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Problems of Profit Determination Encountered By Government Contractors

Vera B. Coulter, CPA

Just as weapon systems have grown more and more complex so have the provisions surrounding government contracts. If the products being purchased by the government were those being used in every-day commercial activity so that prices and performance were well established, all contracts could be firm-fixed price, and accounting problems would be little different from those for commercial products. However, much of the work done for the government has not been done before, making it impossible to estimate the costs of doing the work and to arrive at what both parties consider a fair price on a firm-fixed-price basis at the time the contract is originally negotiated. Hence, contracts range all the way from firm-fixed-price to cost-plus-fixed-fee with various degrees of incentive provisions in between.

Whenever cost-type contracts are involved, the issue of what constitutes reimbursable costs becomes important because the contractor's sales price depends on the costs for which he will receive payment. These costs are determined by the terms of the contracts and other regulations incorporated therein. The basic principles and procedures regarding contracts with the Department of Defense are described in the Armed Service Procurement Regulations usually referred to as ASPR. Other government agencies, such as the National Aeronautics and Space Administration and the Atomic Energy Commission, have their own regulations as they do not come under the Department of Defense.

Section XV of ASPR which is entitled "Contract Cost Principles and Procedures" is important to accountants dealing with government contracts. This section states that the contractor will be reimbursed for direct and indirect costs. Direct costs are not limited to material and labor but are costs identified specifically with a contract. Thus it is permissible to charge items which would normally be charged to overhead directly to contract costs, provided that like items are not charged to overhead and distributed to the same contract.

Indirect costs are reimbursable to the extent that they are determined to be reasonable, allocable and allowable in view of other factors set forth in ASPR. ASPR 15-201.3 states that "A cost is reasonable if, in its nature or amount, it does not exceed that which would be incurred by an ordinarily prudent person in the conduct of competitive business." ASPR 15-

201.4 provides that "A cost is allocable if it is assignable or chargeable to a particular cost objective, such as a contract, product, product line, process or class of customer or activity, in accordance with the relative benefits received or other equitable relationship. Subject to the foregoing, a cost is allocable to a government contract if it:

- (i) is incurred specifically for the contract;
- (ii) benefits both the contract and other work, . . . and can be distributed to them in reasonable proportion to the benefits received; or
- (iii) is necessary to the overall operation of the business, although a direct relationship to any particular cost objective cannot be shown."

Among the other factors are costs specifically excluded, such as trade or institutional advertising, bad debts, contributions and interest or other financing costs. This entire section of ASPR is stated in rather general terms and there is often a difference of opinion on the interpretation made by the government auditors and the contractor's accountants.

Cost-type contracts may provide for reimbursement of actual overhead costs or negotiated overhead rates. Under the negotiated overhead rate provisions, the contractor is required to submit an overhead claim usually within 90 days after the close of his fiscal year. This claim is then subject to audit by the government auditors who submit an audit report stating their findings. This information becomes the basis for the government representative to meet with the contractor and negotiate a rate. It is this negotiated overhead rate that becomes part of the sales price of the contract. Since negotiations may be held anywhere from six months to a year after the close of the contractor's fiscal year and since it may be even longer before a rate is agreed upon, it is easy to see that determining the amount of overhead for which the contractor will be reimbursed can become a problem.

After the contractor has decided on the overhead rates to use in computing his sales price, he still has to be concerned over how much fee to accrue since sales recorded under cost-type contracts are based on costs as incurred plus all allocable fees. In the case of cost-plus-fixed-fee (CPFF) contracts, he knows how much his total fee is and the problem of allocating the fee

becomes similar to any contract where percentage-of-completion method is used to determine gross profit. For the past several years many of the large contracts have been CPFF type of contracts. Prior to 1965, 80% of NASA's business was awarded on a CPFF basis because of the difficulty of setting a firm-fixed price for such products as a capsule to go to the moon. Now more and more NASA contracts contain cost-incentive features. Cost-incentives may be incorporated into fixed-price-incentive contracts or cost-plus-incentive-fee contracts.

Cost-plus-incentive-fee (CPIF) contracts provide for the negotiation of a target cost, a target fee, a maximum fee and a minimum fee, and a fee adjustment formula. For instance, consider a contract with a target cost of \$100,000, a target fee of \$7,000, and a fee adjustment formula of 80%-government and 20%-contractor. Assume that a maximum fee of \$9,000 was provided and a minimum fee of \$5,000. If the total cost is decreased from the target cost of \$100,000 to \$95,000 the contractor's fee increases 20% of \$5,000 or from \$7,000 to \$8,000. This fee continues to increase until cost reduction reaches \$10,000, making costs \$90,000 at which time the maximum fee will be earned and any further cost reduction will benefit only the government. Conversely, if the cost goes up to \$105,000, the contractor's fee will go from \$7,000 to \$6,000. By the time the cost reaches \$110,000, the contractor will be entitled only to the minimum fee of \$5,000 and any other cost will be born solely by the government. It is interesting to note that once the minimum fee is reached a CPIF contract becomes in effect a CPFF contract, with the contractor receiving a fixed fee plus his reimbursable costs.

Under the fixed-price incentive contract, there is negotiated a target cost, a target profit, a price ceiling, but not a profit ceiling or floor, and a formula for establishing the final profit and price. This formula is based on the relationship which final negotiated total cost bears to total target cost. Once the price ceiling is reached in this type of contract, it becomes like a firm-fixed-price contract with any additional costs borne by the contractor.

Sharing formulas come in a wide variety and depend upon the contractor's and the government's confidence in the target cost, the probability of overruns or underruns and the difference between target fees and maximum and minimum fees.

In addition to providing cost incentives, the government is now attempting through the use of weighted guidelines to establish the profit according to the degree of risk undertaken by the contractor. These guidelines suggest ranges for various cost elements within a

given contract ranging from 1% to 4% for purchased parts and materials, to 9% to 15% for engineering labor. The contract negotiator assigns the rate he thinks most applicable and multiplies this rate by the target cost to arrive at the target profit by cost element. These target profits by cost element are then added together to arrive at a total target profit which is divided by total target cost to arrive at the rate. The rate is then adjusted either up or down depending upon the contractor's assumption of risk, his record of past performance and other selected factors. Once the percentage profit is reached, weighted guidelines add no additional complications to the accountant's task of accruing profit.

This is not to say that there are no additional complications, for the government in its attempt to increase the profit motive of government contractors has now gone to more and more types of incentives. Among these is one created by value engineering.

Value engineering is an organized effort on the part of the contractor directed at achieving the same products, quality and performance at a lower cost. The value engineering clause allows the contractor to retain a predetermined share of all cost savings resulting from the effort. After the cost reduction is determined and approved by the contracting officer, the target cost and fees are adjusted accordingly. Under incentive contracts, the contractor's share of the savings may be as high as 50%. This means that the accountant must take these changes into consideration before starting to determine the profit to accrue.

An increasing number of contracts now have performance incentives. Performance incentives consist of such items as the following:

Performance of the Product

- Range of a missile
- Speed of aircraft
- Thrust of an engine
- Maneuverability
- Fuel economy

Performance of the Contractor

- Delivery
- Meeting test schedules
- Quality control
- Maintenance requirement
- Reliability

These incentives are handled in much the same way as cost incentives in that a fee is decided upon for the various incentives. Within the range of acceptable achievement, additional fees are then awarded for bettering the goals or penalties assessed for failure to reach them.

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It would be well at this time to review returns filed for those periods to determine that all elections have been validly made. Any deficiencies can then be remedied within the statutory period.

While on the subject of elections there are certain statutory limitations upon related corporations where controlling dates are most important. As previously stated, December 31 is the controlling date when apportioning the \$25,000 surtax exemption under Section 1561 and the multiple surtax election under Section 1562 of the Code. In the case of the \$25,000 limitation of investment credit the apportionment is as of the last day of the parent company's tax year. On the other hand, apportionment of the additional first year depreciation under Section 179 of the Code is based on the years of the members of the group ending with, or within, the parent's tax year.

While the controlled corporation sections of the Code are of paramount importance, there are many other tax aspects which should be considered. The 1964 Revenue Act has given rise to new problems that are apt to be overlooked upon first exposure to the Act. One of these is unintentional dividends. Prior to enactment of Sections 1245 and 1250 of the Code it was common practice for related corporations to transfer fixed assets to one another at their net book value. If the fair market value of these assets is in excess of that value, the Treasury Department may adjust in accordance with the recapture provisions; and, at the same time, characterize the bargain transfer as a dividend over to the recipient corporation.

When purchasing used Section 38 property, credit may be taken up to \$50,000 of the purchase price in any one year. In the case of an affiliated group (which contemplates more than 50% stock ownership) the \$50,000 must be apportioned among the members of the group on the ratio of used property purchased by each, to total used property purchased by the group. The danger here is that if a Subchapter S corporation is a member of the group it is frequently overlooked in the apportionment calculation, because of its nontaxable status. This credit flows through to the individual stockholders, but is based on apportionment at corporate level.

Only a very few of the problems of related corporations have been touched upon here, but the basis of their selection is the frequency with which they occur, regardless of the size of operation. It is hoped that attention has been called to the necessity of the accountant giving thought to the many problems inherent in the existence of an affiliated group.

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For instance, assume a contract for production of an airplane with the following provisions:

	Maximum Reward	Target	Maximum Penalty
Performance	1,050 MPH	1,000 MPH	990 MPH
Cost	\$80 Million	\$100 Million	\$140 Million
Schedule	27 Months	30 Months	33 Months
Incentives			
Performance	\$6 Million	\$2 Million	0
Cost	7 Million	5 Million	\$0 Million
Schedule	1 Million	0 Million	- 1 Million
	<u>\$14 Million</u>	<u>\$7 Million</u>	<u>-\$1 Million</u>

In this case if target is achieved on everything, the fee will be \$7 Million. The fee could be increased to \$14 Million if the maximums were reached on all incentives or fall as low as a negative \$1 Million.

It now becomes apparent that the contractor may have some trade-off choices. He may have produced the airplane at a cost of \$80 Million within 27 months and have achieved a performance of 990 MPH, thus making him entitled to a fee of \$8 Million. He may decide that by spending an additional \$20 Million in another six months, he can increase the performance to 1,050 MPH and thereby achieve the maximum product performance fee. In this case his fee would be as follows:

	In 27 Months	In 33 Months
Performance	0	\$ 6 Million
Cost	\$7 Million	5 Million
Schedule	<u>1 Million</u>	<u>-1 Million</u>
	<u>\$8 Million</u>	<u>\$10 Million</u>

He would have increased his fee by \$2 Million. The trade-off choices shown above are possible under the contract. However, government contractors must keep foremost in mind that the best possible product, at the lowest cost, must be delivered on time.

It is easy to see that the incentives are interwoven and must be considered together in order to compute the final profit which will be realized on the contract. The accountant's task thus becomes complex, for not only must he obtain engineering and production estimates of cost to complete the contract; but he must also obtain estimates of time and performance. Having obtained the estimates, he must review them before making a decision of how much fee to accrue.

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Annual Meeting American Woman's Society of Certified Public Accountants

In accordance with Article V, Sections 1 through 4, of the Bylaws of the American Woman's Society of Certified Public Accountants, notice is hereby given that the regular Annual Meeting of the Society will be held at 9:00 A.M. on Saturday, October 1, 1966 in the Somerset Hotel, Boston, Massachusetts.

Frances D. Britt
Secretary 1965-1966

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He is also faced with some problems in accounting theory. Should he accrue a fee on performance because the engineers say that the product will reach a certain performance when only a final test will prove that such a performance has been achieved? Should he wait for the test, thereby increasing or decreasing profit possibly as much as a million dollars at one time? These are major decisions which accountants can and do argue pro and con.

Having thus arrived at the fee rate to accrue and the costs believed to be reimbursable, the accountant can proceed to prepare his financial statements. At this point, he still has to worry about whether the Renegotiation Board will take part of it away from him.