94512

Not for publication until released by the Joint Economic Committee

×.,

¢

ţ.

STATEMENT OF HONORABLE BARRY J. SHILLITO ASSISTANT SECRETARY OF DEFENSE (INSTALLATIONS AND LOGISTICS) AGC00/89

BEFORE THE

SUBCOMMITTEE ON PRIORITIES AND ECONOMY IN GOVERNMENT JOINT ECONOMIC COMMITTEE

DECEMBER 21, 1972

094512

BEST DOCUMENT AVAILABLE

18 K.

Mr. Chairman and Members of the Committee:

I appreciate the opportunity to appear before the Joint Economic Committee once again. Your letter of 30 November 1972 indicated that the Committee is interested in discussing several of our procurement policies and practices as related to the acquisition of major defense systems. My statement will cover the items mentioned in your letter. Historically, most of the areas you would like to discuss have caused us problems. There have been problems in our handling some of these areas, and I am sure some problems will surface in the future in spite of our best efforts to prevent them. Nevertheless, we have moved vigorously to correct shortcomings revealed by our own internal reviews as well as those that are brought to our attention from outside the Department. It should be emphasized that most of our shortcomings are highlighted as a result of our own reviews. This includes several of the areas you will probably want to discuss. Conducting reviews and correcting deficiencies in an organization the size of the Department of Defense (DOD) is a never ending task. Recognizing this fact, I want to assure the Committee that the Department of Defense has moved and will configure to move vigorously BEST DOCUMENT AVAILABLE to improve our policies and their implementation.

Before discussing the several specific topics which you identified, I would like to cover briefly a few items that are often overlooked in connection with defense expenditures. As has been true for the past several years, the national defense budget continues to reflect the substantial shift in our priorities from defense to civilian pursuits. In current dollars, defense spending has risen \$24.7 billion since 1964. Other Federal spending has risen \$103 billion. State and local spending has risen \$113 billion.

Defense spending as a per cent of the Gross National Product will amount to 6.5% in FY 1973 compared to 8.3% in the prewar year of 1964. This is the lowest per cent of GNP in the past two decades.

In addition, the per cent of our budget that is devoted to manpower costs has increased significantly. For example, in FY 1964 we spent 43% of our budget for these costs while in FY 1973 this will be 56%. We cannot afford to allow this shift to continue.

All of these changes have placed great pressure on the Department to make the most of the funds that are made available by the Congress for the acquisition of major defense systems. Many of the actions we are taking to improve our acquisition policies and their implementation are the result of this environment.

MAJOR DEFENSE SYSTEMS ACQUISITION

During the past four years, the Department of Defense has instituted substantial changes in its policies for the Acquisition of Major Defense Systems. These broad policy changes were formalized in DOD Directive 5000.1, issued in July 1971 after 2 1/2 years of study. The major areas of change are the requirements for: prototype competition, reduction of concurrency, designing to cost, and increased operational test and evaluation prior to production decisions.

BEST DOCUMENT AVAILABLE

Any objective look back over the past four years must conclude that substantial accomplishments have been made in our defense systems decision making process. Let me summarize a few highlights.

The <u>Development Concept Paper (DCP)</u> has been broadened and become the primary management tool for controlling the orderly development and acquisition of defense systems. For this reason, the DCP is now called the <u>Decision Coordinating Paper</u>. First, as a decision device, it identifies the major issues with their pros and cons, reflecting all the major challenges to the proposed program for review by the Secretary of Defense. Subsequent to the decision by the Secretary, the DCP becomes the "contract" between the Service and the Secretary of Defense. A breach of this "contract" is cause for review of the program, and possibly a revised decision.

The <u>Area Goordinating Paper (ACP)</u> furnishes a broad look at over-all areas, e.g., Fleet Air Defense, and examines the threat, problems, and solutions. Recommended solutions and over-all plans permit logical decisions on individual defense systems. Ultimately all DCPs will be in support of ACPs. **BEST DOCUMENT AVAILABLE**

The <u>Defense Systems Acquisition Review Council (DSARC)</u>, now widely known as the DSARC, serves as an advisory body to the Secretary of Defense on major defense programs when program decisions are necessary. It also conducts management reviews on these programs. Reviews by the DSARC provide a forum for open discussion of issues and

alternatives to ensure that the advice given to the Secretary of Defense is as complete and as objective as possible. Thus far, approximately 60 major defense systems have been reviewed by the DSARC.

The <u>Cost Analysis Improvement Group (CAIG)</u> was organized as a sub-group to the DSARC. This group is responsible for: (1) developing uniform criteria to be used by the Services in preparing program cost estimates; (2) monitoring and assisting the Services in establishing independent cost estimating capabilities, and (3) reviewing the program cost estimates of the Services so as to provide the DSARC with an assessment of the adequacy of the cost data submitted.

Adequate <u>Test and Evaluation (T&E)</u>, starting early in the acquisition process, insures that long-range commitments are not undertaken until concepts and hardware designs have been validated. Readiness to move forward at each subsequent milestone is required to be substantiated by Test and Evaluation.

These policies provide for a process of incremental acquisition. That is, decisions are made sequentially to permit each individual system to proceed through go no-go gates along the development path only when it has been established that the previous step has been completed successfully or that a high degree of technical confidence has been reached.

Total costs are a paramount concern from the inception of the program -- in fact, cost has been made a design parameter. The initial decision to start development will be made only if estimated total costs of development, acquisition, investment and operation of the projected system

are commensurate with the projected performance and also are affordable within realistic budget constraints. During the development process, cost will be the priority target for the designers.

In our incremental acquisition strategy, we have moved from the past practice of basing decisions on paper studies and analyses to basing them on hardware demonstrations. This demonstration is in the form of system and equipment prototypes, such as the AX, the lightweight fighter, the advanced attack helicopter, the surface effects ship and other recent programs. Largely, these are competitive hardware prototypes. Some cost reduction is achieved via the force of competition. There is an incentive to the participating contractors to keep costs down and performance at the highest level within the cost constraint in order to be selected as the source to proceed with the subsequent production contract.

Thus, through the use of the incremental approach, coupled with the increased use of prototypes and hardware demonstrations, we believe we will greatly reduce the degree of concurrency in system programs. This approach should provide a measure of cost control by reducing the potential for subsequent technical problems with their corresponding increases in cost.

I feel that the present policies are sound and they are enabling us to move forward successfully into areas that previously had been difficult to manage. Our future endeavors are being directed toward effective implementation of these policies.

BEST DOCUMENT AVAILABLE

I would like to turn now to an area that we are emphasizing to a much greater degree than heretofore. We call this the "Design-to-Cost" concept. DOD Directive 5000.1, mentioned earlier, states:

"Cost parameters shall be established which consider the cost of acquisition and ownership; discrete cost elements (e.g., unit production cost, operating and support cost) shall be translated into 'design to' requirements. System development shall be continuously evaluated against these requirements with the same rigor as that applied to technical requirements. Practical trade-offs shall be made between system capability, cost and schedule. Traceability of estimates and costing factors, including those for economic escalation, shall be maintained."

This policy introduces two points -- design to and trade-offs. The traditional roles of price and performance are reversed; production unit price is fixed while performance is made a variable. Performance and schedule will be subject to trade-offs in order to meet the design-to production costs. In the past the designers paramount consideration has been to meet performance requirements with insufficient regard to producibility or production costs. The objective of "design-to-cost" is to require the engineer to consider the impact of design alternatives on the production costs and the operating costs.

BEST DOCUMENT AVAILABLE

In implementing this policy, cost control is crucial. It is necessary, therefore, that advanced technology be used deliberately to hold costs down -- not to add performance at any price. It is necessary also that techniques of estimating the unit procurement and lifetime costs of systems be improved. It is necessary to set realistic cost ceilings and attempt to stick to them.

All this, while difficult to execute, is reasonable. We are applying this approach to a few new development programs, and some are far enough along to give us confidence we are on the right track. Of course, one of the difficult but crucial elements in this new approach is how one sets cost ceilings.

One area of particular concern has been in the field of electronics with its high, and rising, unit costs with low field reliability. Among the answers to this problem has been designing to a price, standardization, and supplier responsibility for field reliability.

The Department of Defense has initiated a study for cost reduction, now being conducted as the first part of a two year plan for low cost electronics. This study is being conducted by distinguished research corporations, selected industry participants, and Government agencies, under the coordination of one research agency. The program is being directed by a steering group chaired by Doctor Foster. This joint DOD and industry effort is tasked to examine the overall process of requirements, specifications, development and acquisition; determine the effect of R&D on

BEST DOCUMENT AVAILABLE

production costs, installation costs, support costs, maintenance requirements and cost, and equipment availability; and recommend procedural and institutional changes that will reduce cost and increase effectiveness of DOD electronics.

Some of the specific areas of interest under consideration by this group are: the possibility of institutionalizing the process whereby requirements are traded off with capability and cost; parametric cost estimating - whether it will work and whether other methods are available; how to motivate systems developers to have equal concern for cost, reliability and performance; impact of design-to-cost and design trade-offs on avionics cost-of-ownership; and possible application of failure-free warranty as in commercial practice.

The military departments have several price-limited prototype development programs now in process. In addition, there are Army lab and field tests being conducted of functionally equivalent commercial and military specification avionics equipment.

The second year of the program envisions DOD coordination of the recommendations developed by the study for cost reduction. Prototypes will be initiated for the next generation equipment requirements to include a specification on production cost; and incentives to military and industry for low-ownership costs.

While the thrust of the "design-to-cost" policy is to reduce production cost and life cycle costs through the design to-tradeoff concept,

it does not replace our other efforts to control costs. Cost reduction which can be achieved without degradation of performance will continue to be aggressively pursued. New manufacturing methods, labor saving devices, cheaper materials, simplified designs and other ideas all will be continuously considered and exploited. Contractors will continue to be encouraged to use their ingenuity to achieve cost reductions through value engineering and other contract incentives. In addition, we are making increased use of "should cost" techniques with which your Committee is quite familiar.

I have just described to you our current activities governing major defense system acquisition, the current decision making process, and some of the main areas in the acquisition process where we are attempting to apply incentives to control cost -- not only in our contractual relationships with industry but internally within DOD as well.

One of our priority areas of concern for many years has been to find ways to cope with rising costs and to keep programs reasonably within a budget figure. When we think of incentives, I am sure most people have in mind incentive provisions in contracts, the objective of which is to induce the contractor to cut costs and corperpendingly increase his profit. This is a rather narrow view. Incentivizing contractors is a small part of the total DOD and Industry incentive picture. There is only a limited amount which a contractor can save. In fact, the amount available for defense hardware is directly affected by our ability to control our other more consequential costs. DOD, as the buyer, has an incentive, because

of reduced budgets and rising internal costs to insure the control of all our costs, and, in fact, to eliminate our nonessential costs. If we can't do this job properly, our needed force size will suffer and we just can't allow this to happen. The things which I have discussed are the result of that <u>incentivizing</u>. We are still a long way from achieving a perfect system. There is much work yet to be done to improve the techniques I have described and to ensure that they are adequately implemented and properly applied. I am convinced that we are moving in the right direction and that the steps Defense is taking do face up to its responsibility to provide an adequate defense within reasonable cost limits.

PROGRESS PAYMENTS

Next, I want to discuss some of the particular areas you asked about, starting off with progress payments.

Progress Payments are an essential element of Defense procurement. It is a long-standing DOD policy to provide progress payments when reasonably needed for the prompt and efficient performance of our contracts. Many defense contracts, in fact most contracts for complex hardware, involve extended periods of performance and large investments of funds before any deliveries and billings are made. Furthermore, interest is not an allowable expense under defense contracts. Thus, without progress payments, very few contractors would have the financial resources or working capital to perform defense work. Accordingly, it is in the government's interest to make progress payments. They are a

10

BEST DOCUMENT AVAILABLE

useful working tool which broaden the base of companies able to compete for defense business, and make possible a volume of production that could not otherwise be accomplished. As you know, similar payments are sometimes used in other segments of our society for the procurement of major items involving significant cost or long time periods for production.

As you may know, the development of DOD progress payment policy is the responsibility of my office. I am assisted in this matter by the Contract Finance Committee, which is an inter-Departmental group composed of a procurement representative from my office, a finance representative from the Office of the Assistant Secretary of Defense (Comptroller), and two representatives (procurement and finance) from each of the Military Departments and DSA. The Committee, chaired by my delegate, also receives technical assistance from the Defense Contract Audit Agency and OSD General Counsel's office.

The Contract Finance Committee, created in 1950, formulates policy which is transmitted via Appendix E of the Armed Services Procurement Regualtion to the operating agencies and Departments.

The responsibility for proper implementation and administration of progress payment policy rests with the Military Departments. <u>Changes in Progress Payment Policy</u> BEST DOCUMENT AVAILABLE

During the past year at least four major improvements have been made in our financing policy as it relates to the reimbursement of costs on cost-type contracts and the payment of progress payments on fixed-pricetype contracts. These are: 1) payment only on the basis of cash disbursed

by the contractor for purchased material and subcontracted items; 2) uniform biweekly payments; 3) elimination of the alternate method of recoupment or liquidation of progress payments until cost and profit trends are known; and 4) more accurate data-gathering on the status of progress payments. I believe the changes in contract financing policy will reduce some of the inequities of the past, decrease the level of governmentprovided financing and ensure that all contractors have a greater cash investment in their work-in-process inventory.

These substantive changes, which apply to all contractors other than small business concerns, were made applicable to new contract solicitations issued on or after 1 January 1972. The details of the policy changes were described in Defense Procurement Circular No. 94 dated 22 November 1971, later incorporated in the Armed Services Procurement Regulation through Revision 11. Appropriate changes were also made to recognize the changes in the payment clauses for both cost and fixedprice-type contracts.

Foremost among the changes introduced in contract finance policy was a requirement that contractors (other than small business contractors) pay their vendors and subcontractors for direct material and subcontract cost prior to billing the government for these charges. The effect of this policy change in these cases is to require direct material and subcontract costs to be handled on a "cash disbursed" basis rather than on

an "accrued cost" approach. There has been no change relative to small business companies which are still provided progress payments on the "cost incurred" basis.

The policy providing for uniform biweekly payment for all contractors standardizes the Department of Defense position and eliminates the varying payment practices which in the past have permitted paying some contractors more frequently than others. We believe the new approach will also reduce the administrative cost to DoD.

Looking at the other end of the cycle, several questions arise. How do you recoup progress payments and apply the amounts paid to the price of the units procured and delivered? Do you recover them over a specific time frame Do you recover them on a proportional basis? Do you pay part or all of the profit due when the items are delivered, unit by unit? The intricacies of the various methods of recoupment are complex and not easily understood by the layman.

There have been several methods used over the years since no one method seemed entirely suitable for every case. The usual method employed to recoup progress payments closely parallels the basis on which payments are made. This method, referred to as the "Ordinary" method of liquidation, delays the payment of practically all profit until the final delivery of the last item on the contract. Another method, called the "Alternate" method, allows the contractor to be paid profit on each item as it is delivered to the Government. Our regulations have been

changed to curtail the use of this latter method unless specific conditions are met. The effect of this change is to require contractors to establish actual cost and profit trends prior to recovering a portion of the profit on deliveries under the contract, rather than base recoupment on the negotiated rate of profit.

You recognize I'm sure that it is extremely difficult in an ongoing contract to determine the unit cost of each item delivered and the value of the work-in-process inventory every few days or weeks. As a matter of fact, it is inconceivable to me that any accounting system or technique can be sufficiently precise to reflect this data on a current unit basis. Where the contractor's accounting system uses either actual historical or standard costs, such costing can only be done, realistically on a "lot" basis. Start-up, preproduction, tooling, labor efficiency variances -- are all heavy initial burdens in any weapon system program. This, coupled with development costs, must result in certain arbitrary allocations to develop unit costs. In these situations, contractors, using sound judgment, may allocate costs between delivered items and work-inprocess items differently. In order to constrain this judgmental area, Defense regulations permitted the use of actual cost, actuals plus cost estimates, or target costs in determining the cost of delivered units. In some cases such as in a tightly priced contract, this last method may have provided a temporary financial advantage to a contractor. The eternal

optimism of the American businessman is that the worst is always behind him and the best (i.e., the most profitable) lies directly ahead. In many major contracts, however, the contract costs and possibly losses are not known until the contract nears completion.

Our Internal Auditors questioned the use of the "target cost" method for handling recoupment of progress payments and recommended that it be deleted. We examined this matter very carefully and concluded that the recommendation was a sound one and that it should be adopted. When the DD 1195 Form was revised in April 1972, this method was removed.

An additional change was introduced to improve our data gathering mechanism for requesting and reporting the status of progress payments. Where two forms were previously required, we have been able to cut down the paperwork by <u>consolidating</u> the two forms into one modified version serving both purposes. We believe this consolidation will materially assist us in obtaining more accurate data on the status of progress payments.

OSD Internal Audit Report on Progress Payments

You recently requested copies of an internal audit report dealing with the subject of progress payments. As we stressed in our transmittal letter to you, such unbridled technical evaluations are essential if we are to continue to improve the management of this phase of Defense procurement. I believe that it is important to note that the audit report issued

by the Office of the Deputy Assistant Secretary of Defense (Audit) reflects principally on the procedural matters of applying and administering progress payments. The report highlights the fact that the Auditors noted incorrect interpretations of regulatory guidance and faulty mathematical applications which tended to compound the errors discovered.

As I have explained, the subject of progress payments is a highly complex one involving sophisticated financial procedures. To completely understand and adequately administer this area requires training and experience. While I do not believe we should become involved here with the various complicated precedures and minute technical details of progress payments, I think it is vital to point out that the findings in the audit report should not be interpreted as indicating a loss of substantial funds to the U.S. Government. Unless we are careful, this misunderstanding can easily be caused. In essence, it should be clearly understood that the deficiencies noted did not result in the payment of any significant amounts that would not have otherwise been paid at some future period to the contractor. In some cases payments were premature and in other cases the amounts paid were the result of misinterpretations of administrative guidance. We have taken action to correct these situations and we will continue to stress the need for each Department and Agency to closely monitor this important aspect of procurement policy.

Over-all Decline in Progress Payments

During the past four years, we have seen a steady downward trend in the over-all amount of progress payments outstanding. The following

table shows progress payments outstanding by Military Departments at the end of fiscal years 1969-1972:

Â	MOUNT UNI	LIQUIDATED (Out	tstanding)	
(\$ Millions)				
	June 30, 1969	June 30, 1970	June 30, 1971	June 30, 1972
Army	\$ 875	\$ 943	\$ 718	\$ 494
Navy	23 86	2370	2169	2040
Marine Corps	10	12	6	6
Air Force	4027	4613	2516	1845
DSA	9	9	13	10
TOTAL COST BASED	7307	8027	5422	4395
NAVY- SHIPBUILDING	2156	1814	2301	2648
TOTAL	\$ 9463	\$9841	\$7723 /	\$ 7043

PROGRESS PAYMENTS (Cost Based + Shipbuilding)

You will note from this table that on June 30, 1969 the total amount of progress payments outstanding was \$9.463 billion. By June 30, 1972 this sum had declined to \$7.043 billion, a decrease in total dollars outstanding of approximately 25% during the three year period. The largest decrease during this period is attributed to decline in cost-based progress payments which on June 30, 1969 were \$7.307 billion. By June 30, 1972 this category had been reduced to \$4.395 billion, a decline of almost \$3 billion during the above period. From 1969 to 1972, Navy shipbuilding

progress payments outstanding rose from \$2.156 to \$2.648, reflecting the growth of the Navy's procurement program for ships. We anticipate that this figure will be reduced when deliveries begin on the major vessels presently under construction; then it should rapidly decline as ships are delivered to the fleet.

In summary, we believe that during the past few years significant progress has been made in the improvement of financial controls and the administration of progress payments. Technical audit evaluations such as that rendered by the Deputy Assistant Secretary of Defense for Audit have been valuable tools in helping us gain better control and improve our financial management of contract operations. We have been our own severest critics in this area.

As a closing comment on the subject of progress payments, I want to make it clear that we are talking here only about fixed-price type contracts. Payments are made in a similar manner under cost-reimbursement type contracts, i.e., periodic payments on the basis of costs incurred. However, they are not considered unliquidated payments which are later liquidated by deliveries of hardware at a specified billing price. Payments under cost-reimbursement type contracts are considered as reimbursement for work performed as of each billing period. Progress under such contracts, by their very nature, is generally not measurable in terms of line items or discrete elements. Rather, it is measured only by costs incurred against an estimated total cost to achieve a contractual objective.

Industrial Plant Equipment

When I appeared before the Committee last year I was pleased to be able to tell you that we had been able to selectively reduce the amount of industrial production equipment in the possession of contractors by 25% in the last two years. I am again pleased to state that this reduction is continuing. By 30 June 1972 the acquisition value of industrial plant equipment in the possession of contractors was down by 37% when compared to 30 June 1968. We had actually expected to do better than this. The naval blockade of Haiphong harbor and increased use of naval vessels to shell land bases in Southeast Asia as well as the increased aerial bombardment in North Vietnam required us to keep production of naval gun ammunition and air munitions at a high level. When this is no longer necessary we may be able in an orderly manner to make further significant reductions in the amount of Government-owned plant equipment in the possession of these type contractors.

In March of 1970 the Department of Defense instituted a program for the phase-out of Government-owned industrial facilities in the possession of contractors. This program was initiated at a time when we had to plan for indefinite continuation of support of our Armed Forces in Southeast Asia. It gave contractors three years to submit a phase-out plan and five more years to complete it. Last year I reported that, as of 31 December 1970, 111 phase-out plans had been submitted and approved and that approximately 700 more were in process of review. By 30 June 1972 a total of 461 phaseout plans had been approved. We have had to slow down this program for what I consider to be very valid reasons. First, with the phase-down of U.S. troop support in Vietnam we no longer want to give contractors up to a total of eight years to return our equipment. We want it back much sooner than that. Most of the equipment in the 37% we have had returned since 1968 was recalled without a phase-out plan. Secondly, our industrial preparedness planning has resulted in the identification of instances where it is essential that the Government equipment remain in the contractor's plant to assure the capability for quick response in the event of a national emergency. For this latter reason, we have granted exemptions from phase-out plans to 20 contractors to retain in their plants a total of 66 items with an acquisition value of about \$1.3 million.

In the past, you have expressed interest in the comparability of Government rental rates-for plant equipment with those of commercial leasing firms. As you know, these rates were increased in 1968 to slightly exceed commercial rates. Nevertheless, in May of 1971 we requested the Office of Emergency Preparedness, which is responsible for setting the rates, to review them to determine whether they still were comparable to commercial rates. After a review of the matter, we were advised by OEP that the rates were still generally comparable to commercial lease rates. We are still not happy with our current system of charging rent which involves considerable bookkeeping

and surveillance with attention being given to amount of utilization, commercial use of the equipment and similar factors. For this reason we are having a study made of the whole system to see if we can't find a better way to do it. This study is now underway.

A closely related matter is the number of Government plants owned by the Department of Defense. In 1954 we owned 288 plants. Last May I told you the number had been reduced to 189 and I am pleased that the number is currently down to 183. Twenty-two (22) of these are inactive. In view of recent economic conditions it has been difficult to sell these plants which are generally big and expensive. Negotiations are underway, however, to try to sell several more and we are hopeful that they will be successful.

An important consideration in removing our equipment from contractors' plants is the need to be able to get back into production quickly in the event of future demand for support of our armed forces. In some instances it is necessary that the equipment remain in place ready for use in such an emergency. Even under these circumstances it is not necessary, however, that the Government own the equipment if we could be assured that it would remain available for defense production. Under existing authority if we sell such equipment it must be by public sale and thus we have no assurance of its future availability. Last year I mentioned that legislation was pending in Congress which would authorize sales to the contractor possessing such equipment when availability of the equipment for future defense production would be assured. This legislation passed the House of Representatives but was not acted upon by the Senate prior to adjournment. We understand this legislation will be reintroduced in the next Congress. If it is enacted it will be of great assistance in our effort to reduce Government ownership of industrial plant equipment. It will also assist in reducing our problems of surveillance and management control.

In summary the management of our industrial plant equipment is difficult and complex. We must see that the items needed to support our armed forces as well as adequate war reserves to assure national security are available. Furthermore, we must do this at the lowest possible cost. We are attempting to obtain these supplies in the fairest possible manner to both the taxpayers and to industry with due concern to such things as small business interests as well. Our overall objective remains to reduce the amount of Government-owned facilities in the possession of contractors without endangering the capability of the country to defend itself. I think the figures indicate that we are succeeding.

Industrial Preparedness

The Department of Defense, has long been concerned about the impact the downturn in Defense expenditures was having on defense-related industries. The disappearance of production capability for Defense in terms of skills and people has serious implications not only for industry

and the economy as a whole but also for Defense readiness in terms of preparedness planning. In November 1970, we made a study of production curves on a national level before, during, and after the Vietnam buildup. We were able to depict those industries whose declining Defense expenditures do have a tremendous effect on employment and those industries that can maintain relative stability in the face of a declining Defense budget. The direct result of viewing and analyzing these trends led us to conduct an in-depth study of our plans and policies relating to industrial preparedness -- that is, ensuring the availability of adequate U.S. industrial production capability to satisfy Defense mobilization requirements. As a consequence of this study, we are placing greater emphasis on industrial preparedness measures to assure retention of sufficient capacity, when possible, to serve as a springboard for recreating the production base necessary to meet emergency or mobilization requirements. These measures include planning with industry for mobilization production and the lay-away and maintenance of industrial facilities no longer needed to support current Defense procurement but required to meet DOD mobilization requirements. With respect to long leadtime, high unit-cost major weapon systems such as aircraft and ships, the decision to retain these type of facilities in stand-by is made on a case-by-case basis whenever current production is completed. These decisions take into account considerations such as: (1) estimated one-time and

annual recurring costs to retain the facilities in question; (2) estimated time and cost, if disposed of, to reconstitute that production capacity in event of an emergency; and (3) proposed actions and related costs to insure adequate subcontractor support for the production facility being proposed for retention.

Government Policy Re Aerospace Industry

The long range implications of government policy with respect to the aerospace industry has not been an area of primary responsibility for the Department of Defense. At the same time, we naturally have been concerned with the health of the aerospace industry in that it is so closely tied to our Defense industrial base needs.

We appreciate that this industry has received more than its share of criticisms. At the same time, we are impressed with the manner in which this industry, under severe international competition, has been able to hold its own. As you know, it has exports today in excess of \$4 billion and, in fact, is the single largest area on the positive side of our balance of payments ledger. We believe it is important that our country attempt to maintain this trade position. We are also concerned with the cost implications as regard this industry, in that to maintain the trade position that we presently enjoy on the commercial front, some serious consideration may have to be given to modifying the capital structuring

for future commercial aircraft. Unlike the past, the risk capital in the commercial aircraft business is of such a magnitude that very few companies will be willing to take the required gamble.

I would urge, however, that in discussing this total subject, you call on others from the Executive Branch, i.e., Treasury, Commerce, Transportation, etc., to discuss this very important subject with the members of your Committee.

PROFIT

The last area I want to cover is profit. We have always considered that profit is a basic motivating force in a business enterprise, and our policy is to harness that motive to the greatest extent practicable in defense procurement. Thus, many of our procurement policies are developed with this in mind. Certainly, all of the things I have talked about here today can impact a contractors profit -- things such as his ability to design and manufacture to a given cost, to meet performance requirements without overrunning costs, to be more efficient in his manufacturing operations, to take advantage of progress payments without abusing them, and so forth. So, I think it is fitting to conclude with a discussion of changes being made in our profit policy -changes intended to encourage greater capital investment by our contractors.

We have taken a number of steps directed at increasing the capital investment required of defense contractors. Modification of contract financing policy discussed earlier is one of those steps. Another is the gradual reduction in the amount of government industrial plant equipment provided to contractors. A further step has been examination and planned revision of DoD profit policy to make it consistent with the increased investment objective.

History

This Committee is familiar with many of the major milestones in our examination of profit policy. In 1965 the DoD studied the question of the allowability of interest as an expense. In 1967 a Logistics Management Institute study concluded, as did the 1965 study, that capital investment must be considered in the development of government profit objectives if there is to be sufficient encouragement for contractors to invest in the facilities needed for the performance of government negotiated contracts. In late 1967, we made the initial effort to identify contractor capital and relate it to specific contracts. This study revealed many fundamental problems of policy and mechanics. By 1969 various

study groups had resolved the majority of these difficulties and DoD moved to develop a wider historical data base on which to test the improved methodology. The vehicle for doing this was a statistically representative sample of 165 contracts taken from the Fiscal Year 1970 negotiated procurement universe. Developing the sample, gathering data, and analyzing it took place throughout 1970 and 1971. During this same period the General Accounting Office study of defense industry profits was conducted and published, with recommendations for the consideration of contractor capital investments in the development of pre- negotiation profit objectives.

Profit and Investment

As background it is useful to discuss briefly the financial or economic motivation of contractors. While I do not think the profit motive is the single factor that makes certain companies seek defense contracts, I do feel that profit considerations often drive individual investment decisions in defense oriented companies equally as much as they do in non-defense oriented companies. Profit considerations may not be the only considerations in individual investment decisions faced by defense contractors, but I believe this consideration to be one of the most dominant ones.

If one accepts profitability as a dominant factor in individual investment decisions, it follows that contractors will seek defense business if it will favorably affect their profits.

I think that most will agree that while the fundamental profit motivation is to increase dollars of profit, most American corporations seek to maximize their profit on capital. I do not think it is an over-simplification to say that in making investment decisions, the defense industry, like non-defense industry, seeks to maximize profit on capital.

This basic profit motivation contrasts with the Department of Defense profit policy which historically has focused upon profit measured in relationship to costs. This is a marked difference. What is required to make these perspectives more comparable is for the Department of Defense to consider profit not only in relationship to costs but also in relationship to the capital investment of the contractor. Stated in an equation:

Profit on Capital =(Profit/Cost)X(Cost/Capital) Industry seeks to maximize the left side of the equation and current Department of Defense policies focus only on the Profit/Cost portion on the right side of the equation. The missing link is the capital investment of the contractor.

Problems With Current Policy

The unsatisfactory results of this difference in perspective are twofold. The first is that the current policy may discourage investment in cost reducing equipment by defense contractors. This has been pointed out several times in previous hearings of this Committee, and I shall not do more than summarize the problem. When the profit percentage is based on costs and does not reflect investment, the contractor can increase profit on capital one of two ways: first by minimizing investment, and second by increasing volume. In negotiated procurement, the ability to increase volume is only tangentially controllable by the contractor -- the really important factor, the budget, is external. The only really controllable alternative is minimizing investment.

A second, and very important, problem which to my knowledge has not been described to the Committee, is the matter of equity. Gurrently, the DOD develops pre-negotiation profit objectives by use of the weighted guidelines. In my view, the weighted guidelines are an excellent technique for considering most of the relevant factors that must be considered to decide upon a profit opportunity on a specific contract. The major consideration not presently included is the capital investment of the contractor. Its omission can have an adverse impact on the equity of pre-negotiation profit objectives. In our study of 1970 negotiated procurement, we closely examined profitability as related to contract type. We found that, when measured as a percentage of costs, profits had a reasonable pattern that reflected the degree of risk among contract types.

Firm fixed price (FFP) profit objectives were higher than fixed price incentive fee which in turn were higher than cost plus incentive fee (CPIF). Profit objectives on cost plus fixed fee (CPFF), the lowest risk contract type, were the lowest of all. Such an alignment of profits with risk demonstrates, in our view, an equitable relationship of profit opportunity.

However, when we expressed these same profits as a percentage of capital, the apparent alignment and equity disappear. We found that the profit opportunities for cost plus incentive fee contracts, one of the lower risk contract types, were higher than those for any other contract type. Profit opportunities for the highest risk contracts, firm fixed price, while higher than cost plus fixed fee on a profit to capital basis, were lower than several other types of contracts.

Examination of profit objectives by product line disclosed similar inequities in profit opportunity. The average profit objective was 8.7% of costs for combat vehicles and 10.4% of costs for electronics and communications equipment. When viewed as a percentage of capital, however, the profit objective for combat vehicles was 22.5% and for electronics and communications equipment, 21.4%.

It is our view that in most instances contracting officers have been lead to the right conclusions by using our present weighted guidelines policy. However, while the contracting officers may have reached the

proper conclusion, they had no mechanism to translate this conclusion into the proper rates. They, unknowingly, may have awarded a high profit to the product line they concluded should have had the lower profit. This situation, as well as the counter intuitive alignment of profit and risk, is both unfair and counter to the goals of our DoD procurement policy.

I have just described the two major problems of the current Department of Defense profit policy for negotiated contracts. These problems are an outgrowth of our practice of not giving adequate recognition to the contractor capital investment. Identification of the problems is not difficult. The same cannot be said for their solution. Quite clearly the solution to the problems lies in the successful development of a mechanism to relate, either by a process of identification or allocation, that portion of a contractor's investment to be utilized for performance of the contract being negotiated. Such a mechanism will allow the contractor to share with the government the benefits of investment in cost reducing facilities. Additionally, it will give the contracting officer a better basis upon which to judge the appropriateness of his pre-negotiation profit objective. However, such a mechanism is extremely complex and difficult to develop for effective use by large and decentralized organizations such as the DoD procurement activities. Development requires making difficult decisions on many fundamental issues about which men can and often do disagree. Some of these decisions have made the Department of Defense profit on capital test plan a subject of some controversy within recent weeks.

The proposed profit on capital policy which we are testing focuses upon the uses of capital (operating capital, land, buildings and equipment) rather than the sources of capital (debt and equity). This feature of the policy reflects the Department of Defense position that the assets supported by the financial structure of a company, rather than the financial structure itself is our concern. We view the decision regarding the method of financing as the prerogative of management.

The profit on capital policy allocates capital to contracts rather than specifically identifying each asset with the contract being negotiated. This decision reflects our view that a policy to consider contractor capital investment must conform to the realities of accepted industrial practice if it is to be effective. Cost accounting methods and management control systems do not account for assets on a contract by contract basis because there is no management need for such accounting. To require such identification, solely for the purposes of a profit on capital policy would be nonproductive and would increase overhead expenses to be paid for by the DoD. I mentioned last year that we cannot afford an "administrative nightmare." Our test plan has this in mind. The feasibility of allocation of capital to a contract is reinforced by the fact that allocation has many precedents. Depreciation, the consumption of an asset, is allocated to contracts through the use of the overhead rate. The next step, allocation of the asset being consumed, is not a revolutionary idea.

In developing the proposed profit on capital test plan we relied upon existing procedures to the maximum extent possible in developing allocation methodology. From the outset, we were determined to develop a policy that accomplished our objectives and avoided additional administrative costs without unnecessarily compounding the already voluminous documentation required of defense contractors. In addition, it became apparent that detailed prior resolution of all allocation questions was virtually impossible. Therefore, the only reasonable course has been to develop a procedure that is (1) flexible; (2) relatively simple for contractor and procurement contracting officer to use; and (3) lends itself to effective audit. The mechanics of the policy being developed satisfy these criteria. As a result, we have an allocation process that creates new procedures only where procedures do not now exist, and one that builds upon existing overhead allocation methodology rather than creating a parallel one that adds to the confusion of preparing for contract negotiations.

One of the most difficult aspects of developing the profit on capital policy was deciding how much importance to give to capital and how much to give to weighted guidelines or cost based considerations. There are two extremes, neither of which is acceptable. One is that capital be the sole determinant of pre-negotiation profit objectives; and the other is that capital be disregarded as a determinant of profit objectives. The latter is unsatisfactory for the reasons that I have discussed earlier, for it is basically our

current policy. The former may have the effect of assuring an adequate return on an asset regardless of the potential utilization and doesn't recognize that in many instances capital required will be rather minor.

The policy in its present form strikes a balance between capital considerations and the weighted guidelines cost considerations, causing a contractor to consider his investment in terms of its potential utilization as well as cost.

This, in summary, is the proposed profit on capital policy. It derives 50% of the negotiated "going-in" profit from the uses of capital, or assets. These assets are allocated to contracts by a procedure that whenever possible relies upon established methods. Capital invested and weighted guideline considerations are weighed equally in developing the pre-negotiation profit objective.

Rates

To have a profit policy that explicitly recognizes a contractor's investment in performing the contract requires the establishment of a range of rates of return on capital for application to allocated capital. Establishing rates of return which we are testing, has been an extremely difficult task because, in so doing, one is implicitly stating that the rates selected are "proper" profits. If the rate in the policy is X, then it must be implicit that a rate greater than X is too high and a rate less than X

is too low. The dilemma is that such precision about a rather judgmental issue is preposterous. It is interesting to note that the few major studies of profits in defense contracting have never made a judgment as to whether these profits were too high or too low. This has always been studiously avoided even though many of our critics, often in a rather cavalier manner, have inferred that to do this would be rather simple. The in-depth studies on the other hand, have wisely been content to compare the profits in defense business to profits in other industrial sectors. To not come to grips with this issue in developing the profit on capital policy would make the policy unworkable.

In deciding upon the rates for usage in the proposed policy, we applied three criteria. The first that the rate be fair to both DOD and industry; the second that the rate development be administratively feasible; and the third that the rate be consistent with the objectives of the policy which I have outlined. __

We felt the fairness criteria could be met by basing the numbers used on a broad, objective sample of the profits of industries comparable to the broad cross section of defense suppliers over a representative number of years.

Administrative feasibility virtually required that we search for an existing statistical base that meets the fairness criteria. Rediscovery of

the wheel by developing our own sample would have been extremely timeconsuming task and one for which we have no particular expertise. When developed, it too would probably be broadly criticized. Furthermore, existing statistical series offer the advantage of a great number of years of past data for study that can be updated as time passes. In addition, of course, the sample must be consistent in terminology and definition with the policy that we have developed to be administratively acceptable.

The Federal Trade Commission <u>Quarterly Financial Report</u> for manufacturing corporations satisfies the first two criteria admirably. It is a massive sample accounting for approximately 91% of the total assets of manufacturing corporations which, in turn, represent about 90% of all U.S. manufacturing, one-half of U.S. corporate profits, and more than a quarter of the national income. The Report, which is based upon uniform and confidential reports from corporations, has been compiled since 1947 and is therefore an established statistical series.

One must consider how investment dollars are allocated both within corporations and in capital markets in deciding how to meet the third criterion of effectiveness. Corporate managers allocate capital budgets based on the returns the capital is expected to earn. In many cases the current disincentives mean investments to perform defense contracts cannot compete with alternative investments. Therefore, if we are to remove the disincentive to investment, the potential return in defense negotiated contracts must be made more competitive with the alternative investments.

Correspondingly, if capital is to be attracted to the defense sector, the returns possible must be competitive with other sectors of the economy. In order to compete effectively in capital markets and, of equal importance, within corporations, for the investment dollar, the rates provided for in the DoD profit on capital policy must be taken from the returns of industry segments comparable to the defense sector. It is with comparable industries and products that the competition for investment dollars will primarily take place.

I should emphasize that the profit on capital policy applies only to certain negotiated defense contracts. These contracts are predominantly for the purchase of major hard goods. The following is a distribution of recent negotiated military prime contract awards.

96%

1%

3%

TOTAL NEGOTIATED PROCUREMENT

100%

MAJOR HARD GOODS SERVICES ALL OTHER

Major hard goods is a defense term that includes aircraft, missiles and space, ships, tank and automotive products, weapons, ammunition, and electronics and communications equipment. FY 1970 negotiated major

hard goods contracts were distributed as follows:

DISTRIBUTION OF MAJOR HARD GOODS NEGOTIATED PROCUREMENT FY 1970

Aircraft		34%
Missiles & Space		22%
Ships		11%
Tank-Automotive		3%
Weapons		2%
Ammunition		12%
Electronics & Communications		
Equipment		16%
	TOTAL	100%

Given this distribution, which is likely to account for 80% or more of the potential business to which the profit on capital policy will ultimately apply, it seemed reasonable to us that by culling from the Quarterly Financial Report of the Federal Trade Commission those industries (such as mining process industries, soft goods like apparel, food) which were not comparable to the major hard goodswe acquire, we could construct a sample that satisfied all criteria. In so doing, we developed what we have termed a "Selected Durable Goods" sample from the <u>Quarterly Financial</u>

Report.

The selected durable goods sample includes aircraft and parts, electrical machinery, other machinery, motor vehicles and equipment, other fabricated metal products, instruments and related products, and

manufacturing and ordnance. I think that this sample of manufacturing industry compares very closely with the cross section of major hard goods procurement conducted by the Department of Defense.

We have used an eight year average return on capital of selected durable goods manufacturing industries taken from the <u>Quarterly Financial</u> <u>Report</u> as the base for the return provided in the policy. This average (defined on a basis consistent with the profit on capital policy) is 20.2 per cent.

Several adjustments to this average rate are required to insure that the rate is consistent with the objectives of the profit on capital policy. The first adjustment that is required is to account for unallowable costs, a phenomenon peculiar to defense contracting, which the Department of Defense does not allow as a charge to our contracts. These unallowable costs are deducted from the sample data because by definition total revenues are reduced by all costs-incurred to arrive at profit. The profit on capital policy, on the other hand, is intended to be used in negotiating profit objectives which by DOD definition do not include unallowable costs. Therefore, it was **n**ecessary to add to the sample base a factor for unallowable costs. This factor, taken from average defense contract experience over past years,

is 4.2 percent of capital. This adjustment does not take into account the unallowable costs associated with interest expense.

The next step in the process of developing a rate of return is to relate the return on capital to the risk of contract type. This was accomplished be reducing the return for cost plus fixed fee and cost plus incentive fee and raising the returns of the fixed price incentive fee and firm fixed price contracts by an offsetting amount. In making the adjustment in this fashion, the 24.4 percent average rate of return (after adjustment for unallowable costs other than interest) was held constant.

Having made adjustments for risk and for unallowable costs, the only remaining adjustment required to make the FTC base consistent with the profit on capital policy was to allow an adjustment for profit erosion. Profit erosion is an attempt to anticipate the difference between profit expected and profit earned. The profit on capital policy is used to develop a "going in" profit or profit objective figure while the sample data are earned "coming out" profits. Therefore, it is necessary to add to the FTC base figures an adjustment for the erosion of profit during the contract performance in order to make this base consistent with the policy. Based on data developed, the erosion factors utilized were zero for cost plus fixed fee contracts, one percent for a cost plus incentive fee contracts, two percent for fixed price incentive fee contracts, and three percent for firm fixed price contracts. The profit erosion factor for firm fixed price contracts is not as scientific as we would like. This is due, primarily, to our lack of information regarding earned profit on firm fixed price contracts. On the other hand, from Renegotiation Board data we know that the loss filings were the highest in the past eight years. Eighty-two percent of the dollar losses reported were incurred on firm fixed price contracts. In addition, based on Renegotiation Board data, average earnings on FFP contracts were only 0.23% of sales. <u>Exhibit one illustrates the impact of</u> adjustments to the base rates.

Definition of Capital and Profit

Now that I have introduced the issue of rates, I would like to discuss briefly the matter which I refer to as profit on capital rate games. Because of the large number of acceptable but different definitions of capital for use in the profit on capital rates, it is easy to unknowingly compare dissimilar profit on capital figures. I would like to illustrate this by showing how the numerical rates in the proposed profit on capital policy which have been the subject of some criticism, could have easily been made to appear lower without having the slightest impact on actual profitability.

Exhibit two shows a hypothetical balance sheet and income statement. While simple in the extreme and not necessarily representative of a specific defense contractor or group of defense contractors, I think these are

reasonable financial statements. This exhibit illustrates that, given a fixed situation, the numerical rate can vary across a wide range depending upon the definition of capital chosen. In developing the profit on capital policy, we have used that definition of capital that yields the highest numerical rate of the three shown. We have made this decision, not because we want to overstate the profit rate, but because it is the most valid definition of profit on capital given our requirements. These requirements are that the data be readily obtainable, quickly understood by our work force, and easily audited. We also require that profit be defined in a way that is consistent with the DoD policy that interest is not an allowable cost. Therefore profit must be before interest, unallowables, and taxes. This further raises our numerical rates relative to alternative definitions. Comparison of our rates with rates not similarly defined is both invalid and not very informative.

Impact On Profits

I very much appreciate the concern of those who have attempted to assess the impact of the profit on capital policy when fully implemented by conducting various kinds of comparative analyses with earned profits. In my judgment the most valid way to make an assessment is by examining the impact of the policy upon the pre-negotiation profit objective of the government negotiators. This is the focal point of the policy. The policy provides a mechanism that will enable the contracting officer to consider

capital when he develops his pre-negotiation profit objective, and therefore, will change directly only the pre-negotiation profit objective. Other factors remaining the same, however, one might fairly forecast that if the prenegotiation objective moves down, on the average, then the negotiated profit objective and the earned profit will move in the same direction. The converse is, of course, also likely if pre-negotiation profit objectives are raised.

In order to make such a comparison we superimposed the profit on capital policy on the statistical model of the FY 1970 negotiated procurement universe. Based upon this analysis, the pre-negotiation profit objectives for fixed price incentive contracts move downward from 10.1 per cent of costs to 10.0 per cent of costs. Firm fixed price pre-negotiation objectives increased from 11.2 per cent of costs to 11.9 per cent of costs. Taking into account the dollar volume of these two contract types, there was an over-all increase in pre-negotiation profit objectives of two-tenths of one per cent for the combined fixed price type contracts. Including all type contracts for FY 1970, we are convinced, as a result of this analysis, that the aggregate going-in profits will be about the same. We also learned that when the proposed policy was simulated on the FY 1970 model, pre-negotiation profit objectives for specific contracts changed in almost every instance. Thus, it is our conclusion that when the profit on capital policy is applied to all fixed price type contracts, a major redistribution of profits will take place, but the aggregate profits of all these contracts will increase only by a very small amount.

I would like to point out there are two very distinct phases of the impact of the implementation of the policy. The first and the one which we measured using our statistical model is characterized by a redistribution of profits reflecting the current investment of contractors in the performance of government contracts. Hopefully, the second stage of impact will take place as investment increases and results in decreased costs shared with contractors in the form of increased profits. We are able to forecast the first stage of the impact of the profit on capital policy with a high degree of confidence. The second stage is dependent upon the degree to which the current policy is successful in motivating contractors. At present this cannot be forecast. This is the reason for the planned continued test.

While the second stage cannot be forecast with any confidence at this time I would like to state that we are committed to accomplishing the task of measuring, after the fact, the impact of the policy. Even at this early date I would be remiss were I not to mention that measurement of results will be a difficult problem. One problem, which plagues us in many areas, is that of the baseline against which actual costs experienced should be compared in order to determine results. Another problem is that of the time, because result measurement must, of necessity, await substantial completion of a contract before the impact of investment upon cost can be ascertained. A final problem, one particular to the contracts negotiated during the evaluation

period, is that of assessing the relationship between motivation, and policy permanence. If a contractor has no assurance that the policy will apply to other contracts then his sphere of consideration for investment will be limited only to investments that will be fully or substantially amortized on the specific contract to which the policy will apply. The tendency will be not to invest in long lived assets, or assets whose use will be spread over subsequent contracts or other contracts to which the policy may not apply. We expect that the motivational impact during the evaluation period will be less than when the policy is fully implemented for these reasons. Despite these recognized problems we think that we can effectively measure the after the fact impact of the policy.

Test Period Plans And Objectives

Introduction of the profit on capital policy has three phases. The first which we have recently completed was the basic development stage that began in earnest in 1968. The next phase evaluation and modification, will begin on 1 January 1973. We hope this can be completed by mid-1974. The final phase, implementation, is therefore, tentatively scheduled for the latter half of 1974.

The evaluation phase will be an extremely busy period. We are confident that considering capital in setting Defense prenegotiation profit objectives is

	BAL	ANCE SHEET							
	-	ASSETS		LIABILITIES		INCOME STATE	MENT		
(1)	CASH ·	2	(7)	ACCOUNTS PAYABLE	10	SALES	100		
(2)	SECURITIES	8	(8)	DEBT	<u>30</u>	PROFIT	10		
(3)	ACCOUNTS RECEIVABLE	20	(9)	TOTAL LIABILITIES	40				
(¹ / ₄)	INVENTORY	20		EQUITY					
(5)	FIXED ASSETS (NET)	_20	(10)	EQUITY	<u>30</u>				
(6)	TOTAL ASSETS	70	(11)	TOTAL LIABILITIES AND EQUITY	70				
PROPO	SED POLICY								
	PROFIT ON CAPITAL =	TOTAL ASSETS -	CASH	PROFIT - SECURITIES - ACC	TS PAY (PROFIT) - (7) =	<u>10</u> 50 =	20%
	OPTION #1			· · · · ·					

HYPOTHETICAL SITUATION

PROFIT ON CAPITAL = $\frac{\text{PROFIT}}{\text{TOTAL ASSETS - CASH - SECURITIES}} = \frac{\text{PROFIT}}{(6) - (1) - (2)} = \frac{10}{60} = 16.6\%$

OPTION #2

PROFIT ON CAPITAL =	PROFIT	PROFIT	10	
•	ASSETS	= (6)	 70 =	14.3

EXHIBIT TWO

£.

candid in admitting that they are based on the best data and research available to us. One of our objectives is to assess the validity of these assumptions by observation of actual usage.

The mechanics of the evaluation period are reasonably simple. We have issued a Defense Procurement Circular, (DPC #107), which includes comprehensive examples intended to cover most contingencies. The DPC is the basic statement of the planned evaluation period and an explanation of its usage. If the criteria for applicability are met, the contractor agreeing to participate in the test submits the required data for review and audit.

If that data is deemed adequate and if the procurement is within the internal guidance provided, the PCO will notify the contractor that he agrees to the usage of the profit on capital concept f or the development of prenegotiation of profit objectives. The negotiations are then conducted using prenegotiation profit objectives developed through the profit on capital policy and documentation is forwarded through channels to OSD.

In the event the PCO does not agree to use the profit on capital policy in a negotiation for reasons spelled out in the supplementary guidance, the PCO so notifies the contractor and negotiations are conducted using the normal weighted guideline procedures.

Because this is a test involving important matters, it is imperative for OSD to control the test in a manner adequate to insure proper gathering and use of necessary information. All future improvements and refinements require the control and information gathering activities be carried out in a thorough and responsible manner. Our control system includes two types of controls - direct or people oriented controls and indirect or procedural control. Direct controls are the most effective. A policy coordinator will be designated within OSD(I&L) to coordinate the several activities underway during the test period and resolve operational problems quickly. To further smooth the operation of the test, a knowledgeable individual will be designated in the headquarters of each of the major buying commands in DoD to handle communications and problems in his activity. These representatives, along with the profit policy coordinator, will serve as a committee to communicate ideas and assure consistency and appropriateness of application of the policy during the evaluation phase.

To communicate the intent and purpose of the policy, OSD has undertaken a comprehensive training program to reach the procurement work force within the Department of Defense. This training began in November and is expected to be completed by mid-April. It encompasses both the conceptual and methodological aspects of the policy and includes handson experience in using the policy in the classroom.

By having a knowledgeable policy coordinator within OSD, active service participation within the DoD components and a comprehensive training program designed to reach the procurement personnel involved, we feel we have established top notch direct control for an effective evaluation.

Indirect or procedural controls will play a complementary role in assuring the reasonable use of the policy during the evaluation period. The first is the requirement that all documents submitted by the contractor and prepared by DoD personnel be forwarded to OSD for review. Having this information available for review will allow those monitoring the policy the flexibility of using source documents to resolve procedural and operational problems. These documents also provide data for a defense industry capital data bank. All information submitted by the contractor will be audited by the Defense Contract Audit Agency (DCAA) as part of its regular procedure on negotiated contracts.

Another procedural control is the DPC example. This example describes several instances of the policy's application and the manner in which we intend that it be used. This will provide more information to the user and prevent misuse in the field.

A control system is only as good as the people using it. Its objectives are to assure the appropriate use of the policy, and application in the manner intended so that we may acquire data and experience to permit further

refinement in improvement of the policy. We expect this control system, relying on both people and procedures, will accomplish those objectives. We anticipate the result of the test period and the results of activities and studies carried on during that period to provide us with a firm basis for improving and refining the policy and to give us the assurance that we are proceeding in a constructive manner to improve DoD procurement.

A key result will be an intangible one, but one very important to the long-run success to any DoD profit policy. This is to be a reorientation in the thinking of people about the adequacy and measure of profit in negotiated procurements. Profit has been thought of as a percentage of cost for a long, long time and a change in perspective will take some time, hopefully not too long. We hope to make the DoD workforce at ease with the concept of profit on capital and enthusiastic about its application.

Secondly, we expect the application of the policy in different situations to give us a very good indication of the effectiveness of the procedures and the ease of their application. We are sure there is room for improvement in these policies, but their repeated application will give us a better guide to those areas requiring attention and correction.

Thirdly, we expect to acquire a better knowledge of the Defense industry capital structure. Such information is essential when making policy changes that will impact upon our national security capability and also on this

important segment of the economy. Possessing improved capital structure data will permit even more accurate assessment of policy impact.

Finally, we expect to gain more insight as to what rates of return must be possible in order to maintain a modern Defense industry and what methods are the best suited to provide the opportunity for such a return.

When we feel we have answered or satisfied the questions which now confront us, we shall use the knowledge to modify the profit on capital policy. This is the real payoff of the evaluation we are just starting.

Improvements will most likely occur in the following areas:

1. We expect the existing procedures to be modified and improved as necessary, including both the weighted guidelines procedures and profit on capital procedures.

2. We expect to revise as necessary the means and method for considering capital in Defense contracts. This could take several forms, including increasing or decreasing its relative importance from what we have.

3. The final step in our use of the output from the test will be to revise the DoD sponsored training to better convey the philosophy and procedures of these profit policy changes.

A policy can be best applied and implemented if the users of the policy are convinced of its good intentions, flexibility, workability and potential benefits to the government and taxpayers. Part of effective implementation of any profit policy change is to assure that the users of the policy have this kind of confidence. We accept that as part of our task and are vigorously pursuing it.

Summary

Evaluation is the next step in a lengthy process to develop a sound profit on capital policy. We are commencing on several projects and studies to enhance the quality of our measurements, prove out our assumptions, and strengthen the policy. At the conclusion of the test period we expect to have a policy sound enough to be implemented with confidence that it will accomplish its intended objectives without introducing new problems.

Mr. Chairman, I-have gone into considerable detail on the subjects that you asked that we cover. I have done this in order that the record will be complete and to be sure there is no misunderstanding of these subjects. I appreciate the opportunity to provide this information to the Committee.

PROFIT ON CAPITAL POLICY ADJUSTMENTS OF FTC SELECTED DURABLE GOODS BASE

٢

•	CPFF	CPIF	FPI	FFP
FTC/SEÇ BASE	20.2%	20.2%	20.2%	20.2%
Adjustment for Unallowable Costs	+4.2%	+4.2%	+4.2%	+4.2%
Risk Differential	-4.4%	-1.4%	+1.6%	+4.6%
Adjustment for Profit Erosion	1	+ 1%	+ 2%	+ 3%
Profit on Capital Rate	20%	24%	28%	32%

53

EXHIB IT ONE

	BAL	ANCE SHEET							
	-	ASSETS		LIABILITIES		INCOME STATE	MENT		
(1)	CASH ·	2	(7)	ACCOUNTS PAYABLE	10	SALES	100		
(2)	SECURITIES	8	(8)	DEBT	<u>30</u>	PROFIT	10		
(3)	ACCOUNTS RECEIVABLE	20	(9)	TOTAL LIABILITIES	40				
(¹ / ₄)	INVENTORY	20		EQUITY					
(5)	FIXED ASSETS (NET)	_20	(10)	EQUITY	<u>30</u>				
(6)	TOTAL ASSETS	70	(11)	TOTAL LIABILITIES AND EQUITY	70				
PROPO	SED POLICY								
	PROFIT ON CAPITAL =	TOTAL ASSETS -	CASH	PROFIT - SECURITIES - ACC	TS PAY (PROFIT) - (7) =	<u>10</u> 50 =	20%
	OPTION #1			· · · · ·					

HYPOTHETICAL SITUATION

PROFIT ON CAPITAL = $\frac{\text{PROFIT}}{\text{TOTAL ASSETS - CASH - SECURITIES}} = \frac{\text{PROFIT}}{(6) - (1) - (2)} = \frac{10}{60} = 16.6\%$

OPTION #2

PROFIT ON CAPITAL =	PROFIT	PROFIT	10	
•	ASSETS	= (6)	 70 =	14.3

EXHIBIT TWO

£.