily reduced by the use of deferred funding practices, but funding is delayed until nonvested employees obtain their vested pension rights.

Another GOCO plant was operated by the Olin Matheson Chemical Corporation prior to May 1972 and by ICI-United States, Inc., thereafter. Employment levels at the plant decreased from 18,987 to 3,151 during a 6-year period ended January 31, 1975. Government contributions from 1969 to 1972 totaled about $4 million.

Olin pension plans under insured arrangements also included employees at the Badger and Alabama Army Ammunition Plants. Hourly employees obtained vesting after 10 years of service at age 50, while salaried employees also obtained vesting after 10 years of service but at age 40. Deferred funding was used until hourly employees obtained vested rights, while deferred funding was used for salaried employees until they reached age 30. Although the element of deferred funding existed when funding of pension benefits was withheld until salaried employees reached age 30, some potential still existed for excessive fund payments since some employees had not attained vested rights by that age. Payments into pension funds, for example, could have been deferred less than a year if the employee was hired at age 29. The effect of using different time periods for converting from deferred to current funding was dramatized when ICI-United States assumed operations of the GOCO plant. Since Olin only partially used deferred funding for salaried employees, an excess of $1,250,000 was generated for these employees. The amount was transferred to the pension fund of ICI-United States at the insurance company. No transfer of funds was necessary, however, under the hourly plan.

General comments

ASPR requires an appropriate credit to the Government when abnormal pension forfeitures from employee terminations were not taken into account previously. That is, when forfeitures were unforseeable or were forseeable but no cost reductions were made. Actuarial gains and losses under contracts subject to cost accounting standard (CAS) 413, effective March 10, 1978, are to be amortized over a 15-year period in equal annual installments. This standard, by requiring a contractor to amortize termination gains over fifteen years will reduce the extent to which the contractor can improperly shift such gains on Government work to other operations. This in turn, will reduce the periodic amounts which the Government will recover in the form of a credit for costs previously reimbursed. The abnormal terminations of employment discussed in this report, however, occurred prior to March 10, 1978, and, thus, the amounts due to the Government for termination gains were not so limited.

ASPR states that advance agreements are desirable between the Government and a contractor for treating special and unusual costs in order to avoid possible subsequent disallowance or dispute based on unreasonableness or nonallocability. The Department of Energy (formerly ERDA), however, requires advance agreements for treating special items, such as pension costs, as part of its contractual agreements with contractors operating Government-owned facilities.

CONCLUSIONS

We believe that the fluctuating employment levels at GOCO plants require a funding procedure that (1) eliminates unnecessary Government contributions into contractors' pension funds, (2) minimizes abnormal termination gains, (3) curtails cumbersome negotiations to settle claims when operating contracts are terminated, (4) eliminates the problems of the Government receiving its equitable share of excess credits from pension funds which are irrevocable trusts, and (5) reduces the chance for an inequitable allocation to the Government of costs resulting from contractors increasing benefits or reducing eligibility requirements.

Since Army deferred funding procedures were determined to be inconsistent with Employee Retirement Income Security Act, the Army should require GOCO contractors to use employment termination assumptions sufficently high to prevent abnormal termination gains in consonance with applicable laws, standards or regulations. If realistic termination assumptions are not utilized for GOCO plant employees, then the Army should by contractual agreement limit reimbursement of contractors' pension plan costs to those costs that are based on assumptions developed by it to prevent abnormal termination gains.

The need to prevent abnormal termination gains is apparent in view of the Cost Accounting Standards Board requirement that such gains, if material, shall be amortized over a 15-year period. We believe, in the cases cited in this report and in future cases, that the Government is entitled to actuarial gains generated from terminations of employment of GOCO plant employees. The amounts due to the Government should be determined and credited to it either as a reduction of costs or as a cash refund. Also, where GOCO plants have closed, or where operating contracts are being terminated, the amounts due the Government should be refunded or treated as an offset to contract termination costs.

We also believe that the Army should use advance agreements with its contractors to insure that equitable credits are recoverable by the Government. These agreements would be made a part of the contractual relationships between the Government and its contractors.

OTHER PENSION PLAN PRACTICES OF CONTRACTORS MAY RESULT IN QUESTIONABLE COSTS TO THE GOVERNMENT

Use of unrealistic actuarial assumptions and other pension plan practices by GOCO plant contractors generally results in increased pension plan costs to the Government.

Below we discuss cases in which contractors used companywide actuarial assumptions in computing GOCO plant pension costs, understated expected investment income, and did not recognize appreciation of pension fund assets as required by ASPR.

Use of companywide actuarial assumptions

Use of companywide actuarial assumptions generally results in inequitable allocations of contractor pension plan costs to Government contracts. This situation may occur when the assumptions used for termination, retirement age, or salary scale are not representative of the employees engaged in Government work. In addition, where the level of benefits, eligibility for benefits, or age distribution of employees in Government work materially differ from those in contractor's commercial operations, Government contracts may also bear unnecessary costs.

CAS 413 provides that, unless an equitable allocation of pension plan costs to organizational segments can be made by means of an allocation base, separate pension plan costs shall be calculated for the segment. ASPR requires that contract costs charged to the Government be allowable, allocable and reasonable.

Lake City Ammunition Plant

All Lake City plant employees were included in the companywide trust fund pension plan of the Remington Arms Company, an affiliate of E. I. du Pont Nemours. Pension plan costs are computed separately for Lake City and commercial employees and an account is maintained to identify the amount of trust funds applicable to Lake City employees. Companywide actuarial assumptions, however, were used in computing Lake City pension plan costs.

Pay scale assumptions that were changed for a 1974 valuation, for example, were based on Du Pont experience for the the previous 15 years. Lake City experience was not considered in establishing the assumptions. In this connection, Lake City employment decreased 62.8 percent from 1969 to 1973 while commercial operations decreased only 4.5 percent. The overall employment level for the company, including Lake City, decreased 39.2 percent during the same period.

The inequity of using companywide assumptions when computing pension plan costs for a specific activity, such as Lake City, was demonstrated in a 1972 DCAA review of pension plan practices of the Newport Army Ammunition Plant. This plant was also operated by Du Pont.

In its report, DCAA concluded that use of companywide turnover assumptions resulted in excessive costs to the Government. DCAA also stated that it appeared unlikely that a significant number of employees at the GOCO plant would ever obtain a vested interest because it was questionable that the plant would remain in operation for the 15 consecutive years needed for employees to vest in pension benefits. DCAA recommended that the computation of pension plan costs for the Newport plant be based on specific circumstances at the plant. DCAA also recommended that the Government negotiate recoveries for previously reimbursed pension plan costs found to be excessive.

In the absence of an actuarial study, the contractor could not demonstrate the validity of some assumptions used--particularly the assumption that pay scales and employee termination rates were appropriate for Lake City. The situation at Newport, as outlined by DCAA, is essentially the same as we found at Lake City. Specifically, unique GOCO experience must be recognized in actuarial assumptions when computing pension plan costs for GOCO plants.

Our review also showed that several other contractors used companywide assumptions when computing pension plan costs at GOCO plants.

Recognition of asset appreciation and depreciation required

Inadequate recognition of appreciation or depreciation of pension trust fund assets will affect the amount of contributions required to protect (1) the integrity of the fund and (2) income security of vested employees.

ASPR requires that the determination of allowable costs shall take into consideration unrealized as well as realized appreciation or losses in the market value of fund assets, including equity securities. Under ASPR, appreciation in equity securities shall be recognized to 80 percent of the market value in excess of adjusted book value. An 80 percent factor is used to leave a 20 percent reserve for possible declines in the values of the securities involved. ASPR also requires that the total value of all equity securities not be depreciated below acquisition cost. CAS 413, however, requires that for covered contracts, the total actuarial value of pension fund assets (equity securities and bonds) shall fall within a range from 80 to 120 percent of the assets' market value.

Lake City Army Ammunition Plant

During the 3-year period ended June 30, 1969, unrealized appreciation on common stocks was recognized by applying a 3-percent writeup to the annual average balance in a memorandum reserve account. After July 1, 1969, a 4-percent write-up factor was used until suspended for the year ended June 30, 1974, because of a depressed equity market. We were unable to determine compliance with ASPR because memorandum records did not readily disclose the Lake City share of pension fund assets.

Remington Arms Company, Inc., the GOCO plant operator, set up a memorandum reserve account to identify the amount of trust fund assets applicable to Lake City employees for use in computing their annual pension plan costs. The memorandum account, however, may not accurately reflect the pension fund asset values applicable to Lake City because adjustments were not made for certain gains and losses, such as (1) earnings on pension assets reserves for retirees, (2) release of reserves at the death of a retiree, and (3) increases in pension benefit costs from pension plan amendments.

In a July 10, 1975, letter we suggested that the Army initiate a study to determine whether

--the memorandum reserve account accurately reflects gains and losses applicable to Lake City retirees,

--duPont's actuarial assumptions are applicable to Lake City,

--adjustments are due the Government for the significant number of Lake City employee terminations which occurred from 1969 through 1974, and

--the contractor has properly recognized appreciation and depreciation of Lake City pension assets in accordance with ASPR.

In October 1975 the Army responded that it had reviewed these matters with the contractor. The Army restated the contractor's earlier position that termination gains were applied as a reduction of past service cost and amortized over the employees' remaining service life. The Army stated that the net increase of $500,000 in pension plan costs was incurred through December 1974 due to increases in retirees' benefits. This benefit increase was not recorded in the memorandum reserve account. The Army agreed the account did not reflect actuarial gains and losses applicable to retirees, stating only that the present practice is in the Government's best interest. The Army also stated that the development of separate actuarial assumptions for the GOCO plant would require a costly, time-consuming study.

We do not agree with the Army's conclusions. In most instances that we have examined, the cost of an actuarial analysis is more than offset by the reduction in pension plan costs applicable to Government contracts. Further, the joint review apparently considered only losses and did not consider the effects of gains resulting from (1) earnings on pension asset reserves for retirees, (2) deaths of retirees, and (3) increases in social security benefits. We believe that an actuarial analysis is essential to establish

--how much in termination gains and credits may be due the Government,

--whether the companywide actuarial assumptions are equitable to the GOCO plant,

--how accurately the memorandum reserve account portrays the value of trust fund assets applicable to the GOCO plant, and

--whether pension plan costs charged the Government are reasonable.

Radford Army Ammunition Plant and Sunflower Army Ammunition Plant

DCAA took exception to the contractor's procedure of recognizing unrealized appreciation of equity securities at an annual rate of 3 percent, but only to the extent that the amount by which 75 percent of the market value of the assets exceeded the adjusted book value. For a 5-year period ended June 30, 1973, the amount of unrealized appreciation, adjusted for stocks sold, totaled about $7 million. As mentioned previously, ASPR provides that 80 percent of the appreciation in market value should be recognized. Had the contractor followed the ASPR requirement, an additional $1.6 million would have been recognized, reducing current year pension contributions.

As guidance in approving contribution rates for 1973, DCAA used a formula which recognized about 80 percent of market value of equity assets and face value of fixed-income assets. The formula was designed to maintain funding of total plan requirements at about a 90-percent level. The contractor did not agree with the application of the formula, but did agree to use the DCAA recommended rate for 1973 contributions.

Understatement of investment income assumptions

Understatement of investment income assumptions, if not offset by other unrealistic assumptions, will result in excess Government contributions to contractor pension funds. On the other hand, overstating the investment income assumption will result in insufficient contributions to the fund, with decreased costs to the Government. Neither situation is desirable since current costs are misrepresented, jeopardizing benefits due employees. The effect of understating investment income assumptions can be dramatic. In our initial pension report, we discussed one case where during a 22-year period the investment yield exceeded interest rate assumptions by about $50 million.

CAS 412 provides that the validity of the assumptions used may be evaluated in the aggregate. However, if these assumptions are not reasonable in the aggregate, then the contractor shall identify the major causes for the actuarial gains and losses and justify returning or revising each assumption. ASPR had no specific provision dealing with investment income assumptions except that contract costs be allowable, reasonable, and allocable.

Iowa Army Ammunition Plant

The understatement of the investment income assumption from 1969 to 1973 for interest earnings on pension funds in trust for the nonbargaining employees created actuarial gains of about $181,000. The actuary recognized this deficiency, and the investment income assumption was increased from 4-1/4 to 4-3/4 percent for 1972 costs, and to 5-1/4 percent for 1973 costs.

The investment income assumption for the bargaining plan has remained at 4 percent. The actuarial gains and losses, however, were not disclosed for this plan. We, therefore, could not verify the reasonableness of this assumption.

Lone Star Ammunition Plant

The actuarial assumptions for interest have been consistently understated. From 1969 through 1973, the investment income assumption for hourly employees ranged from 3.5 to 4 percent. The actual return ranged from about 6.9 to 7.3 percent, resulting in actuarial gains of about $537,000. The actuarial gains for the salaried plan totaled $87,592 during the same period. For a pension plan valuation at December 31, 1974, the contractor changed the income assumption to 5 percent. As early as December 1970, however, the DCAA had indicated that assumption adjustments were required. The delay in following up on DCAA suggestions contributed to unnecessary charges to the Government for contractor's pension plan costs.

Conclusions

ASPR had no specific provisions on use of actuarial assumptions except for dealing with abnormal terminations and valuations of pension fund assets. Contract costs were allowable, however, if allocated to Government contracts in reasonable proportion to benefits received. Cost accounting standards now provide that contractors, when computing and allocating pension plan costs to covered contracts, must (1) use actuarial assumptions that are reasonable in the aggregate; (2) allocate pension plan costs equitably to organizational segments; and (3) recognize appreciation and depreciation in pension fund assets.

We believe that the Government was charged more for pension plan costs because contractors

--used companywide actuarial assumptions instead of the rates experienced by the GOCO plant when computing the GOCO plant pension plan costs,

--failed to recognize appreciation of equity securities in trust funds as required by ASPR, and

--understated investment income assumptions.

NEED FOR IMPROVED REVIEW OF CONTRACTORS' PENSION PLAN COSTS

The Army is not effectively monitoring and evaluating contractors' pension programs because it (1) did not require sufficient pension plan data from contractors, (2) made only limited review of such data, and (3) lacked skilled staff to make actuarial studies. Consequently, the Army did not determine the reasonableness and equity of pension plan costs being reimbursed under Government contracts.

DCAA, however, has reviewed some of the GOCO plants' pension plan costs, as discussed in this report, and recommended corrective action concerning questionable actuarial cost practices. We believe that the Army should be continuously involved in the monitoring and evaluation of contractors' pension programs to preclude overfunding of pension plan costs charged to the Army.

Insufficient reporting on pension plan practices by contractors

The data furnished the Army by GOCO contractors routinely consists of pension plans and amendments. In some cases they may furnish summarized actuarial reports so that the Army can approve accrual rates and obtain future payroll data. This information is not sufficient for the Army to conduct a detailed review of contractor pension plan practices and of the plans' actuarial and financial condition, both of which affect annual pension plan costs.

Since the Army lacked data sufficient for our review purposes, we suggested that the Army request the operating contractors to submit actuarial data, financial data, and related reports for all pension plans for a 5-year period. Even then the contractors submitted only limited data. Some contractors, for example, did not disclose the composition and valuation of the pension fund assets or submit an analysis of actuarial gains and losses. Without these submissions, it was not possible to compare actuarial assumptions with actual results to establish the reasonableness of the assumptions used in calculating pension plan costs.

Inadequate Army oversight of contractors' pension plan practices

The extent of Army oversight procedures is limited primarily to the review and approval of pension plans and amendments, subject to formal approval by the Internal Revenue Service. Generally, the Army reviews these documents to determine whether

--pension benefits for GOCO plant employees are consistent with benefits for employees in the contractors' commercial operations,

--pension benefits are appropriate for the plant's geographical area,

--the plans comply with ASPR and Internal Revenue Service requirements, and

--funding practices are followed consistently.

While having the responsibility for assuring that pension plan costs are reasonable and equitable, cognizant audit and contracting activities appear to be accepting the amounts computed by the contractors' actuaries. Due to the lack of contractor-supplied information and detailed review by or for the Army, the reasonableness of contractor pension plan costs has not been determined in most cases.

Annual pension plan costs are greatly influenced by funding practices, actuarial cost methods and assumptions, amortization of past service costs and actuarial gains and losses, and by the valuation of trust fund assets. These are complex matters requiring more oversight than they have received if the Army is to have assurance that Government-reimbursed pension plan costs are reasonable. Our review of six GOCO plants selected indicated

--inadequate disclosure of actuarial gains and losses, especially termination gains;

--noncompliance with ASPR provisions on abnormal forfeitures due to foreseeable large employment reductions;

--possible improper allocation of actuarial gains and losses generated at the plants, but benefiting all participants in companywide plans,

--use of unrealistic actuarial assumptions, particularly those relating to employee turnover and interest earnings; and

--insufficient recognition of unrealized appreciation of pension fund assets had occurred.

The cost account standards on pension plan costs contain requirements designed to improve the visibility and verifiability of contractor pension plan accounting practices and actuarial valuations. These requirements now provide the means for the Army to make meaningful reviews of contractor pension plan practices. Pension plan costs should be accounted for uniformally and consistently. Assigning these costs to proper accounting periods with improved pension cost measurement should now be evaluated effectively by applying the "Cost Accounting Standard for Composition and Measurement of Pension Cost" (CAS 412).

CAS 413, the "Adjustment and Allocation of Pension costs," provides additional assurance that costs will be equitably allocated to Government contracts.

Pension expertise

We do not believe the Army has staff sufficiently skilled in pension accounting and actuarial computation to adequately evaluate whether pension plan costs are being propely computed and charged to Government contracts. As discussed in our initial pension report (PSAD-77-100), DOD has provided only limited staffing for review and evaluation of the allowability, reasonableness, and allocability of pension plan costs charged to Government contracts. Even with the limited priority, staffing and effort, some important recoveries and adjustments to contract costs have been realized.

Army currently has one individual who administratively reviews and approves pension plans and amendments subject to formal approval by the Internal Revenue Service. The individual has many other duties not related to pension reviews and thus has limited time and expertise considering the complexities involved in reviews of pension programs.

The types of findings discussed in this report and our previous report (PSAD-77-100), as well as those developed by DCAA, would probably not have been questioned during a routine review of pension costs or with only a passing knowledge of pension plan practices. To be effective, reviews of pension plan costs should include thorough analyses of the effects of actuarial cost methods and assumptions, funding techniques, allocation of costs by cost centers and/or periods, and the requirements of the Cost Accounting Standards Board.

We believe that the Army needs to develop staff skilled in such technical areas as (1) selecting actuarial costs methods, (2) determining the reasonableness of actuarial assumptions, (3) establishing realistic amortization periods for actuarial gains and losses, and (4) recognizing unrealized appreciation of pension fund assets.

We also believe that the size and complexity of contractors' pension programs is such that significant benefits would accrue from periodic review and evaluation of their pension plan practices and costs.

We suggested that the Army consider using Defense Contract Administration Services (DCAS) to assist in the oversight of contractor pension plans at the ammunition GOCO plants. DCAS employs 12 insurance and pension specialists who review cognizant defense contractors' pension and insurance costs, procedures, and practices. The DCAS reviews have been worthwhile resulting in major savings in Government reimbursements of contractors' pension plan costs.

The Army responded that DCAS assistance would not be necessary, since it was recruiting an actuary for establishing pension policy and expanding on current review procedures. In June 1976, however, we were advised that the Army had not been successful in recruiting an actuary and was seeking authority to hire an insurance specialist instead.

Conclusions

The Army does not have an effective system or sufficient expertise to monitor and evaluate contractor pension plan practices and their effect on Government-reimbursed costs. In addition, contractors have not been required to routinely provide the Army with complete information on their widely varying pension plan practices and on the actuarial and financial condition of their pension plans.

We believe the Army can improve its oversight of contractor pension plan practices by requiring contractors to report regularly on pension plan practices and on the actuarial as well as financial condition of their plans. Reviews of contractors' pension plan programs by the insurance specialist the Army intends to hire and coordination with DCAS review activities when applicable would thus be facilitated and lead to more uniformity in contractor pension plan practices.

The need to develop better oversight procedures is more apparent with the issuance of cost accounting standard for pension plans. The standard dealing with the composition and measurement of pension plan cost (CAS 412) should increase consistency and uniformity in accounting for pension costs.

CAS 413, dealing with adjustment and allocation of pension plan costs, provides additional means to equitably allocate such costs to Government contracts.

APPENDIX II

DEFINITIONS OF ACTUARIAL TERMS

Actuarial cost method

--A technique using actuarial assumptions to measure the present value of future pension benefits and pension fund administrative expenses. They are also used in assigning the cost of such benefits and expenses to specific periods.

Actuarial assumptions

--Predictions of future conditions that affect pension plan costs. For example, assumptions are made for annual salary increases, investment earnings, employee turnover, and employee mortality. Actual events seldom coincide with estimated events and differences result in actuarial gains and losses. As conditions change, the assumptions may need to be revised to reflect actual experience and reasonable future expectations.

Actuarial gain and loss

--The effect on pension plan cost resulting from differences between actuarial assumptions and actuarial experience.

Current funding

--The contractor practice of annual funding of the actuarial cost of pension plan benefits and expenses using recognized actuarial cost methods. The term does not mean the use of the pay-as-you-go cost method which is not acceptable under the Employee Retirement Insurance Security Act of 1974.

Deferred funding pension plan

--Costs are not recognized or funded at the time an employee becomes eligible under the plan, but are deferred for several years or until the employee acquires full or partially vested pension rights.

Past service costs

--Pension costs assigned, under the actuarial cost method in use, to years prior to the inception of a pension plan.

APPENDIX II

Prior service costs

--Pension costs assigned, under the actuarial cost method in use, to years prior to the date of a particular actuarial assumption. Prior service costs include remaining past service cost.

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