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THE GAO REVIEW

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The Relationship of Budgeting, Program Planning, and Evaluation

721495

By Elmer B. Staats
Comptroller General of the United States

This paper is based on remarks by the Comptroller General at the Budget Analysts Institute sponsored by the Institute of Government, University of North Carolina, and the National Association of State Budget Officers, Chapel Hill, N.C., August 20, 1969.

There are some who feel that planning, programming, budgeting, or PPB, is a cure-all for Government management. There are others who feel that it is really a fancy term for a lot of common sense things that we have been doing for a long time anyway. Whichever group is nearer right, PPB has stirred the imagination of a lot of people. And interestingly enough, we have had a tremendous amount of interest on the subject from overseas. People figured that here was something brand new, something that they could use. Their interest probably was stimulated by the interest that former President Johnson displayed in it, and because of the great acclaim that Secretary McNamara achieved at the time he was Secretary of Defense for revolutionizing the way that budgeting was done in the Department.

President Johnson initiated PPB with a memorandum in August 1965. I helped write this memorandum, so the critical things I am going to have to say about PPB, I am saying also about something of which I was one of the

authors. The President stated that the PPB approach was designed for three essential purposes. First, to define national goals, identifying those considered most urgent. Second, to determine alternative ways of attaining these goals and the probable attainment costs. Third, to improve performance by attaining the best possible program returns for each dollar spent.

PPB Defined

PPB is thus an ordered way of examining problems through choice—choice among specific objectives intended to serve higher goals; choice among alternative courses of action through which defined objectives can be achieved.

It is a systematic analysis of alternative objectives and of alternative means, which sets out the expected cost and benefit implications of alternative courses of action as fully as practicable, for examination by decisionmakers.

PPB analysis is designed to project expected costs and benefits into the future. Now this is another element.

Examination under PPB should include all aspects of costs and benefits, or detriments, including social, political, and economic, as well as financial factors, and including the implications for State and local government, and the private sector, as well as for the Federal Government.

At this point I would like to emphasize the importance of PPB particularly for those involved with State and local government. More and more, budgeting at the Federal level cannot be done effectively without regard to its impact on State and local government. And of course you can reverse this statement and say it is more and more difficult to budget at the State and local level without knowing what the Federal Government's programs and plans are going to be.

Grant-in-aid programs today represent about 19 percent of all State and local revenue. The grant-in-aid programs have tripled in the last 10 years and now are projected to go up by 1975 to somewhere in the neighborhood of \$50 billion, which would be more than double what they are today.

These requirements create an emphasis upon efficient analytical methods for estimating future costs and benefits. They also increase the need for adequate information to support analyses and feasible alternative objectives and programs for their accomplishment. Better information is needed for the specific needs of our society. Better information is needed concerning costs, results, and efficiency of programs that are already in existence.

Now the nature of PPB requires certain organizational and procedural definitions since, to be effective in the

decisionmaking process, the alternatives must be presented to the central decisionmakers and must be relatable to current problems. This entails, in addition to analysis, a multiyear projection into the future that can be related to the categories contained in the budget. The organization of the process in the executive branch must be such that the top decisionmakers are offered an opportunity to participate in an evaluation of alternatives rather than only an opportunity to pass judgment on whether a specific course of action formulated at a lower level should be undertaken.

As our Government has responded over the years to the demands of increasingly complex problems of the Nation, it has become more and more difficult for decisionmakers at the top to visualize the full implications of alternative courses of action. Over a period of several years, various techniques have been developed in response to the need for improved information that can be used by decisionmakers to make judgments on alternatives. We can expect, I believe, experimentation and research to develop techniques and hopefully more useful information.

PPB Not Totally New

As you are aware, PPB, in the minds of some, acquired the image of being something totally new in concept. The President's initial memorandum (to which I referred) stated, quite correctly, that the PPB approach to evaluation of alternatives was old. PPB may for the first time identify those techniques as a "system" and give them a special name. But if you will examine into history, you will find even that the

term is not new. Prof. Frederic C. Mosher of the University of Virginia wrote a book back in 1953 called "Plans, Programs, and Budgets" in which he outlined the needs for a different type of budget system for the Department of the Army.

In summary, therefore, the planning, programming, budgeting system is an effort to establish, on a Government-wide basis, a common approach and procedure for:

1. Establishing long range planning in terms of Federal objectives and goals as defined by the Congress or the President.
2. Finding a procedure for identifying the most advantageous programs to fulfill these objectives on a basis of an analysis of costs and benefits of alternatives.
3. Translating programs into budgetary and legislative proposals in longer term projections.

Many people would prefer the simpler term of "program budgeting." Charles Hitch, now president of the University of California, is widely credited with having placed planning, programming, budgeting into effect in the Department of Defense. I think he also shares this view that it would be much better to simply describe this as "program budgeting" in order to emphasize program analysis but recognizing that all three elements are included.

"Program budgeting" means long term planning—looking at the budget not in terms of a single fiscal year but in terms of a multiple of years, including three things: the growth of costs and the trends involved; the selection of an adequate number of alternatives so

that you are not looking simply at a proposition that may emerge out of one bureau or department; and, program outputs.

In other words, program budgeting means translating broad objectives into programs and programs into outputs that you can define. Related to all this, of course, is the question of definition of programs which may have the same objectives but which cut across departmental lines or lines of organizational units within an agency or among agencies of several departments. This is true at the State and local level as well as at the Federal level. You can go back in history and find a great many of the elements we are talking about. For example, in the water resources field—flood control projects, recreational projects, power projects—we have had something the Federal Government called cost-benefit studies going back several decades, as far back as the Rivers and Harbors Act of 1902. These have emerged and have been refined over a period of time. The Flood Control Act of 1936 was quite explicit that flood control projects should be begun only when estimated benefits were in excess of costs.

Budget Preview Process

In the Federal Government, we have had long term projections of budget totals for many years, going way back before World War II. When the present Secretary of Commerce, Maurice Stans, left the Budget Bureau at the end of the Eisenhower administration, he issued what was properly regarded as a somewhat risky document presenting a 10-year projection of the budget based upon possible "high" levels and a "low"

level and an "intermediate or probable" level of spending.

A budget preview process was begun by the Bureau in 1946 as a preliminary step in the preparation of the 1948 budget. Its primary purpose then was to develop and communicate to the major agencies general policy guidance for the preparation of their requests to be submitted in the fall. This purpose was served, beginning in 1947, by "ceiling" or "target" figures which were given to the major agencies to give them meaningful guidance as to the President's general budgetary objectives. As time went on, this preview became more and more a systematic procedure for program planning and evaluation.

The preview was marked in 1961 by the formal adoption of a two-stage process for the preparation of the 1963 budget, comprising a longer range forward look at the budget prospects in the spring and the usual preparation of the budget in the fall. The Budget Director's letters setting forth this plan to the major agencies expressed the intention of making the spring budget preview period a time of useful joint examination of goals and objectives, and of major policy questions, rather than a time of negotiation of detailed budget figures.

The movement in this direction continued steadily. In 1964 Federal agencies were first asked to submit program plans, as such, related to their financial plans, to indicate the relative priorities of programs, and to examine in depth certain program issues that had been identified as a result of joint discussions. By the spring of 1965, the preview for the 1967 budget had taken on

essentially the elements that we now associate with PPB.

Much has been done in the development and refinement of functional classification of the budget as well. The functional classification that you see now in the Federal budget is a product of many years of evolution and development. We have also had a great deal of history on what has been properly called performance or cost base budgeting. This goes back to the Budget and Accounting Procedures Act of 1950. Both Hoover Commissions emphasized that the budget should be oriented to an output basis so as to emphasize program results rather than inputs such as travel or salaries, or even organizational unit lines.

I think it can be said that PPB reflects an evolution—nothing magically new in spite of the efforts by some people to give it such a label. I think that it might be worth a bit of discussion on what I consider to be some of the limitations of the whole process because there are real limitations upon the budget process as a whole, of which PPB is simply a part.

Most authorities on management science would probably agree that the processes of planning, programming, and budgeting are desirable processes. They are all interrelated processes. They cannot, however, solve all of the resource allocations problems that face decisionmakers.

Limitations of Analysis

Some of you may recall that Senator Jackson, who was chairman of the subcommittee on National Security of the Government Operations Committee of

the Senate, held a series of hearings last year growing out of his concern about what he called the over-systematization of analyses supporting the recommendations coming out of the Pentagon. One of the publications that emerged out of those hearings was called *Specialists and Generalists*, a masterpiece of quotations from history that bear upon the whole subject of program formulation and policy formulation.

What Senator Jackson was really getting at was whether or not we hadn't overemphasized system analysis to the point where we might lose sight of the value of the judgments of experienced people in the field. He was thinking particularly about the Department of Defense in terms of the judgment of militarily experienced people in the Department.

One quotation that Senator Jackson dug up in this little report, which I particularly like, was called "Quantifying the Unquantifiable?" This is a letter from Charles Babbage to Alfred Lord Tennyson, written in 1850; Senator Jackson says that "although Babbage never strayed very long from his calculating machines, his tremendous scientific curiosity led him into many byways—some stemming directly from the main line of his machines, and some that were far afield." Babbage extended his demand for statistical accuracy to poetry and it is said that he sent the following letter to Alfred Lord Tennyson about a couplet in a poem called "The Vision of Sin." The letter was as follows:

"Every minute dies a man, / Every minute one is born": I need hardly point out to you that this calculation would tend to keep the sum total of the world's population in a state

of perpetual equipoise, whereas it is a well-known fact that the said sum total is constantly on the increase. I would therefore take the liberty of suggesting that in the next edition of your excellent poem the erroneous calculation to which I refer should be corrected as follows: "Every moment dies a man/And one and a sixteenth is born." I may add that the exact figures are 1.167, but something must, of course, be conceded to the laws of metre.

This is a very wonderful little publication because it is full of historical references back to Aristotle, Plato, and Socrates. What Senator Jackson was really driving at was the limitation of any type of total analysis upon some of the kinds of decisions that were made in Government where quantification may not be too meaningful.

Goals of Society Complex

I testified before Senator Jackson's committee at that time, and I was criticized by some of my friends and colleagues. One statement particularly that I made caused concern. I said the goals of our society cannot be simply stated. If our goal was solely economic efficiency, with all of its ramifications, then perhaps some one system, such as PPB, would guide us toward the wrong ultimate objective. But we do not seek one goal. Instead we have numerous goals, such as security, progress, and prosperity, freedom of choice, strengthening of the free enterprise system, and many others. These goals cannot be accomplished in all cases and still be consistent with the highest degree of economic efficiency.

Priorities among our national goals are not easily agreed upon. Decisions must be established largely through the operation of our political process. Al-

though PPB can generate information useful to this process, it is quite easy to oversell the PPB contribution to the determination of national priorities.

One of the most significant problems in the planning and programming processes is that of measuring the contribution which existing programs have made toward achieving stated goals and assessing the potential contribution of alternative programs. Many times you find yourself talking about alternatives where you don't have experience, and you can't have progress without experience.

The problem of defining criteria is especially complex when we seek to measure effectiveness of social programs. Measurement criteria must reflect directly goals or aims of a program if the criteria are to allow reliable measurement of effectiveness. However, absolute agreement on goals and aims is often lacking and the relative weight to be given different specific objectives often defies definition.

What criterion will permit us to choose between saving one human life and preventing a large number of cases of blindness? If we are choosing among lives to save, what criterion tells us which lives?

Cases in Program Evaluation

Perhaps I can make the problem more concrete with an example from another area. This has to do with the U.S. Information Agency, which is, of course, designed to help achieve U.S. foreign policy objectives by influencing public attitudes in other nations. The development of measure of effectiveness to evaluate progress toward this objective is

a problem that requires continuous analysis because public attitudes change irrespective of USIA efforts, and because the effectiveness of particular media may not remain constant over a period of time.

Although USIA has recognized the desirability of determining the effectiveness of particular media on public attitudes, it has not been able to do so in all cases. For this reason objectives are stated in terms of exposures of target groups to various media. In other words, how many people have received the signal from broadcasting? Or how many copies of a pamphlet were distributed? The relative effectiveness of the media on attitudes—which is the Agency's ultimate objective—must be at the present measured by subjective evaluations.

At one point in my career, I spent 5 years as head of an agency of the National Security Council where we were concerned primarily with trying to interrelate our various U.S. programs overseas, particularly in terms of trying to influence attitudes of other people more favorably toward the free world and particularly toward the United States. One of the things that we tried to do was to make a determination as to what level of programming we should establish for broadcasting behind the iron curtain. We had our Armed Forces Network, our Radio Liberty Program, our Radio Free Europe Program, and so on. It was almost impossible to measure our broadcast effort in terms of quantifiable results. We were forced to rely upon the number of letters coming from behind the iron curtain and interviews

with people who had come from behind the iron curtain into the free world. How do you measure this sort of thing?

Let me give you something a little closer to home in terms of your own direct interests and concerns. Take the community action programs of the Office of Economic Opportunity which, by involving groups in the political process, may bring about the strengthening of local governments followed by institutional changes. A goal set by this program was involvement of the disadvantaged into the political processes at the local level. How do you measure this?

Take the Peace Corps. It is not possible to describe the benefit of the project in a country in terms of the project's contributions of the gross national product. But we operate the Peace Corps because we have faith, or a judgment, that this will produce desirable results. Or take any area of research—medical research or agricultural research; it is very, very difficult to measure the output here in any planning, programming, budgeting sense.

Another aspect of this problem is the joining of program participation by the Federal Government with other governmental entities which makes it difficult to define all of a program's implications and factors.

Take the area of public works and economic development programs of the Department of Commerce. Under these programs several types of aid are available to both governmental and nongovernmental entities to promote the economic development of depressed areas. In determining the way in which the resources should be allocated, at what

level should the agency try to make the decision? There are redevelopment areas, economic development districts that contain two or more redevelopment areas, economic development regions that contain two or more districts, and of course, the whole country. The Government does not finance total investment costs and in general does not participate in operating and maintenance costs. There can be several entities at each level with which the Federal Government can deal. The role of the Government is only to encourage, assist in, and approve the planning at each level—it cannot dictate what is to be done.

No Substitute for Sound Judgment

But with all these imponderables, responsible decisions have to be made and so it is that budgeting must in the final analysis, I think, remain a function of broad and sound judgment, not solely an expression of dollar absolutes resulting from the application of a formula. We live in a dynamic society, a pluralistic society. And this very pluralism produces a contest of priorities and values. Since we must deal with relatively finite resources, we are unlikely to produce the complete harmony of satisfaction that each planner would like to expect of the PPB process. It would be extraordinary, in fact, if a dynamic society did not have expectations and estimations and goals which surpassed its immediate resources. I don't think we should be unduly frustrated, therefore, when these aspirations must be achieved in an orderly way through a framework of balance and in the perspective of our total needs and problems.

In a directed or dictatorial society, there would probably be less concern about determining priorities. But in an open society, this matter of priorities is the very essence of budgeting.

This is why budgeting is probably the single most important device that we have yet developed in public administration for assessing priorities and assuring that priorities are carried out in the most economical and effective way.

Perhaps what I am really trying to say is that there is no assured way to bring the decisionmakers down to a single right answer. If there are many who want people who urge greater expenditures for national security there may be many others, just as dedicated, who will say that the Government's dollars should go for school construction, or for medical research, or for farm subsidies, service pensions, for highways, for housing, urban renewal,

space, science—you name it and I am sure it is somewhere on a list.

The Basic Issue of Priorities

There is no way that you can develop a system such as PPB, in my opinion, that will resolve these basic issues of priorities as among different broad purposes of Government. But in terms of specific programs and specific objectives, the world of PPB can play an important role. How do you select proper alternatives? How can you develop an analysis which will project for you the long term consequences of those alternatives, in terms of achieving the greatest output? I think that whether we continue to call it PPB, program budgeting, or what have you, this basic type of analysis is good within the framework of determining alternative ways of attaining national goals. That's really about where I come out on it.

The Tangled Purse Strings

721496

By Marvin Colbs

This article presents the case for basic changes in the present system used to provide funds to finance Federal programs. It suggests that the Federal establishment shift from a June 30 fiscal-year cycle to a calendar-year cycle and that extensive use be made of biennial instead of annual appropriations for most agencies, in order to achieve a more orderly appropriation process and facilitate preparation and review of budgets and programs.

The Constitution of the United States delegates control of the Federal purse to the legislative branch of the Government. In recent years, however, there have been complaints that the purse strings have become tangled, that the congressional system for making funds available to finance Government programs has not kept pace with the greatly increasing scope, complexity, and cost of Government activities.

Congress' difficulties in dealing effectively with complex authorization and appropriations bills have been the subject of considerable discussion recently, primarily in the Defense area. The concerns have centered primarily around the lack of information and of adequate analytical capability available to the Congress to assist it in evaluating

the executive budget and proposed programs. Less emphasis has been placed on another manifestation of the need for modernization of congressional procedures, one which has direct impact on the ability of agencies and departments to conduct their affairs in an orderly fashion—the extensive delays experienced in the enactment of major appropriation bills.

Delay in Passage of Appropriation Bills

It has become a rarity for the major appropriation bills (as well as many of the minor ones) to be passed in time for the funds to be available by the beginning of the fiscal year, on July 1. To provide sufficient operating funds for the agencies in the interim, Con-

Mr. Colbs is an assistant director on the supply management staff of the Defense Division. He has been with the General Accounting Office since 1955 and has had experience in both Washington and the field. He holds a bachelor's degree in accounting from Temple University and a master's degree in international affairs from George Washington University. He is a CPA (Pennsylvania) and a 1969 graduate of the National War College. This article is based on a portion of a broader paper on the appropriation process prepared by Mr. Colbs during his study at the National War College.

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gress has followed the practice of adopting continuing resolutions which permit the agencies to expend funds at the same relative rate as during the previous fiscal year until such time as the appropriation bill itself is finally passed.

Although these continuing resolutions prevent complete stoppage of agency operations, the delays in passing the actual appropriation bills have a significant impact on the operation of the executive agencies. The delays create considerable uncertainty as to the level of funding that can be anticipated in support of programs. Initiation of new programs frequently must be deferred. Also, steps must be taken to closely control rates of expenditure at all levels to avoid using a disproportionate share of the funds by the time the appropriation bill is passed. These stringent fund controls result in substantial additional administrative costs.

Presented below is a tabulation showing for the last 10 years the dates on which three major appropriation bills have been passed. These three appropri-

tion bills cover Defense Department, State Department and related agencies, and foreign assistance and related agencies. Each year the President's budget was presented to the Congress in mid-January. As can be seen from the tabulation, in only one of the last 6 years has the Defense appropriation been passed before the end of September—after one-fourth of the fiscal year had already passed. Even greater delays have been experienced with respect to the appropriations for the other agencies.

Increased Volume of Authorizing Legislation

One factor contributing to the delay in passage of major appropriation bills in recent years has been the ever-expanding volume of programs for which prior authorizing legislation is required before appropriations can be considered. In recent years, for example, in the area of Defense appropriations, the requirement has been imposed for separate authorization for the procurement of aircraft and missiles, whereas such

Date of Final Approval of Major Appropriation Bills

	Defense	State Department and related agencies	Foreign Assistance and related agencies
1959	Aug. 22, 1958	June 30, 1958	Aug. 28, 1958
1960	Aug. 18, 1959	July 13, 1959	Sept. 28, 1959
1961	July 7, 1960	Aug. 31, 1960	Sept. 2, 1960
1962	Aug. 17, 1961	Sept. 21, 1961	Sept. 30, 1961
1963	Aug. 9, 1962	Oct. 18, 1962	Oct. 23, 1962
1964	Oct. 17, 1963	Dec. 30, 1963	Jan. 6, 1964
1965	Aug. 19, 1964	Aug. 31, 1964	Oct. 7, 1964
1966	Sept. 29, 1965	Sept. 2, 1965	Oct. 20, 1965
1967	Oct. 15, 1966	Nov. 8, 1966	Oct. 15, 1966
1968	Sept. 29, 1967	Nov. 8, 1967	Jan. 2, 1968
1969	Oct. 17, 1968	Aug. 9, 1968	Oct. 17, 1968

was not necessary before. Representative George Mahon of Texas, chairman, House Appropriations Committee, pointed out in 1965 that such authorizations had increased to the point where they involved programs and agencies representing half the total annual appropriation bills and that this added to the floor load and delayed the appropriations.

This trend has been the result of growing concern by members not on the Appropriations Committees that only those committees were in a position to exert any meaningful influence on major Defense programs. Thus, requiring prior authorizations on selected segments of the appropriations gives members of other interested committees an opportunity to apply their judgment and influence to major policy questions regarding the structure of the armed services.

This increase in the volume of appropriations requiring prior authorizing legislation has had a particular effect on top agency officials in the executive branch. More and more time of these busy executives must be spent in repetitively presenting programs and justifying budget requests to congressional committees. Some of these executives appear before as many as four different committees and give, for the most part, the same testimony to each.

For example, as a minimum, the Secretary of Defense must appear before the Armed Services Committees and the Appropriations Committees of both the House and Senate. The Secretary of State meets with a similar situation with respect to the Senate Foreign Relations Committee and the House Foreign Affairs Committee. Estimates have

been made that some of the top executives of major departments spend as much as one-third of their time on Capitol Hill.

Numerous suggestions have been made for more joint meetings of pertinent committees to avoid these undue demands on the time of top executives.

Impact of Delayed Appropriations on Executive Agencies

The problem of delays in enacting appropriations was commented upon very candidly by Representative Morris K. Udall of Arizona in testimony before the Joint Committee on the Organization of the Congress, 89th Congress, first session. He submitted the following comments on the appropriation process as part of his testimony.

Appropriations process is stalemated.—A legislature can operate successfully without passing new laws or repealing old ones. But its one essential function is to pass proper appropriation bills for the operation of Government departments. In 1963, the President presented his budget in January for the fiscal year beginning in July. July came and went and by December—five-twelfths of the way through the fiscal year—only 5 of the 13 major money bills had been passed. By this time department heads were preparing their new 1964-65 budgets for submission to Congress in January. They didn't know what their current budgets were. If one expects a reasonably efficient government, this is an intolerable situation.

Again, I am not quarreling with any decision Congress finally makes. Foreign aid should be either \$4 billion, \$2 billion, or nothing. The Federal Aviation Agency may need either \$100 million or \$800 million. My point is that the administrator of a public agency—just like his counterpart in private industry—ought to know what his budget is before his fiscal year begins.

It is not possible to precisely measure

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the impact on Government operations from the practices currently followed in the Congress for handling the appropriations. Nevertheless, as Mr. Udall indicated, the adverse effects on efficiency can be substantial.

Delays in approval of the appropriations create considerable uncertainty as to the level of funding that can be anticipated in support of ongoing and previously proposed new programs. This makes planning for subsequent periods quite difficult. During much of the year agencies are actively engaged in various phases of at least three different budget programs at the same time. In the spring they are in the process of (1) justifying the budget for the next fiscal year to the Congress, (2) operating under the appropriations for the current year, and (3) starting the projection and preparation of the budget for the fiscal year after next, which must be ready for the Bureau of the Budget (BOB) in September. The first 6 months of the fiscal year can be particularly difficult in that programs for the next fiscal year must be finalized and defended to BOB at a time when the appropriations for the current year have not been passed. Furthermore, during this period great care must be exercised in managing funds under the continuing resolutions to avoid overcommitment and at the same time ensure effective agency operations.

In the event that the Congress drastically cuts the amounts requested by the executive branch, even greater problems arise. For example, in 1964 the bill appropriating foreign aid funds was not signed into law until 6 months of the fiscal year had already passed. Furthermore, the Congress provided only

66 percent of the money that had been requested 9 months earlier. Even opponents of all foreign aid were disturbed when the Secretary of Defense, in blunt terms, described the "absolute chaos" created in military aid programs by the fund reductions voted by the Congress and retroactively applied to the beginning of the fiscal year.

Perhaps the most difficult problems arising in the Defense area from delayed appropriations are experienced with respect to construction programs, because proposed new projects are involved. The continuing resolutions permit ongoing programs and day-to-day operations to continue (although with some difficulty, as described later). However, starts on new projects must be deferred until funds are appropriated. In the construction program where line-item approval of the Congress is required, this is especially confining.

For example, planning and estimating for new construction projects must be performed well in advance of the budget submission and some provision must be made for foreseen changes (usually increases) in the construction cost index before the project is to be started. If additional delay is experienced in approval of the funds for the project, the continually rising cost indexes may significantly alter the cost of the project to the point that, when the funds are finally made available, the agency cannot afford the project. Also, it has been found that, faced with protracted timeframes for approval of projects and the resultant uncertainty, suitable contractors tend to apply their resources and capabilities elsewhere

and may no longer be available when funds are finally approved.

Similar problems with respect to new projects are experienced in the area of research and development. Also, reprogramming of funds, which has greatly increased in frequency and volume in recent years, is complicated by delayed appropriations. Significant reprogramming actions, on which prior congressional approval is required, cannot be proposed to the Congress until the original appropriation has been approved.

During the early months of the fiscal year when the appropriation bills have not been passed, the uncertainty as to funding levels requires the exercise of close fund controls to avoid commitment of funds at too rapid a rate and to preclude situations later in the year wherein important, urgent requirements cannot be funded. Thus, administrators at various levels tend to hold back in the allocation of funds to lower levels, and managers tend to be more conservative in incurring obligations.

The effects of this type of operating environment were described in a report to the Congress by the Comptroller General of the United States.¹ The report described conditions during a period of considerable uncertainty within the Department of Defense (DOD) as to the funds that would eventually be available to support the requirements of the military services. During this period DOD imposed close funds controls and released funds to the services on a piecemeal basis. The

incremental receipt of funds at spare parts procurement centers created management difficulties. Specific difficulties cited in the report were:

- Spare parts could not be purchased in larger, more economical quantities,
- Prices were increased by contractors because of delays in placing orders,
- The administrative costs of procurement were increased because of the additional paperwork, and
- The purchase of supplies on a piecemeal basis increased the likelihood of parts shortages which could adversely affect the operational readiness of aircraft.

The report contained specific examples of the increased procurement and administrative costs incurred.

Possible Corrective Measures

Former Congressman Robert P. Griffin of Michigan (now Senator) has remarked that many of the suggestions for reform in the Congress would not be needed if Congress would adhere to its own rules already in effect. For example, the Legislative Reorganization Act of 1946 provided that generally the two Houses of Congress should adjourn no later than the last day of July of each year. The Congressman was alluding to the fact that, if this could be done, the problem of extensive delays in appropriation bills, and the adverse effects related thereto, would not exist.

However, since that provision was put into law in 1946, the Congress has not succeeded once in adjourning by that date. Previously, it had succeeded in doing so on occasion.

¹ Need for Improvement in Funding Practices Affecting Spare Parts Procurements (B-164301, Aug. 27, 1968).

In view of the growing complexity of Government programs, and both national and international affairs, it does not seem reasonable to expect the business of the Federal establishment to be dealt with on a part-time basis, that is, with a 6- or 7-month session. It seems inevitable that Congress will be obliged to remain active, if not actually in session, for almost the entire year. This seems to be borne out by the adjournment trend in recent years.

Therefore, some other measures will be required if appropriations are to be passed in sufficient time to ensure smooth operation of the agencies and to permit orderly planning and projection of budgets and programs for subsequent periods.

One possibility would be to amend congressional rules to provide that any appropriation bill not passed by a certain date would automatically be in effect. Although this would put considerable pressure on the Legislative and Appropriations Committees to finish their work early, its prospects for adoption would appear to be slim, since the members would not be apt to impose a limitation on themselves that would tend to limit their influence in the budget.

For some years Senator Warren E. Magnuson of Washington introduced a bill (cosponsored by Senator Joseph S. Clark of Pennsylvania) to split each session of Congress into two parts. The first, running about 7 months, through July, would deal entirely with legislative matters, with priority on messages from the President. The second would deal solely with fiscal matters and would be tailored to allow for election year activity. The Ways and Means,

Finance, and Appropriations Committees would proceed with hearings and mark-up of the bills during the first session so that they could be ready for the floor during the second session. Implicit in this concept is a change from a fiscal-year to a calendar-year basis for the Federal Government.

This proposal has had considerable support over the years but has not been adopted. Although the bill was proposed and supported by several witnesses, the Joint Committee on the Organization of the Congress did not see fit to include the proposal as a recommendation in its report in July 1966. Instead the committee recommended that committee and floor sessions be scheduled on a 5-day week so that the business of the session might be completed by July 31 in normal circumstances (i.e., when there was no national emergency). The committee recognized that this might be difficult to accomplish, however, and provided for extending the sessions if necessary.

Change to Calendar Year for Federal Government

One solution to the problem of appropriation bills not being completed until some time after the fiscal year has started would be to change from a fiscal-year to a calendar-year basis of budgeting in the Federal establishment. Although the ever-expanding business of the Government seems to require longer sessions of the Congress, there is strong motivation for completion of its work by November or early December (earlier in election years). Thus, if the calendar-year basis were adopted, passage of the appropriation bills would be almost ensured before the beginning

of the budget year in January. If, in addition, the submission date for the President's budget were slipped from January to mid-March, a period would be provided for making any adjustments in the new budget necessitated by congressional decisions on the budget just passed. It seems that these two changes could result in a more smoothly phased appropriation process for both the Congress and the executive branch. The Comptroller General recently commented favorably on a proposed bill (H.R. 12330, 91st Cong.) which would effect such a change. He stated that the advantages to be gained argue strongly for a change in the Government's fiscal year.²

Opposition to such a change has been expressed on the basis that it would extend by 6 months the already too long projection period for planning budgets and programs. However, this disadvantage would have to be balanced against the smoother operation and other advantages that would accrue as a result of being able to plan future budgets with full knowledge of current funding available. With respect to some of the problems that would be created, the Comptroller General expressed the opinion that they would not be wholly insolvable and appear to be relatively minor in relation to the overall benefits.²

Another proposal with much potential for achieving a more orderly and effective appropriation process is the suggestion that appropriations be made for 2-year rather than annual periods.

² Letter to The Honorable William L. Dawson, chairman, Committee on Government Operations, House of Representatives (B-153121, Aug. 21, 1969).

The following advantages have been attributed to such a procedure:

- It would enable the executive agencies to plan and carry out their programs more effectively and would avoid the problems inherent in preparing and defending a budget for a subsequent year while the current year's budget had not been approved.
- It would greatly facilitate more effective allocation of time by the Congress and its Members. More time would be available for review and oversight functions and evaluation of proposed programs.
- It would considerably reduce the time and effort required of agency officials to present and defend their programs.
- It would lead to alternating long and short sessions of Congress, the short legislative session in the second year giving Congressmen time for important work in their home districts and for the biennial campaigns and elections.

The principal objection to this proposal has been that there is too much uncertainty involved in projecting expenditures that far into the future when the budget is being prepared, which would lead to a large volume of supplemental requests in the second year. This would tend to counteract the advantages.

Proponents of the change, however, refer to the fact that numerous supplemental requests occur under the present annual system and that a strong congressional stand on supplementals, to-

gether with better administration and allocation procedures in the executive branch, could satisfactorily control the volume of supplemental requests.

Doubtless there are certain Government programs which, because they are so sensitive to change and need to be flexible in response to rapidly changing world conditions, would likely require congressional consideration more often than once in 2 years. It is not intended that more frequent attention in such cases be ruled out. On the other hand, there are numerous agencies with relatively stable programs and with fairly standard justifications that are presented each year. It seems that considerable effort and time could be saved if these appropriations, at least, could be handled biennially. This approach also seems particularly worthwhile in the case of agencies whose operations consist mainly of individual projects that run over a period of several years. The Agency for International Development is an example of such a program. Appropriations every 2 years would greatly facilitate the smooth operation of that agency's projects and remove much of the uncertainty and resultant peaks and valleys of activity that result from the current annual consideration of its program.

Conclusion

The problems of Government have become so broad and complex that it may not be feasible to expect Congress to deal effectively with them on a 7-month basis. Recent trends seem to indicate that something closer to a 10- or 11-month session may be necessary. With this in mind, it seems that more basic changes are required to create a more smoothly phased appropriation process that is realistically aligned to the actual operating pattern of the Congress. Senator Mansfield of Montana made this point most clearly when he commented, "Perhaps it is the persistence of the illusion of a 7-month Congress in a 12-month nation which is at the root of the difficulty and with this illusion, the incongruity of a June 30 fiscal closing in a December 31 government and nation."³

A shift from a fiscal-year cycle to a calendar-year cycle for the Federal establishment and extensive use of biennial appropriations for most agencies and departments appear to be two changes with much potential for accomplishing a more orderly appropriation process and thereby helping to untangle the Federal purse strings.

³ U.S. Congress, Joint Committee on the Organization of the Congress, *Organization of Congress, Hearings Before the Joint Committee Pursuant to S. Con. Res. 2, 89th Cong., 1st sess., 1965, p. 1655.*

A New Form of Technical Assistance to Ethiopia

By John P. Competello

721497

In this article, the author describes the role of the Auditor General of Ethiopia and outlines the plan of technical assistance to be given by the Agency for International Development.

The Agency for International Development (AID) is planning to provide technical assistance to Ethiopia in a form that may well be the forerunner of similar assistance to other developing countries. Ethiopia's low gross national product of only about \$63 per capita, about 50 percent of the Africa average, makes it essential that the limited funds available be used as effectively as possible, to promote economic and social development.

One way that AID is trying to gain a greater impact from its country program is by technical assistance to improve financial management and administration in the Ethiopian Government, including budgeting, auditing, governmental accounting, and purchasing and supply management. Although AID has provided technical assistance for financial management to other countries in the past, a unique feature of

AID's plan in Ethiopia is to assist in the audit function of government.

Ethiopian Government's Role in Economic and Social Development

The Imperial Ethiopian Government is the dominant factor in the economic and social development of the country. Foreign private investment is low, amounting to only \$4 million in 1967. About 90 percent of Ethiopia's people work in the agriculture sector of the economy, which accounted for about 60 percent of Ethiopia's gross domestic product of \$1.3 billion in 1968. Government expenditures amount to about 15 percent of the gross domestic product.

Besides the various Government ministries and agencies, the Imperial Ethiopian Government plays a significant

Mr. Competello is a supervisory auditor in the European Branch of the International Division, where he has been assigned since September 1966. Prior to his European service, Mr. Competello was assigned to the Denver Regional Office from the time of his GAO appointment in June 1962. He holds a B.S. degree from Brooklyn College and an LL.B. degree from La Salle Extension University. Mr. Competello is a CPA (Colorado) and is a member of the American Institute of Certified Public Accountants.

role in the private, commercial sector of the economy. The Government has created some 30 chartered public agencies, such as the Ethiopian Light and Power Authority and the Tobacco monopoly, and it has established about 30 share companies, such as the Ethiopian Air Lines and the Ethiopian Investment Corporation. The Government-chartered agencies receive varying degrees of financial support from the Ethiopian Government, and the Government owns 51 percent or more of the share companies organized under Ethiopia's commercial code.

Under these conditions in Ethiopia, economic development is heavily dependent on the Government's ability to expand and improve the efficiency of its own commercial enterprise, as well as to foster the growth of private economic enterprises. The improvement of governmental financial management is considered an important element in attaining this goal. Upgrading the scope and quality of Government auditing is recognized by the Imperial Ethiopian Government and by major foreign assistance contributors as an integral part of a financial management improvement program.

Prior to 1958 there was an almost complete centralization of financial administration, i.e., budget preparation and execution, accounting, treasury management, and auditing, within the Ministry of Finance. Changes since then have produced a measure of decentralization, the operating ministries and agencies now sharing financial management responsibility with the three key central agencies—the Ministry of Finance, the Planning Commis-

sion in the Prime Minister's Office, and the Department of Auditor General.

The Department of Auditor General

The Department of Auditor General was established in 1959 by a proclamation of His Imperial Majesty, Haile Selassie I, of Ethiopia. The Department is independent of all ministries, departments, and agencies of the Imperial Ethiopian Government. An Auditor General, appointed by His Imperial Majesty, is the head of the Department and serves for a term of office at the pleasure of the Emperor. The Auditor General reports to both the Emperor and the Parliament on the audits of Government accounts.

The Auditor General is charged with the responsibility of establishing a system of audit designed to provide full disclosure of the results of the financial operations of the Government, and to obtain the financial information necessary for the management of the Government, and with the exercise of effective control over Government income, expenditures, funds, property, and other assets.

The Auditor General also has the responsibility to audit all Government accounts, including the accounts of the Government-chartered agencies and the share companies. Some of the major Government-chartered agencies and share companies engage public accounting firms for annual audits of the accounts; the Auditor General can use the results of these audits in fulfilling his audit responsibilities.

Legislative problems which currently face the Department of Auditor Gen-

eral include the requirement that audits of all Government accounts be completed not later than 7 months after the close of the fiscal year and include a statute of limitations that generally precludes audits of records of a Government activity after a lapse of 2 years. The Auditor General is attempting to remove, by legislation, the 2-year statute of limitations and hopes, with the increase in qualified staff, to be better able to meet requirements for reporting to both the Emperor and the Parliament, on the audits of Government accounts.

Even though the Department of Auditor General was established 10 years ago, until recently the major emphasis of the audit program was directed to determining the legality of each transaction and the accuracy of its recording. The present Auditor General, His Excellency, Ato Asafa Demissie, took office in early 1968 and has attempted to reorganize the Department to be more responsive to its responsibilities by evaluating program effectiveness and by redirecting audits to produce useful information for financial planning and other management purposes.

The task of the Auditor General is made more difficult because, even though most major ministries or departments have their own group of inspectors, there is no internal audit within the Government. The Auditor General plans to assist in the establishment of internal auditing; however, the recruitment of competent staff is a major problem.

One of the most pressing needs of the Department itself is for qualified personnel. Prior to HE Ato Asafa Demis-

sie's taking office, there were 43 auditors, of which only four held college degrees and four others had specialized training at the commercial school for business. As of July 1969, there were 91 auditors, more than double the number only 18 months prior. More important, however, is that the staff has become more professional. The number of college-trained auditors increased to 10 and the commercial school graduates numbered 57. In addition, the Department has branched out and has recruited a small number of college-trained specialists in economics, public administration, management, and law. Even this number, however, is seen as inadequate for the large task of annually auditing the operations of Government envisioned in the Emperor's proclamation.

Future staff increases will depend not only on the geographic area to be covered, i.e., whether fieldwork could be performed by visits from a central headquarters or whether field offices should be established in certain areas, but also on the ability of the Department to train present and future staff. The sources for qualified auditors and other professional people for the Department of Auditor General are the College of Business at the Haile Selassie I University and the Commercial School of Addis Ababa, capital of Ethiopia. The private sector is also seen as an important source for experienced and qualified personnel.

Public Accounting in Ethiopia

At the present time there are only 11 public accountants in Ethiopia, most of them licensed by an Ethiopian ministry,

either as a firm or as a professional organization. There is no specific requirement for licensing. The Auditor General is striving for the authority to license the public accountants who audit Government-chartered and share companies, wherein the Government has financial interests. This means practically all the public accountants now practicing in Ethiopia. The Auditor General would like to see such licensing requirements include qualifications of education, experience, and the passing of an examination. In addition, the Department is in the process of preparing draft regulations governing, among other things, the professional conduct of public accountants.

Although salary ranges vary among firms and, in part, depend on educational background and experience, a qualified public accountant with over 5 years' experience reportedly could earn between \$500 and \$600 a month. However, earnings of contract employees from other countries reportedly range from \$1,000 to \$1,200, excluding fringe benefits, a month.

The Auditor General and the GAO

General Accounting Office representatives have met with the Auditor General on several occasions, both at GAO headquarters in Washington, D.C., and in Ethiopia. While in Washington, in 1968, the Auditor General met with the former Assistant Comptroller General, Frank H. Weitzel, and others, enjoying an exchange of views which included a comparison of the functions and responsibilities of the two Government audit agencies.

In March 1969, the Auditor General had discussions with the GAO European Branch Director, Joseph P. Normile, and members of the GAO team performing a review of U.S. aid programs in Ethiopia. The discussions in Ethiopia centered on the GAO's authority, responsibility, and operating procedures, as well as the review of U.S. aid programs in Ethiopia then being performed by GAO.

AID Assistance

In 1968 AID financed a survey of financial administration in the Imperial Ethiopian Government, emphasis being placed on the effectiveness of the Auditor General and the Ministry of Finance in carrying out their auditing, accounting, and related responsibilities. In regard to auditing, the survey report pointed out that the type of basic accounting system used in the Imperial Ethiopian Government, characterized by decentralization of expenditure control and a high proportion of cash transactions, placed unusual demands on the postaudit program. With such an accounting system in use, it was observed that the auditing program had to be comprehensive and performed on a current basis, as well as designed to provide assistance in improvement of financial records, procedures, and reporting.

The report proposed a program of work to improve the capability of the Auditor General to fulfill his responsibilities. The principal steps in the proposed audit improvement program are as follows:

1. Prepare a preliminary audit manual applicable to the audit pro-

- gram for the regular ministries and departments.
2. Formulate and conduct an intensive in-service training program for all audit personnel of the Department of Auditor General.
 3. Conduct demonstration audits of representative ministries and departments to test the preliminary audit manual and provide training for the audit staff.
 4. On the basis of experience gained in 3 above, prepare a final audit manual.
 5. Analyze the special auditing requirements of Government-chartered agencies and develop proposed audit programs.
 6. Review the audit situation of share companies which are more than 50-percent Government owned and make recommendations necessary to ensure protection of the Government's interest.

AID planned to provide four advisors by the end of 1969 to render this assistance to the Auditor General. A special-

ist has also been obtained by Ethiopia through the International Monetary Fund to work as a personal advisor to the Auditor General. This specialist will undertake a review of the legal basis for auditing in the Ethiopian Government and propose modifications to provide a better legal foundation for the auditing program. The organization, staffing, and administrative practices of the Department of Auditor General will also be analyzed.

According to the AID-financed survey report, the audit program developed should provide, through postauditing, for verification of the legality, accuracy, and correctness of financial transactions and the receipt, custody, investment, and disbursement of public funds. Beyond this, it should include evaluation of compliance with established accounting procedures and disclosure of ways in which internal controls and financial records can be improved. The audits should also measure the attainment of agency and program objectives in terms of the effective utilization of funds.

Legal Considerations in Contracting for Personal Services 721498

By Edwin J. Monsma

This article is intended to provide guidelines for evaluating the relationship between the Government and the employees of service-type contractors in connection with possible violations of the civil service laws in contracts for personal services.

During the past few years the policies and practices of Government agencies in the field of contracting for the performance of personal services have received the critical attention of the General Accounting Office (GAO), the Civil Service Commission (CSC), and several committees of the Congress.¹ Much of the GAO work in that regard has been concerned with the comparative cost of contractor v. in-house performance. Such cost evaluations are of prime importance when the procurement of the services by the contract involved is authorized by law. There are, however, certain legal principles under which the propriety of contracts for services must be determined.

¹ H. Rept. 188, 89th Cong., 1st sess. (House Committee on Post Office and Civil Service); Hearings before Senate Committee on Government Operations on Government Policy and Practice with respect to Contracts for Technical Services, 90th Cong., 1st sess.; Hearings before the House Committee on Government Operations on Government Procurement and Contracting on H.R. 474, 91st Cong., 1st sess., part 7.

CSC is responsible for the administration and enforcement of the civil service laws, rules and regulations, and the pay provisions applicable to the single largest group, General Schedule (GS), of Federal employees. (5 U.S.C. 1104(a)(5); *id.* 1301; *id.* 1302; *id.* 3301; *id.* 3302; *id.* 5102; *id.* 5103; *id.* 5331.) Therefore, GAO has coordinated its actions with CSC or consulted with CSC prior to final actions taken by GAO on service contracts which appeared to be in violation of such provisions of law, rules, and regulations. CSC has studied the legal aspects of this problem and in opinions of its General Counsel certain specific contracts and the general rules of law applicable have been discussed and applied. GAO is the agency vested with enforcement powers under its authority to disallow payments made pursuant to contracts which have been found to be illegal. (See 5 Comp. Gen. 450.)

Mr. Monsma received a J.D. degree from the Law School, George Washington University, in 1956. He has been employed as an attorney in the Office of the General Counsel since 1958, and in 1967 he received a Meritorious Service Award.

Personal Services

Some confusion in the application of the rules set by GAO and the principles enunciated by CSC has resulted from the fact that the term "personal services" has been given various meanings and connotations.

The term "personal services" as used in early decisions of the Comptroller General included all services normally performed by Government employees and all services which could be performed by incumbents of existing civil service positions. It was held in those decisions that Government agencies were not authorized to contract for the performance of such services. It was considered that those services should not be performed by contractors that could not be held personally responsible for failure or misfeasance in the performance of such duties. The format and operation of the contract, whether on a job or end-product basis or under conditions clearly suggesting an employer-employee relationship, were not stressed. (See 6 Comp. Gen. 140; *id.* 364; *id.* 474. See also 32 Comp. Gen. 427; *Turei v. Delaney*, 32 NE 2d 774 (New York, 1941).)

More recently it has been emphasized that services normally performed by Government personnel may be performed under a proper contract with a Government agency if that method of procurement is shown to be more feasible, more economical, or necessary to the accomplishment of the agency's task. Inherent in this modification of the prior strict rule was the requirement that the contract be so worded and carried out in a manner so as not to be tainted with an employer-employee re-

lationship. (31 Comp. Gen. 372; *id.* 510; 33 *id.* 143; 44 *id.* 761.) Also inherent in that modification was the restriction that the services involved in any contract were services which could properly be delegated to non-Government personnel.

The recent examinations of contracts which have been performed by CSC were concerned with the lack of legal authority on the part of Government agencies to secure personal services by contract with a firm in lieu of securing such services under the provisions of the civil service laws. Basically, the position taken by CSC is that, if the terms of the contract permit or require detailed Government supervision over the contractor's employees or the manner in which the services are performed under the contract leads to the same result, the contract must be questioned on a legal basis. Contracts for service which are in fact performed under detailed Government supervision and control have been referred to as contracts which are "performed on a personal service basis" or more loosely as "personal service" contracts.

The various uses of the term "personal services" have caused some misunderstanding with regard to the legal conclusions of GAO and CSC. It should be clearly understood that the legality of contracts for services which are to be performed on a nonpersonal service or independent contractor basis has not been questioned even though the services involved may be performed by an individual contractor himself or may be services normally performed by Government employees. (See 43 Comp. Gen. 390; 28 *id.* 296; *id.* 50; 26 *id.* 442; *id.* 188.)

Two aspects involved in the legal examination of personal service contracts are discussed herein: first, the relationships created by contracts between the Government and individuals performing the services required by such contract and, second, the justification for the rule that contracts which result in an improper relationship between the Government and the individuals performing the services required are illegal.

The Government and "Contractors' Employees"

It has been assumed by many Government officials that any person working on a Government project under a contract between a company and the Government and paid by the contractor is, for all purposes, the employee of the contractor. Although that is normally the case, the existence of a contract and the terms thereof do not always conclusively determine the legal relationship created between the individual performing work required by the contract and the parties to the contract. The law relating to the master-servant or employer-employee relationship must be used to determine who is the employer. The "personal service" relationship between the Government and individuals performing services under a contract which is created by the operation of certain Government contracts is tantamount to the legal relationship of master and servant, or of employer and employee.

The factors which determine whether the master-servant or employer-employee relationship exists have been applied in determining whether a Gov-

ernment contract creates a personal service as distinguished from a non-personal service relationship. Such factors include (1) the degree of supervision and control exercised over the individuals performing the service, (2) the right to dismiss individuals from performance of work required by the contract, (3) the furnishing of materials, supplies, facilities, or clerical or other assistance, (4) payment on a time, as opposed to a job, basis, and (5) the furnishing of a completed product or service. (See 56 C.J.S. Master and Servant § 3(2), 3(8).)

In the analysis of contracts which have come to the attention of GAO, the primary test of whether the contract calls for services to be performed on a personal service basis is the degree of supervision and control to be exercised by Government personnel over the details of the work which is performed by contractor employees under the contract. Corollary to that test is the control exercised by the Government in the selection of the individuals to perform work under the contract and the extent to which the Government may require the dismissal of an employee performing work under the contract if he is not considered to be satisfactory.

The investigation which resulted in the correspondence printed in House Report 188, Eighty-ninth Congress, dated March 18, 1965 (the "Fuchu" case), showed that the Government contractors agreed to furnish personnel with qualifications specified in the contract. Those personnel were used by the agency concerned to augment their in-house capability. The obligations of

the contractors were to furnish personnel while the work done by the individuals furnished was assigned by Government supervisors and performed under the detailed direction of such supervisors. Government personnel and contractor personnel worked at the same jobs, no distinction being made between the two classes of personnel as to work assignments or degree of supervision. Payments were made to the contractors on the basis of time worked by the personnel that the contractors had furnished. Furthermore, the contracts contained provisions which gave the Government the right to require that a contractor-furnished employee be dismissed from further performance of duties under the contract.

The contracts involved in 44 Comp. Gen. 761 (June 1, 1965) were described at page 762 as follows:

* * * In the case of prototype contracts which you have furnished the contractor will supply personnel to assist the Government in the performance of Government functions when made necessary by reason of a temporary requirement for doing work during peak-load periods or by reason of emergency conditions. The contracts provide that the individuals supplied by the contractor will be able to perform the type of work which is the subject of the contracts—typing and clerical services or telephone and teletype operator services—in accordance with the minimum standards set forth in the contracts and that if an individual supplied does not perform satisfactorily the contractor will furnish another individual.

The operation of those proposed contracts was described at page 763 as follows:

* * * The clerical and typing contract specifically provides for Government supervision and we do not have evidence indicating that the work to be done under either contract

can be properly performed or is performed without detailed instructions and close supervision by Government personnel. We must emphasize here that supervision over the individuals performing the work required under a contract remains in the hands of Government personnel even if the contractor provides an additional employee to act as supervisor and relay instructions of Government personnel to other contractor-furnished personnel, and that the test of supervision by Government personnel must be applied to a contract as it operates even though its terms do not call for supervision.

It would seem evident from the prototype contracts furnished that they are contracts under which the contractors' prime contribution is to furnish people who are managed and supervised by Government officials.

In both of those cases the contractors' primary duties were to supply specific types of personnel who were to work for the Government as directed by Government supervisors. No real distinction between the work performed by contractor-furnished personnel and by Government employees who were assigned the same type of work was evident. The relationship created between contractor-furnished personnel and the Government under those conditions was tantamount to the employer-employee relationship. Therefore, it was held that the contracts were improper in that they were to be performed on a personal service basis.

The opinion of the General Counsel, CSC, in the "Goddard" case, issued October 17, 1967, and supplemented July 8, 1968, involved a more complicated set of facts than those involved in the "Fuchu" case or the decision 44 Comp. Gen. 761. The contracts involved in the "Goddard" case were contracts for technical assistance. Contractor responsibilities were not defined ex-

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plicitly in the contracts but were to be assigned under task orders. CSC concluded that many of the task orders could not be performed by the contractor without direct supervision and control by Government employees over contractor employees or supervision by Government employees relayed through a contractor supervisor who could not supervise but merely passed on the directions of Government personnel to contractor employees. Because a substantial number of contractor employees worked under supervision of the Government it was concluded that the contracts should be terminated as being in violation of the civil service laws.

The criteria used by the CSC to determine what positions should be filled in accordance with Federal personnel laws are (1) the incumbent performs a Federal function, (2) the incumbent is employed or appointed by a Federal officer, and (3) the incumbent is under the supervision and direction of a Federal officer. (See *Stapleton v. Macy*, 304 F. 2d 954 (CADC, 1952); 5 U.S.C. 2105(a).)

The first mentioned criterion recognizes that a Federal employee must be engaged in the performance of the work of the Federal Government. The other two criteria are for use in determining the existence of the employer-employee relationship to the Federal Government. Implicit in those criteria is the fact that the existence of a Federal position is predicated not solely upon the work which is to be done but also upon the relationship of the Government to the individual performing the work. Thus, services ordinarily

may be performed for the Government by contractors on a nonpersonal service or independent contractor basis without regard to the civil service laws or pay laws governing Federal employees, but the creation of a relationship between an individual and the Government which is tantamount to that of employer-employee must be in accordance with the civil service laws and the pay must be in accordance with the Government pay system applicable to the job.

In most instances a Government agency is in a position to determine whether it will accomplish a certain task by the use of a nonpersonal service contract. If the agency decides to use the contract method, however, it must be willing and able to entrust the performance of the required task to the contractor under the terms of the contract and forego the exercise of detailed control over contractor employees during the performance of the contract.

It should be recognized that there are certain functions of the Government, such as those requiring personal discretionary actions by the head of an agency and others involving the making rather than the implementation of Government policy, which may not properly be performed other than "in-house." Broad guidelines in this area are contained in Bureau of the Budget Circular No. A-76; however, neither GAO nor, to our knowledge, CSC has in recent years purported to formulate rules as to what functions may or may not be contracted out. Each case must be viewed on the basis of the particular facts and law involved; and, if it is determined to be a function which may properly be

exercised only by persons who are responsible to the Government as officers or employees, such function may not be performed by a private firm under contract.

Violation of the Civil Service Laws and Government Compensation Schedules

Agencies are not free to avoid the civil service system and the pay schedules applicable to Federal employees by the simple expedient of making a contract for the performance of the required service if the contract by its terms or in its operation results in the creation of a relationship tantamount to that of employer-employee between the individuals performing the services and the Government. GAO and CSC have questioned and will continue to question the legality of such contracts under the requirements of the civil service laws and Federal employee pay provisions.

The Attorney General has held that an individual employed to perform the work of the United States must be hired in accordance with the civil service laws unless a specific exclusion of his position is provided by statute. The absence of a formal appointment and the non-compliance with civil service laws cannot be used as a means of excluding a position from the civil service.

In 25 Op. Atty. Gen. 341 (1905), the Attorney General held that assistant engineers at the U.S. Military Academy were to be appointed within the framework of the civil service laws and that appointments made by the Superintendent of the Academy which did not comply with those laws were invalid.

Similarly, it was held in 26 Op. Atty. Gen. 363 (1907), that deputy collectors of Internal Revenue were to be employed only in accordance with the civil service laws. (See also 26 Op. Atty. Gen. 502 (1908); 27 *id.* 95 (1908); 37 *id.* 121 (1933).) In those cases the Attorney General was concerned primarily with statutory language necessary to exclude an appointment made by a Federal officer from the requirements of the civil service laws. The general conclusion reached was that statutory authority given an official to appoint persons to fill specific positions or to appoint personnel necessary to accomplish a certain purpose did not authorize such appointments to be made outside the civil service laws.

Similarly, CSC and GAO have long held that, in the absence of a specific statutory exemption, all Federal agencies are required to comply with the civil service laws and fix the salary rates of personnel in accordance with the applicable pay schedule. (24 Comp. Gen. 147, 149.) Also, in 44 Comp. Gen. at page 763 the Comptroller General held that broad authority given an agency to contract for the furnishing of supplies and services did not authorize that agency to enter into a contract for the furnishing of services on a personal service basis.

Relating to the classification of Government positions, 5 U.S.C. 5102(b) provides:

Except as provided by subsections (c) and (d) of this section, this chapter applies to all civilian positions and employees in or under an agency.

The exception contained in 5 U.S.C. 5102(c) (20) covers "employees em-

ployed on a fee, contract, or piece work basis." Similar language contained in section 202(29) of the Classification Act of 1949 (now 5 U.S.C. 5331) was explained in reports of both the House of Representatives and the Senate on the proposed Classification Act as exempting "employments on a fee, contracts, piece work basis when authorized by other law." (S. Rept. 847, 81st Cong., 1st sess., p. 33; H. Rept. 1264, 81st Cong., 1st sess, p. 7.) Therefore, that exception is not to be interpreted as exempting persons employed by Federal agencies through contracts which operate on a personal service basis. but must be considered as exempting from the classification and pay provisions only persons employed by contract under authority such as that contained in 5 U.S.C. 2376(d) (1964 ed.).

Thus, employees of the United States must be appointed or employed and must be compensated in accordance with law unless a specific exemption from an applicable law has been approved. The Congress has not authorized a general exception from the civil service laws and applicable pay schedules for all persons who stand in a relationship to the United States tantamount to that of employee under the terms and operation of contracts made with the person or with a firm.

The application of those laws was not intended to be a matter within the discretion of the heads of Government departments and agencies. Agency heads are not authorized to procure services which are furnished on the basis of a relationship tantamount to that of employer-employee without regard to the requirements of the civil service laws and employee compensation provisions.

Conclusion

In 44 Comp. Gen. 761 and in the "Fuchu" and "Goddard" cases, certain rules are stated which are designed to bring about compliance with the laws applicable to the civil service of the United States so that persons working directly for the United States will be employed in accordance with such laws, compensated at rates set by or in accordance with the applicable pay laws, and be afforded the protection and other benefits authorized by law for employees of the United States. Noncompliance with such rules would necessarily erode the protections, benefits, and principle of equal treatment set forth in the various laws, rules, and regulations applicable to Government employees.

On Loan to the Bureau of the Budget

By B. Reginald Howard

This article describes some of the author's observations and experiences over a period of several weeks when he and two fellow GAO staff members were assigned to assist the Bureau of the Budget in a special research project in San Francisco.

The General Accounting Office is frequently called upon to lend direct assistance to other activities of the Government, especially congressional committees. Early in 1969, in response to a request from the Resources and Planning Division of the Bureau of the Budget, the San Francisco Regional Office provided three staff members to assist in a research project involving the city and county of San Francisco.

Initially, Don Miller and I were assigned; later, Julian Fogle joined the group. Our enthusiasm in accepting this assignment was due primarily to the prospect of working closely with the Bureau staff, rather than actually accumulating the required data. As the project progressed it became evident that the data accumulation presented more of a challenge than originally anticipated. However, working with the Bureau staff was, beyond any doubt, the high point in the assignment. Without exception, they were highly conversant with, and vitally interested in,

current political situations. They imparted considerable excitement to the project through discussions of how this and similar projects could materially aid in more effectively achieving both Federal and local program objectives.

It has been said that, to fully understand and appreciate the English language, it is necessary to learn another language. Similarly, the perspective gained in this 10-week assignment—in essence, in a *modus operandi* foreign to us—provided a far better understanding of GAO operations. I wholeheartedly recommend such assignments to the adventuresome and look forward to having others.

Purpose—To Develop a Federally Sourced City Budget

The primary objective of the project was to align total receipts and expenditures by city programs with Federal program expenditures. Such an inter-related structure would, for the first

Mr. Howard is a supervisory auditor with the San Francisco Regional Office. He has been with GAO since 1964, following his graduation from San Jose State College with a bachelor's degree in accounting. He is an active member of the Federal Government Accountants Association.

time, connect Federal funds, in terms of dollar amounts and source within the Federal Government, with the receipts and expenditures of individual programs of a test city.

The actual data to be accumulated involved, for fiscal year 1968 (on a cash basis), total city receipts and expenditures categorized by departments and city programs. These amounts were then further broken down to source; i.e., local, State, or Federal. Whenever Federal funds were involved, additional information was required to reflect the specific Federal source, program, and conditions involved in the transfer. This data was recorded on coding forms and was subsequently key punched and computerized.

The basic sources of this information were (1) city receipt and expenditure lists, (2) records available at the various city departments, and (3) interviews with city, State, and Federal officials. Since no requirement had been established for automatic generation of such data, however, we found that, in many instances, more research was necessary to pin down this information. For example, a recurring problem involved ascertaining the source of funds coming into the city coffers. In the management of their programs, city officials did not always find it necessary to know whether funds received from the State were, in fact, of Federal origin—it was simply money received from the State. Upon consulting State and Federal officials, we found that, although information might be available by grant, it was not available by fiscal year or on a cash basis. Needless to say, judgments were made and decisions ar-

rived at by the several coders (naturally, in a logical, rational, and consistent manner); of this, more later.

Differences in Bureau of the Budget and GAO Methods

As mentioned earlier, the most rewarding aspect of this assignment was working with the Bureau staff. Although the actual data accumulation was not unlike that in GAO reviews—use of the agency's information system, supplemented by interviews—the methodology used by the Bureau was quite unlike that used by GAO. The following sections outline some of these differences.

Site Supervision

Regardless of the number of staff assigned to any given GAO review, there will be a supervisor at each site where work is being done. By the conclusion of this Bureau project, no less than 12 individuals had been involved in the data accumulation, but there had been no designated full-time site supervisor. Questions and problem areas were resolved through discussions among the individual staff members. Policy decisions relating to coding of the forms were arrived at through discussions involving all staff present.

Where disagreement prevailed, the issues were often resolved by conference calls to the project leader in Washington, D.C. Such decisions, however, were subject to later change as new information became available.

Progress Reports

An important method used by GAO to monitor and control the work being performed on each assignment is

through the use of biweekly progress reports. The Bureau handled this monitoring function much more informally, usually over the telephone; occasionally by on-the-job visits by the project leader.

Workpapers

If GAO audit techniques do nothing else, they do involve the accumulation of workpapers in support of work performed; no job is complete without them. On the Bureau job, no formal workpapers were accumulated. Information obtained was coded directly on the forms, with the basis for such coding largely unrecorded. However, in doubtful cases, consensuses were generally reached (see Site Supervision above).

Office Space

Office space is often hard to come by and occasionally GAO auditors may find themselves working in what appears to be a hastily cleaned out broom closet. This Bureau research project was performed in the basement of City Hall, on both sides of an aisle leading to a rather busy men's room.

Although this arrangement did cause some inconvenience, it was not without its benefits. For example, it greatly reduced travel time to interviews with city officials—it was necessary only to wait and the interview could be conducted as the individual passed by.

For a 2-week period, an attractive miniskirted blonde management intern was coding on the research project. Among her other important contributions to the project, she was directly responsible for a substantial increase in traffic along the aisle, thereby further

reducing the waiting time between interviews.

Individual Responsibility

GAO auditors sign their workpapers and by so doing assume responsibility for the accuracy and validity of their work. In this Bureau project, responsibility—in some instances—could be attached to individuals on an informal basis during the fieldwork, but no efforts were made to formalize such responsibility. Rather, emphasis was placed upon group or team responsibility; this was a natural concomitant of the absence of workpapers noted earlier.

Staff Backgrounds

A college background with a major in accounting or business is shared by the bulk of GAO auditors. On this project, the assigned Bureau staff represented many disciplines including social and political scientists, economists, and even an historian. Equally varied were their backgrounds: the blonde management intern, who was on loan to the Bureau from the Department of Housing and Urban Development, was the historian—major emphasis on India; an associate professor on leave of absence from the University of Washington; a sociologist; an author-lecturer; an ex-Air Force officer recently returned from Southeast Asia and currently studying for his Ph. D.; an assistant professor on leave from Rutgers University; a Columbia Law School graduate with an M.B.A. degree from Harvard; and, at the time of the project, the Director of the Bureau's Resources and Planning Division and

his research-team leader, both with strong Bureau backgrounds.

Attire

GAO auditors wear suits, usually conservative, often dark, and generally with white shirts. The Bureau staff dressed much more informally, usually in slacks and sport jackets, sometimes khakis and jackets, and—on one occasion—levis, pullover sweater and tennis shoes. And, as mentioned earlier, there was one miniskirt wearer.

Stability of Staffing Pattern

In GAO it is customary for the staff to remain on the job to its completion, with the exception of trainee rotation. On this project the Bureau used almost any available staff for as long as they could remain, which was seldom more than 2 weeks and often but 1 week or less. Time spent on orientation at the site was somewhat greater than that to which we were accustomed.

Hours of Work

GAO auditors adopt agency working hours and adhere to them with considerable punctuality. The Bureau staff used the city's working hours as a basis for deviation. Although a Bureau representative might be an hour or two late on any given morning, it was as likely that on another morning he could be found at work long before the arrival of city employees. Even more common, he would be working hours after city employees left for the day.

The lunch break was another Bureau deviation. Any lunch consumed in less than an hour and a half was considered barbaric. On the other hand, the Bureau staff seemed completely unaware of the

traditional midmorning and midafternoon coffee breaks. Once shown, however, they rapidly took to the idea, demonstrating their flexibility of operation. These occasions, however, were often used for discussion of the project's status and of the various methods of displaying and using the data being obtained.

Grade Structure of Staff

In GAO the staffing of a job usually ranges from a GS-13 site supervisor to a GS-7 trainee. The Bureau staff that performed the actual coding of forms involved three GS-9's, four GS-14's and a GS-17.

Wind-Up

Despite the absence of a structured formal approach, which in GAO is considered essential, i.e., site supervisor, progress reports, workpapers, business suits, and observance of agency hours, the Bureau project was completed within the established time frame and with completely acceptable precision. (Note: The project results, distributed in September 1969 and comprising some 58 pages, were fully responsive to the prescribed objectives.) What then, one may wonder, is the necessity for the more structured GAO approach? The quality of the Bureau staff was undoubtedly an important factor in the project's success. Until the working level can be staffed with mostly GS-14's, it seems probable that the current GAO techniques will prevail.

With the data accumulation phase completed, the remaining Bureau staff left for Washington to complete the analysis phase of the project while we three auditors returned to the real

world of workpapers and progress reports. Perhaps someday there will again be an opportunity to journey into Wonderland; I hope so, for it was both enjoyable and professionally satisfying.

EDITOR'S NOTE:

The written product of this analytical study was a report completed by the Bureau of the Budget in September 1969 entitled "A Federally-Sourced Budget for the City and

County of San Francisco, Fiscal Year 1968."

The report includes the following acknowledgement: "Special thanks to Elmer Staats of the General Accounting Office and for the extremely valuable assistance of Reginald Howard, Donald Miller, and Julian Fogle." In a separate communication to the Comptroller General, the Deputy Director of the Bureau of the Budget stated that "All three men did a first-rate job, reflecting great credit on the General Accounting Office for their conscientious efforts to obtain valid and reliable data in the face of many obstacles."

Low-Income Consumer Acceptance of Private-Brand Food Products

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By E. Robert DeManche

This article reports the author's findings from a research investigation that resulted from two areas of interest: (1) current public and private concern with the economic plight of the poor and, in particular, with the low-income black community and (2) continuing corporate interest in individual brands' market share, consumer franchises, market penetration, etc. Although the research reported offers some insight into the latter interest, its emphasis is on the former.

A widely accepted proposition of the American consumer is that private brands, synonymous with distributor or house brands, are lower priced than national or manufacturer brands. A related proposition is that product equality exists between private and national brands. The study reported here attempted to ascertain the degree of consumer acceptance of these propositions and whether the difference in the degree of acceptance of these ideas is affected by race.

Also, because price consciousness is thought to be inversely related to social class, the attempt was made to learn whether there was a marked difference

in the amount of price knowledge possessed by low-income families.

The study's basic hypothesis was that low-income families, Negro and white, buy private brands in the food market because they represent acceptable quality at a lower price. Specifically, answers were sought for the following questions.

1. Is the low-income consumer aware and informed about private-brand food items (e.g., availability, quality, and price)?
2. Is the low-income consumer informed about existing price differentials between "acceptable quality" private brands and manufacturers' brands?

Mr. DeManche is a member of the Norfolk Regional Office staff. He joined the General Accounting Office in September 1968 upon completion of graduate work in business administration at Virginia Polytechnic Institute. A part of the investigative effort for this article was done to meet thesis requirements, but additional work has been done in cooperation with Dr. R. L. King, head of the Department of Business Administration, Virginia Polytechnic Institute, for a paper that was presented to the American Marketing Association's Summer Conference in Cincinnati, Ohio, August 24, 1969.

3. Is there a significant difference in the knowledge about, and acceptance of, selected private-brand food products by low-income and middle-income families?
4. Is there a significant difference in the knowledge about, and acceptance of, selected private-brand food products by low-income Negro and white families?

The Universe and the Sample

In testing the hypothesis, the author designed a limited study of the "urban poor" of a medium-size southern Standard Metropolitan Statistical area. For purposes of this study, a "low-income" family was defined as a multiple-person consuming unit with an annual income of \$3,000 or less.

It was decided that "low-income" respondents would be selected on a simple random sampling basis from among residents of the area's public housing projects. This limitation gave the researcher maximum assurance that the income ceiling by which he defined "low income" had not been exceeded, since the public housing authority had substantially more ability than the researcher to verify the residents' income level.

The sample size was determined by the following formula, which uses proportionate data, while permitting adaptability to the degree of precision (tolerance of error) determined by the investigator. This tolerance of error is limited by setting the size of the sample percentage standard deviation.

$$Sp^2 = \frac{p \cdot q}{N - 1}$$

In this formula, "p" is set equal to the sample percentage which purchases private brands, and "q" to the percentage which does not purchase private labels. The percentage of standard deviation for the sample is expressed as Sp^2 , which, for the purpose of this investigation, was limited to 5 percent. The values for "p" and "q" were determined by research of secondary sources available to all investigators, which reported sales percentages of private labels of leading grocery retailers.

From a blueprint drawing furnished by the project manager and a table of random numbers, the sample of Negro and white family units was selected. In addition, a quota sample of middle-income Negro and white families was selected. Respondents were selected on the basis of their membership in a church congregation or a civic organization with citywide membership. The author's intent was to define a small, easily contacted, yet hopefully typical middle-income group with whose answers the responses of the urban poor might be compared.

Selection of Food Items To Be Studied

It was essential to the success of the study that the food items included be widely used by blacks and whites alike and that they be bought frequently. This contention seemed to be supported by the restricted product categories in which private brands are widely available, by the one-time nature of the interview, by the chance of encountering price awareness, and by the small sample size required for economy.

To determine which food items should be included, a preliminary study

was conducted at food stores near the public housing projects included in the sample design. Observations of consumers' purchases were made at the checkout positions, identifying six grocery items which were commonly purchased by both low-income Negro and white families. These items were bread, flour, regular coffee, oleomargarine, peanut butter, and pork and beans. When it was established that the six items named above were also frequently purchased by middle-income families, they were adopted as the product subjects of the study.

Information Required

Extensive personal interviews were conducted in respondents' homes, combining survey and observational techniques. Several kinds of information were important to the planned analysis.

Store Identification

While the area offered a choice of retail food outlets, it was hypothesized that consumers would identify one store as the place where they did most of their food shopping. Store identification was essential in testing respondents' price knowledge about brands of the six selected food items.

Awareness of Private and National Brands

Awareness was measured, if only roughly, on the basis of unaided recall of brands available in the store(s) where the respondent shopped or recalled from advertisements, etc.

Verification of Brands Used

To minimize erroneous responses concerning product and brand usage, a "pantry check" was built into the study

which allowed for visual verification of the answers already obtained.

Price Knowledge Possessed

Respondents were tested for exact knowledge of prices of various brands of the six selected items. This precision seemed warranted since price differentials between brands and stores were often as small as 1 cent a unit.

Findings of the Study

Highlights of the study's findings are summarized in terms of (1) low-income shoppers' awareness of the availability of the private-brand offerings of the selected food items, (2) the incidence of private-brand purchases in the six selected product categories by low-income families, (3) price knowledge among low-income family food shoppers, and (4) similarities and differences among low-income Negro and white families regarding the use of the private-brand food items.

Awareness of Brand Availability

As would be expected, because of the larger number of national brands available and the typically higher level of advertising support given to them, both the low-income and the middle-income respondents named substantially more national brands than private brands.

Although low-income and middle-income respondents' awareness of private-brand availability was strikingly comparable, the average middle-income respondent was able to name about 40 percent more national brands than could the low-income respondent. The two income groups' comparative awareness of available private and manufacturers' brands of the selected items varied widely, as the data in charts 1 and 2 indicate.

BRAND AWARENESS

CHART 1

Low-income families

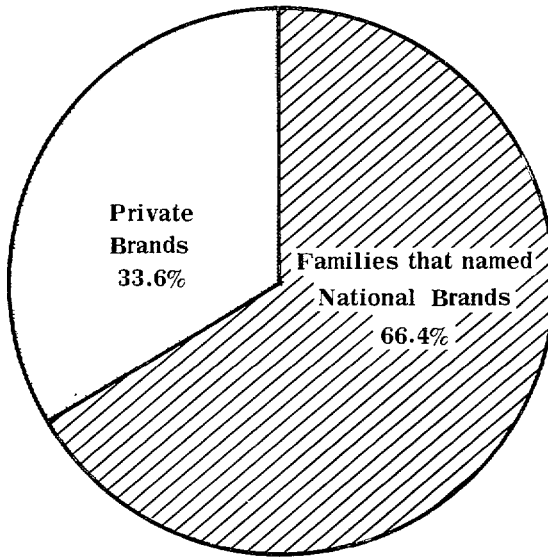
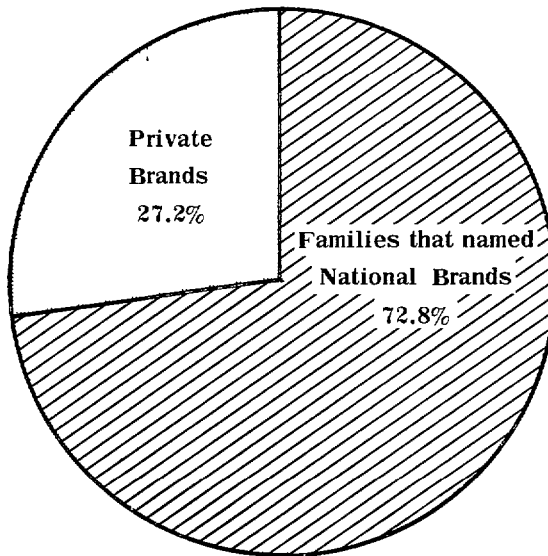


CHART 2

Middle-income families



CONSUMER ACCEPTANCE OF PRIVATE-BRAND PRODUCTS

In summary, statistical tests (not shown) of the data indicate that the knowledge possessed by low-income consumers of the private-brand offerings of the selected food items was not significant. These tests indicate, however, that low-income consumers are slightly more aware of available private brands than are middle-income consumers.

Incidence of Private-Brand Purchases

As noted in table 1, low-income households in the study were predominantly consumers of national brands, rather than private brands, of the selected food items.

Only in the case of oleomargarine did the pantry audit discover more instances of private-brand ownership,

Table 1.—Respondents' Purchases of Selected Items

Item	Verified purchases		Product not in pantry (note a)		No purchase of product	Irrelevant data
	(P)	(N)	(P)	(N)		
Low-income families:						
Coffee	11	23	0	2	7	6
Bread	11	36	1	2	0	0
Peanut butter	15	19	0	3	13	0
Flour	9	34	0	3	4	0
Oleomargarine	19	16	4	7	3	1
Pork and beans	5	29	0	4	12	0
	70	157	5	21	39	7
	5	21				
Total	75	178/253				
Middle-income families:						
Coffee	1	15	1	2	3	3
Bread	1	24	0	0	0	0
Peanut butter	5	16	2	1	1	0
Flour	2	19	1	2	0	1
Oleomargarine	11	11	1	1	1	0
Pork and beans	4	18	1	2	0	0
	24	103	6	8	5	4
	6	8				
Total	30	111/141				

(P)—Private brands,
 (N)—National brands,
 * Respondents' answers were not verified by a "pantry check."

and even here the lead held by private labels was quite small. For the six products combined, the ratio of national-brand ownership to private-brand ownership was approximately 2.2 to 1 among the low-income households.

By comparison, among the middle-income households, in no product category did private-brand ownership exceed national-brand ownership, although the pantry audit of oleomargarine brands revealed an even division between private- and national-brand ownership. For the six products combined, the ratio of national-brand ownership to private-brand ownership was approximately 4.3 to 1, or double the ratio of national-brand ownership discovered among low-income households.

In summary the data do not indicate that low-income families buy private brands of the selected food items to a greater extent than national brands. There is evidence, however, that low-income families buy relatively more private-brand food items than do middle-income families. These conclusions were also supported by binomial distribution and Wilcoxon rank tests.¹

Price Knowledge

In the study respondents were asked to name the most frequently purchased brand of each selected item and to list other known brands on an unaided recall basis. Then respondents were asked to give the exact current price of their "regular" brand and to make relative comparisons ("higher," "lower," or "the same" price) for each other brand mentioned. A surprisingly high level

of price knowledge was evidenced by both low-income and middle-income consumers. However, middle-income consumers demonstrated a higher level of price knowledge than did low-income consumers, 71 percent to 64 percent, respectively.

Interestingly, a majority of the respondents in both income categories was able to identify the correct price of the six selected items, although the extent of price knowledge for the individual items varied widely. For example, while over 85 percent of the middle-income respondents could identify the prevailing prices of their regularly used brands of oleomargarine, a scant majority of the low-income respondents could pinpoint the price of the bread they bought.

In summary, the data indicate that price knowledge among low-income families was substantially better than merely "by chance." Compared with middle-income families, however, the low-income group was less accurate in its price information. Further, the data indicate that price was less important to low-income families than were other factors (e.g., location of the retail store and its nearness to public transportation).

Negro-White Low-Income Family Comparisons

The study provides insight into several Negro-white low-income family comparisons. Specifically, comparative data are presented below for the following characteristics: (1) level of private-brand awareness, (2) level of purchase of private-brand food items, (3) level of food-item price knowledge,

¹ The Wilcoxon rank test is a statistical method to establish that the samples selected are representative of groups having generally comparable characteristics.

and (4) importance of the price of food items.

Level of Private-Brand Awareness

As was noted previously, low-income respondents could recall substantially more manufacturers' brands than private brands and their ability to recall private brands of the selected items was not better than would be expected "by chance."

However, differences in brand awareness between low-income Negroes and whites were striking. Not only could the Negro food shoppers name 18 percent more brands than could their white counterparts but also the Negro respondents could name 2½ times as many private brands as did the whites. Even so, the level of private-brand awareness is not statistically significant in either group. In fact, both groups were poorly informed about the private-brand offerings.

Level of Purchase of Private-Brand Food Items

As mentioned earlier, low-income families were found to buy private brands of the selected food items to a greater extent than did middle-income families. However, like the middle-income families, low-income families typically bought national brands rather than private brands. In fact, in only two of the 12 race/product categories were private brands found more frequently than national brands in low-income households (peanut butter in Negro households and oleomargarine in white households).

Overall, 37.3 percent of the selected

food items observed in low-income Negro households were private brands compared with only 24.8 percent in low-income white households. If we include answers relating to brands usually bought but not presently available in the household, the level of Negro private-brand usage would drop to 34.4 percent while the comparable measure of white family usage would remain constant at 24.8 percent. The apparent shift in Negro private-brand use may reflect response bias favoring national brands, as reported in the past by several marketing researchers. This question was not explored in this study.

Level of Price Knowledge

It was noted earlier that precise price knowledge for the selected food items was found more commonly among middle-income families (71.1 percent) than among low-income families (64.4 percent). A greater differential in exact price knowledge was found to exist between low-income Negro and low-income white families, however. Perhaps surprisingly, Negro food shoppers were found to be better informed about prices than were their white counterparts. Exact prices were known in 70.2 percent of the Negro purchasing situations compared with only 56.5 percent of the white purchasing situations.

Negro shoppers showed a higher level of price knowledge in five of the six products categories and a nearly equal level in the sixth category. Further, the higher level of Negro price knowledge was based upon 36.2 percent more product/brand responses than was the measure of whites' price knowledge.

Importance of Price of Selected Food Items

The comparatively high level of price knowledge found among low-income respondents need not indicate that price is more significant to these consumers than are other factors. Indeed, it was noted that store location and accessibility to public transportation were more important to low-income families generally than was price in determining store preference.

Similarly, higher levels of price knowledge among low-income Negro consumers than among low-income white consumers need not reflect a greater significance of price to the Negro group. To test the issue, t-tests² were run separately for the low-income Negro and white groups to determine the significance of price in the selection or acceptance of the preferred food store. Attributes studied in these tests, in addition to price, were convenience, friendliness, store hours, product quality, cleanliness, variety, and credit. In addition, respondents were encouraged to name and evaluate other attributes which they felt were significant in determination of their preferred food store.

² A t-test is a method of determining the credibility of a selected sample in terms of the standard deviation of that sample.

Paradoxically, perhaps, the prices of individual food items were found to be of far more consequence to the low-income Negro consumer than to his white counterpart, *once store preference has been determined.*

Summary

The author realizes and emphasizes that these findings are at best tentative, given the limitations of his study. Especially critical limitations are the restricted population from which the sample items were selected and the limited range of food items included in the study. In defense of the limitations, however, accepted statistical techniques were employed to extract maximum meaningful information from the data.

Statistical tests applied to the data lend confidence to the generalizations noted, insofar as they relate to the consumption of the six selected food items by low-income Negro and white residents of the given metropolitan area's public housing projects. Obviously, the study's results can only suggest that similar patterns may exist for other food products which are widely available in a number of private and national brands.

NEW ASSISTANT COMPTROLLER GENERAL



CAO Watchdog Photo

Robert F. Keller is sworn in as the fifth Assistant Comptroller General of the United States by Federal District Court Judge George C. Hart, October 3, 1969.

New Assistant Comptroller General Sworn In

Robert F. Keller, former GAO General Counsel, was sworn in as the fifth Assistant Comptroller General of the United States on October 3, 1969. Mr. Keller had been nominated for this post by President Nixon on August 29 and was confirmed by the Senate on September 26 (See *GAO Review*, Fall 1969, page 3).

The swearing-in ceremony was held in the GAO Auditorium. The oath was administered by Judge George C. Hart, U.S. District Court, Washington, D.C.

After Mr. Keller was sworn in, the Comptroller General, *Elmer B. Staats*, addressed the audience with the following remarks:

Changes of administration do not occur frequently in the General Accounting Office. That fact alone makes today's ceremony of unusual importance—as well as the fact that Bob Keller is our new Assistant Comptroller General. Mr. Keller is the fifth person to hold the post since the General Accounting Office was established almost 50 years ago. I am likewise the fifth person to hold the post of Comptroller General. It may be of some significance that Assistant Comptrollers General seem to have endured somewhat longer than Comptrollers General.

When Frank Weitzel, who is with us today, became Assistant Comptroller General, the Federal budget was approximately \$70 billion. This year it will be more than \$190 billion—almost a three-fold increase. The Government has not only grown in size, but in complexity as well . . . complexities which present challenges to the General Accounting Office in its concern with economic and effec-

tive administration of governmental programs. Today we have, for example:

- A space program which has grown from a few hundred thousand dollars to approximately \$4 billion.
- A defense budget which has more than doubled in size and with vastly increased complexities in weapon systems and management problems.
- Programs to deal with increasingly urgent social problems: Medicare, welfare, urban renewal, and the increasingly urgent problems of air and water pollution.
- And greatly increased complexities of administration, growing out of the sharp increase in the number and size of Federal grant programs to State and local governments.

The growth in size and complexity of Government has presented the Congress with a challenge as to how it can effectively exercise its legislative and oversight responsibilities. It, too, is seeking ways and means to cope with the problems of modern society. It is therefore giving renewed attention to the ways in which the General Accounting Office can help. We welcome this interest; indeed, we want to be in the forefront of finding ways in which we can be of greater assistance.

Mr. Keller's appointment as a distinguished career public servant is a recognition that the GAO cannot accomplish its ambitions, its goals, and its responsibilities without the help of a dedicated and hard-working professional staff which he symbolizes. So I am most happy today to welcome Bob Keller to a role of increased responsibility and to join with him in saying that with the help of all of the staff of the General Accounting Office we will meet the challenges ahead.



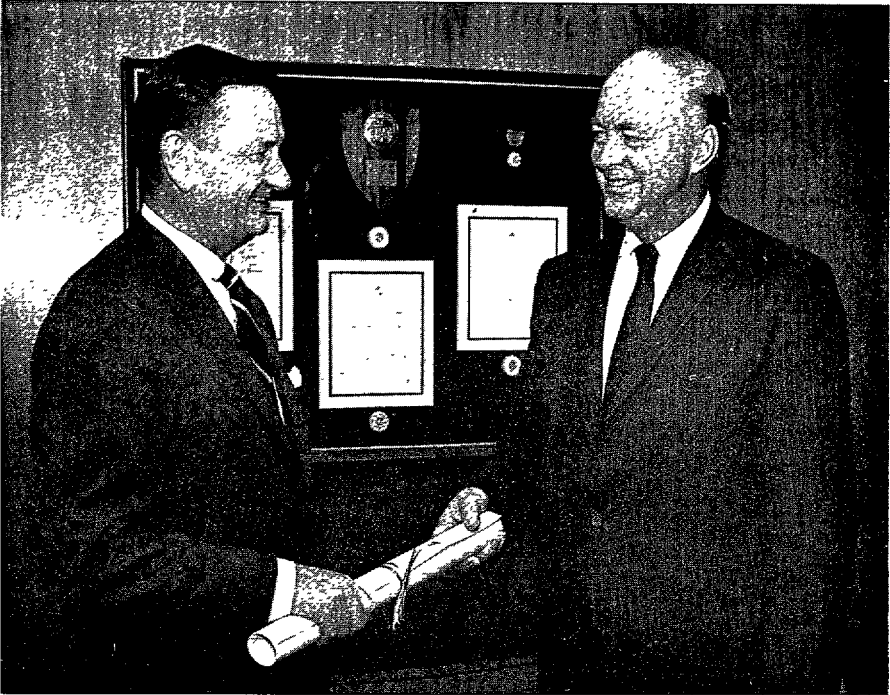
Elmer B. Staats, Comptroller General, and Robert F. Keller, Assistant Comptroller General, meet with President Richard Nixon at the White House.

The General Accounting Office has never striven to win popularity contests. Critics seldom win plaudits. It is therefore doubly important that while serving the role of critic we serve responsibly and put the emphasis upon ways and means of improving public services. A quotation from a speech by Theodore Roosevelt is apropos:

It is not the critic who counts; not the man who points out how the strong man stumbled, or where the doer of deeds could have done better. The credit belongs to the man who is actually in the arena; whose face is marred by dust and sweat and blood; who strives valiantly; who errs and comes

short again and again; who knows the great enthusiasms, the great devotions and spends himself in a worthy cause, who at the best knows in the end the triumphs of high achievement; and who at the worst, if he fails, at least fails while daring greatly; so that his place shall never be with those cold and timid souls who know neither defeat nor victory.

It gives me great pleasure now to present to Bob Keller his commission from the President, an appointment that I know we all applaud, and to congratulate him on becoming the fifth Assistant Comptroller General of the United States.



GAO Watchdog Photo

The Comptroller General, Elmer B. Staats, presents Mr. Keller with his commission as Assistant Comptroller General.

American Institute of Certified Public Accountants Annual Meeting Notes

The 82nd annual meeting of the AICPA was held in Los Angeles on October 5-8, 1969.

Those attending from the General Accounting Office were:

Civil Division:

Gregory J. Ahart, deputy director
John J. Cronin

San Francisco Regional Office:

Alfred M. Clavelli, regional manager

Los Angeles Regional Office:

Hyman L. Krieger, regional manager
Karl E. Deibel
Milo L. Wietstock
Anthony W. Eleamos
Ronald A. Bononi
Anthony F. Venneri
Robert L. Stotts
Eugene G. Horwitz
Benjamin H. Mannen
George W. Hubbard

Notes of interest on some of the sessions of the meeting follow.

Business Meeting

The outgoing president, Ralph E. Kent, discussed the major problems confronting CPA firms today. One of the major problems is the shortage of accountants graduating from college. Mr.

Kent said that because of the shortage, CPAs are often spreading themselves too thin. He also commented that many students are turning away from accounting study in college and are pursuing other courses of study.

The incoming president, Louis Kessler, included the lack of reciprocity of the CPA certificate within the United States and with foreign countries, and the incorporation of CPA firms, as additional problems facing the accounting profession. Mr. Kessler hoped that, in the future, the AICPA would issue the certificate upon successful completion of the CPA examination, and that the individual States would issue licenses to practice after a CPA met the State's experience requirement.

Tax Policy as a Social and Economic Force

Dr. Norman B. Ture, Economist, Planning Research Corporation, Washington, D.C., dealt with the question of whether the tax system is an appropriate tool for achieving economic objectives. His remarks indicated that, although there are some areas in our economy where changes in the tax system have been applied and have achieved the desired results, there is a great deal of misunderstanding regarding how effective these changes have

been, and there is room for doubt as to whether the desired results have been brought about in certain instances.

Meade Whitaker, Tax Legislative Counsel, U.S. Treasury Department, concluded that the tax reform bill being considered by the Congress is one that would inevitably be known as the "people's bill." His office had hoped to introduce into the tax reform bill some measure of simplicity but their experience proved this to be a very difficult task.

Some Problems Facing Our Nation

Maurice H. Stans, Secretary of Commerce, stressed that the effects of inflation are being felt to a considerable degree in the area of foreign trade and the balance of payments. After commenting on the erosion of the U.S. dollar, he pointed out that the Department of Commerce had embarked on a program of (1) modernizing and rebuilding its maritime fleet, (2) improving procedures in documentation to expedite export services, and (3) dealing directly with countries to eliminate unfavorable tariff restrictions. Mr. Stans, turning to domestic problems, pointed out the need to develop a harmonious society. He commented that we have built the greatest society and economy ever known to man, yet, might allow dissenters to tear it down.

Specialization

L. S. Janofsky, Chairman of the Committee on Specialization of the California Bar Association, pointed out

that accountants and lawyers share many of the same problems in regard to specialization. He spoke on behalf of specialization, stressing that it permits better use of a lawyer's time and also provides better service to the client.

H. J. Davidson, Chairman of the AICPA Planning Committee, pointed out that the legal profession is ahead of the accounting profession in this matter. Mr. Davidson said that it is not a case of whether there will be specialization but rather that specialization is here and how will it be controlled. He pointed out, for example, that within the accounting field we have specialization by type of service such as auditing, tax, or management services, and by type of industry or product. Within a specialty field we have further specialization—such as within management services, we have computer specialists, accounting information specialists, and inventory specialists.

Mr. Davidson believes that specialization should be encouraged and accredited. He suggested that a label such as CPA (1) confers status, (2) motivates an individual since he must earn the label, and (3) protects the public interest. On the other side, a label (1) promotes narrowness, (2) costs time and money to administer, and (3) implies erroneously that all people with the label are equal.

Mr. Davidson suggested a labeling which, in addition to CPA as the umbrella or common label, would be supplementary. For example, a man could be a CPA-CPE (certified public examiner) or a CPA-CPTA (certified

public tax advisor). The supplemental label would be earned through experience, schooling, and examination; and the individual earning the label would be accredited by the AICPA. This would provide for uniformity and lower administrative costs.

Address by Governor of the State of California

Governor Reagan's address was primarily an appeal for greater economy in government, particularly at the national level. He touched on the topics of welfare, medicine, and education, and their effects on society and taxes. He praised the task force of accountants that had worked with his administration at the beginning of his term to analyze the business operations of the State of California and to make recommendations for economy and efficiency. He noted that the Comptroller General had recently issued a report on procurement practices in the Federal Government and recommended adoption of some of the economical practices that his administration had installed in the State of California.

Governor Reagan pointed out that as a whole, poor people would like to be self-supporting but "we are making it unattractive for people to get back on their feet." He stated that, if you pay people to be poor, you will have a lot of poor people.

In view of the disorders in the colleges and, in particular, the unrest at California campuses, Governor Reagan commented that there has been too much concern over the academic inde-

pendence of college teachers and that more of this concern should be devoted to the students. He stressed that it is the students that are the reason for teachers and not the teachers that are the reason for students.

Corporate Financial Reporting

J. J. Needham, Chairman, Securities and Exchange Commission, was very complimentary in his remarks concerning the accounting profession and the Accounting Principles Board in particular. He stressed that the SEC does not seek to usurp the authority of the Accounting Principles Board but rather looks to it for leadership in establishing the principles for corporate financial reporting.

H. C. Knortz, Senior Vice-President and Controller, International Telephone and Telegraph Company, emphasized the inconsistency and lack of uniformity in financial reporting. He was critical of the Accounting Principles Board switching ground rules on reporting at the time when corporations and the investing public finally had gained a clear understanding of the former reporting requirements. In his look at the future, he expects all footnotes to financial statements to be eliminated, and simplified financial statements to replace the current statements which are now understood by only trained analysts and auditors. He also expects the disclosure of nonfinancial data such as employment, floor space, and production units to be more commonplace in future reports.

GAO Review of the Economic Opportunity Programs

A major review and evaluation of the economic opportunity programs was carried out by the General Accounting Office during 1968 and 1969.¹ This examination was directed by the Congress when it enacted, in December 1967, the Economic Opportunity Amendments of 1967. The law required the Comptroller General to investigate the programs and activities financed under the act to determine:

- The efficiency of their administration, and
- The extent to which they achieve their objectives.

The GAO examination extended into all of the OEO programs and was made in some depth at selected specific locations which are identified in an appendix to the summary report on the examination which was submitted to the Congress on March 18, 1969. The examination also included for analytical purposes the collection of cost and performance data on certain programs at 112 locations in 41 States and the making of a number of special studies by private consulting organizations who were engaged for the purpose.

To provide expert professional advice and assistance on various aspects of the review of these programs, 19 individual consultants in specialized

fields were utilized. This examination was the largest, and most difficult, ever undertaken by GAO. It resulted in the issuance of 55 reports to the Congress and five supplemental reports prepared by a contractor which were transmitted to interested congressional committees. These reports, which provide the public record of the performance of this comprehensive examination, may be grouped into the following categories:

Summary report entitled "Review of Economic Opportunity Programs Made Pursuant to Title II of the 1967 Amendments to the Economic Opportunity Act of 1964" (B-130515, dated March 18, 1969) ----	1
Supplementary reports pertaining to:	
Community action programs ----	15
Job Corps -----	10
Neighborhood Youth Corps -----	11
Work Experience and Training Projects -----	10
Concentrated Employment Program -----	4
Economic Opportunity Loan Program -----	2
Legal Services Program -----	1
Migrant and Seasonal Farmworkers Program -----	1
Total -----	55
Supplementary reports prepared by GAO contractor, Resource Management Corporation, Bethesda, Md.:	
Evaluations of the War on Poverty:	
Status and Prospects at the Office of Economic Opportunity	
Education Programs	
Health Programs	

¹ See also commentaries on this assignment in *The GAO Review*, Summer 1969, p. 37.

REVIEW OF ECONOMIC OPPORTUNITY PROGRAMS

The Feasibility of Benefit-Cost Analysis for Manpower Programs Economics of Poverty

In its report on the bill to extend the Office of Economic Opportunity for 2 additional years, the Senate Committee on Labor and Public Welfare commented favorably on the GAO examination, as follows (S. Rept. 91-453, October 10, 1969):

In 1967, the committee undertook an exhaustive, nationwide study of the poverty program, aided by a staff of consultants who prepared a 15-volume study of OEO and its programs. Extensive field hearings were held. The committee has not undertaken a study of such breadth and depth this year for two principal reasons.

Much of the need for studying program operations was satisfied by the release, in March 1969, of a complete audit of the OEO conducted by the General Accounting Office as a result of an amendment to the act in 1967 sponsored by Senator Prouty. A second reason was the decision of the new administration to request a 2-year extension of the act, with no substantive changes, pending the development of the administration's own further proposals in regard to poverty.

The committee has found the GAO audit of value in carrying out its responsibilities. The committee is concerned that the program benefit from the recommendations made in the report.

The committee's report provided other instances of use of the GAO report and subsequent testimony as authoritative sources of information. In discussing the critical problem of inadequate coordination of the OEO programs and related programs administered by other agencies, a major finding of the GAO review, the report quoted testimony of the Comptroller General, *Elmer B. Staats*, on this finding and added:

The Comptroller General testified that, while OEO's budget has been less than \$2 billion a year, "the total Federal outlays for the income level groups that we are defining as being with the poverty level" were estimated at about \$24 billion for fiscal year 1969 and \$27 billion for 1970.

There is, of course, considerable disagreement over the allocation of any specific spending item to the "poverty" category, but the Comptroller General's point was well taken. Even more important than the efficient operation of the relatively small program operated by OEO is the coordination of the vast, governmentwide war on poverty which, measured in terms of dollars, is at least 10 or more times as large as the OEO budget.

The committee's report emphasizes its concern with the need for more and better evaluation of the Government's antipoverty efforts. Highlights of its comments on this important function are:

- The committee feels strongly that evaluation of Federal anti-poverty programs should be far more extensive and far more comprehensive.
- The committee supports the commitment to more and better evaluation of the OEO Director, Donald Rumsfield, who testified:

The evaluation of programs must be one of the most important activities of the Office of Economic Opportunity. It appears to be one of the most neglected. OEO has only recently completed the first evaluation of the national impact of one of its major programs.

Until last year, this agency had no systematic process for initiating and conducting evaluation. The state of the art of evaluating social programs is still primitive. I intend to devote more of OEO's resources to evaluation and to work with other Federal agencies in developing a more effective evaluation capability.

REVIEW OF ECONOMIC OPPORTUNITY PROGRAMS

- Evaluation efforts in the past have been deficient, as brought out in the GAO report as follows:

Past evaluations at OEO have not provided information that is pertinent for planning of broad changes in program orientation.

There is a pronounced need for evaluations that are national in scope and coverage in order that the overall impact of the antipoverty program may be adequately assessed.

- There has not been enough emphasis on nationwide evaluations of overall program effectiveness. Large-scale evaluations, based on national samples and using sophisticated research designs with control groups and longitudinal measures of change, have been almost nonexistent.
- One of the most important needs

is a cross-agency evaluation of the overall effectiveness of all Federal programs and activities in eliminating poverty. We lack a broad and coordinated overview of the full Federal effort.

- We do not have sufficient information on whether Federal anti-poverty efforts reach the intended target groups and whether such efforts are as efficient and effective as they can be given the amount of resources which the Federal Government is willing to dedicate to eliminating poverty.
- The committee is pleased that the present OEO director intends to meet this need by developing a major cross-agency study which would comprise a coordinated evaluation of all U.S. Government antipoverty programs.

Realism in Contract Negotiations

GAO staff members are generally familiar with the so-called "Truth in Negotiations" Act enacted by the Congress in 1962 to strengthen Government procurement processes. The following technical and cost proposal allegedly submitted by a firm on a new Defense program provides some insight into the kind of truthful information needed in the negotiation process. The proposal was published in the 22 November 1969 issue of the *Armed Forces Journal* and characterized as a "refreshingly honest bid" from a source that must remain anonymous for obvious reasons. The proposal is reprinted here with permission of the *Journal*.

TECHNICAL AND COST PROPOSAL

1. General Experience

A detailed reference to the large number of programs which we have mismanaged would be beyond the scope of this proposal (see report 789-2, AF Board of Inquiry; see also report of Congressional Investigating Committee, 1209-A-). We feel, however, that the experience gained from these miserable failures puts us in a strong competitive position, since it is unlikely that these mistakes will be repeated. Our competitors may have a greater number of failures, but we would like to point out that our errors were made on larger and more important projects. Furthermore, we have absolutely no experience in the specialty areas required for this design and will, therefore, approach the problem without prejudice.

2. Organization

We have reviewed this question carefully and find that we are unable to determine the precise instant of time at which the customer desires to see the organizational structure and are, therefore, at a loss as to how to present it. We have investigated the use of high speed movie cameras and magnetic recorders as a means for presenting a changing organization, but we feel that these do not meet the requirements. We therefore re-

quest that the customer specify the moment desired. We suggest a time during the interval from 0200 to 0700 on a Sunday would be best, as experience has shown that the rate of change is at a minimum during this period.

We have found on recent proposals that our key personnel received offers from one of our competitors a few days after the submission of a list of personnel. Since there seems to be evidence of a security leak in the customer's organization, we respectfully request that a "need-to-know" be established before this information is supplied.

3. Technical Approach

Our plan for this project is to hire engineers from the companies which lose the competition. Our technical approach will, therefore, be determined by these people and can be obtained from our competitors' proposals. We do have a few guiding principles. We have found that on a project of this nature about 12-18 months are required to catch up with the art. This time is spent in visiting other companies, universities, and test sites and in reading classified reports and the *Congressional Record*. This period is followed by a 6-month study phase. At the end of the time it is usually desirable to start travelling again because of the extremely rapid changes that take place in the State-of-the-Art.

4. Schedule

In order to improve the appearance of our proposal the Art Department has made up a 7-color schedule using stereoscopic plexiglass overlays. The dates in this schedule represent a weighted average between the estimates of the Research and Sales Divisions (these are the Sales Division's figures). In any event, company practice is to terminate a project when the personnel are needed on a more profitable contract.

5. Subcontracts

It is a firm company policy to never let a dollar get out of the house.

6. Cost Information

Engineering—we do not plan to spend much here. We have found that engineers make changes, and this reduces profits.

Facilities—this is a large item. We view this contract as an excellent opportunity to build up our plant.

Testing—no charge has been put in, since we do not plan to test. In the past, test programs have shown up faults and caused can-

cellation of contracts years before the mistakes would have been discovered in the field.

Entertainment—this item was inadvertently omitted from the request for proposal; we have added it.

7. Contract Forms and Profits

An exhaustive study will be made during the first 6 months of the contract to consider these factors. All of the modern techniques of operational analysis, game theory, and high-speed computing will be applied to the problem of profit optimization. Key points in this study will be legal loopholes, tax dodges, and evasively written clauses. It is expected that several nationally-known consultants will be retained for this work due to the overriding importance of the problem.

8. Physical Resources

An excellent survey of our physical facilities is contained in the Receiver's report prepared during our most recent bankruptcy proceedings. A copy of that report is appended.

NEWS and NOTES

Technology Assessment

On December 4, 1969, the Comptroller General testified before the Subcommittee on Science, Research, and Development of the House Committee on Science and Astronautics, on this subject.

This testimony was given in connection with a series of hearings by the subcommittee, the immediate purpose of which was "to seek some mechanism for the assessment of new technologies which the legislative and executive branches, independently or together, may be able to use effectively."

Mr. Staats expressed full support for the importance and timeliness of efforts to ascertain the new or strengthened arrangements that may be necessary to assure that maximum feasible steps are taken in the Government to assess the risks and benefits of new technological developments, whether sponsored and supported by the Federal Government, private industry, or others. Other comments of interest:

Role of the General Accounting Office

Section 312(a) of the Budget and Accounting Act of 1921 directs the Comptroller General to "investigate * * * all matters relating to the * * * application of public funds * * *." Section 312(b) of that act directs that the Comptroller General "make such investigations and reports as shall be ordered by either House of Congress or by any committees of either House having jurisdiction over revenue, appropriations, or expenditures" and "at the request of any such committee, direct assistants from his office

to furnish the committee such advice and information as it may request."

These provisions constitute a broad charter within which to serve informational needs of the Congress. Accordingly, we have extended our assistance to all committees of the Congress.

Section 312(a) clearly indicates, in our opinion, that the GAO is to be concerned with whether funds expended are achieving the program objectives intended by the Congress. Consequently, we have placed increased emphasis on reviewing Federal programs and activities from the standpoint of the extent to which congressional objectives are being achieved. This increased emphasis stems from various expressions of interest by the Congress and its committees and Members in our doing more of this type of work as well as from our own desire to be of greater service to the Congress.

Because many of the programs and activities for which the Congress has authorized funds involve the promotion or control of technology, the application of technology to meet an existing problem or need, or the treatment of problems brought about by technological change or progress, our work necessarily involves us in the area which is the subject of these hearings. Our reviews of programs from the standpoint of achievement of objectives can and often do result in providing information which suggests the need to revise or strengthen a program or its administration to improve its effectiveness. In some cases this information leads us to recommend a change in the governing legislation itself.

*

* * * we believe that the GAO can and should play an increasingly important role in the surveillance and monitoring of Federal programs where technological assessment is an important consideration. In planning our work programs, we will be placing increased emphasis upon known problem areas or areas where problems may exist with a view to sup-

plying the Congress with information, findings, and recommendations with respect to Government activities.

* * * * *

* * * we do not believe it would be appropriate for the GAO to undertake broad assessments of developing technology and its impact on society. We believe, however, that through our examinations of authorized programs and activities, with increased emphasis on the extent to which they are accomplishing their intended objectives, we have and should continue to contribute to the needs of the Congress in this area. We can make a further important contribution through analyzing, at the request of congressional committees, proposals made by the executive branch for specific programs.

Also, we stand ready to cooperate with any legislative branch organization to which the Congress might choose to assign responsibility for broad technology assessment efforts.

* * * * *

Use of Consultants

Our objective in the use of outside experts is to establish informal arrangements so that the best talent can be brought to bear on a particular matter under review. At the same time, it is important that we have a group of experts who would be knowledgeable on a continuing basis of the work and role of the GAO and who would be available to consult with us as we make our plans for future reviews.

To this end, preliminary consideration has been given to establishing an informal Consultant Panel on Science and Technology. In doing this, we hope to draw upon the advice of the National Academies of Sciences and Engineering and the National Research Council, groups which have already been of such great assistance to your committee.

* * * * *

We believe the Consultant Panel on Science and Technology can assist us in formulating studies of selected problems in technology and developing criteria for evaluating benefits, risks, and costs of technology related

public investment. The panel would also include representatives of related fields, such as economics, social sciences, and public administration.

* * * * *

The Open Door

Robert Drakert, regional manager, New York, submits his concept of the open-door policy:

To begin at the beginning, it should be said that, sure, in our regional office we have an open-door policy. It's been announced and proclaimed, orally and in writing. In fact it's been practiced these many years. So much being said, and perhaps agreed on, is it effective as it should be? Of course not. The reasons for its shortcomings rest with all of us.

Is the boss' door open? Ajar? Shut tight? Do you care and does it matter? You should care, and it does matter. The physical relation of the door to the jamb may not matter; but the concept that the open-door policy implies should be a matter of considerable importance not only to you and to me, but to our entire office.

Our present concept of what the open door is for, the point-of-view of you or me, peering in or staring out, may be too narrow, may give a distorted perspective. This door should not, even in our mind's eye, carry the inscription "Complaint Department—For Complaints Only, Office of Last Resort." Probably too often, in fact as well as in concept, this is how we think.

To my mind, an open-door concept starts with the relationship of the staff man or woman with the site senior;

then with the audit manager; then with the regional manager. This line of progression to the regional manager's door should have well-marked bypasses which lead when needed to our advisor on professional career development; to our recruiters; to our ADP specialist; to our experts on sampling and systems analysis; to our committee on development of new audit areas; to our administrative assistant; to our assistant regional managers. In other words, there should be as many open doors as there are questions, or suggestions, or thoughts to carry through them. Organization lines have their purposes, but they are made to be broken when they stand in the way of the pursuit of knowledge, or when ideas and questions are confined or are turned back by them.

The ideal to be aimed at, it seems to me, is an organization in which all doors are open, and provide passage both in and out, for the free flow of ideas, suggestions, criticisms, questions; from all segments of the staff to, as necessary, all other segments. We can reach that goal only if each of us not only accepts this concept but practices it. How? By getting involved in the total GAO purpose-for-being. By disciplining ourselves to doing more than just the job currently assigned; by thinking about enlarging, improving, and making more effective the total GAO effort. By beginning with ourselves, creating an atmosphere of inquiry, of constructive questioning, of initiative, of availability and accessibility of new and old staff members. As ideas know no rank, rank should raise

no barriers based on grade, or age, or sex, or discipline.

In our office, a title on the door may not always rate a Bigelow on the floor, but it does require that the door be symbolically always open to all members of the staff. For complete success of the open-door policy, it requires, also and most emphatically, that these doors, real or fancied, be used. They swing both ways. We should not think only of access to someone else. We should step across the threshold of our own door and come on out and join the action and the turmoil of the mainstream.

If the door is open, walk in. If it's ajar, push it. If it's shut, knock. You may be surprised how often it shall be opened to you. And if a door is opened to you, resolve that yours will always be open too.

Workshop for Middle Managers

Many Seattle Regional Office supervisory auditors have attended the workshop for middle managers sponsored by the Civil Service Commission. *Robert L. Bruns* and *Thomas E. Harryman* of the Seattle Region contributed the following evaluation:

Each workshop is a 5-day, live-in program consisting of lectures, films, and small group discussions. The workshops are designed to provide a step toward professional growth by laying the groundwork for, and stimulating interest in, a sustained program of self-development. The course consisted of sessions on effective communication techniques, management theory and practices, and self-development.

Generally, we were very favorably impressed with this course and felt that

it was a valuable supplement to GAO's career development program. The workshop provided the middle manager with an opportunity to assess his place in the organizational structure by examining his managerial role and the roles of his superiors, peers, and subordinates.

The session on management theory and practices was of particular interest in view of the management reviews which we perform in GAO. Although several of the management theories discussed have been presented in our training sessions, it was interesting to note that other agencies in the Government are also being exposed to these management theories. This session also provided the participants with an insight into ways of improving their methods of managing assigned staff. Since our training sessions have in the past devoted limited attention to techniques in managing people, this part of the workshop was considered to be especially helpful.

In summary, the workshop was well received by the participating middle managers in our region. In their opinion, such a course would be helpful to all staff members, since an understanding of the techniques of effective communication, the current concepts of management theory and practices, and the various means for self-development are important at all levels of management.

Published Interview With Comptroller General

The magazine *Government Executive* for November 1969 carries an article by Scot MacDonald based on an interview with the Comptroller General.

Elmer B. Staats. Entitled "Staats, GAO: Defense Procurement GAO Preoccupation in 1970," the article leads off with the following commentary:

Of the many men in Government, one of the most commanding and impressive is Elmer Staats, Comptroller General of the U.S., heading the small but potent General Accounting Office. Tall, trim, decisive, he is the epitome of neutrality in a belligerently partisan environment. Except for a one-year flirtation with the business world, all of his adult life has been spent with the Federal Government, beginning in 1939 with the Bureau of the Budget. Three-plus years ago, former President Johnson appointed him to the Comptroller Generalship and since then the evolution of the GAO has speeded up.

AEC Financial Report

An example of good financial reporting by a Federal agency is the 1969 financial report of the U.S. Atomic Energy Commission.

This agency has been in the forefront of good accounting and financial reporting practices in the Federal Government for many years. The 1969 report compares very favorably with the best stockholder reports issued by major private business corporations. It presents a wealth of information on the agency's operating programs and costs.

Text material is clearly written and is not so long and detailed as to obscure. It is also well sprinkled with pertinent pictures, illustrative of AEC's wide-ranging activities.

Short financial tabulations of cost data are included throughout the report, making it easy to associate such information with the text material on operations and accomplishments.

Included also are overall financial

statements, such as a statement of operations, balance sheet (total assets nearly \$9 billion), and an analysis of the investment of the U.S. Government in the atomic energy program. Additional analyses show AEC plant and equipment by location, costs by contractors, and a 10-year comparative summary of financial data.

An audit opinion on the AEC financial statements by the controller of AEC based on the examination work of the AEC internal audit staff is another plus factor (and a rarity in Federal financial reports). The opinion states that "except for the exclusion of information relating to weapons and production inventories for security reasons, the statements fairly present the financial position of AEC at June 30, 1969, and the results of operations for the year ended on that date."

Audit Workshop

As part of a continuing program designed to assist in improving the relationships between Federal, State, and local government auditors, a workshop was planned under the general sponsorship of the GAO Office of Policy and Special Studies for the purpose of (1) describing the types of cooperative audit effort which could be performed by Federal and non-Federal staffs and (2) showing that the cooperative effort does not result in loss of independence or initiative in audit matters by the non-Federal auditors.

The workshop was conducted on October 21, 1969, by the Oak Ridge Operations Office of the Atomic Energy Commission in cooperation with its contractor, Union Carbide Company at

Oak Ridge, Tenn., and Paducah, Ky. The meeting was attended by 13 auditors and controllers from the States of Tennessee, Mississippi, North Carolina, Georgia, Delaware, Arkansas, Texas, New Jersey, and Florida. Also attending were representatives of the Department of Health, Education, and Welfare and GAO.

The presentation consisted of descriptions of the techniques used by AEC auditors and Union Carbide auditors in the performance of their audit work and highlighted the interrelationships of these operations. The workshop presentations were made under the direction of Francis O. Christie, Chief of the Oak Ridge Operations Office audit branch, and John Reeve, audit manager for Union Carbide Company. The primary message of the workshop was that the two audit staffs could and did operate independently but cooperatively in fulfilling their responsibilities to their respective managements.

State audit officials who attended described the presentation as being realistic and appropriate to the Federal-State audit relationship. Both Abram Vermeulen, State Controller of New Jersey and President of the National Association of State Auditors, Comptrollers and Treasurers, and William R. Snodgrass, State Controller of Tennessee, commented on the meeting as being an encouraging demonstration of the increasing cooperative attitude of Washington towards the State audit community.

A similar workshop was conducted at Oak Ridge on December 9 for representatives from the States of Arkansas,

Colorado, Kansas, Maryland, and Virginia.

GAO Accounting Systems Operations

In October 1969, the Comptroller General announced some important changes in operating policies and responsibilities in carrying out GAO operations with respect to executive agency accounting systems.

These changes were announced in a memorandum to the heads of Federal departments and agencies on October 16, 1969 (B-115398). Pertinent excerpts in explanation of the changes follow:

For some time we have been considering changes which would enable us to more effectively perform our functions in this important area. Based on a comprehensive reconsideration of our policies and practices with respect to the development, review, and approval of executive agency accounting systems, we are making the following changes in order to increase the effectiveness of these operations.

1. In the future, our formal approval operations will be limited to the two stages of (a) agency statements of principles and standards established to govern their accounting systems, and (b) to the proposed general designs of those systems. We will no longer undertake to formally approve accounting systems in actual operation.
2. In lieu of formally approving accounting systems in operation, we will devote more effort to conducting reviews of agency accounting operations from time to time, as now required by law, and provide reports to agency officials and to the Congress setting forth our evaluations and recommendations.

This change in the manner in which we will be carrying out our accounting functions is intended to provide a more effective method

of operation by the General Accounting Office. In making this change, however, we will continue to emphasize that it is the primary responsibility of each executive agency to install and maintain accounting systems which are adequate and in accordance with the principles, standards, and related requirements and the proposed designs which we approve.

Another reason for this change is that accounting systems for Federal agency operations are seldom static. They must keep abreast of changes in information system concepts and technology and changes in Federal programs and activities. To attempt to keep the "approved" status of all systems in operation on a current basis can be an impossible objective. We have concluded that we can accomplish as much, if not more, in the way of promoting improvement by

- Continuing to cooperate with the executive agencies in their accounting systems development work, and
- Making more examinations into the operation of agency accounting systems and proposing constructive recommendations for strengthening or otherwise improving those systems.

The general purposes of these examinations in each agency will be to evaluate:

1. The effectiveness and efficiency of the accounting system in producing reliable financial reports for internal and external use and in contributing to management control of agency resources.
2. Accounting improvement progress and conformity with the accounting objectives stated by the Congress in the Budget and Accounting Procedures Act of 1950, as amended, and our prescribed principles and standards.

In making these examinations, careful consideration will be given to the nature and extent of agency internal audit or other internal review group work that may be performed.

The foregoing changes in GAO review and approval policies do not signify any change in the degree of importance which we attach to this area of responsibility assigned to us by the Congress or any reduction in the

amount of effort to be devoted to it. It does mean some shift in the nature of our efforts, particularly in providing for more evaluations of agency accounting operations.

* * * * *

Organizational Changes in GAO

In connection with the foregoing changes in the nature of our review and approval operations, we are also making the following changes in internal assignments of responsibility in the General Accounting Office.

1. The Office of Policy and Special Studies will be responsible for the following functions:
 - a. Developing Federal accounting principles, standards, and related requirements for prescribing by the Comptroller General.
 - b. Cooperating with the executive agencies in the development of their accounting systems.
 - c. Reviewing agency statements of ac-

counting principles and standards and proposed accounting systems designs and making recommendations for formal approval by the Comptroller General.

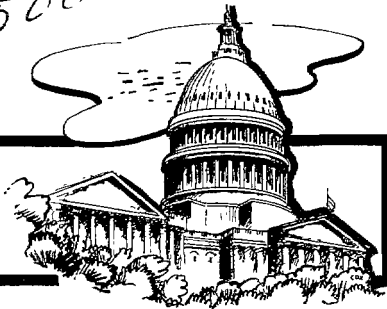
Mr. Daniel Borth, who has been in charge of the Management Control Systems Group of the Defense Division, is being designated as Deputy Director of the Office of Policy and Special Studies to head up this work.

Mr. Frederic H. Smith, Deputy Director, Office of Policy and Special Studies, will continue to represent the General Accounting Office on the Steering Committee of the Joint Financial Management Improvement Program. His alternate on this assignment will be Mr. William L. Campfield, Assistant Director of the Office of Policy and Special Studies.

2. The Civil, Defense, and International Divisions will continue to be responsible for conducting reviews and preparing reports on the operation of agency accounting systems.

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HEARINGS *and* LEGISLATION



By MARGARET L. MACFARLANE

Chief, Legal Reference Services, Office of the General Counsel

New Laws

Military Procurement Authorization for Fiscal Year 1970

The lengthy and searching debate on the military procurement authorization for fiscal year 1970, including numerous proposals to require special studies by GAO, distinguishes this authorization legislation from similar annual authorizations enacted in recent years. As approved by the President on November 19, 1969, Public Law 91-121 requires the GAO to make a study and review of defense contractor profits.

This profit study had its origin in a report issued by the Subcommittee on Economy in Government of the Joint Economic Committee on May 23, 1969.¹ One of the subcommittee recommendations was that "GAO should conduct a comprehensive study of profitability in defense contracting. The study should include historical trends of 'going-in' and actual profits considered both as a percentage of costs and as a return on investment. Profitability should be determined by type of contract, category of procurement, and size of contractor."

¹ 91st Cong., 1st sess., Joint Committee Print (LDS CP No. 41), p. 29.

The language of the profits study was worked out during the conference action on the legislation. It was stated by the conference managers that the original version included by the Senate could have been interpreted to require contractors and subcontractors to maintain their accounting records on a basis other than that normally followed in their business practice.² The original amendment by Senator Proxmire also granted the GAO subpoena power. The final version required the study on a selective basis and provided that the House and Senate Armed Services Committees would issue subpoenas upon request of the Comptroller General.

The profits study as enacted as section 408 of the law provides as follows:

SEC. 408. (a) The Comptroller General of the United States (hereinafter in this section referred to as the "Comptroller General") is authorized and directed, as soon as practicable after the date of enactment of this section, to conduct a study and review on a selective, representative basis of the profits made by contractors and subcontractors on contracts on which there is no formally advertised competitive bidding entered into by the Department of the Army, the Department of the Navy, the Department of the Air

² 91st Cong., 1st sess., H. Rept 91-607, p. 21.

Force, the Coast Guard, and the National Aeronautics and Space Administration under the authority of chapter 137 of title 10, United States Code, and on contracts entered into by the Atomic Energy Commission to meet requirements of the Department of Defense. The results of such study and review shall be submitted to the Congress as soon as practicable, but in no event later than December 31, 1970.

(b) Any contractor or subcontractor referred to in subsection (a) of this section shall, upon the request of the Comptroller General, prepare and submit to the General Accounting Office such information maintained in the normal course of business by such contractor as the Comptroller General determines necessary or appropriate in conducting any study and review authorized by subsection (a) of this section. Information required under this subsection shall be submitted by a contractor or subcontractor in response to a written request made by the Comptroller General and shall be submitted in such form and detail as the Comptroller General may prescribe and shall be submitted within a reasonable period of time.

(c) In order to determine the costs, including all types of direct and indirect costs, of performing any contract or subcontract referred to in subsection (a) of this section, and to determine the profit, if any, realized under any such contract or subcontract, either on a percentage of the cost basis, percentage of sales basis, or a return on private capital employed basis, the Comptroller General and authorized representatives of the General Accounting Office are authorized to audit and inspect and to make copies of any books, accounts, or other records of any such contractor or subcontractor.

(d) Upon the request of the Comptroller General, or any officer or employee designated by him, the Committee on Armed Services of the House of Representatives or the Committee on Armed Services of the Senate may sign and issue subpoenas requiring the production of such books, accounts, or other records as may be material to the study and review carried out by the Comptroller General under this section.

(e) Any disobedience to a subpoena issued

by the Committee on Armed Services of the House of Representatives or the Committee on Armed Services of the Senate to carry out the provisions of this section shall be punishable as provided in section 102 of the Revised Statutes.

(f) No book, account, or other record, or copy of any book, account, or record, of any contractor or subcontractor obtained by or for the Comptroller General under authority of this section which is not necessary for determining the profitability on any contract, as defined in subsection (a) of this section, between such contractor or subcontractor and the Department of Defense shall be available for examination, without the consent of such contractor or subcontractor, by any individual other than a duly authorized officer or employee of the General Accounting Office; and no officer or employee of the General Accounting Office shall disclose, to any person not authorized by the Comptroller General to receive such information, any information obtained under authority of this section relating to cost, expense, or profitability on any nondefense business transaction of any contractor or subcontractor.

(g) The Comptroller General shall not disclose in any report made by him to the Congress or to either Committee on Armed Services under authority of this section any confidential information relating to the cost, expense, or profit of any contractor or subcontractor on any nondefense business transaction of such contractor or subcontractor.

In commenting on the enrolled bill to the Bureau of the Budget, the Comptroller General noted that the successful completion of the study within the time allowed would require the full cooperation of the contractors involved.

Military Related Research

Subsequent to the President's approval of the military procurement law, which contained a prohibition against the use of research project funds unless the project had a direct relationship to

a military function, Senator Mansfield who had sponsored the provision asked the GAO to assist in its implementation. On December 6, 1969, on the floor of the Senate, Senator Mansfield indicated that he had directed a letter to GAO requesting the Office to establish guidelines and machinery to determine the effectiveness of the prohibition.³ At the same time the Department of Defense reported that it would cooperate with the GAO review.

Commission on Government Procurement

Another law enacted by the Congress having significance to GAO was Public Law 91-129, signed by the President November 26, 1969, authorizing the establishment of a Commission on Government Procurement. The Comptroller General had testified on the desirability of such a Commission at hearings before both the House and Senate Committees on Government Operations earlier in the year.⁴

Under Public Law 91-129, the Comptroller General is designated as one of the 12 members of the Commission. The other members are to be appointed by the President of the United States, the Speaker of the House of Representatives, and the President of the Senate. The Commission was given a 2-year life span and charged with the responsibility for studying and investigating Government procurement procedures and policies to determine whether goods, services, and facilities are being procured by the Government in accordance with the broad declara-

tion of policy guidelines set forth in the law.

Hearings

Philadelphia Plan

On October 28, 1969, the Comptroller General was invited by the Subcommittee on Separation of Powers of the Senate Committee on the Judiciary to discuss the position of the Office on the revised "Philadelphia Plan." This plan was issued by the Department of Labor for the purpose of requiring construction contracts financed with Federal funds in the Philadelphia area to include commitments covering minority employment goals. The Plan was the subject of a decision rendered on August 5, 1969,⁵ in which it was held that the Plan violated the equal employment opportunities provision in the Civil Rights Act of 1964. The hearings generated widespread interest and subsequent to the presentation the Comptroller General directed a communication to the heads of executive departments and agencies concerning the consequences of obligation of Federal funds in implementation of the plan. (Other participants at the hearings were: Messrs. *Keller, Welch, Miller, Lynn, Allen, and Kane.*)

Postal Service Corporation

At the request of the Senate Post Office and Civil Service Committee, the Comptroller General presented the views of the Office concerning the bond financing provisions of H.R. 11750, a bill to reorganize and modernize the postal establishment. Introductory to commenting on the financing pro-

³ 115 Congressional Record, Dec. 6, 1969, pp. 15927-9.

⁴ *GAO Review*, Summer and Fall issues 1969, pp. 51, 68, respectively.

⁵ B-163026

visions, Mr. Staats pointed out that a Government corporation structure for the operation of the postal system could be justified if Congress desired such an organization. With respect to the financing aspects of the bill, Mr. Staats recommended that the corporation borrow all of its funds from the Treasury rather than borrow directly from the public. (Other participants: Messrs. Ahart, Neuwirth, Medico, Ramsey, Smith, and Blair.)

Military Supply Systems

The Subcommittee on Military Operations of the House Committee on Government Operations asked representatives of GAO to review the progress made in improving the military supply system since the testimony given in June 1968.⁶ Charles M. Bailey, director, Defense Division, presented the review at hearings held on November 20, 1969. He summarized both the improvements accomplished by the Department of Defense as well as the existing areas in supply management and logistics systems that needed further corrective action. (Other participants: Messrs. Fasick and Thompson.)

Role of GAO in Technology Assessment

The Subcommittee on Science, Research, and Development of the House Committee on Science and Astronautics in connection with its hearings on technology assessment invited the Comptroller General to present his views on the role of GAO in this area. Mr. Staats reviewed examples of GAO work relevant to technology assessment at hearings held on December 4, 1969,

and advised the subcommittee of GAO plans for increasing emphasis on review of scientific and technological programs to determine whether funds are expended within the framework of the congressional objectives. (Other participants: Messrs. Dembling, Ahart, Gutmann, Marvin, and Kane.)

Congressional Follow-Up on GAO Reports

The consummate value of GAO report efforts is determined by constructive implementation action. To illustrate, on November 13, 1969, the House Committee on Government Operations released a report on *Deficiencies in Administration of Federal Insecticide, Fungicide, and Rodenticide Act*.⁷ The study by the Intergovernmental Subcommittee began after receipt of a GAO report on *Need to Improve Regulatory Enforcement Procedures Involving Pesticides* issued September 10, 1968.⁸ Subsequently on February 20, 1969, a further report on *The Need to Resolve Questions of Safety Involving Certain Registered Uses of Lindane Pesticide Pellets*⁹ was issued and the subcommittee held public hearings. In the report acknowledgment was given to the GAO assistance. Among the recommendations was that Department of Agriculture officials at the highest levels and the GAO maintain close surveillance over future operations of the Pesticides Regulation Division of the Department of Agriculture.

Two reports on water pollution requested by the Subcommittee on Air and Water Pollution of the Senate Com-

⁶ *GAO Review*, Fall 1968, p. 77.

⁷ 91st Cong., 1st sess., H. Rept. 91-637.

⁸ B-133192.

⁹ *Id.*

mittee on Public Works have recently been printed for the use of the members of the subcommittee in its deliberations on water pollution control legislation to be undertaken early in 1970. These reports by GAO are entitled *Administration of the Construction Grant Program for Abating, Controlling, and Preventing Water Pollution*¹⁰ and *Personnel, Staffing, and Administration of the Federal Water Pollution Control Administration, Department of the Interior*.¹¹ Both reports received favorable commendation from the chairman of the subcommittee.

Another study based on GAO reports

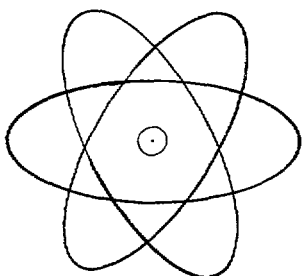
¹⁰ 91st Cong., 1st sess., Committee print (LDS CP-167); B-166506.

¹¹ 91st Cong., 1st sess., Committee print (LDS CP-169); B-166506.

and recently printed is a report entitled *Federal Involvement in Construction in Hazardous Geologic Areas*,¹² issued as the Seventh Report by the House Committee on Government Operations. The GAO reports were issued on February 15, 1966, and May 20, 1968,¹³ under the title *Operation of Federal Housing Programs in Areas of Potential Geologic Instability, Foster City, California*. Following the hearings held by the Special Studies Subcommittee on May 7 and 8, 1969, the subcommittee made certain findings and conclusions and the report was issued containing recommendations to be followed by the Federal agencies involved.

¹² 91st Cong., 1st sess., H. Rept. 91-429.

¹³ B-158554 and B-158554(1).



AUTOMATIC DATA PROCESSING

Considerations in Auditing Clients With Computer Installations

The following excerpts were taken from the article on this subject by Stanley Halper, CPA, and partner with the public accounting firm of S. D. Leidesdorf & Co., New York City. The full text of Mr. Halper's article is printed in the September 1969 issue of *The California CPA Quarterly*.

The ability to audit "through" the computer has become a requirement in many of our auditing engagements. It is rapidly becoming an integral part of the daily auditing activity.

Even with the extensive use of computers it should be recognized that the purpose of the external audit has not changed—the attest function remains the same. The auditor still renders an opinion on the fairness of presentation of the financial statements.

The amounts appearing on the financial statements have been generated by a system; therefore, the auditor must know, evaluate and test this system to be satisfied that the figures the system is generating present fairly the financial position and results of operations. To the extent that the system is manually based, the auditor must understand the functions of the people involved and he must test their work; to the extent that the system is computer based, the auditor must understand and test the computer system.

The approach to any audit engagement includes the obtaining of representations as to what the system is purported to be doing and

the examination of the related system of internal control. This is generally elicited initially from management through appropriate inquiry.

* * * * *

Once the basic information is obtained, the auditor will seek to further clarify management's representations. In the pursuit of such clarification, the auditor should obtain and review the systems documentation and compare this to management's representations. To ascertain if the systems documentation reflects the represented processing activity, the auditor should select computer programs for review. This review encompasses not only the analysis of programming documentation but the related coding of the program as well. The results of this review are then compared to the system documentation. To the extent all three—i.e. management's representations, systems documentation and programming—are in agreement and that the systems controls (i.e. input and output) appear adequate, the auditor can have preliminary satisfaction as to the system. To the extent they differ, problems will occur and the scope of the auditor's work may have to be extended. At the least, these weaknesses should be reported to the client in an internal control letter.

* * * * *

This type of system review, including program analysis, is essential to understand the system and to design tests of the system. The more the system is computer oriented, the more essential this review becomes. It would also be a mistake to assume that a perfunctory review is all that is necessary or that it can be performed alone by an auditor unskilled in the computer arts. As in a manual system,

each client's system differs and the proliferation of computer equipment and operating systems make this even more complex An understanding of the system is essential if the auditor is to rely on the figures it generates. There is no easy path to this understanding—it requires work and a combined team effort between computer specialists and auditors. The team must also have the ability to communicate with each other and the client. The more complex the system or the weaker the internal control, the greater the effort required to determine that the system is working properly or the extent of the system's weaknesses.

Testing the System

The evaluation of the results of the systems review and the planning of the methods to test the system are the next steps. The method and extent of testing the system are determined by the evaluation of the system review. This evaluation should be discussed with the client prior to the implementation of actual testing. This is necessary to avoid subsequent inadvertent processing difficulties when the system is actually being tested. Testing of the system should be in two forms: (a) the selection of source data entering the system to check its propriety and (b) the testing of the consistency of processing.

The method of selection of source data entering the system for testing will depend on the requirements of the system. To the extent that validation occurs outside the system, selection and testing will be to the controls outside the system. This has been typical of a batch-oriented control environment. Checking will generally be done from the initial computer edit report to the controls maintained by batch by the control department. This testing of batch controls should be done on a timely basis while the batches are in their original form. Timing, therefore, becomes essential. Individual items in a batch should be tested to source documents to ascertain their propriety. It should be noted that in a typical batch-oriented environment the initial validation and edit programs do not establish the authenticity of an item entering the system, but only that the item meets certain criteria (e.g. credit limitation, accept-

able location). The validation of the propriety of a source document to enter the system is generally performed through manual control procedures. Therefore, the auditor must test these procedures.

The selection of the individual items could be made manually from the physical batches themselves. Another method could be the use of statistical sampling techniques. This can be implemented by using the RAND table of random digits on magnetic tape or disk. Once the auditor has satisfied himself as to the initial edit processing, he could utilize the magnetic tape or disk containing the batches entering the system. Sampling could then be performed from this media utilizing the RAND table by a program written for this purpose. This could be performed by a separate pass of the validated batch file, or by program modification of the edit program, at the same time the actual processing is taking place. The method of selection is dependent on the technical support the auditor has available. If this support is present, the sampling routes may be "catalogued" as part of the client's computer program library and activated, when necessary, through the computer typewriter console. Appropriate provisions must be made in the client's computer programs to allow for the "calling" of the auditor's sampling routines. Utilizing a method such as this, sampling could be performed on a periodic or continuous basis. Implementing a procedure such as this should be provided for at the design stage of the system. Appropriate programming could then be made to allow linkage with the auditor's routines. During the time selection is taking place, the file may be stratified by selecting (a) items of unusual amounts or (b) those having particular characteristics which the auditor may wish to examine on a separate basis.

In many third generation systems, the origination of the transaction as well as the validation is being assigned to the computer. For example, input through telecommunication terminal devices, data collection facilities from the production floors and optical scanning techniques are becoming more commonplace. An understanding and evaluation of the computer validation is mandatory

and must be tested. In addition, random collection techniques require more sophisticated programming for proper updating, and testing of this requires equally sophisticated program audit techniques. It is possible to implement both validation and sampling techniques on quasi realtime and true realtime systems by utilizing the realtime clock to actuate random sampling routines while the on-line processing is occurring. The samples are outputted onto a magnetic tape or onto an available area on a disk or drum under the supervision of the auditor. These are later tested back to the hard copy and edit messages located at the transmitting terminal. Seasoned judgment by the team and the client's cooperation are necessary.

Consistency Is Essential

The advantage of the computer, of course, is in its ability to process consistently once it has been programmed to do so. The system review was to establish the propriety of such processing; the next objective is to establish the consistency of such processing. This may be done in a number of ways:

1. Comparison periodic "memory dumps" taken by the auditing team to the object code of the programs previously reviewed by them. (This method is more technically complex in third generation computers utilizing dynamic core relocation techniques.)
2. The mechanical comparison of program libraries used by the client to those furnished previously to the auditor by the client and which the auditor has reviewed.
3. The reprocessing of data through auditor controlled programs and comparing the auditor's results to the client's results.
4. Use of controlled input data, such as test decks, in environments with good internal control.

* * * * *

Programming Possibilities

The obtaining of external evidence may be effectively combined with other tests by programming. For example, the circularizing of accounts receivable or payable may be performed at the same time that the aged trial balance is being checked. This can be done

by modification of the client's existing programs which must be reviewed to satisfy the auditor as to the methods of aging and trial balance accumulation. Responses may be reconciled on the computer.

* * * * *

The samples of the physical inventory taken by the auditor when he observed the inventory may be tested electronically to the client's physical inventory tape and exceptions noted. Ticket accountability may be electronically checked as well as extensions and footings. Price tests made at a preliminary date may be tested to the prices used for the inventory. Depending on the system, sophisticated techniques such as bill of material explosions, consistency of pricing of common parts and projections using ratio-estimate techniques, may be employed. By the simple expedient of keeping a copy of last year's inventory tape, comparisons may be made for slow-moving items, etc. The general objective is to furnish the auditor with only those items which merit his attention—the technique of "auditing by exception" should be utilized wherever possible. When the auditor uses these exception techniques, he expends his efforts in the most profitable manner. He becomes a "decision maker," setting forth the parameters governing the exceptions to his technical support personnel. The computer then sifts through the mass of information, relieving the auditor of the detail work. Another important point to note is that modern management techniques require information that the auditor can utilize in various forms for his benefit. The first step in using the data is knowing that it exists. The only way the auditor would know it exists is by knowing the system. The only way the auditor can audit by exception is by knowing the system.

Is It Economical?

Questions are often raised as to economy achieved in using the computer over manual methods. While this should not be the primary objective in entering computer auditing, as the auditor's skills in computer technology increase and as he develops the necessary computer audit programs, econ-

omies can be achieved. In many audits, after the initial programming efforts have been expended, many man-hours may be saved by using the computer. More important, however, is that better audit coverage will be achieved than under conventional manual methods, assuming such manual methods could continue to be applied. The potential time savings can often aid in securing cooperation from a client. The client's cooperation in any venture into computer auditing is essential.

By the cooperation of the auditor, technical support personnel and the client, the concept of auditing through the computer can become a practical reality in our daily auditing activities.

Mr. Halper's basic point is that the auditor must get involved with computers if he is to continue doing his job. He must understand, evaluate, and test the computer system. A sense of urgency is indicated by Mr. Halper's comment that economies can be achieved by using the computer over manual methods, but, more important, is that better audit coverage will be achieved than under conventional manual methods, *assuming such manual methods could continue to be applied*. The obvious implication is that manual auditing methods can no longer be used on some computerized systems.

Current literature on the subject of computer auditing tells the same story—the auditor must get involved and become intimately acquainted with computers. Statements like, “to certify the data, auditors have to know what happens to it in the computer”; “trying to do today's work with yesterday's auditors”; and “time sharing systems give auditors the willies,” are becoming more commonplace.

The general feeling seems to be that many computers are being used as a

piece of high speed tabulating equipment. Since the audit trail is separated from the computer, it is still relatively easy to follow. More and more, however, the audit trail will go through the computer. Input data will more often simultaneously update several files in a variety of ways. The audit trail, therefore, goes through the computer with the tangle of interrelated computer programs. Since there will be fewer and fewer paper documents to test, the auditor must test electronic documents electronically.

As stated by Mr. Halper, the concept of auditing through the computer can become a practical reality in our daily activities by the cooperation of the auditor, technical support personnel, and the client.

Successful Auditape Application

The following résumé of a successful Auditape application was submitted by *Daniel C. White* of the Dallas Regional Office staff.

Our office has recently completed a successful Auditape application on a review being conducted at the General Services Administration. We estimate that the use of this technique resulted in a savings of approximately 6 man-days on the assignment. An additional benefit was the increased reliability of the selected sample. *Cliff M. Justice*, site supervisor, initially suggested the use of Auditape as a technique to obtain in minimum time a reliable sample from an extremely large universe.

The decision to use Auditape was primarily based on a desire to reduce the audit time and effort that would have

been required to select a statistical sample from a universe containing approximately 360,000 transactions. Because the agency did not have a listing of the transactions in the format needed by the auditor, the selection of a sample would have required a special audit run to list the transactions and to provide the audit staff with information concerning the size and amount of the universe. The audit staff would then have to either manually select the sample or make arrangements to have a special program written for a computer-selected sample.

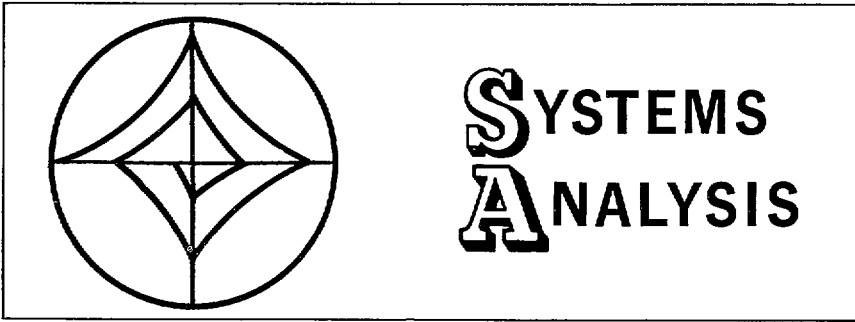
Through the use of Auditape we were able to select a statistical sample designed to produce the desired degree of reliability and have the sample selection printed in the format desired by the audit staff. This procedure involved three runs as follows:

1. The initial run arranged the GSA disbursement transaction file in Auditape format. This run produced three reels of edited Auditape.

2. The three reels of edited Auditape served as input data to the second run (sample selection). This run produced one reel of tape which contained the selected sample.
3. The final run provided the print-out of the selected sample in the desired format.

The complete run took 1 hour and 10 minutes. Approximately 2 hours were used by the site senior and the ADP specialist in preparation of the Auditape specification sheets. The key punch time was negligible since this application required only eight punch cards.

We found that the agency ADP personnel were extremely interested in the Auditape and asked us to provide them with as much information as possible on this system. We did not encounter any problems in this Auditape application. We believe that the complete cooperation of agency personnel and the careful attention given by the site senior and the ADP specialist to fully explaining the Auditape system to agency ADP personnel resulted in a problem-free application.



New Glossary

A revised and expanded glossary for systems analysis and planning-programming-budgeting (PPB), dated October 1969, has been prepared by the Office of Policy and Special Studies and distributed to the GAO professional staff.

Many of the terms referred to in the glossary are discussed in the GAO statistical sampling and systems analysis training courses. The terms have not been defined in a rigorous fashion because one objective of the glossary is to enable the professional staff to better understand discussions and documents in which these terms are used. The glossary defines terms which are encountered primarily in quantitative analysis. Many other terms which are characteristic of particular functional disciplines such as social science, medicine, or national defense will also be encountered in actual analytical situations. The glossary attempts to define terms commonly used in many of these situations.

The Civil Service Commission is making use of the glossary in at least four of its continuing training courses in 1970. The objective in preparing the glossary and in providing training in the use of these techniques is to stimulate interest on the part of the GAO professional staff in pursuing in greater

depth current analytical concepts and techniques and the possibility of applying them to their job assignments.

Nature and Definition of Systems Analysis

Keith E. Marvin, associate director, and *Joseph D. Comtois* of the systems analysis staff of the Office of Policy and Special Studies offer the following discourse on this subject.

A scanning of the terms included in the revised glossary indicates the interdisciplinary nature of systems analysis. Terms defined in the glossary include methods of quantitative analysis taken from such fields as micro- and macro-economics, statistics, operations research, and mathematics. For many years, these fields tended to develop in isolation from one another.

More recently, a significant characteristic of applied analysis has been the integrated use of varied disciplines to bring together the best mix of techniques *in a systematic manner* to cope with complex systems having numerous and different types of variables. The interaction of disciplines results in substantially improved analysis since under this approach significant variables and underlying causes may be identified which might otherwise be overlooked.

In recognition of this need several

universities are using an interdisciplinary approach for teaching students in the field of systems analysis. For example, the Educational Program in Systems Analysis offered at the Massachusetts Institute of Technology includes specially tailored courses taken from the Departments of Engineering, Economics, and Political Science. In addition, seminars held on a weekly basis are led by experts from numerous professions. The same program at the University of California at Irvine is taught in a graduate school of administration which includes both business and public administration in one graduate department. Here too, economics is included in the curriculum.

Confusion regarding the term "systems analysis" stems largely from the extremely dynamic nature of the interdisciplinary approach to problem solving which has evolved in the last 20 years. During World War II statistical techniques and knowledge from different sciences were used successfully in the solution of tactical problems. Since these analyses were used to assist in operational decisions they became known as "operations research." Operations research focused mainly on the analysis of quantitative data.

Subsequent to World War II, the concept of systems analysis evolved to describe the analysis of large systems which include the interaction of a large number of variables, both quantitative and qualitative. This evolution has resulted in a kind of analysis which encompasses the consideration of a wide range of possible actions taking increasingly higher level alternatives into account. To date qualitative factors are

assessed mainly by making them as explicit as possible in analytical studies and by qualifying results in the light of such factors. However, better methods of evaluating such factors are being developed. For example, sensitivity analysis can be used to test the possible effects of uncertainty in numerical measurement or interpretation. It can also be used to test quantitatively the effect of uncertainty in the job to be performed, thus reflecting quantitatively the effect of varying qualitative judgments.

The foreword to the new glossary points out that the term "systems analysis" has been defined in many ways and in many contexts and that different definitions result from the use of the term by different specialists to define their areas of interest. It is important that the definition arrived at for a particular organization or activity reflects the different types of analysis and character of the problems it has responsibility to study and review.

With respect to the GAO it is necessary to define "systems analysis" within a broad programmatic context while fully taking into account its primary role as a comprehensive reviewer of ongoing Federal programs. The concepts and techniques of systems analysis can be used for broad scope program analysis on a before, during, and after basis.

The definition arrived at for the glossary places the emphasis on the work of a systems analyst without reference to the specific objectives of the analysis. Thus, this definition is considered descriptive of systems analysis generally:

Systems analysis may be viewed as the search for and evaluation of alternatives which

SYSTEMS ANALYSIS

are relevant to defined objectives, based on judgment and, wherever useful on quantitative methods, with the objective of presenting such evaluations to decisionmakers for their consideration. It emphasizes the system concept under which any course of action designed to achieve an objective is viewed as a system requiring inputs and producing outputs. The inputs and outputs involved may take on any of a large variety of forms. In this sense, systems analysis encompasses both cost-benefit and cost-effectiveness analyses as well as other types of analysis which may be more limited in scope.

The degree to which *defined objectives* enter into an analysis is highly variable. The objectives may need to be more clearly defined during the planning of an analysis and the analysis itself may suggest revision or refinement of the objectives. The feedback of such suggestions to decisionmakers, either executive or legislative, may cause revision of the criteria for measuring achievement of objectives, which in turn may result in different available alternatives.

The essence of systems analysis is dynamic, i.e., to use not only existing criteria to measure the achievement of existing alternatives but also to search for improved criteria and alternatives. If these are discovered, they become a measure of the worth of the available alternatives.

The foregoing discussion suggests that the stated objectives may be a subject of comments in GAO reports, and this is often the case. For example, a narrative discussion of agency objectives formulated pursuant to more broadly stated legislative objectives may serve important congressional information needs. In addition reviews may disclose a lack of needed post-decisional

data related to the criteria of a program. Such a deficiency would itself then appropriately be an area of major comment in a report.

The scope of systems analysis applications may vary considerably depending upon the problem or question addressed and need not entail the development of highly sophisticated models. As Aaron Wildavsky¹ and Roland N. McKean² point out, analysis may be of great significance if it merely indicates what questions should be asked regarding a program since the raising of the right questions can be a powerful aid to decisionmakers.

Raising the right questions is a particularly important objective of analysis which is intended to be of use to the Congress or its committees in oversight of Federal programs. The restructuring and re-ordering in various ways of information for the Congress which has been developed from the PPB systems of Federal agencies and other information sources is expected to lead to greater insight into the most relevant questions to be raised.

In short the trend is toward decision-oriented, interdisciplinary analysis using new conceptual ways of assessing problems of management at all levels of Government. It is important that all professionals involved in public program analysis keep reasonably abreast of *developments in conceptual approaches* as well as techniques of problem solving.

¹ Aaron Wildavsky, "Rescuing Policy Analysis from PPBS." Article reprinted for use of the Subcommittee on National Security and International Operations (pursuant to S. Res. 24, 91st Cong.), p. 15.

² Roland N. McKean, "Efficiency in Government Through Systems Analysis," (New York, John Wiley & Sons, Inc., sixth printing, March 1967) pp. 5-8.

GAO Staff Changes



Paul G. Dembling

Paul G. Dembling, formerly Deputy Associate Administrator of the National Aeronautics and Space Administration, was sworn in as General Counsel of the General Accounting Office on November 17, 1969.

Mr. Dembling entered the Federal service in 1942 with the War Department, and served in various industrial relations capacities. He joined the National Advisory Committee for Aeronautics in 1945. He served successively as Special Counsel, Legal Advisor, and General Counsel with NACA. In that capacity, he was a principal drafter of President Eisenhower's Administration bill, which became the National Aeronautics and Space Act of 1958.

When NACA was absorbed in the formation of NASA, October 1, 1958, Mr. Dembling was appointed Assistant General Counsel. In addition, he served as Chairman of the NASA Board of Contract Appeals from 1958 to 1961. On November 1, 1961, he was appointed Director, Office of Legislative Affairs. In addition, he served as Vice Chairman of the NASA Inventions and Contributions Board from its establishment in 1959 until 1963. From December 1963 until January 1, 1967, he served as Deputy General Counsel, when he was named General Counsel. In September 1969, Mr. Dembling was appointed Deputy Associate Administrator of NASA.

Since 1964, Mr. Dembling has also served as a member of the U.S. delegation to the U.N. Legal Subcommittee in the drafting of the Outer Space and Astronaut Treaties.

GAO STAFF CHANGES

Mr. Dembling received his A.B. *cum laude* and with special honors in economics in 1940 and his M.A. degree in 1942 from Rutgers University. In 1940–42, he served as graduate assistant and teaching fellow at Rutgers. He received his Juris Doctor from George Washington University Law School, where he served as an editor of the Law Review.

He is the recipient of the Army's Civilian Meritorious Award and NASA's highest award, the Distinguished Service Medal.

Mr. Dembling is a member of the District of Columbia bar and of the American Bar Association, the Federal Bar Association, and the International Institute of Space Law. He served as Editor-in-Chief of the *Federal Bar Journal* from 1962 to 1969, and has written more than 20 articles for law reviews and other professional journals. He also serves as Professional Lecturer at George Washington University National Law Center.



Robert W. Benton

Robert W. Benton was designated director of the Data Processing Center, effective November 9, 1969. In this position he will be responsible for the planning and direction of the overall digital computer systems activities of the General Accounting Office, in addition to serving as an advisor to the Comptroller General and members of his staff on matters relating to automatic data processing.

Mr. Benton served in the Naval Air Corps from 1944 to 1948. He then attended Purdue University where he received his B.S. degree in 1951 and his M.S. degree in 1959. He has been a pioneer in the design and implementation of management information systems, playing a key roll in the design and development of the Army's Headquarters Information System, the Federal Information Exchange System for OEO/BOB, and the first successful computerization of the President's Budget for the Bureau of the Budget.

Mr. Benton has served as the Army representative on the Department of Defense tri-service board for the Five-Year Defense Program, a member of the Editorial Board for the Army's AIDS Technical Bulletin series, and as the Army data processing expert on the board to evaluate and select a cost model for the Department of the Army.



Daniel Both

Daniel Both was designated deputy director, Office of Policy and Special Studies, on October 18, 1969, to head the financial management systems staff. He joined the General Accounting Office on July 1, 1966, as associate director of the Defense Division in charge of the management control systems staff, a position held until the above reassignment.

Mr. Both attended the University of Kansas and the University of Illinois. He holds the degrees of bachelor of science, master of science in accountancy, and Ph. D. in economics. He is a certified public accountant.

Mr. Both has served as an official of the Louisiana State University, successively in the capacities of Auditor, Assistant Comptroller, Comptroller, Dean of Administration, and Executive Vice President. He has been Dean of the School of Business Administration and Head of the Department of Economics of Washington State University and Associate Dean of the College of Commerce and Business Administration of the University of Illinois. In addition, he has held academic appointments with Lehigh University, West Virginia University, Louisiana State University, and the University of Chicago.

During World War II, Mr. Both served as Chief of the Stock Accounting and Procedures Division of the Office of the Quartermaster General with the rank of colonel. Prior to the assumption of that position, his duties encompassed the areas of depot administration, office management procedures, and work simplification. He is the holder of the Legion of Merit. Previous Federal appointments have been with the War Assets Administration, the Bureau of the Budget,

and the Office of the Assistant Secretary of Defense (Comptroller). From July 1, 1962, to June 30, 1964, he served as Deputy Assistant Secretary of Defense (Accounting and Audit Policy).

He is a member of the American Institute of Certified Public Accountants, the American Economic Association, the American Society for Public Administration, the National Association of Accountants, the Louisiana Society of Certified Public Accountants, the American Society of Military Comptrollers, the Southwestern Social Science Association, and the Federal Government Accountants Association. He is also a member of Beta Gamma Sigma, Beta Alpha Psi, Phi Kappa Phi, and Omicron Delta Kappa honorary fraternities.



William A. Calafiura

William A. Calafiura has been designated as an assistant director in the Defense Division, effective October 5, 1969. In that capacity he will continue to have primary responsibility for GAO's accounting, auditing, and investigative work concerned with military housing programs of the Department of Defense.

Mr. Calafiura served in the U.S. Army from 1942 to 1946. He received a bachelor of business administration degree from the Business School of the College of the City of New York in June 1948. He had several years experience with a public accounting firm in New York City before joining the General Accounting Office in 1953.

Mr. Calafiura received a Meritorious Service Award in 1960. He is a member of the Federal Government Accountants Association, the American Society for Public Administration, and the American Academy of Political and Social Sciences.



John H. Coffey

J. Edward Welch, deputy general counsel, in announcing the retirement of John H. Coffey, assistant general counsel, after nearly 42 years of Government service, expressed the sentiments of the Office when he stated that Mr. Coffey's dedication to the legal work of GAO will be missed.

John Coffey was born in Boston, Mass. He received an LL.B., LL.M. and M.P.L. from Columbus University, now merged with Catholic University. Mr. Coffey graduated first in his law class and received several honorary scholastic awards. During World War I he served in the U.S. Navy.

Mr. Coffey began his GAO service in 1936 in the Claims Division. He transferred to the Office of the General Counsel the same year and progressed to senior attorney and principal attorney. On October 20, 1949, he was designated assistant general counsel. In this capacity he was in charge of the attorney group assigned to appropriation and miscellaneous cases. Mr. Coffey was a legal perfectionist and instilled a similar thoroughness in the new attorneys in his group.



Edward A. Densmore, Jr.

Edward A. Densmore, Jr., was designated as an assistant director in the Civil Division, effective October 5, 1969. In this position he is responsible for the accounting, auditing, and investigative work at the Corps of Engineers (Civil Functions), Department of the Army, and the Federal Water Pollution Control Administration, Department of the Interior.

Mr. Densmore has had broad experience with the Civil Division including assignments at the District of Columbia Government, the Panama Canal Company and Canal Zone Government, the Post Office Department, the Atomic Energy Commission, and the Department of the Interior.

Mr. Densmore received a bachelor of science degree in business administration from Boston College in 1958. He is a CPA (Massachusetts) and a member of the American Institute of CPAs and the Massachusetts Society of CPAs.

Mr. Densmore received a Career Development Award in 1969.



Stanley R. Eibetz

Stanley R. Eibetz was designated as an assistant director in the Defense Division, effective October 5, 1969. In this position he will be responsible for the General Accounting Office review of contract administration activities of the Department of Defense.

Mr. Eibetz is a CPA (Virginia) and a member of the American Institute of Certified Public Accountants and the District of Columbia Institute of CPAs. He received a bachelor of arts degree from Cornell University and a master of business administration degree from the Harvard Graduate School of Business Administration. He served in the U.S. Army from 1942 to 1946.

Prior to joining GAO in 1956, Mr. Eibetz held positions in private industry and with the Auditor General of the U.S. Air Force.



Herbert L. Feay

Herbert L. Feay was designated as assistant director and actuary in the Office of Policy and Special Studies, effective October 1, 1969.

Mr. Feay is a fellow of the Society of Actuaries, a fellow of the Conference of Actuaries in Public Practice, a fellow of the Fraternal Actuarial Association, a member of the American Pension Conference, a member of the American Statistical Society, a member of the American Insurance and Risk Association, and a member of the American Academy of Actuaries.

His working experience includes positions of Principal Actuary of the New York State Insurance Department, Actuary of the Manhattan Life Insurance Company of New York, Actuary for Joseph Froggatt and Company of New York (Insurance Auditors), and Actuarial Consultant for insurance companies and private pension plans in Baltimore.

Mr. Feay has written numerous technical papers which have been printed in actuarial publications. Mr. Feay graduated from the State University of Iowa with a major in mathematics and actuarial theory.



Charles E. Hughes

Charles E. Hughes returned to the International Division at the end of August 1969 after completing almost 2½ years as Manager of the Saigon Office, Far East Branch. Mr. Hughes has been assigned duties as assistant director for special projects in the International Division. He was designated an assistant director in the International Division, in January 1967.

Mr. Hughes received a bachelor of science degree in business administration from the University of Denver in 1947. He is a certified public accountant in Colorado and a member of the American Institute of Certified Public Accountants. He served with the U.S. Army from 1941 to 1945 and from 1951 to 1956.

Before joining the General Accounting Office in 1956, Mr. Hughes was with a national firm of public accountants.



Daniel L. Johnson

Daniel L. Johnson was designated as an assistant director on the Program Planning Staff, effective September 8, 1969. He is responsible for developing and reviewing GAO-wide programming, scheduling, and reporting systems and for reviewing GAO's programs and program proposals.

Mr. Johnson is a certified public accountant (Maryland) and a member of the Maryland and the District of Columbia bars. He holds the degrees of bachelor of arts (1950) and Juris Doctor (with honors—1963) from the George Washington University.

Mr. Johnson recently completed 20 years' service with the Federal Government. Employed by the Audit Division of the General Services Administration as a staff auditor in 1952, he became its deputy director in 1964. Employed in the planning-programming-budgeting areas of GSA and the Small Business Administration, he played a significant role in developing and implementing the PPB system of both those agencies. Mr. Johnson received a Meritorious Service Award in 1969 from SBA.



Joseph J. Kline

Joseph J. Kline was designated as an assistant director in the Defense Division, effective October 5, 1969. In this position he will be responsible for planning, programming, and directing reviews of various aspects of manpower management activities within the Department of Defense.

Mr. Kline joined the General Accounting Office in 1952 following his graduation from the University of North Carolina with a bachelor of science degree, majoring in accounting.

Since joining the General Accounting Office, Mr. Kline has had a wide diversity of experience, including assignments involving Government civil agencies as well as the Department of Defense. In 1964 he was the recipient of a Meritorious Service Award.

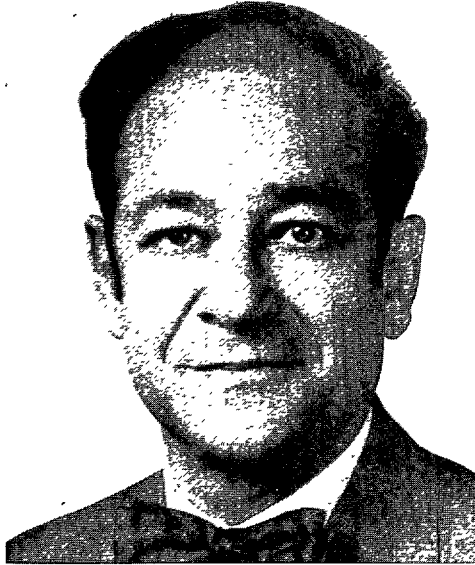


Charles O. Magnetti

Charles O. Magnetti was designated as assistant director, personnel operations, in the Office of Personnel Management, effective November 18, 1969. In this capacity he is responsible for planning, developing, and managing a number of personnel operations.

Mr. Magnetti joined the General Accounting Office early in 1942 and was assigned to the Audit Division where he progressed through several intermediate positions to the position of administrative officer. He transferred to the Division of Personnel, as Chief, Classification Section, in September 1951, and a year later, when the Classification and the Standards Sections were combined, he was placed in charge.

Mr. Magnetti attended Fordham University and received his J.D. degree from National University (now George Washington University) in 1950. He is a member of the bar—District of Columbia (1950) and Maryland (1951). He was admitted to practice before the U.S. Supreme Court in 1967 and is a member of the National University Honor Society and the American Judicature Society.

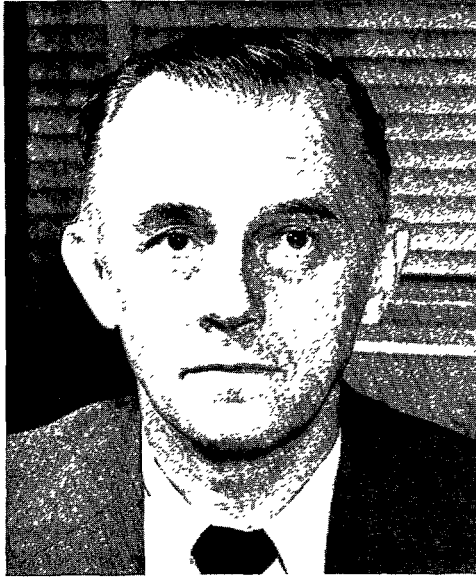


Robert G. Meisner

Robert G. Meisner was designated as assistant director for auditing policy in the Office of Policy and Special Studies, effective October 5, 1969.

Mr. Meisner received a bachelor of business administration degree from the College of the City of New York. He served in the U.S. Air Force from 1942 to 1946. Prior to joining the General Accounting Office in 1952, he had extensive public accounting experience.

He is a CPA (New York) and a member of the New York State Society of Certified Public Accountants and the Federal Government Accountants Association.



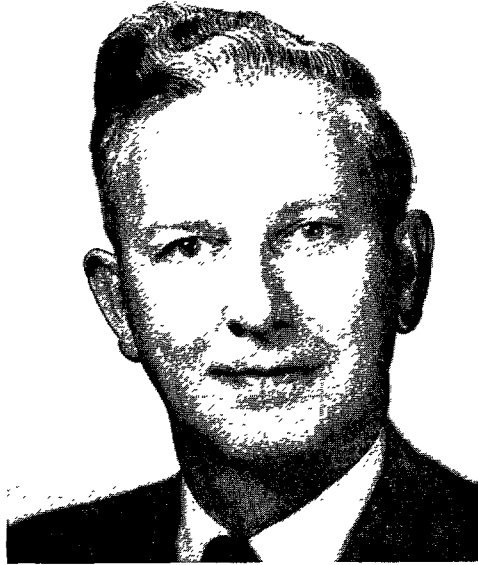
Ralph E. Ramsey

Ralph E. Ramsey, associate general counsel, retired on October 23, 1969, after more than 43 years of dedicated Government service, of which 22 years were in the General Accounting Office.

Mr. Ramsey, from Ottumwa, Iowa, came to Washington in the 1920s to study law. He received both his A.B. and LL.B. from George Washington University and in law school earned the honorary award of the Order of the Coif.

Mr. Ramsey's career in the General Accounting Office began in 1937 as a claims examiner and included service as associate chief of the Investigations Division as well as in positions of increasing responsibility in the Office of the General Counsel. He served as an assistant general counsel from 1955 to 1957 when he was designated as an associate general counsel. He was the recipient of a Meritorious Service Award given by Comptroller General *Lindsay C. Warren* in 1953 and a Distinguished Service Award given by Comptroller General *Elmer B. Staats* in 1968.

The Assistant Comptroller General, *Robert F. Keller*, the former assistant comptroller general, *Frank H. Weitzel*, and deputy general counsel, *J. Edward Welch*, joined colleagues and friends in paying tribute to Mr. Ramsey at a retirement ceremony held in the Law Library on November 12, 1969.



Robert J. Ryan, Sr.

Robert J. Ryan, Sr., was designated as an assistant director in the Office of Policy and Special Studies, effective October 5, 1969. His responsibilities relate primarily to the development and approval of accounting systems in the Department of Defense.

Mr. Ryan received a bachelor of science degree in accounting from the University of Illinois. He served in the U.S. Navy from 1942 to 1945.

Mr. Ryan had 6 years' experience with the public accounting firm of Haskins & Sells and 6 years of diversified experience in private industry. He is a CPA (Illinois and California) and a member of the American Institute of Certified Public Accountants and the American Accounting Association.

Since joining the General Accounting Office in 1957, Mr. Ryan has served in the San Francisco Regional Office and in the Defense Division. His assignments have primarily involved activities of the military departments. He received a Meritorious Service Emblem in 1964.

Professional Activities

Office of the Comptroller General

The Comptroller General, *Elmer B. Staats*, spoke before the following groups in recent months:

Federal Government's Agency Program Planning Officers Group on "Congressional Interest in Program Evaluation," September 18.

Middle Atlantic Association of Colleges of Business Administration on "Management Auditors in the General Accounting Office," October 16.

Industry-Government Seminar on Inflation, sponsored by the National Institute of Public Affairs, November 12.

Seminar on Urban Problems, "Purposes and Prospects," sponsored by the National Institute of Public Affairs, Baltimore, December 7.

National War College on "The General Accounting Office's Role in Congressional Oversight of Defense Programs," December 15.

Intergovernmental Affairs Fellowship Program sponsored by the Brookings Institution, December 16.

The Assistant Comptroller General, *Robert F. Keller*, spoke before the Industry Advisory Council, Department of Defense, October 10, on "Uniform Cost Accounting Standards."

He also addressed the conference for Business Executives on Federal Gov-

ernment Operations sponsored by the Brookings Institution on "The Role of the General Accounting Office," October 20.

The Comptroller General has designated *Harry C. Kensky*, director, Program Planning Staff, to be the liaison between the General Accounting Office and the Federal Government Accountants Association. Mr. Kensky also serves on the FGAA National Research Committee and its National Committee on Cooperation with Government Agencies.

William A. Newman, Jr., special assistant to the Comptroller General, served on a panel at the Fifth Annual Meeting of the Government Procurement Relations Department, Electronic Industries Association, on November 3. The meeting was held at Scottsdale, Ariz. The subject of Mr. Newman's remarks was "Uniform Cost Accounting Standards."

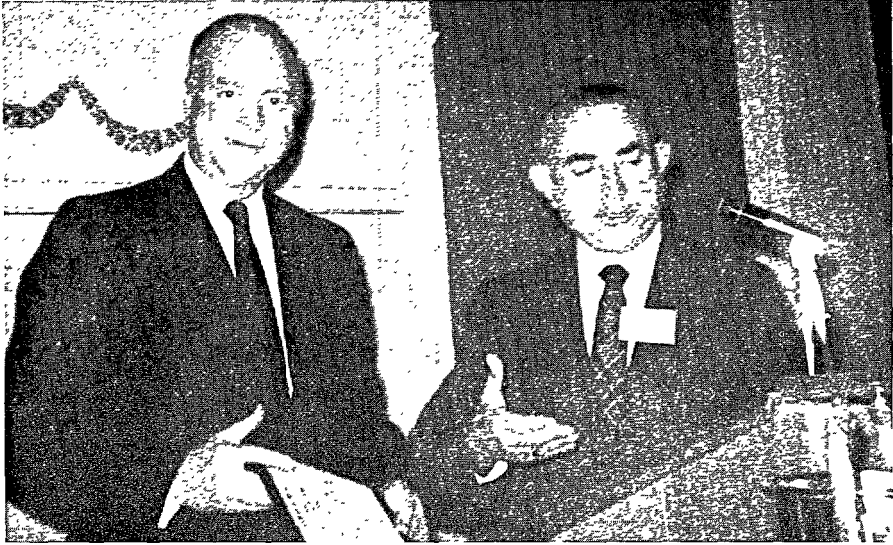
Ralph M. Kee, assistant director, spoke before the Government Contracts Council, Machinery and Allied Products Institute, at the Fall meeting, held in Washington, D.C., on October 20. He spoke on the general outlook for uniform cost accounting standards.

Office of the General Counsel

J. Edward Welch, deputy general counsel:

Spoke at a Briefing Conference held by the North Alabama Chapter of the Federal Bar Association,

**AUTHOR AWARDS BY NATIONAL ASSOCIATION OF ACCOUNTANTS, WASHINGTON CHAPTER,
NOVEMBER 19, 1969**



The Comptroller General, Elmer B. Staats, receives NAA certificate for his article, "Management Information Needs in an Era of Change," published in the October 1968 issue of *Management Accounting*. Max Neuwirth, associate director, Civil Division, and NAA Washington Chapter manuscript director, makes the presentation.



Mr. Neuwirth also presents author awards to other GAO representatives for quality manuscripts submitted: John M. Loxton, assistant to director, Transportation Division; Earl M. Wysong, Jr., supervisory accountant, Defense Division; Hassell B. Bell, associate director, Defense Division; A. T. Samuelson, director, Civil Division; William L. Campfield, assistant director, Office of Policy and Special Studies; and Frank Medico, assistant director, Civil Division.

PROFESSIONAL ACTIVITIES

Huntsville, Ala., on "Philadelphia Plan," September 23.

Spoke at the Associated General Contractors Conference on Davis-Bacon Act matters, Washington, D.C., November 19.

Stephen P. Haycock, assistant general counsel:

Spoke before the Contract Management Institute, on "Public Law 87-653, Truth in Negotiations," October 2.

Participated on a panel of the 1969 North Central Regional Symposium and Education Conference, Dayton Chapter, National Contract Management Association, Dayton, Ohio, October 25.

Melvin E. Miller, assistant general counsel:

Spoke before 10th Annual Western Briefing Conference on Government Contracts sponsored by the Federal Bar Association on "Review of Recent Decisions and Developments" and "Public Law 87-653, Truth in Negotiations," San Francisco, Calif., October 3.

Participated as a panelist in the 2-day Construction Contracts Conference presented under the co-sponsorship of the George Washington University and Federal Publications, Inc., on the "Philadelphia Plan," November 6.

Participated as a panelist in the 2-day Construction Contracts Conference presented under the co-sponsorship of the George Washington University and Federal Publications, Inc., San Francisco, Calif., on "Equal

Employment—The Hard Line," on November 24.

Robert H. Rumizen, deputy assistant general counsel:

Spoke before the Procurement Seminar for Army Audit Personnel on "Formal Advertising," Fort Lee, Va., on October 1.

Paul Shnitzer, deputy assistant general counsel:

Participated in the GSA course on Procurement Contracting and Policy, Chicago, Ill., on "Role of GAO in Procurement Field, Mistakes in Bids, Protests—Before and After Award," on September 29, and on "Administrative Handling of After Award," on September 30.

Spoke before a course on Federal Contract Law which is run by the U.S. Department of Agriculture on "Government Agency Presentation to the GAO in Connection with a Contract Matter," on November 5.

Simon Littman, attorney-adviser:

Participated in the Briefing Conference on Fiduciary Obligations and Conflicts of Interest in the Modern Corporation sponsored by the Federal Bar Association and the Foundation of Federal Bar Association in cooperation with the Bureau of National Affairs, Inc., September 29 and 30.

Office of Policy and Special Studies

E. H. Morse, Jr., director, participated as a representative of the Comptroller General in the Anglo-American Conference on "Evaluation of Social Action Programs," held at Ditchley

Park, Oxfordshire, England, October 28-31.

On December 5, Mr. Morse was initiated as an honorary member of the University of Maryland chapter of Beta Alpha Psi.

William L. Campfield, assistant director, addressed the following groups:

16th Annual Western Area Conference of the Institute of Internal Auditors, Palo Alto, Calif., August 29, on "Controversies and Opportunities in the New Management Auditing."

Long Island Chapter, Federal Government Accountants Association, October 15, on "Some Problems and Opportunities in Public Management of the 1970's."

Federal Government Accountants Association of Austin, Tex., on "Problems and Opportunities for Public Managers in the 1970's," December 3.

The undergraduate class in governmental accounting at the University of Texas on "Improvements in Financial Planning and Control in the Federal Government," December 4.

Beta Alpha Psi chapter at the University of Texas on "Notions Regarding Professional Excellence," December 4.

Mr. Campfield also participated in the University of Illinois Department of Accountancy Professional Advisory Board 3rd Meeting, November 20-22, at Champaign-Urbana. The subject of his discussion was "On the Matter of Continuing Education."

M. A. Dittenhofer, assistant director: Delivered a paper before the Post

Audit Workshop of the National Legislative Conference, August 29, on "Federal Performance Auditing—Its Application to State Audit Effort."

Addressed the Committee of Government Financial Management Associations, December 4, on "Audit Standards for State and Local Government Audits."

Herbert L. Feay, assistant director and actuary:

Presented a paper on "A Critical Analysis of the Gain and Loss Exhibit" at the annual meeting of the Conference of Actuaries in Public Practice in Chicago on October 13 and 14.

Conducted a workshop on reinsurance and on profit formulas for a life insurance company at the meeting of the middle Atlantic Actuarial Club in Washington, D.C., on October 24.

Civil Division

A. T. Samuelson, director, and *Frank Medico*, assistant director, were recipients of awards by the Washington Chapter of the National Association of Accountants for their manuscripts entitled "Public Service Opportunity for the Management Accountant" and "Thoughts on Simplification on Individual Income Filing and Administration," respectively.

Morton E. Henig, assistant director, addressed the NASA Property and Supply Management Conference on "The Role and Responsibility of GAO." The conference was held on October 8 at the Langley Research Center, Hampton Roads, Va.

Defense Division

Charles M. Bailey, director, addressed the Professional Military Comptroller Course, Air University, Maxwell Air Force Base, Ala., on November 17, on the subject of "DOD/ GAO Relationships."

Sam Pines, assistant director, spoke on September 25, to Marine Corps contracting officers attending the Marine Corps Procurement Seminar on the subject of "Pricing of Small Purchases."

Max Stettner, assistant director, attended the 13th Annual Summer Institute for Federal Executives, held at the Center for Advanced Study in Organizational Sciences, University of Wisconsin, Madison, Wis., during the period September 7 to September 19.

Carmen Smarrelli, supervisory auditor, attended a Civil Service Commission Executive Seminar on Federal Program Management at Kings Point, N.Y., from September 22 to October 3.

Ralph VanKirk, supervisory auditor, completed an 8-month course, December 5, in computer programming at Lear Siegler Institute, Silver Spring, Md.

William A. DeSarno, a Defense Division trainee who entered military service in December 1968, writes that after completing the Army's advanced school on mechanized stock control procedures, he was assigned to the U.S. Army Headquarters in Long Binh, Vietnam, where he has set up a school for supervisors in the NCR 500 System.

An article by *Robert B. Hall*, assistant director, and *Timothy D. Desmond*, management analyst, appears in the

Fall 1969 issue of the *National Contract Management Journal*. The article is entitled "The GAO Role in the Business Decisions Process of Defense Procurement—What Should It Be?"

International Division

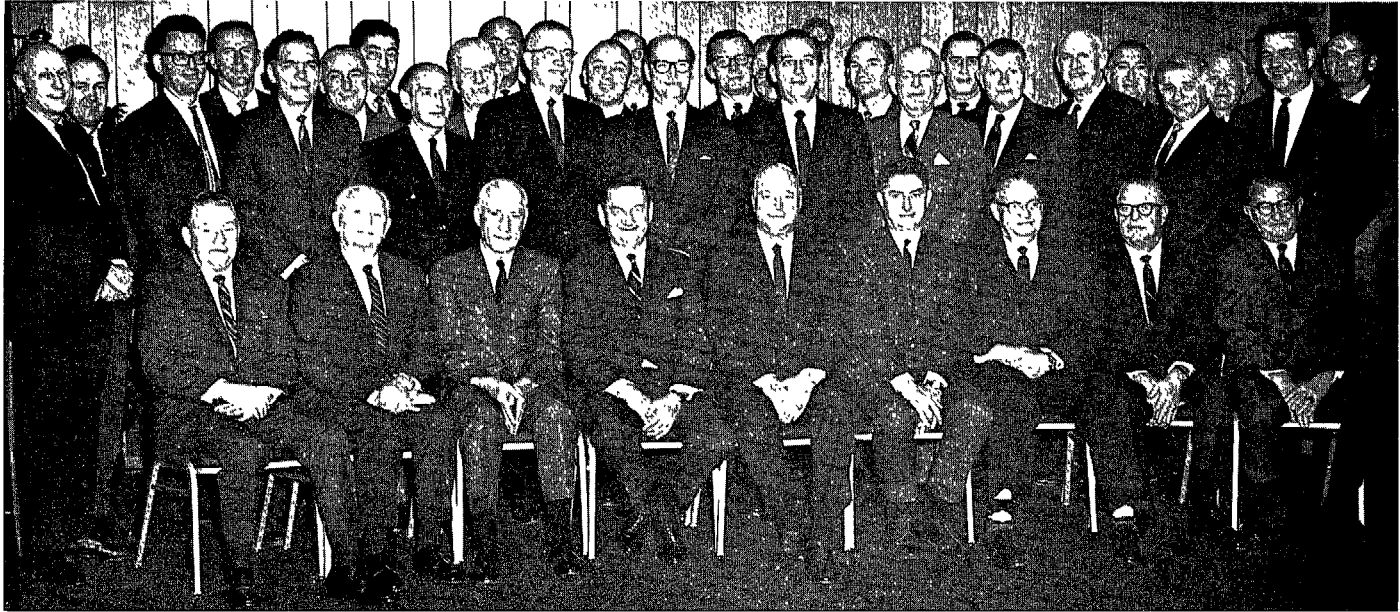
Joseph P. Normile, director, European Branch, recently addressed the members and senior staff of the Court of Audit (Court de Compte) of the Republic of Lebanon, the nearest Lebanese equivalent to the General Accounting Office, on the authority, responsibilities, organization, and principal audit policies and procedures of the U.S. General Accounting Office.

Frank M. Zappacosta, assistant director, attended the 8-week Management Program for Executives at the University of Pittsburgh, September 14–November 7. On September 17, Mr. Zappacosta was awarded a Certificate of Merit by the Washington Chapter of the National Association of Accountants for being among the 10 outstanding members for the 1968–69 year.

Transportation Division

Fred J. Shafer, deputy director, *Charles C. Loomis*, chief, motor audit branch, and *Allan J. Sumner*, traffic manager, participated as guest lecturers at the Defense Advanced Traffic Management Course, U.S. Army Transportation School, Ft. Eustis, Va., in October 1969.

E. B. Eberhart, staff assistant, transportation audits, and *W. F. McDade*, section chief, rail audit branch, participated in a joint air industry–Gov-



U.S. GENERAL ACCOUNTING OFFICE REGIONAL MANAGERS CONFERENCE, NEW ORLEANS, LA., NOVEMBER 3-5, 1969

Seated, left to right: Thomas E. Sullivan, Director, TD; A. T. Samuelson, Director, CD; J. E. Thornton, Director, FOD; Robert F. Keller, Assistant Comptroller General; Elmer B. Staats, Comptroller General; E. H. Morse, Jr., Director, OPSS; Charles M. Bailey, Director, DD; F. R. Browne, Deputy Director, FOD; Herschel J. Simmons, Director, OAS.

Standing, left to right: Oye V. Stovall, Director, ID; Paul deLassus, New Orleans; Walter H. Henson, New Orleans; Richard W. Gutmann, Deputy Director, DD; David P. Sorando, Cincinnati; Kenneth L. Weary, Kansas City; A. J. Strazzullo, Norfolk; H. L. Krieger, Los Angeles; Robert Drakert, New York; Charles H. Roman, Honolulu; Leo Herbert, Director, OPM; Donald L. Scantlebury, Washington; Charles D. Hylander, Deputy Director, ID; William N. Conrardy, Seattle; S. D. McElyea, Denver; Myer R. Wolfson, Chicago; W. H. Sheley, Jr., Dallas; Joseph Eder, Boston; James H. Rogers, Jr., Philadelphia; Joseph P. Normile, Frankfurt; Richard J. Madison, Atlanta; Charles H. Moore, Detroit; Harry C. Kensky, Director, PPS; A. M. Clavelli, San Francisco; Dr. Joseph Pois, Consultant; Gregory J. Ahart, Deputy Director, CD; L. Fred Thompson, OLL.

PROFESSIONAL ACTIVITIES

ernment panel held December 8, at the Air Transport Association, Washington, D.C., on the subject of automatic payment of air tickets for Government travelers.

H. W. Connor, associate director, December 12, completed an 8-week Civil Service Commission training program in Executive Education at the Federal Executive Institute, Charlottesville, Va.

New Staff Members

The following new professional staff members reported for work during the period September 16, 1969, through December 15, 1969.

Civil Division	Culbert, Frederick W. Gilhousen, Gary L. Green, Russell E. Gregor, Regina M., Miss McDowell, William D. Perry, Jerry J. Schofield, Robert F., Jr. Yeakel, David W.	Old Dominion University Pennsylvania State University University of Michigan Indiana University of Pennsylvania Columbia Union College Kansas State College of Pittsburg Susquehanna University Bob Jones University
Defense Division	Black, James R. Donahue, Patrick S. Dyckman, Lawrence J. Williams, Harlow S.	West Virginia University Marquette University Brooklyn College Audit Manager—Stanford University
International Division— Washington	Watson, John E.	Harvard University
Office of Policy and Special Studies	Brown, Charles R. Feay, Herbert L. Kessler, Carl	Department of the Air Force Maryland Life Insurance Company American University
REGIONAL OFFICES		
Boston	Briggs, Brian J. Coder, Thomas H. Prevett, John C., Jr.	Northeastern University Martin Industries Incorporated Raytheon Company
Cincinnati	Conner, David M. Greene, Ronald J. Lawson, Frank T. Superczynski, Albert, Jr.	Union College University of Evansville University of Cincinnati Ohio State University
Dallas	Strong, Stephen J. Thompson, Dennis P.	Southwestern State College Bethany Nazarene College
Denver	Casey, Richard J.	University of Minnesota
Kansas City	George, Richard D. Holdeman, Forrest A.	Northwestern State College Kansas State Teachers College

NEW STAFF MEMBERS

<i>Los Angeles</i>	Seymour, Albert J.	California State College
<i>New Orleans</i>	Smith, Richard L.	Louisiana Polytechnic Institute
<i>New York</i>	Schurgin, Dennis R.	Monmouth College
<i>Norfolk</i>	Chappell, Priscilla H., Mrs.	Old Dominion University
<i>Philadelphia</i>	Lewandowski, Robert W.	Pennsylvania State University
<i>San Francisco</i>	Fukumoto, Arnold	San Jose State College
<i>Seattle</i>	Elich, Carla J., Miss Ziebarth, Gary E.	University of Montana University of Washington
<i>Washington (Falls Church)</i>	Van Pelt, JoAnn B., Mrs.	Department of the Navy

Readings of Interest

The reviews of books, articles, and other documents in this section represent the views and opinions of the individual reviewers, and their publication should not be construed as an endorsement by GAO of either the reviewers' comments or the books, articles, and other documents reviewed.

EDP for Auditors

By Harry L. Brown, CPA, CDP; Manager, Ernst & Ernst; Detroit, Mich., 1968; John Wiley & Sons, Inc.; New York • London • Sydney

This book's emphasis is on the internal control in an electronic data processing (EDP) system and on the information processed. The review of internal control is the starting point in an audit because the better the internal control the more reliance the auditor can place on the accuracy of information available in the system.

Mr. Brown uses almost half of the book to explain the fundamentals of EDP in an easy to understand way with a slant toward how these fundamentals pertain to internal control functions. Any auditor should be able to read the book without any difficulty and obtain a needed basic understanding.

EDP knowledge has become a necessity for the auditor. He states:

The Committee on Auditing Procedure of the American Institute of Certified Public Accountants has published generally accepted auditing standards (Statements of Auditing Procedure No. 33). Of the 10 standards included therein two are of special interest to the auditor in relation to his proficiency in

data processing and evaluation of internal control.

The first *general* standard states, "The examination is to be performed by a person or persons having adequate technical training and proficiency as an auditor." The second standard of *field work* states, "There is to be a proper study and evaluation of the existing internal control as a basis for reliance thereon and for the determination of the resultant extent of the tests to which auditing procedures are to be restricted."

Since these standards were published, the computer has become an important item in the audit environment. The auditor should have training and proficiency in computerized data processing, as well as in the processing methods that preceded this technique. Such training might be required in the future in order to comply with the currently accepted standards.

In the reviewer's opinion there is no reason for auditors not being able to understand the majority of EDP internal controls because they are so basic and detailed knowledge of EDP is not required. Mr. Brown further states:

The essential internal-control requirement of any manual accounting system should be present in a computerized recordkeeping function. There must be well-defined and understood limits of authority, adequate segregation of duties, personnel competent to perform their assigned duties, a meaningful chart of accounts, timely and useful con-

trol reports, and a continuous review of adherence to established policies and procedures, all for the purpose of safeguarding the assets and assuring the reliability of financial records of the company.

Having an understanding of the EDP fundamentals Mr. Brown covers should enable any auditor with a limited knowledge in EDP to evaluate most of the internal controls in a company or agency. When making such an evaluation, it should be remembered that the basic control elements are not distinctly separate entities; each must be considered as a part of the total system of controls. Mr. Brown has an internal control questionnaire in his book which could serve as a guide in an evaluation. If the auditor finds an adequate system of internal control, he can have more confidence in the correctness of the data produced. He can therefore apply less effort in the audit before certifying to the data. However, the auditor will not know for certain that the data produced by an EDP system is correct without a detailed analysis of the system.

Mr. Brown's background information, the internal controls he discusses, and the internal control questionnaire should be quite helpful as a guide in evaluating internal controls in any system. The real value of his book is that it shows the practical side of what the internal controls should be. He shows how the individual controls fit into each segment of an EDP system and the overall internal control in the system. By this means and by describing what should be looked for when reviewing internal controls he has made it much easier for the auditor to understand

the problems of internal control in an EDP system and to spot weak practices.

The reviewer recommends this book for all auditors, especially those who are auditing the output from computers. A study of this book should enable an auditor to evaluate the internal controls pertaining to an EDP system so that he can make judgements as to the quality of the output and the amount of effort that will be required in his own work to achieve his audit objectives.

Donald G. Franklin,
OFFICE OF POLICY AND
SPECIAL STUDIES.

Congress Wants To Know: Is There a Case for Competitive Prototypes?

Armed Forces Journal, November 22, 1969.

"No More One-Horse Races" is the heading for the lead editorial in this comprehensive treatment of competitive prototyping as a method of procuring advanced weapons systems.

The *Journal* tells how "paper competition" has replaced hardware demonstration as a means of acquiring weapons systems.

. . . Fairchild Hiller . . . proposal on the F-15 totaled 30,747 pages and weighed over two tons . . . Proposals submitted by Lockheed and Boeing for the C-5A totaled a staggering 240,000 pages . . . Navy F-14 amounted to 15,000 pages

To analyze such mountains of paper and select the winning design must be a staggering task if it can be done at all. Senator Philip A. Hart's speech on the Senate floor based on the GAO report on evaluation of two proposed methods for enhancing competition in weapons

system procurement (B-39995, July 14, 1969) and related testimony is quoted:

. . . It is a practical impossibility to visualize from speculative paper the attributes of competing designs—much less the probable cost—and confidently pick the best one . . . a contractor's promises about complicated hardware that has never been built before are simply not verifiable at this stage.

Nevertheless, a winning contractor is selected and, on the basis of this tenuous paper, he is now locked in for the life of the weapons system. Comptroller General Staats, quoted in the *Journal*, said in testimony before the Senate Subcommittee on Antitrust and Monopoly, “. . . If competition is lost in initial development it is lost forever.”

The magazine article displays pictures of several advanced Soviet fighters and the well-regarded Mirage air-

planes made in France. These weapon systems were preceded by developmental prototypes—not by volumes of paper. The *Journal* cites how few were the engineers and craftsman who built the Mirage prototypes at Avions Marcel Dassault.

The magazine suggests that the GAO report cited above along with Senator Hart's speech is now the “pro-prototype bible.” Later, however the *Journal* repeats some of the caveats about the method discussed in the GAO report.

Most interesting reading for those concerned with weapons systems and their acquisition.

Timothy D. Desmond,
SUPERVISORY MANAGEMENT
ANALYST,
DEFENSE DIVISION.



Armed Services Procurement Act

Robert Hall is to be commended for his informed, provocative, and forthright article entitled "The Armed Services Procurement Act of 1947 Should Be Reformed," included in the Spring 1969 issue of the *GAO Review*. Hopefully, this article will provoke professional debate within and without GAO and perhaps lead to further constructive considerations. In the spirit of such endeavor the following is offered.

I am not persuaded of the merit of the thesis advanced by Mr. Hall, the principal thrust of which is to give legitimacy to policies which the Department of Defense has pursued ever since the act was passed over 20 years ago. The suggestion to "reform" the act in the face of the Department's inability to live up to it more fully is questionable.

Numerous reports rendered by GAO in years past are testimony to areas of defense management where sympathetic orientation to certain aspects of the intent of the act could have been achieved. Illustrative of a few of these are the following:

(1) Improved system of controls over Government-owned facilities, spe-

cial tooling, and material in possession of contractors needed.

(2) Restrictions on competitive procurement of aeronautical spare parts; anthracite coal.

(3) Improved procedures, criteria, and management techniques needed for determining aeronautical ground support equipment and repair parts stock levels.

(4) Retention requirements revised on idle industrial plant equipment.

(5) Rentals paid in excess of costs of property acquired under long term leases under ASPR provisions.

(6) Limitations established over costs in excess of benefits for the use of contractor-owned or chartered aircraft.

In two recent fiscal years, GAO reported "collections and other measurable savings" involving DOD of \$259,000,000. All of these items are easily identifiable with instances where GAO believed management improvements were possible. Most of these instances involved aspects which were fully within the purview of DOD management to accomplish without the further need to reform or otherwise modify the act itself.

In reflecting on Mr. Hall's proposal, it seems entirely possible that by re-

warding DOD for such substantial failure we are opening a Pandora's box for all agencies who cannot effectively administer the functions entrusted to them. Instances where other agencies could seek legislative reform to eliminate particularly vexing or troublesome management problems can easily be visualized. Why not, for instance, reform postal laws to justify the painfully slow progress which has been made in controlling the relative costs of operation at a time when the Department is enjoying an expanding mail volume base while no significant increases in services are being rendered? Why not reform the Federal highway laws to eliminate the slippages in completion of the interstate highway system and the ever-increasing cost estimates?

Admittedly, the policies expressed in the act are difficult to attain. But, they are not irrelevant. Indeed such policies recognize basic economic truths. As the article clearly demonstrates, DOD has not experienced any difficulty in using the very broad powers bestowed by the act to bring about necessary procurements. The very exercise of such latitude negates the need to further legalize DOD's practices.

Mr. Hall contends that regulation and practices are disjointed and concludes that a viable statute recognizes and deals with prevailing conditions. In my view, law and practice are both controllable aspects of human behavior. It is doubtful that law should merely reflect contemporary conditions, particularly in light of the ever-changing nature of man's desires. Law best serves its social purposes when it elevates us to higher standards of performance.

On the basis of my observations of the workings of the act in actual practice, experienced during many reviews involving DOD areas, I really doubt that by reforming the Armed Services Procurement Act we will achieve better procurement practices. What we really need is more dedicated management in DOD which will conscientiously strive to manage within the spirit as well as the letter of the act.

Alfred L. Panico,
SUPERVISORY AUDITOR,
NEW YORK REGION.

The Author's Rejoinder

I certainly can agree with Mr. Panico's opening remarks. From thereon, however, our views diverge.

The issue is not whether DOD can better administer the Armed Services Procurement Act; rather, my article raised the issue of whether the procurement process itself might be improved through modernization of the act. I might add that the illustrations cited by Mr. Panico do not relate to the act or the article except in a remote sense. Further, I thought the reference to the overall savings in the GAO annual report stretched things a bit.

My article attempts to show that while the character of the DOD procurement process has changed drastically in recent decades, the procedures built into the law since the early 1800's have not. DOD's most important and primary mission is to acquire R. & D. and production of advanced technology devices or systems from industry sources. As a general rule, the designs of these items rarely stabilize and the only ones that stay in production for any length

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of time are those with considerable potential for design growth. For a host of reasons, including complexity of the undertaking and security, some 80 percent or more of the defense needs cannot be formally advertised. An act which demands accomplishment of the agency's primary mission through an "exception process" can hardly be considered relevant.

This does not mean that these complex new weapons cannot be competed for. On the contrary, the competition could be even more vigorous, and multidimensional as well. A discussion of one form of this kind of competition (parallel development) is contained in the Comptroller General's report to the Congress (B-39995) and in his testimony at hearings on July 14, 1969, before the Subcommittee on Antitrust and Monopoly of the Senate Committee on the Judiciary. It was the major theme of the *Armed Forces Journal* of November 22, 1969 (Editor's note: See brief review of this journal on page 104).

Mr. Panico's view that reforming the act would reward DOD for substantial failure to administer the act is certainly not shared by the DOD. Although not revealed in the article, the DOD is the principal source for the various arguments mentioned against reforming the act.

The first effort to modernize the act came in the late 1950's after Sputnik and was known as the Saltonstall Bill (S. 500). In a letter Levcrett Saltonstall wrote to me recently commenting on the article, he said:

. . . I had a difficult time [as Senator] to get a hearing on S-500. I think I put it in a second year. But there really was not enough interest in it to overcome the objec-

tions and difficulties created by the Defense Department.

In hearings this year on the Government Procurement Commission Bill, John M. Malloy, top DOD procurement official, answered in response to a question about the adequacy of the law:

. . . We feel that it is basically a good statute. It has again survived the test of time over these many years. As a generality, I would say that in my judgment the Armed Services Procurement Act remains basically a good statute today.

This response is really the DOD "party line." However, in the present law, DOD has found, despite the paperwork requirements, sufficient flexibility to conduct procurement in almost any manner it sees fit. This is a main point. Considering the current mood of Congress, the DOD could lose some of its flexibility if changes in the law were entertained. As one chief of procurement said in a panel discussion recently, "we have the flexibility; we would rather not have the visibility, otherwise people would see all those zebras running around in the forest."

I suppose my main objection to Mr. Panico's remarks is his view on how the act could be soundly administered if we just had dedicated and conscientious management. Superior management is a laudable goal but not always achieved. Executive effort and philosophy is hardly legislatable.

Robert B. Hall,
ASSISTANT DIRECTOR,
DEFENSE DIVISION.

EDITOR'S NOTE:

A lengthy review of Mr. Hall's article on reform of the Armed Services Procurement Act was printed in the Fall 1969 issue of the

National Contract Management Journal. The review was written by Edwin Bartenstein. Among the reviewer's comments of interest are these:

"The article is an excellent recitation of a

need with which most legislators should have little trouble finding areas of agreement . . . anyone with even a remote interest in government procurement will find the time well spent to read Mr. Hall's article."

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The awards are based on recommendations of a panel of judges designated by the Comptroller General. The judges will evaluate articles from the standpoint of the excellence of their overall contribution to the knowledge and professional development of the GAO staff, with particular concern for:

- Originality of concepts.
- Quality and effectiveness of written expression.
- Evidence of individual research performed.
- Relevancy to GAO operations and performance.

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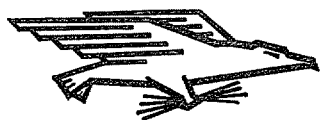
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