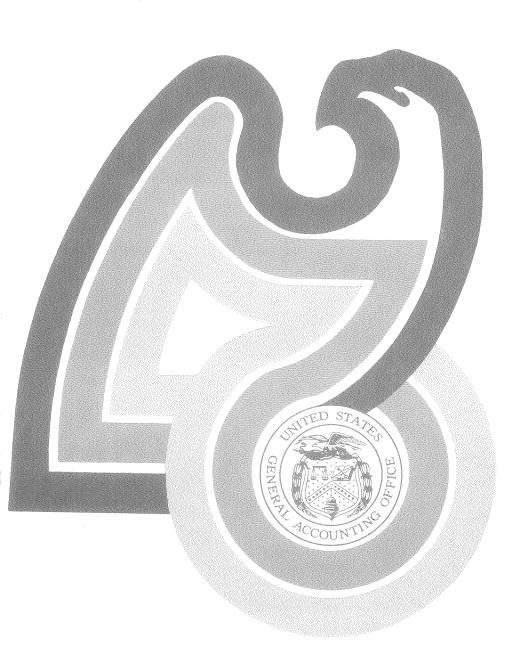
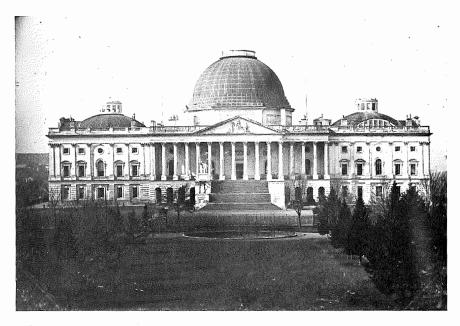
Ine GAO Review Fall 1977



Capitol of the United States-1846



This picture is the earliest known photographic image of the U.S. Capitol Building, home of the national legislature, the Congress of the United States.

It was made originally on a daguerreotype plate about 1846 and is attributed to John Plumbe, Jr., of Washington, D.C. The view was taken from the east. The statue on the north side of the portico is not in place. The building is capped with Bullfinch's dome. The Potomac River and a few buildings in southwest Washington are faintly visible at the left.

The original daguerreotype of the Capitol and others of the White House, the old Patent Office, the General Post Office Building in Washington, and one of the battle monuments in Baltimore were discovered in 1972 in a flea market in San Francisco. They were purchased by the Library of Congress.

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The index to the 1977 volume is published in the back of this issue. Indexes for issues prior to 1973 are **not** available.

The Increasing Importance of Internal Auditors in Today's World

On June 20, 1977, the Comptroller General addressed the 36th International Conference of the Institute of Internal Auditors at Hollywood, Florida, on this subject. The following remarks are adapted from his address.

The General Accounting Office has taken a strong stand on the need for internal auditors in government. Federal agency heads were made responsible for creating and maintaining effective internal audit in their agencies by the Accounting and Auditing Act of 1950 which states that:

The head of each agency should establish and maintain systems of internal control, including appropriate internal audit, to provide effective control over the accountability for all funds, property, and other assets for which the agency is responsible

I was not at GAO in 1950, but I was in the Bureau of the Budget. These organizations were the principal architects of this legislation. Today there are about 11,600 persons in the Federal Government who call themselves internal auditors. Similar functions are performed by many others who identify themselves

by different titles, such as management analyst, internal review, etc.

In the Federal Government today, auditors are among the principal providers—if not the principal providers—of factual information to Government officials, legislators, and the public on economy of operations and financial integrity. The same audit goals that are in the 1950 act are being adopted almost uniformly by State and local government auditors.

Examples of GAO Audit Work

Before discussing the increasing importance of the role of internal auditors, let me provide some examples of the work government auditors do, drawn from the operations of the General Accounting Office, with which I am most familiar.

Financial Audits

GAO sends reports on audits of financial statements to the Congress on such Government corporations as the Federal Deposit Insurance Corporation, the Commodity Credit Corporation, and the Federal Prison Industries, Inc. We also make audits of many other aspects of the financial operations of Government agencies.

For instance, in the last few years, sales of U.S. arms to foreign governments have become sizable. Legislation requires that prices charged by the Defense Department for these arms be sufficient to recover the Government's cost. There is a similar requirement in providing foreign military students with technical training in piloting aircraft, helicopter repair, and many similar skills. We reviewed the Department of Defense's procedures for recovering the Government's costs incurred in training these students and found that millions of dollars have not been recovered due to faulty pricing, billing, and collecting systems. We reported this to the Congress in December of last year, pointing out that in the Army alone, such unrecovered costs totaled \$18 million during fiscal year 1975.

As one result of this report, the Department of Defense took action to improve its pricing system, but it subsequently made reductions in its tuition charges. We followed up with a report to the Congress in February which

pointed out that these reductions would cost the United States at least \$40 million in this fiscal year. In response to our report and congressional concern, the Department, on May 3, raised its tuition rates to the cost-recovery level as the law requires.

On the subject of cost recovery, we found also that, contrary to law, the rates charged to nonmilitary medical personnel for the care they get in military facilities did not recover costs. In fact, about \$12 million in medical costs are not recovered annually. We reported this to the Congress in March. The Department of Defense responded favorably, raising its rates to U.S. civilians and foreign nationals in April. While these rates will increase the amount of reimbursements significantly, they will not recover all costs that should be recovered because all applicable costs are not included in the existing rate computation due to accounting system deficiencies. The Department has advised us that it is giving high priority to developing the accounting procedures needed to provide more complete information for determining reimbursement rates.

Economy and Efficiency Audits

GAO has a long history of reporting to the Congress on ways in which Federal executive agencies can do their job either as effectively or more effectively at a lower cost. Here are some recent examples:

Recently, we reviewed the effi-

ciency and effectiveness of federally operated hydroelectric power plants, such as those operated by the U.S. Army Corps of Engineers, the Department of Interior's Bureau of Reclamation, and the Tennessee Valley Authority. To put this review in proper perspective, I should mention that about 15 percent of our Nation's electric generating capacity is hydroelectric, and of that capacity, about 40 percent is federally owned.

Hydroelectric power is produced by channeling water from dams through turbines that drive generators that produce electric current. We found that the potential exists at some Federal hydroelectric plants to increase power production because of technological advances in turbine and generator designs and materials since the 1930s, when the Government first became substantially involved in hydroelectric power production.

In March we reported to the Congress that if Federal hydroelectric power plants would modernize their turbines and generators to increase efficiencies and capacities, power production at Federal dams could be increased. We pointed out that the additional hydroelectric power production not only will increase the Nation's energy supply but also will

—reduce pollution,

—increase Federal revenues, and

—displace or delay construction of alternate power sources. We are hopeful that Federal agencies that operate hydroelectric plants will recognize these opportunities and act accordingly.

Some of our economy and efficiency audit findings involve supplies, equipment, or facilities that are either excess to the needs of an agency or not used sufficiently. One example involves the Veterans Administration's cardiac catheterization laboratories, operated at a total cost of about \$20 million in some 67 VA hospitals. By way of explanation, in a cardiac catheterization, a thin, pliable tube—the catheter—is inserted into an incision in the patient's arm and passed through a vein or artery into the heart chambers. The procedure is used to diagnose heart ailments.

We reviewed the use of cardiac catheterization units in 12 VA hospitals and found that 11 of them were underused. The problem appears to be that the VA central office permitted cardiac catheterization laboratories to be established without adequately determining whether they were needed.

We found also that 8 of these 12 laboratories were not located at VA hospitals where cardiovascular surgery is regularly performed, even though the medical community and the Veterans Administration agree they should be. We pointed out this problem in our report to the Congress, issued in February, stating that the Veterans Administration may be exposing its patients

to unnecessary risks by performing cardiac catheterizations in hospitals without facilities to handle emergencies. We are hopeful that the Veterans Administration will correct these deficiencies.

Program Results Audits

Much of our work in GAO involves audits designed to assess the effectiveness of Government programs in achieving the objectives for which they were created. An example is our study of the effect of regulation of the airlines industry by the Civil Aeronautics Board on passenger fares. The study was made at the request of the Chairman, Subcommittee on Administrative Practice and Procedure, Senate Committee on the Judiciary.

Our study estimated what fares would have been on a number of busy routes if the airlines were less regulated by the Board and compared those fares with fares charged by the regulated airlines. Our analysis offered reliable evidence that less regulated airlines probably would have charged lower first-class and coach fares, primarily due to increased competition. We estimate that if airlines had been less regulated during the period from 1969 through 1974, passengers would have saved on the order of \$1.4 billion to \$1.8 billion annually. I should point out that while passengers on the average would have paid lower fares, they would have been required to give up some conveniences regulated airlines now provide. For example, some flights would have been more crowded, and fewer flights might have been provided on some routes.

Our report states that the Civil Aeronautics Board itself has concluded that economic regulation of the kind that has been applied to the airline industry is no longer in the public interest, but has taken the position that such a fundamental change in the approach to regulating air transportation should be mandated by the Congress. This case is an excellent example of the expanding horizons of GAO's work, particularly in the evaluative area.

Another example is GAO's first audit of the supervision of State and national banks by the Comptroller of the Currency, Federal Deposit Insurance Corporation, and Federal Reserve System. From time to time, there are incidences of bank failures in the United States notwithstanding Federal supervision of banks, including periodic bank examinations. We found that one reason failures occurred was that Federal bank examinations emphasized analyses of a bank's condition at the time of an examination but did not always provide sufficient attention to basic management policies and controls exercised by the banks themselves, which could lead to detection of situations causing deterioration of a bank's operations. Fortunately, the Comptroller of the Currency recently revised bank examination procedures, which should result in earlier detection of such situations. I am hopeful the Federal Deposit Insurance Corporation and the Federal Reserve System will join the Comptroller of the Currency in using the revised bank examination procedures.

We also found that Government surveillance of the Federal Reserve System's bank holding companies was not sufficient to disclose problems in the holding companies before these problems affected affiliated banks. We recommended more frequent, indepth, onsite inspections of holding companies to improve the detection of such problems.

Computer Auditing

About a year ago we issued a report entitled "Improvements Needed in Managing Automated Decisionmaking by Computers Throughout the Federal Government." In our audit work at a naval installation, we observed that certain types of stocks in an automated inventory system were building up, though they should not have been. After some diligent digging, we discovered a quirk in the computer program which had the effect of double counting requests for issuance of parts and supplies. Naturally, the computer ordered replacements automatically to accommodate this apparent increase in the need for such parts and supplies. But the result was that unneeded stock was ordered.

No one had questioned the computer's output. Before we looked into the cases, the computer's actions were assumed to be correct. Our auditors worked to get the situation remedied. Then one of our more thoughtful staff members began to wonder how frequently other situations of this type might exist, where a computer's input was resulting in actions being taken automatically—actions that could be wrong—with no review by human beings.

We reviewed the reports of a number of internal audit agencies within the Government to find out whether similar situations had been encountered elsewhere. These internal audit reports provided us the answer in a short time at a minimum cost. We were surprised to find that it was rather common for internal auditors to encounter automated systems turning out bad decisions-decisions not being detected by operators and users of the system. The internal auditors had unearthed the errors in automated systems, had run them down, and had corrective actions taken. But—and here is the point-each of these had been treated as an individual case when, in fact, there was a pattern of such bad decisions. Eventually. we were able to attribute these similar cases to bad programing, bad data, or a combination of the two. These factors, together with almost unquestioning acceptances of the outputs of computers as correct, had resulted in a loss of hundreds of millions of dollars through erroneous payments, ordering unneeded items, incorrect eligibility determinations, etc.

By establishing that this pattern existed rather generally across the Government, and in disclosing the magnitude of the errors being made, we were able to convince the Office of Management and Budget of the paramount need to issue specific directives to all Federal departments and agencies directing them to take the broad corrective steps recommended in our report.

One of the most important of these steps is the provision for internal auditors to make periodic reviews of the output of automated systems to assure that the decisions being made are correct. Another is to encourage early auditor involvement in the development of such systems to make sure that appropriate controls and audit trails are built in. This report has made a vital contribution to improving the use of computers in the Federal Government and to demonstrating the need for continued, careful surveillance by internal auditors of computer systems.

Our report complements, in many respects, the recent contribution of the Institute of Internal Auditors to improvement of the entire area of computer systems development and operation in the Systems Auditability and Control Project. The institute is to be commended for its outstanding foresight in recognizing the need for such a comprehensive study of the area of computers and information systems.

Our office has already benefited from this study. We are using it in our computer training

courses because we feel it is a landmark effort in the struggle to show the contribution that auditors can make toward improved managerial efficiency in the electronic age.

Earlier this year we participated with the institute in a national Bureau of Standards workshop in considering whether supplementary audit standards for situations involving computers would be useful. We have concluded, as did those in the workshop, that such standards would be useful and we have a project underway to prepare a supplement to our GAO audit standards for application when computerized systems are under audit.

How Internal Auditors Can Be of Help to Federal, State and Local Government

Today, Government at all levels is beset with financial problems; one need only read the papers. Our larger cities have serious financial problems—New York, of course, being the prime example. The Federal Government and State governments too are feeling the pinch of steadily rising costs accompanied by widespread taxpayer opposition to tax increases.

In such a situation, the skills of internal auditors are often just what is needed. One answer to such a situation is to reduce costs, improve efficiency, and eliminate unproductive or ineffective programs. These are pre-

cisely the things that internal auditors are skilled in.

For internal auditors who are in government at one level or another, opportunity is at hand. They need to be sure they have a sound planning process so they can concentrate on matters of significance; do the best work they can so their findings will be understood and their recommendations implemented; and, when necessary, educate those in managerial positions who do not vet know how internal auditing can be used as a tool for improvements in efficiency and effectiveness.

For those of you not in government, I would urge you to take an interest in governmental affairs. Many levels of local government still have no internal audit staffs and little work is done in such organizations to cut costs or eliminate unproductive programs. Frequently, the lack of internal audit is directly related to lack of knowledge by local officials on how the audit function can help them. The same is true, to a lesser extent, in State government and even in some agencies of the Federal Government. If internal auditors would take the lead in helping government organizations that do not have internal audit staffs to understand the value of internal audit work and assist them in establishing effective internal audit organizations, they would help to eliminate some of the budget crunch that many government organizations are experiencing. Another area in which internal auditors might help is to get those government organizations that are totally oriented toward financial work to broaden their scope into economy, efficiency, and effectiveness reviews.

Insofar as the Federal Government is concerned, there is a strong movement to make the periodic assessment of the usefulness of programs a requirement.

I refer here to what is called "sunset legislation." For those of you not familiar with this term, let me explain. Almost all Federal Government programs have been created without concern to whether they should ever end. This, of course, means that programs tend to perpetuate themselves even though they may have outlived their usefulness. The objective of sunset legislation is to specify termination points for such programs so that they cannot continue unless reauthorized specifically by the Congress.

In considering whether to do this, the Congress will want information. What is the program achieving? Is it reaching the desired target group? Has the problem been corrected? These and many other questions will and should be asked. As we see it, the Congress, in its search for factual and impartial answers, will rely to a considerable extent on auditors.

Where Is Auditing Going And What Must Auditors Do To Get There?

Periodically, all of us should take stock of the overall picture in our profession, but too often in the heat of battle, we see the task at hand but avoid looking at where we are going and how we are going to get there. In concluding these remarks, let us do a little crystalball gazing about the future of internal auditing.

There is a direct connection between the complexity of governmental and business operations, and the need for auditors. The more complex things are, the more difficult it is for management to get accurate information. In such circumstances, managers will rely on internal auditors to provide them with such information.

From what we understand about internal auditing in industry, the function now centers on testing financial controls and identifying areas in which operational efficiency and economy can be improved. Audits of the effectiveness of programs have not received as much attention. We have perhaps devoted more attention to effectiveness auditing in the Government because there the bottom line is how well a program achieves its intended purpose. I think industry will do more of this kind of work in the future.

Industry has programs too that can be advantageously evaluated. For instance, training programs might be evaluated to see if they are cost effective and produce good results. The effect of pension plans might be evaluated to see whether they actually do attract and retain desired types of employees. Programs to protect the environment might be evaluated to see whether alternatives might do a job more effectively. Thus, as I see it, the frontier for internal auditors lies in evaluation of whether various types of programs are achieving the objectives for which they were created. This is not to say that internal auditors will give up their traditional roles in the financial and efficiency and economy areas. Rather, they will be called upon to add another function to their traditional skills.

Although I see increasing demand for evaluation of the results of programs, internal auditors are going to have to make some changes of their own if they are to do this work well. They will need to

- -acquire new skills,
- learn to work on what is happening right now rather than what did happen, and
- —learn more effective ways of reporting their findings.

Acquiring New Skills

The demands on auditors for greater skills in just the financial and efficiency and economy arenas are challenging enough, but as we have seen, even broader skills are necessary to do the kind of audit that produces information on effectiveness of programs. To do this work well

requires a mixture of a variety of skills—mathematical, statistical, actuarial, engineering, and data-processing skills. Some of these skills are also useful in economy and efficiency audits.

Some of the basic auditing skills needed to perform audits of operational efficiency and economy and program effectiveness are not taught in schools. Accounting and auditing curriculums center almost entirely on financial auditing. Curriculums for other subjects—engineering, mathematics, and so forth—do not give them the point of view which the auditor follows in doing his work. So we all are faced with complex training jobs.

While I believe more training is necessary, training alone is not the answer. The days are too short for anyone to acquire *all* the skills needed to perform some audit tasks. Consequently, auditors must discard the idea that an individual auditor can possess every necessary skill. Audit staffs need to be teams of people with varying backgrounds and professional disciplines.

Learning to Audit What Is Happening Now

Traditionally, auditors like to look at records of transactions that occurred weeks or months ago and check on the way they were handled, to reach a conclusion on whether such transactions were proper, economical, and so on. The days in which such auditing can be done are numbered. In the systems of the

future, we will have to audit transactions as they occur, before there is necessarily a record to look at. This will mean that much better audit planning will be needed so that many tasks now performed sequentially can be performed more or less simultaneously. Without far greater planning than is now given most audits, such audits cannot be done.

Auditors will also have to rely far more on systems functioning effectively, after they have been checked out, than they do now. This will require some better techniques for testing such systems than we now have. Both the Institute of Internal Auditors and GAO have done considerable work in this area, but I believe far more is needed before we can say that we have this well under control.

Learning More Effective Ways Of Reporting

Reporting audit findings promptly and in an understandable manner is perhaps the most difficult problem auditors face. It certainly is a constant problem with us at GAO, and I am sure it is with many other audit organizations. Difficult as it is, auditors must learn to do it well, for audit findings and recommendations are of little value if not communicated effectively.

I think use of innovative reporting techniques—more briefings, video tapes, and greater use of photographs when appropriate—can help management

"get the message." However, we will also need a written report in most cases, and report writing for audits that go beyond a simple opinion on financial statements remains a common problem. Auditors must communicate with people who are unsophisticated in the technicalities of programs as well as auditing and accounting terminology. Writing reports that communicate requires talent and hard work—especially the latter—as in other challenges of life.

But difficult as this is, auditors are going to be pressed to do far better in the future. Things will be happening so fast on the data processing systems that prompt action and clear communication will be demanded to stop inefficient or uneconomical procedures.

Concluding Remarks

In closing, I must tell you that we in GAO hold internal auditors in high esteem and, as you have already heard, we rely heavily on their work. Without internal audit staffs in the Federal agencies, GAO would have to be much larger than its present size to do its job.

Reporting Waste and Inefficiency

***We create this independent establishment, answerable to Congress, an establishment that has clerks and accountants, who will go through every department of the Government. When they find waste and inefficiency, when they find duplication in the service, they will come to the committee of Congress that has jurisdiction of appropriations and report that fact. That fact will also be communicated to the President of the United States. With that system of checks and balances it is believed that this great overlapping of activities, this duplication that exists in every department of the Government, will cease, and that the Government of the United States will be placed upon a business basis ***.

Congressman James W. Good of Iowa
Debates on budget and accounting legislation
1920

The National Environmental Policy Act of 1969

About a legislative act intended to keep us from running out of "biological money."

Economic growth and technological progress are nibbling away at our world's natural resources. Russell W. Peterson, Chairman, Council on Environmental Quality, stated during a GAO symposium on environmental protection issues held in Annapolis, Maryland, in May 1976:

Man has been damaging his earth and its life support system from the moment of his emergence on this planet. In the past, however, the capacity of our species to damage the earth was relatively insignificant in comparison with the size of our globe and its ability to bounce back. But these days, the size of our population, the devastating power of our tools and the incredible complexity of the substances we are pouring into our air, water, and soil have begun to exceed the resilience of our planet. For the first time in the history of man, we really do have the capacity to spend our earth into bankruptcy.

From a hard-nosed, no nonsense point

of view then, when we talk about environmental impacts, we are not only talking about unspoiled scenery and endangered toads. We are talking about deficit spending of the most grievous and final sort—and if and when we run out of biological money, we will have no machine to print more. The earth owns the only press of that kind.

Man has reached the time when he must start considering the impact of his actions on the environment. Recognizing this fact, the Congress enacted the National Environmental Policy Act of 1969. The goal of this law is to promote wise and wellplanned budgeting of our remaining "biological money" through improved Federal decisionmaking. It attempts to accomplish this goal by requiring all Federal agencies, to the fullest extent possible, to direct their policies, plans, and programs to protect and enhance environmental qual-

Mr. Faltermeier has a B.S. degree in business administration from St. Mary's College of California. He worked for Touche Ross & Co., Certified Public Accountants, from September 1973 until June 1976, when he joined GAO's Kansas City regional office.

ity. All Federal agencies are required to prepare an environmental impact statement for all "major Federal actions" significantly affecting the quality of the human environment.

Definitions Under the Act

Although an agency must strive to implement the act's policy in all its activities, it will have to prepare an environmental impact statement only for "major Federal actions" which significantly affect the quality of the human environment.

In determining what is a "Federal action," the courts do not normally discuss whether the Federal presence is sufficient for an action to be considered a Federal action. The presence is assumed to exist. Similarly, Federal regulation of private conduct poses few problems. The action must involve Federal control and responsibility. For example, distributing Federal funds to State and local governments in the form of general revenue sharing does not constitute a "Federal action," since use of the funds is not under Federal control.

Not every action is deemed a "major action." The courts have interpreted "major action" as any action which requires substantial planning, time, resources, and expenditures.

It is more difficult to determine what is a "major action that significantly affects the quality of the human environment." Each Federal agency is responsible for identifying such actions. Agencies can consult the Council on Environmental Quality in developing specific criteria and procedures to determine if an action has a significant impact.

The Council on Environmental Quality emphasizes that to determine whether an environmental impact statement is required for a proposed Federal action, an agency must consider the overall cumulative impact of the proposed action and the consequences of subsequent related actions. This is important because an individual decision about a complex project may not greatly alter the human environment; however, a number of related decisions, taken together, may have a substantial impact. During the GAO symposium on environmental protection issues, Russell Peterson indicated that a study of a proposed action's impact on the human environment requires an agency to analyze the effects on human health, housing, and community growth, as well as on the natural environment.

The Environmental Impact Statement

Preparation

Once an agency has identified a "major Federal action which significantly affects the quality of the human environment," it must decide at what point the act should be implemented. Compliance with the spirit of the act requires an agency to build a detailed analysis of the proposed action's environmental aspects into its planning and decision-making process at the earliest possible point, so that damage to the environment may be avoided or minimized.

Also, at this time, the agency must prepare a study of alternatives to the proposed action, including those not within its existing authority, and analyze their environmental and economic impacts. So that options which might improve environmental quality or do less harm are not overlooked, the agency should continually keep this analysis in mind throughout the planning and decisionmaking process. The analysis of alternatives should be detailed enough so that the reader can compare the environmental and economic impact of the proposed action with that of each alternative.

It is important to note that the alternatives of no action at all and of another action that fully accomplishes the goal without harming the environment constitute the extremes between which possible alternatives fall. The district court in the Gillham Dam case 1 stated that both extremes must be covered. A decision to take no action—i.e., to reject the proposed action—is itself an alternative which must be considered in the statement. The court characterized the Corps' failure to describe fully the consequences of leaving the river alone as a "glaring deficiency" in the statement.

Coordination With the Public and Other Units of Government

Judicial opinions have confirmed that the public has a right to be informed of a proposed action and to participate in the planning and decisionmaking process. Conservation, public service, education, labor, and business organizations in the community and other individuals affected by the proposed action should be given opportunities to comment at all appropriate stages in the planning and decisionmaking process and to review and comment on the draft and final environmental impact statements.

The Council on Environmental Quality encourages agencies to coordinate with appropriate Federal, State, and local agencies and with the community early in drafting the environmental impact statement. This aids in identifying environmental impacts and planning measures to mitigate them, including changes in project design. The community can air its opinions during the formative stage of the project, so serious controversy may be avoided later on.

When an environmental impact statement has been drafted, the agency is required to furnish a copy to the Council on Environmental Quality and to Federal, State, and local agencies, to provide these parties a further

¹ Environmental Defense Fund v. Corps of Engineers, 325 F. Supp. 728, 1 E.L.R. 20130 (E.D. Ark. 1970-71).

opportunity to consider the environmental issues involved before the first significant point of decision in the agency review process. The draft impact study should also be circulated to Federal agencies with legal jurisdiction over or special expertise in the environmental area affected. A list of the Federal agencies and their relevant areas of expertise can be obtained from the Council on Environmental Quality. A system of State and area clearinghouses, established by Office of Management and Budget Circular A-95, provides a means for circulating a draft environmental impact statement to State and local environmental agencies.

The agency is also required to announce when an environmental impact statement draft is available to the general public. Copies must be supplied to individuals and organizations that request an opportunity to comment.

Agencies seeking comments can establish a time limit of not less than 45 days within which all replies must be received. If no response has been received and the commenting party has not requested an extension, the agency may assume the party consulted has no comments.

The Final Statement

When all comments have been received, the agency may write the final environmental impact statement. All substantive comments received on the draft must be appropriately included in the final statement. Copies of the final statement must be sent to all parties who made substantive comments on the draft statement and to anyone requesting a copy. Several copies must be sent to the Environmental Protection Agency and the Council on Environmental Quality.

Administrative action to execute the proposed action cannot begin until 30 days after the release of the final environmental impact statement, which is the last date of the following three:

- —the date the statement was filed with the Council on Environmental Quality,
- —the date the statement was provided to the commenting agencies, or
- —the date the statement was made available to the public.

The environmental impact statement is not an end in itself. An agency should keep in mind that the statement serves as the means of assessing the environmental impact of a proposed action, rather than as a justification for an action that has already been planned and decided on. The decisionmaker must consider environmental information with the same depth of understanding and detail as the economic and engineering aspects of a proposal.

A Useful and Beneficial Law

The National Environmental Policy Act of 1969 is a useful and

beneficial law. It collates the study of technical and economic factors with environmental analysis. It gives the public an opportunity to participate in the Federal Government's planning and decisionmaking process. It makes Federal agencies face their responsibility for the consumption or waste of "biological money."

Value of Annual Congressional Review

***I think it is a very wholesome thing for heads of governmental agencies to come before this committee in connection with appropriations for their future expenditures, in order that this committee may review their administration and thus ascertain in what manner the public business is being transacted and at what cost. Congress can then determine whether the activity should be continued as is, enlarged, curtailed, or discontinued. Once an activity is started it seems usually to grow, whether beneficial or not, and when there is no definite control over what may be expended, as is the case with respect to certain of the permanent indefinite appropriations, the temptation in this respect is dangerously great.

There is no practice so effective in disclosing poor and expensive administration and possibilities for betterments and economies, as that of requiring responsible officials of activities to be appropriated for to come before Congress and explain what is going to be done with the money asked for, and the need for the amount requested.

John R. McCarl
Comptroller General of the
United States before House
Appropriations Committee
1934

Multidimensional Analysis— A New World for GAO

GAO used multidimensional analysis to estimate costs of alternative methods of caring for the Nation's elderly.

As society and therefore government services become more complex so does GAO's work. We are becoming involved in sophisticated research efforts similar to those performed by management consulting firms or university research departments. An example is the Detroit regional office's review of home services received by older people.

The Nation's elderly are increasing rapidly. In 1900, people 65 and over numbered 3 million. By 1970, they had increased over sixfold, to 20 million, and in the year 2000 they are expected to reach 30 million. The Nation will thus be faced with an ever-heavier financial burden—long-term health care and eventually in-

stitutionalization for the aged. The Congress is concerned with their plight.

As part of this concern, a congressional committee asked GAO to analyze the cost of alternative types of care for the elderly. This complex project required determining degrees of impairment and estimating the cost of services provided by family and friends. To do this required looking at human functions and simultaneously evaluating services affecting these functions. This process we call multidimensional analysis.

Cleveland, Ohio, was selected because the Detroit regional office has developed one of the country's largest data bases on

Mr. Burdette, an auditor with the Detroit regional office, has been with GAO since 1967. He has a B.S. degree in business administration from Youngstown State University, Youngstown, Ohio.

Mr. Carter joined the Detroit regional office in 1976 after spending 2 years in the Washington headquarters office. He has a B.S. degree in engineering from the U.S. Military Academy at West Point (1970) and an MBA degree in accounting from the University of Maryland (1974). Mr. Carter is a CPA (Maryland) and a member of the Association of Government Accountants and the Maryland Society of CPAs. Mr. Carter is a previous contributor to *The GAO Review*.

the elderly. Our objective was to determine the point at which services provided to keep older people in their homes become more costly than institutionalization.

The Data Base

The data base had been developed for another Detroit regional office review ("The Well-Being of Older People in Cleveland, Ohio," HRD-77-70, Apr. 19, 1977). That review combined information from two major sources. The first comprised interviews of 1,609 older people in the city of Cleveland. These people were interviewed twice once in the summer of 1975 and again a vear later using the "Multidimensional Functional Assessment Questionnaire," developed by the Duke University center on aging. The interviews were conducted by interviewers from Case Western Reserve University and supported by the Cleveland Foundation, a local philanthropic organization. Over 300 pieces of information were gathered on each person.

The second source of data used in the earlier review was 118 agencies that provided a wide range of services to older people. These agencies supplied information on the types and frequency of services they provided to each person in the sample. The data from both sources had been computerized to allow multiple comparisons.

The 1,609 people were rated in each of 5 dimensions, as shown

on the questionnaire: social and economic status, mental and physical health, and ability to do daily tasks. Using the five ratings, each person was then categorized into one of seven impairment levels—unimpaired or slightly, mildly, moderately, generally, greatly or extremely impaired.

Note: at the beginning of our review, we had available data on 7 impairment levels consisting of 5 dimensions based on 300 characteristics of older people. Analysis of such complex multidimensional data could only be handled with innovative computer programs and statistical techniques. With the help of the Financial and General Management Studies Division and our consultants, we were able to advance the state of the art of data analysis.

Service Packages

We began by developing, for each impairment level, service packages consisting of combinations of the 28 services available in Cleveland. These packages could only be developed through multidimensional analysis. We had to look at impairment levels based on 5 dimensions consisting of 300 characteristics and apply information on 28 services to each impairment level. We did this with computer crosstabulations and added the following elements to our analysis:

1. Percent of the people receiving each service.

- Percent receiving each service from family and friends.
- 3. Percent receiving each service from an agency.
- 4. The average monthly frequency of use of each service.

Cost Data

To develop cost data for each service, we interviewed representatives of 25 local agencies serving the elderly. We interviewed officials in Chicago, Illinois, to collect cost data on services provided by eight other agencies there. We also received data collected by Duke University on service costs in Durham, North Carolina. The average costs developed for each service in Cleveland were similar to the costs in Chicago and Durham; therefore, the results of our review could be projected nationally.

Service Package Costs

To complete our multidimensional analysis, we needed to develop new methods for calculating service package costs. We then added four more elements to our analysis:

- 1. Cost per unit of service.
- 2. Monthly use of services for each impairment level.
- Percent of persons in each impairment level receiving each service from family and friend.
- 4. Percent of persons in each

impairment level receiving each service from an agency.

Using these four elements, we calculated an agency cost and a cost to family and friends for each service at each impairment level, in terms of monthly cost per 1,000 people. These two costs were then added to get total cost for each service. The costs of all services were then totaled to determine agency cost, cost to family and friends, and total costs, for the service packages of each impairment level. These service package costs were then plotted to give us our home services curve. (See graph 1.)

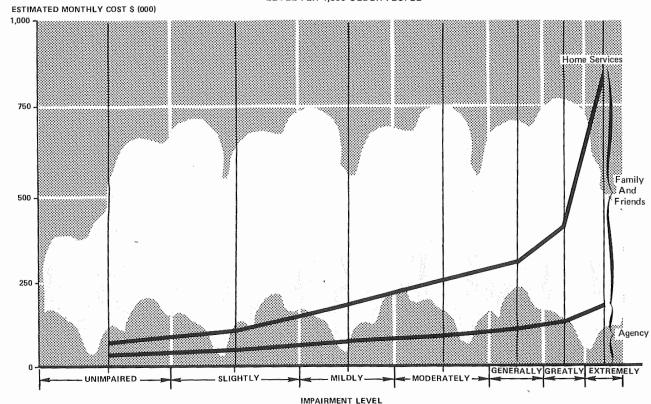
Older people requiring longterm care and unable to get it from family and friends or a private nurse have no alternative but to enter an institution. There they receive a complete package of services. The average cost of these services in intermediatecare and skilled-nursing facilities was \$458 a patient per month.

Comparison

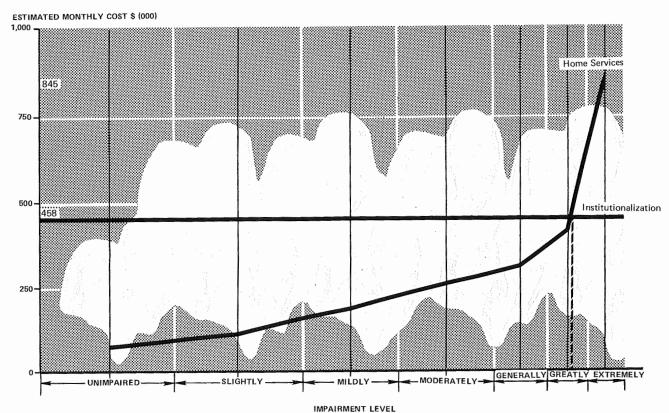
To compare the cost of home services to the cost of long-term institutional care we put the costs on the same basis and plotted them on the same set of axes. (See graph 2.) Our comparison indicates that home services cost more than institutionalization at the higher impairment levels. The break-even point falls within the greatly impaired level. About 14 percent of uninstitutionalized older people are past the break-even point.

ESTIMATED MONTHLY COST AND SOURCES OF HOME SERVICES BY AGENCY AND FAMILY AND FRIEND AT EACH IMPAIRMENT LEVEL PER 1,000 OLDER PEOPLE

GRAPH 1



GAO Review/Fall 1977



Results

Our analysis gives the Congress a new picture of home care. We were able to estimate the importance of family and friends in providing services to the elderly and to project the cost of legislation that changed their role. Specifically, our analyses of the relationships between levels of impairment, the services received at each level, and how the services were delivered showed:

- —Agencies are currently spending less per person for home services than is spent for institutional care.
- —Care provided to the greatly and extremely impaired living at home is similar to care provided in institutions.
- —Family and friends provide over half the services received by older people at all

impairment levels and over 70 percent of the services received by the greatly impaired or worse.

Summary

GAO has come a long way in blending the basic research techniques of academia with proven GAO audit techniques. The result has been an approach we call multidimensional analysis. Using multiple dimensions allowed us to expand our analytical horizons—to open a world of auditing beyond two dimensions in a world that is no longer flat.

EDITOR'S NOTE: The GAO report prepared on the analysis referred to in this article was addressed to the Congress and is entitled "Analysis of Certain Aspects of Home Health Benefits."

GAO A Valuable Resource

The GAO is the investigative arm of Congress and a valuable resource in assuring the legality and propriety of governmental expenditures and the effectiveness of governmental programs.

House Committee on Government Operations Report No. 95–492 July 12, 1977

The Intergovernmental Audit Forums— Initiatives in Intergovernmental Auditing

These forums are voluntary, cooperative organizations of Federal, State, and local government audit directors. Relatively new, these forums promise improved intergovernmental audit cooperation.

The winter 1974 issue of The GAO Review carried an article about a new initiative in intergovernmental audit cooperation intended to improve the usefulness of auditing at all levels of government. Mortimer Ditarticle "Intertenhofer's governmental Audit Forums" told how these forums were being sponsored by GAO, in cooperation with Federal, State, and local government audit agencies, to improve governmental auditing in the United States.

Since that article was written.

the audit forums have grown in number from 2 to 11 and their combined membership has increased from 58 to over 370 audit directors; they now have members from every State.

What are these intergovernmental audit forums? What do they do? Why should you read about them?

The Forums in 1974

The intergovernmental audit forums trace their beginning to numerous discussions in the

Mr. Wiltshire is a supervisory auditor in the State and local audit standards group of the Financial and General Management Studies Division. He holds a B.A. degree from the Virginia Military Institute (1956) and an M.B.A. degree in Management from the University of Oklahoma (1970). He joined GAO in 1973 after 17 years of service in the U.S. Army. Mr. Wiltshire is a Certified Manager, a member of the Institute of Certified Professional Managers, and a member of the American Society for Public Administration's policy issues committee (National Council).

INTERGOVERNMENTAL AUDIT FORUM

Objectives

- To provide a means for exchanging views and solving common problems.
- To promote the acceptance and implementation of the governmental audit standards.
- To encourage coordination of audits and standardization of audit guidelines to the maximum extent practicable.
- To promote understanding and communication that will result in cooperative audit work and mutual reliance on audits performed by others.

early 1970s on the need for better coordinating machinery among Federal, State, and local government auditors. In September 1972, the legislative auditors of Tennessee, Wisconsin, Maryland. Colorado, and Illinois and representatives from the Council of State Governments met with Comptroller General Elmer B. Staats, Dwight Ink of the Office of Management and Budget, and other GAO and OMB officials to propose national and regional audit councils to improve planning and coordination between the Federal agencies and State audit personnel.

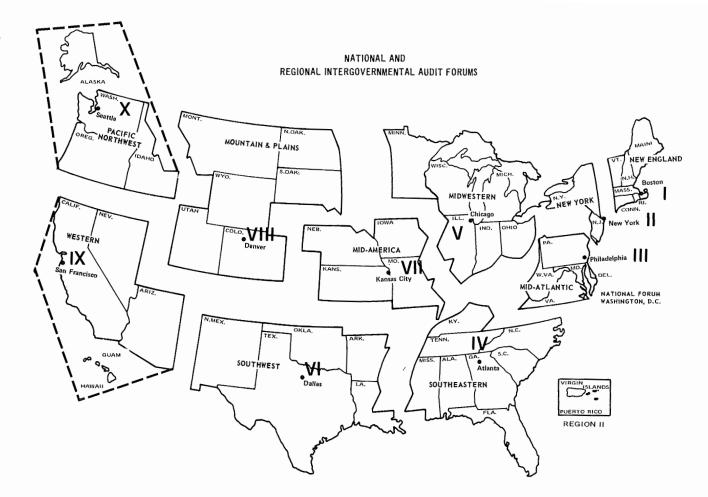
Mr. Staats agreed with the State auditors' suggestion, and the project was assigned to the Financial and General Management Studies Division's intergovernmental audit standards group which had just completed its assignment to develop and publish GAO's Standards for Audit of Governmental Organizations, Programs, Activities & Functions.

The audit standards group's

first efforts on this project were to initiate a National Forum in Washington and to work with GAO's Atlanta regional office to pilot-test a forum in Federal region IV. These two groups, the National and Southeastern Intergovernmental Audit Forums. were active when Mr. Dittenhofer wrote his article. (An independent organization, the Regional Audit Council of New York, was also operating at that time: it has since evolved into the New York/New Jersey Intergovernmental Audit Forum.)

The Forums Today

Today, the first three forums have been joined by others in the remaining eight Federal regions; together, they number among their members the heads of virtually every Federal and State Government audit organization in the United States and those of many local audit groups as well. Although GAO provides some administrative support to the



forums and designates staff members in each of the regions to serve as points of contact, the forums are independent of GAO—and of one another. Each forum is a self-governing independent body; no forum can impose its will on another. Likewise, no member can be required to adopt a forum position that is not in agreement with that of his own agency.

The National Forum

The National Forum now consists of 17 Federal audit executives from GAO, OMB, and major grant-making agencies; the heads of 10 State audit organizations chosen by the State audit-

ors in each region; and the heads of 6 local government audit organizations selected by the Municipal Finance Officers Association.

The position of chairman in the National Forum alternates every 2 years between OMB and GAO. Currently, Don Scantlebury, Director of the Financial and General Management Studies Division, is chairman and John Lordan, Chief of the Financial Management Branch, OMB (formerly with GAO), is vice-chairman.

The Regional Forums

The regional forums vary in size, depending upon the number



D.L. Scantlebury, director, Financial and General Management Studies Division, at a recent meeting of the National Intergovernmental Audit Forum. Mr. Scantlebury (at end of table) is chairman of the Forum.

of Federal agencies having offices in the region, the number of States in the region, and the number of local government auditors who participate in forum activities. The charters of five of the regional forums designate the current GAO regional manager to be their chairman; the others leave this office open for election from the forum membership.

Why Do We Need Forums?

The forums' charters speak of abstract values, such as "increasing coordination," "enhancing cooperation," "encouraging standardization," "exchanging views," and "promoting understanding." These are all good things for public servants to do; but why now?

The root need for a movement such as the forums lies in the rapid growth of expenditures by State and local governments—an over six-fold increase in the past 20 years (from \$32.9 billion in 1955 to \$227.5 billion in 1975). A significant factor in this growth, and the primary reason for Federal auditors' interest in it is the fact that Federal grants make up more than 20 percent of the combined State and local government budgets.¹

Federal aid to State and local governments can be traced back to 1785 when the Congress—still operating under the Articles of Confederation—made Federal

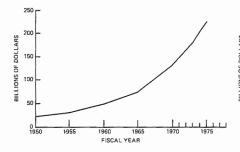
land grants to support education in the Northwest Territory (now Ohio, Indiana, Illinois, Michigan, Wisconsin, and part of Minnesota). Until recently, this aid grew slowly, and not until 1950 did it reach \$2 billion a vear. Over the following 10 years the amount tripled, and has been rising ever since. (See graph.) In fiscal year 1978, Federal grants to State and local governments are total expected tobillion-more than the entire Federal budget for 1955.

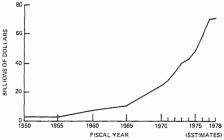
The Problem

These grant funds are channeled through some 1,300 programs administered by 50 States and 90,000 local governments. Auditing all these grants and grantees simply exceeds the resources available to the Federal establishment, which has a total of less than 12,000 auditors—a matter highlighted in 1976 by the Legislative Auditor of Montana. Morris Brusett, who reported, "Some grants are seldom audited by anyone—State, Federal, or independent auditors." He cited the following examples:

- One Federal agency last conducted a detailed audit of its funds at the Montana Department of Health and Environmental Sciences in fiscal year 1965-66. These grants have recently averaged \$4,000,000 per year.
- 2. Federal agencies seldom audit their grants at the Montana Department of Institutions. Currently, this department receives over \$6,000,000 in Federal moneys per year.

¹ Special Analyses, Budget of the United States Government, 1978, pp. 271-278.





STATE AND LOCAL GOVERNMENT EXPENDITURES

FEDERAL GRANTS TO STATE
AND LOCAL GOVERNMENTS

These charts depict the parallel growths of State and local government expenditures and Federal grants to State and local governments.

(The transition quarter, July - September 1976, has been omitted for clarity.)

SOURCE: Special Analysis - Budget of the United States - Fiscal Year 1978 - pp 272-273

- The Office of the Superintendent of Public Instruction has had no major audit of the *** grants since 1968.
 These grants currently total about \$10,000,000.
- 4. U.S. *** moneys at the Montana Department of Social and Rehabilitation Services have received piecemeal Federal audit effort. The last detailed audit was conducted by the Montana Office of the Legislative Auditor in 1970. This department receives about \$45,000,000 annually ***.

It is not unreasonable to suggest that when some of these grants are audited, the outdated findings will be obsolete for use as any kind of management tool and the information will be of no use except as a historical document. The objectives of such audits, i.e., assessment of compliance and accomplishments, will be meaningless.²

Auditors know that the use of public funds must be reviewed from time to time "to evaluate the efficiency, economy, legality and effectiveness with which *** agencies carry out their financial, management, and program responsibilities."3 To be effective, audit reports must be not only complete, but also timely. The Federal audit agencies know these things too, but staff increases have not kept pace with the increase in grants—and the audit groups simply do not have the personnel to do a complete job.

² State Audits of Federally Assisted Programs, Office of the Legislative Auditor, State of Montana, July 1976.

³ United States General Accounting Office Comprehensive Audit Manual, part I, p. 2-1.

The problem facing Federal auditors is real. Every year more money is returned to States and local communities through Federal programs and grants, and every year the audit task increases. In 1974, GAO reported a cumulative backlog of over 850 staff years in 4 agencies alone, and, if Montana's experience is typical for the Nation, this backlog has not diminished over the past 3 years.

A Solution

Each State and some county, city, and other local governments have their own audit organizations. These agencies offer tremendous potential for reducing the problem.

Until GAO's Standards for Audit of Governmental Organizations Programs, Activities & Functions was published in 1972, there were no standards by which audit agencies could measure their work or be measured by others. With the issuance of the "yellow book," Federal, State, and local government audit groups had a set of standards for performing governmental audits.

The intergovernmental audit forums have encouraged the use of and compliance with the standards. As the forums grew in number, and the auditors interacted more and more with their counterparts from other levels of governments, increased use of the standards was a natural byproduct. This, in turn, encouraged greater reliance on work performed by other audit organizations.

The Results

Now that the forums have been in existence for three to four years, it seems only fair to ask—what have they accomplished? For the most part, the forums' achievements can be listed under three headings: communication, cooperation, and coordination.

Communication

The first step in any joint enterprise is for the partners to communicate with one another. With the increased Federal aid to State and local governments supplying the need and the standards furnishing a basis for communication, the forums provide a channel through which the opinions and problems of all governmental audit agencies in the United States can be aired. And, because membership is restricted to heads of audit agencies, many issues can be resolved before thev become problems.

An excellent example of the benefits from this improved communication recently occurred in an audit of a Social and Rehabilitation Service public as-

⁴ "Increased Intergovernmental Cooperation Needed For More Effective, Less Costly Auditing of Government Programs" (B-176544), Apr. 8, 1974, p. 12. The agencies were the Environmental Protection Agency and the Departments of Labor; Housing and Urban Development; and Health, Education, and Welfare.

sistance program. The law requires States to audit the program; however, it also contains restrictions on the release of information in order to protect the privacy of welfare recipients, and the Service's lawyers had interpreted these rules as barring release of information to State auditors. Before the advent of the forums, a situation such as this would have resulted in recriminations, frustrations, delays, and increased audit costs. As it happened. Morris Brusett, a member of the Mountain and Plains and National Forums, simply contacted fellow National Forum member Ed Stepnick, Inspector General for Auditing, Department of Health, Education, and Welfare. Together they convinced the program lawyers that the information could be released to State auditors and would not be improperly disclosed.

In a second instance, the accepted practice in Columbus, Ohio, was for the State Auditor Thomas E. Ferguson to review many of the same city programs that City Auditor Hugh J. Dorrian's staff also audited. As a result of the auditors' membership in the forum and the opportunities for increased communication that this gave them, the two officials were able to work out an agreement whereby the State auditor would accept audits by the city audit office of its designee. This agreement, signed in 1976, has eliminated a substantial amount of duplicate work, and is estimated to save approximately \$30,000 a year.

In another communications-related project, one intended to help auditors to make better use of each other's work, the New York/New Jersey forum has begun work on a computerized catalog of active and completed Federal audits. The plan is for this catalog to be available online to any member. When finished, this catalog will help interested auditors having access to a computer terminal find out what work has been done and is now going on in a given area.

Through this and similar projects in the other forums, the members are improving audit communication, which leads to audit cooperation.

Cooperation

With literally dozens of audit groups interested in the grant funds expended in a given State or city program, it is not uncommon for many fund recipients to receive visits from several auditors, each concerned with a specific portion of the program funds. When such multiple audits do occur, much of the information sought by each agency is common to all the reviews. This situation is succinctly summed up by the auditor general of Illinois, Robert G. Cronson, who reported:

It is probably safe to say that 80% of the content of a Federal audit report relating to any given agency or program of State government will be identical with the content of the State audit report concerning that same agency or program. The 20% which will be unique to either audit will be concerned solely with program questions.

Two factors make it difficult to achieve unified and coordinated State and Federal audits. First, although the Federal government has been anxious to enlist the aid of the states in discharging Federal audit obligations, it has not achieved a realistic method for reimbursing the cost involved in such programs as required by the Illinois State Auditing Act. Secondly, each Federal agency involved has developed its own audit guides, requirements, and instructions with apparent disregard for requirements imposed by other agencies. In the absence of any practical standard Federal audit procedures, it is impossible for the State auditor to undertake mastery of the peculiar Federal audit requirements of the many audit programs funded by Federal agencies.5

The audit forums are addressing both of the problems highlighted by Auditor General Cronson.

Reimbursement for the costs of federally assisted program audits has been a problem for some time. Although the situation has improved somewhat since 1975, when GAO reported that many State auditors were unable to obtain reimbursements for these audits, the problem still exists. The forums, at a joint conference in 1976, elected to study the problem and seek a workable solution. The first requirement was

The multiplicity of Federal audit guides is another problem. There are at least 63 different audit guides now specified for use in audits of federally assisted programs, and several more are in various stages of development. In an effort to reduce the number of guides and to standardize audit requirements, the National Forum is working with GAO and the Association of Government Accountants to sponsor publication of Audit Guidelines for Audits of Financial Operations of Federally Assisted Programs. (These guidelines have been released as an exposure draft and are now being tested by several forums.) When finalized, this publication will provide a single guide that auditors at all levels

to find out just how many Statelevel auditors actually perform audits of federally assisted programs. Using a questionnaire and telephone followups, the New England forum was able to determine that only one State had laws prohibiting its audit groups from participating in audits of federally assisted programs; but, for a variety of reasons, only 30 of the 65 auditors responding had actually performed any. The forums are now working in close cooperation with the Joint Financial Management Improvement Program in a study to determine the extent of audit duplication, overlap, and undercoverage; how to improve audit coordination; and ways to increase State and local auditor participation in audits of federally assisted programs.

⁵ Annual Report of the Auditor General—1976, Robert G. Cronson, auditor general, State of Illinois, p. 35.

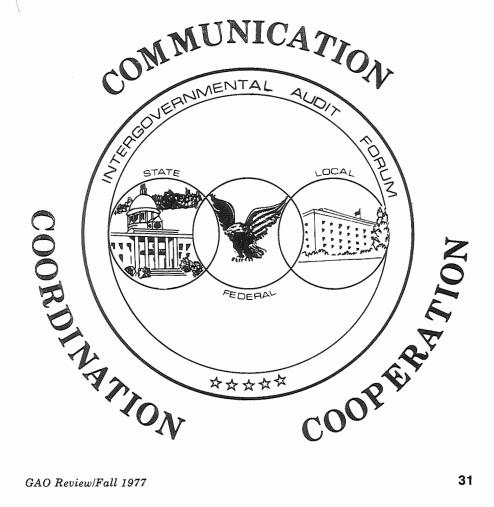
⁶ "Problems in Reimbursing State Auditors for Audits of Federally Assisted Programs" (FGMSD-75-22), June 25, 1975.

of government can use in financial operations audits.

To further standardize audit guides, the Southwestern forum is developing a standard guide for compliance audits, the New England forum is undertaking a project to prepare a guide for audits of economy and efficiency, and the Western intergovernmental audit forum is working with GAO's San Francisco reoffice gional todevelop guidelines for program results reviews.

Coordination

Coordination of audit efforts so as to focus audit resources where they will do the most good is an ultimate goal of the forums' work. Because it is not uncommon for several audit groups to be interested in the same grantees, the current lack of audit coordination sometimes creates a situation similar to a traffic jam. Frank Greathouse, director of State audit for Tennessee, commented on this problem in re-



marks at a Joint Financial Management Improvement Program conference in February 1977:

There is a possibility that Federal, State, and local auditors may all meet in the same room auditing the same program at the same time. Recently, while auditing CETA [Comprehensive Employment and Training Act] funds being administered by a local community action agency, we encountered an independent public accountant on the premises auditing a CETA fund contract from a municipal prime sponsor, an auditor from C.S.A. [Community Services Administration] auditing a C.S.A. contract, and a H.U.D. auditor auditing a grant contract.

The National Intergovernmental Audit Forum recognizes the problem pointed out in this statement and has worked hard to improve coordination between audit teams that operate in the same area. The Forum's position is:

Federal, State, and local audit staffs are encouraged to publish and exchange schedules of audit work programs in which other auditors have concurrent audit jurisdiction at the earliest time possible. This information will facilitate the coordination of audit activity and provide opportunities to organize cooperative concurrent audit activities within agencies scheduled to be audited.⁷

As part of its mandate to improve audit coordination, the Western forum is now testing a system of procedures intended to expedite cooperation and coordination between State, local, and

Federal audit agencies. When published, this guide should be a valuable tool in improving the efficiency and effectiveness of intergovernmental audits.

In the Mid-Atlantic forum, the controller of Philadelphia; the auditor general of Pennsylvania; the Department of Health, Education, and Welfare; and GAO have just completed a coordinated audit of the Philadelphia "get set" program. At the time of this writing, the audit report is still in draft but, when released, it will contain recommendations addressed to all three levels of government and will provide excellent insight on the problems and advantages of conducting joint audits.

Other projects are currently underway in the Mid-America, Midwestern, and Southwest forums to test whether a single audit of a multifunded grantee can be made that will satisfy all funding agencies.

Full-fledged audit coordination is still a yet-to-be-realized goal, but then, the level of communication and cooperation now existing among intergovernmental audit groups was but a vague ideal just 5 years ago.8

⁷National Intergovernmental Audit Forum Position Statement #75-2, Aug. 6, 1974, "Intergovernmental Audit Agency Cooperation," p. 1.

⁸ Since this article was written, President Carter has directed the heads of all executive departments and agencies to make the State and local government portion of their annual audit plans available to these governments and to the intergovernmental audit forums. Audit forum members and staff members discussed the draft memorandums with White House personnel and contributed to their development.

A View Toward the Future

The intergovernmental audit forums are young. Their first accomplishments may, at first glance, seem modest; but any organization that plans for the future must build on a solid base. As the members work together and gain confidence in one another's work, we can anticipate their addressing issues that go far beyond what was considered to be within the governmental auditor's sphere of interest just a few years ago. Today, intergovernmental audit cooperation is more the exception than the rule, but within the next decade this status will probably be reversed. As Comptroller General Elmer B. Staats foresees by 1986:

- Larger programs will be audited cooperatively by Federal, State, and local auditors.
- Government audit staffs almost universally will be able to do all three types of audit work; i.e. financial and compliance, economy and efficiency, program results.
- While all grants will be subject regularly to financial audits, specific grants to be audited for compliance with laws and regulations, economy and efficiency, and program results

- will be selected using statistical sampling methods on a national basis by Federal, State, and local auditors working together.
- Audit staffs will be multidisciplinary staffs which will include accountants, mathematicians, economists, data processing specialists, and others in accordance with the demands of particular jobs.
- Grant requirements will be greatly simplified and procedures for auditing them standardized.
- Information on how well programs work will be regularly considered by legislators before reauthorizations are voted on.9

Intergovernmental audit cooperation is key to the success of four of the six characteristics listed by the Comptroller General and can be implied in the remaining two. Clearly, the future envisioned by Mr. Staats is a challenging one—and the intergovernmental audit forums are committed to leading the way to meet this challenge.

To Spend A Billion

In this day of multibillion dollar weapon systems and Federal programs, we often lose sight of just how much money a billion dollars really is. We in the audit business must keep such values in mind, for the money is tax dollars, and we too are taxpayers.

Reflect for a moment:

If you could have spent \$1,000 a day, every day from the time of Christ's birth (now generally accepted to be in 4 B.C.) until this very day, you would not yet have spent a billion dollars—and would not for over another seven and half centuries....

⁹ "Initiatives for Improving Governmental Audits," Joint Conference Report, Intergovernmental Audit Forums, 1976, p. 4; and "Auditing in Government," Civil Service Journal, Oct.—Dec. 1976, p. 3.

Teambuilding for Higher Productivity

Teambuilding techniques can strengthen the effectiveness of small groups and improve organizational productivity.

Small groups are the basic work units which carry out the missions of many organizations, including the General Accounting Office. Operating group teams, regional work programing groups, regional audit teams, and task forces are some of the small groups which are responsible for the productivity of our organization. To a large extent, the level of organizational achievement is a measure of the strength and effectiveness of GAO's small groups.

But things can go wrong within and between small groups, thus resulting in poorer individual performance, decreased small group effectiveness, and reduced organizational productivity. Teambuilding techniques can keep small groups functioning harmoniously and improve

productivity.

Problems Within Groups

Group cohesion—members' desire to maintain order in the group—can erode if conflicts and disagreements are handled inappropriately. On the other hand, conflict can be allowed to disrupt group achievement. Group members perceive themselves in winlose situations when expressing and defending their positions.

Compromises acceptable to all group members are not always sought. Team members blame each other or their leader when lessened cohesion and group effectiveness results in productivity problems, such as job delays. They tend to evaluate each other's ideas without fully understanding them. Communication and interaction can thus be reduced, and organizational lines can become more formal. In

Mr. Case is a supervisory management analyst in the Seattle regional office. He has a B.A. degree from Willamette University in political science and graduate credits from the University of Oregon and George Washington University. He joined the former Civil Division of GAO in 1969.

short, tension gets out of hand and production suffers.

On the other hand, conflict can be suppressed. Positions can be changed to avoid conflict. Differing opinions may not be sought and some group members may be excluded from decisionmaking. Ignoring a broad range of opinions and information can lead to poor decisions. Conflict-reducing techniques such as majority vote can be used, limiting the expression of divergent views. Suppressing conflict precludes a full exploration of alternatives.

Problems Between Groups

Conflict can also arise between groups, such as between headwork-programing guarters groups and regional audit teams. Planners often perceive doers as lacking flexibility and a broad view of problems. Regional teams often suggest that planners develop poor work programs because they are unfamiliar with the details of a job. Regional auditors also suggest that planners frequently change work plans and delay processing final products for unknown but probably inconsequential reasons. Both groups often believe they could do the other's job better, as evidenced by increased regional planning on the one hand and headquarters' frequent rechecking of a region's work on the other. The interdependence of the two groups is not always recognized.

Interdivisional conflicts over

jurisdiction and responsibilities can perhaps be of greater consequence. Competition for work areas can result in work overlap and tension. Further reorganization and definition of responsibilities has not, and likely never will, rid an organization, structured along functional lines, of jurisdictional disputes.

When conflict increases between groups, several symptoms can be observed. Within each group, the climate changes from informal to rigidly task- and work-oriented. Leadership tends to become more autocratic, while the group tolerates that leadership style and becomes more structured and hierarchical. Group members are asked for loyalty to create a solid front and internal differences are suppressed.

Other things happen between groups when conflict increases. Each sees the other as an adversary rather than a partner. Each group begins to see only its own best attributes, denying its weaknesses, while seeing only weaknesses in the other group, ignoring its strengths. Hostility increases and communication between the groups diminishes, making it easier for the adversaries to maintain negative perceptions of each other. Each group is more inclined to listen to its own members and not to listen to representatives of the other group. While each group thinks it fully understands the other's position, in fact, it may not. Areas of agreement are overlooked. Each group understands its own position much better than the other groups, and it becomes difficult to view the other group realistically. If one group wins, the other loses, and blaming takes place within each group. Meanwhile productivity declines.

What Can be Done

Teambuilding techniques increase trust and mutual respect, structuring conflict toward productive ends without allowing it to lower cohesion and productivity. Individual group members can manage conflict, avoiding communication breakdown and generating many ideas. Group leaders should organize and manage group activities toward these same ends. Upper-level managers must understand group processes too, because they can reward competition, collaboration, or complete independence. They should take steps to encourage group interaction, limit the independence of small groups, and avoid win-lose situations.

What Group Members Can Do

- 1. Avoid arguing. Present positions clearly, but listen to the other members' reactions and consider them carefully before pressing points.
- Do not assume that someone must win and someone must lose when discussion reaches a stalemate. Instead, look for the most acceptable alternative for all parties.

- 3. Do not change positions simply to avoid conflict and to reach agreement and harmony. When agreement seems to come too quickly and easily, be suspicious. Explore the reasons and be sure everyone accepts the solution for basically similar or complementary reasons. Yield only to positions that have objective and logically sound foundations.
- 4. Avoid conflict-reducing techniques, such as majority vote and bargaining. When a dissenting member finally agrees, do not feel that he must be rewarded by having his own way on some later point.
- 5. Differences of opinion are natural and expected. Seek them out and try to involve everyone in the decision process. Disagreements can help the group's decision because, with a wide range of information and opinions there is a greater chance that the group will reach better solutions.
- Paraphrase the opinions and positions of others to make sure you understand before agreeing or disagreeing. Listen actively.
- 7. Avoid blaming individuals for group shortfalls, for to do so endangers group cohesion and threatens future achievement.
- Concentrate on problems and solutions, not on personalities.

What Group Leaders Can Do

- Delay judgment when an immediate decision is not needed. Allow time for new ideas to generate other ideas, with evaluation coming later.
- Get all group members involved in planning and decisionmaking. Generate a receptive atmosphere for ideas. Organize discussions around a clear statement of agreed goals.
- Allow time for testing possible conclusions. Reach conclusions that all group members can accept, even if sacrifices have to be made.
- 4. Place staff members where their strengths can be most productive.

What Organizational Managers of Groups Can Do

- 1. Rotate group members to discourage rivalry.
- Emphasize total organizational effectiveness. Reward contributions to large organizational goals.
- 3. Encourage interaction and communication. Reward partly on the basis of help given from one group or organizational unit to another.
- Avoid situations where one group must win and another lose. Avoid competition for rewards.

 Identify and eliminate actions by managers and other leaders throughout the organization that hinder staff members from doing their jobs.

Conclusions

Well-managed conflict can raise group achievement, with better solutions and decisions than even the best individual member could provide. Small group effectiveness can depend on group cohesion and the subordination of some personal achievement goals to the betterment of the group.

Differences between people and groups need not be regarded as inherently good or bad. The reasons for differences need to be assessed: Did the parties have access to different information? Did they have different perceptions of the same information? Did perceptions of organizational roles influence attitudes and actions? If differences are seen as enriching rather than as threatening, better solutions and decisions can come from conflict.

Teambuilding can result in a better balance between group maintenance and task needs, a greater utilization of group resources, and, in the end, higher productivity.

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The true bureaucrat is any individual who has lost sight of the underlying purpose of the job at hand, whether in government, industry—or a bank . . .

* * *

The struggle to prevent this subtle subversion is—or should be—a continual challenge to every policy maker in any organization, public or private. Bureaucrats love any policy and can be counted on to enforce it faithfully, as in, "I'm sorry, but that's the policy here." Unfortunately, they don't understand what a policy is.

A policy is a standard solution to a constantly recurring problem, not an inviolable law. As a weapon in the hands of literalminded people, however, a "firm policy" can be as deadly as a repeating rifle. When matters finally become intolerable, the harassed administrator will usually "change the policy." Of course, this never helps because the problem was not the policy in the first place, but the manner of its application.

> From Citiviews leaflet on "The Bureaucrat" 1977

Communication: Is It Useful or Not?

An auditor's suggestion for improving communications.

Imagine yourself as one of these individuals in this situation:

Mary: "Where is the summary on the State's position?"

John: "What do you mean, where is the summary? I thought you were going to do it."

Mary: "I thought you knew that I expected you to summarize the information, since you worked on that section."

John: "Granted, I worked on it, but nothing was ever mentioned to me about summarizing it."

Mary: "It's understood; since you are the one who worked on a section and you know the most about it, you are the one to summarize it."

John: "It makes sense, but that was never explained to me

before. My last supervisor liked to do all the summary work himself. If you'd like me to do it, I will get right on it."

Mary: "Thank you. I'd appreciate it as soon as you can."

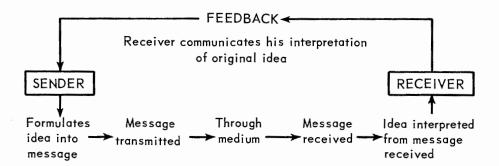
Have you ever found yourself on one or both sides of a situation like this? Would you like a suggestion for avoiding such misunderstanding? If so, read on.

Since different people make different assumptions and people are not mind readers, each person must learn exactly what is expected of him and must convey what he expects of others at the outset of every new assignment. This understanding can be a formal or informal talk-it-out, wherein the "game plan" and "rules of the game" are clearly laid out. Each person's duties and responsibilities in the audit

Frank O. Comito is a 1973 graduate of North Central College, Naperville, Ill., with degrees in economics, business administration, and psychology. In 1975, he received a master's degree in business administration with a minor in accounting from Illinois State University. He joined the Chicago regional office in February 1975 and is a member of the Association of Government Accountants, Chicago chapter.

COMMUNICATION: IS IT USEFUL OR NOT?

CONCEPT OF COMMUNICATION



should be laid out clearly, so no confusion or misunderstanding arises later about who was to do what, such as, "I didn't know I was supposed to do that segment," or, "That was naturally understood to be your responsibility."

If, during the course of the audit, it becomes necessary to change the rules of the game or modify one's specific duties and responsibilities, another talk-it-out is essential. Newly discovered information should be frequently conveyed to all parties involved to see if any changes in assigned roles need to take place.

Some Problems

What is so difficult about informing another of what is on your mind or what you have discovered?

The basic concept of communication consists of one individual conveying an idea to another and the various problems encountered. When an individual has in-

formation that he wishes to share with another, he first must formulate this information into a transmittable message. He then must choose a medium through which to transmit his message, such as verbal or written disclosure. The recipient of the information, or receiver, either by listening or reading the message, must then interpret what he understands the sender's original idea to be. This is one-way communication. Two-way communication occurs when the receiver returns messages either verbally or through body language to the sender, informing him as to how and if his message was received. This is also called feedback.

Now after thinking about this simple procedure for awhile, you become aware of why individuals are not always on the same wavelength. Some problems that tend to complicate this simple procedure:

• The sender lacks ability in formulating or transmitting the original message.

- The medium chosen to transmit the idea is not appropriate, such as trying to convey the message verbally in a noisy room or writing out the idea when just saying it would be more effective.
- The receiver being distracted while receiving message, thereby distorting original idea.
- Misinterpretation of feedback—the same types of problems occur in transmitting and receiving feedback as in the original message, only now the sender is the receiver and vice versa.
- No feedback—when sender refuses to accept feedback or receiver does not communicate any.

You can probably cite more instances that you have experienced. The better this communication concept is understood, the easier it will be to recognize and overcome its pitfalls.

Some Solutions

Some helpful hints to consider in overcoming communication pitfalls:

 Never assume-ask. In the situational example, each party assumed the other knew his/her position so neither conveyed his/her position to the other.

- Never say, "I understand,"
 when you don't. If you have
 any doubt at all, question the
 other individual, remember ing that the only really dumb
 question was the one that
 was never asked.
- To insure the receiver understands the original idea, have him restate in his own words what he understood the original message to be.

Tying this concept to an audit, if at any time you, as a supervisor or staff member, perceive a gap in communication, it is your duty to bridge it. Common sense tells you that you will benefit by lowering your own anxiety level when everyone is broadcasting and receiving on the same wavelength.

The time invested in getting everyone's duties and responsibilities straight in the beginning, and keeping them current, will be well repaid when you avoid situations like the one in the example. Also, you will avoid duplication of effort and many other untold but experienced troubles that come from poor communication.

Effective communication is the key to saving time, preventing misunderstandings, and doing an effective and efficient audit.

Now ask yourself again: Communication: Is it useful or not?

Accounting Principles for State and Local Governments—Is There A Role for GAO?

The author suggests a need for thought and discussion about whether GAO has a role in prescribing or encouraging the acceptance of accounting principles for State and local governments. New York City's experience demonstrated a void in this area, and that experience should have taught a hard lesson to administrators at all levels of government.

New York City's fiscal crisis arrived without warning early in 1975. The city's residents were helpless in the face of an uncertain future, its creditors were faced with losing their investments—in some cases their life savings—and, together with State officials, these victims looked toward Washington for help.

The enormity of the crisis couldn't be told with certainty, although some spoke ominously of small banks across the Nation incurring tremendous losses and in some instances closing their doors, unable to shoulder the burden of defaulted city notes. At that time the city had an estimated \$5.3 billion in short-term notes outstanding (almost 30 percent of the national total of municipal short-term debt outstanding in June 1975).

Faced with the uncertain impact of a city bankruptcy, the Federal Government responded

Mr. Hefferon, an audit manager in the New York regional office, is project manager on GAO's New York City audit work. He has a B.B.A. degree in accounting from Iona College and is a certified public accountant (New York). He is a member of the American Institute of CPAs. Within the New York State Society of CPAs, he is on the Committee on Governmental Accounting for 1977–78 and is a volunteer in the community affairs program to assist community service organizations and disadvantaged businessmen.

with a program of loans and oversight which involved it in the fiscal affairs of the city.

All this might have been avoided if the financial condition of the city had been accurately reported, in accordance with a set of generally accepted accounting principles, in the years preceding the crisis.

The Essence of the Crisis

With 20/20 hindsight, it is fairly easy to look at some of the roots of the city's problem.

When all the complications are stripped away, New York City's financial crisis boils down to the fact that revenues did not cover expenses and had not done so for several years. Since local financial law required that the city's budget be balanced, "creative" accounting practices had been devised to permit the city to meet the "balance" requirement and still spend more than it had. In one of the most significant of these practices, the State legislature simply redefined "capital expenditures" to include certain operating expenses, such as manpower training programs. The city then removed these expenses from its operating budget and deficit, put them in the capital budget, and borrowed to finance them as though they were long term capital improvements.

The "checking plus" approach to city financing mainly involved issuing short-term notes. Between 1971 and 1975, the city borrowed \$1.8 billion in this way,

continually rolling over its notes in ever-increasing amounts. Its 1976 budget projected a borrowing of \$697 million for that year, and presumably, without the recession and the tightening of municipal credit in 1975, New York City would have continued to borrow by these methods, further inflating its debt picture and setting the stage for an even more dramatic crisis when the bell tolled later. No one objected to these practices, since the city's financial statements, like those of many other cities, were not audited and certified.

Early Warning Was Possible

Although many blame the general downturn in economic conditions as the immediate cause of the "bust" in New York and offer the theory that the city was just a "captive of events," that explanation is not wholly satisfactory. Through its creative accounting practices, the city had built a financial house of cards, destined for eventual collapse even if the economy continued to grow. Adverse economic conditions in the area in 1975 simply accelerated the collapse.

The growing cancer of the fiscal crisis would, however, have been obvious 4 or 5 years earlier if adequate standards for municipal accounting and financial reporting had been required by local residents, the investing public, and the Federal Government. Early disclosure of the city's problems should have led to

corrective action—probably dictated by the investment community, particularly the trusts and fiduciaries responsible for investing large amounts of other people's money. That corrective action would, in turn, have obviated the painful cuts in city services, the anxiety of investors, and the involvement of the Federal Government in local affairs.

Who Was at Fault?

The blame for permitting this dangerous situation must be shared by local officials and taxpayers, the States, the investment community, the Federal Government, and the accounting profession. It serves no purpose to debate whether the taxpayers' failure to demand strict accountability played a greater or lesser role than the Federal sector's failure to anticipate the need for control over a municipal credit market which is large enough to have a major impact on the national economy (annual issues about \$55 billion, total outstanding about \$250 billion). The question which does deserve debate is that of the proper role which each of these groups should assume to prevent this situation from recurring even in a time of a deep recession and tight credit.

The scope of this article precludes an adequate discussion of all of these roles. It does however, raise the question—with the objective of stimulating debate—what is the proper future role of GAO in improving State and municipal accounting and reporting?

Existing Standards

Accounting and financial reporting guidelines and standards for municipal governments are contained in the "blue book," formally called Governmental Accounting, Auditing and Financial Reporting, issued by the National Council on Governmental Accounting. The "blue book," with some modifications, constitutes generally accepted accounting principles (GAAP), according to the American Institute of Certified Public Accountants (AICPA).

GAAP Isn't GAAP

Unfortunately, "GAAP isn't GAAP"; i.e., these principles are not in fact generally accepted. Although it received the endorsement of the AICPA when that body published its Industry Audit Guide-Audits of State and Local Governmental Units in 1974, the blue book had little impact on New York City.

Nevertheless, the city was able to market enormous amounts of short and long term debt. It's hard to say, but perhaps the financial condition of the city was so obscured in its 574-page annual comptroller's report that even the experts didn't recognize the dangers inherent there. Or perhaps, more simply, no one believed a large municipality could go bankrupt in the 1970s.

In any case, the city did not face much resistance to its bond offerings; therefore, it had no incentive to embrace GAAP. Perhaps city fathers even had an incentive to ignore the blue book, since market acceptance was so favorable.

Many other municipalities have similarly ignored that publication. In February 1976, the Senate Committee on Banking, Housing and Urban Affairs was advised by the Chairman and Chief Executive of Arthur Andersen & Co. that:

Financial reporting and accounting standards and the accounting systems and controls of many State and local governmental entities are deficient. Many State and local government entities either do not publish financial statements for investors or the public in general or the statements that they do publish are not very complete or informative.

These remarks were supported by securities dealers representing the public finance council of the Securities Industry Association at the same hearings. They stated:

***uniform accounting practices do not exist. Two accounting auditing standards have been published: one by the National Committee on Governmental Accounting and the other by the American Institute of Certified Public Accountants. While these two standards appear to be quite similar, very few municipalities have had their financial statements audited pursuant to these standards. The difficulty in establishing uniform accounting practices on a voluntary basis for the municipal industry is illustrated by a 1972 study by Robert Merriam, reported in "The Rating Game," which indicated that only 233 out of 1,822 [1] cities belonging to the MFOA [Municipal Finance Officers Association] had agreed to comply with the set of uniform accounting standards promulgated by the MFOA in 1946. Many states do mandate the accounting or auditing practices to be employed by the various state and municipal agencies within the state. However, there is no assurance of comparability among these various legislatively mandated accounting systems and practices. Furthermore, the principle of independently audited financial statements has not been widely accepted in the municipal area.

MFOA representatives, while defending the "blue book," nevertheless stated "we would not deny that the need to increase the quality and uniformity of governmental financial reporting and accounting practices is clear."²

Despite the widely recognized need for improvement in the standards themselves as well as in their acceptance, the Chairman of the Financial Accounting Standards Board indicated in late 1976 that there is little hope that the Board will address the former problem in the foreseeable future. A possible reversal in this position was indicated in a recent newspaper article stating that the Board has commissioned a year-long study to determine whether it should develop a basic accounting framework for nonprofit organizations.*

¹ As of June 1977, 293 cities had received certificates of conformance.

² The National Council on Governmental Accounting is in the process of revising the GAAFR.

^{*}EDITOR'S NOTE: Financial Accounting Standards Board Status Report No. 52 (Aug. 24, 1977) says: "Marshall S.

Federal Involvement

Given the fact that municipal "GAAP" is not generally accepted, we must ask how this affects GAO and should we be doing something about it?

Federal involvement in local governmental affairs is a thorny issue and one which evokes endless but sincere debate about the proper role of each level of government. This issue was addressed by the Comptroller General in the forward to GAO's Standards for Audit of Governmental Organizations, Programs, Activities & Functions. He stated:

In earlier and simplier times in our Nation's history, when the responsibilities of each level of government could be more clearly divided, each level could work fairly independently. Today, profound changes in our social, political, and economic order have brought steadily mounting demands for new and better public services in a variety and on a scale unprecedented

Armstrong, chairman of the FASB, has announced that he has commissioned a research study on the objectives and basic concepts underlying financial accounting and reporting for not-for-profit entities. The study will be conducted by Robert N. Anthony, a professor at the Harvard Graduate School of Business Administration who has wide experience with both governmental and private nonprofit organizations." The purpose of the study is to assist the Board in evaluating suggestions it has received that a need exists for a conceptual framework for nonbusiness accounting as well as for accounting and financial reporting for business enterprises, on which the Board is actively working.

in our history. Response to these demands requires a process of policy-making, financing, and administration which involves the cooperation of Federal, State, and local governments in solving public problems.

The implication is clear and our responsibility seems equally clear, since we also took the following position in that same document:

A fundamental tenet of a democratic society holds that governments and agencies entrusted with public resources and the authority for applying them have a responsibility to render a full accounting of their activities. This accountability is inherent in the governmental process and is not always specifically identified by legislative provision.

If we, as an organization, affirm that governments have a responsibility to render a full accounting of their activities, then we should be vitally concerned with the fact that State and local governments do not account for their activities and report on them in accordance with a generally accepted set of accounting principles. Without a set of GAAP that is truly "generally accepted," a State or local government can't render a full accounting. This issue becomes more important each day as the Congress enacts legislation which increases the accounting and reporting burdens of State and local governments. When the Federal Government spends money to aid States and localities, taxpayers should have some assurance that funds are accurately accounted for. That assurance will not exist until

State and local governments accept a set of GAAP, voluntarily or because taxpayers, investors, and the Federal Government demand it.

GAO's Role

There is a clear need for further thought and discussion about the proper role for GAO in encouraging the adoption of such principles. It is not the author's objective to restrict debate, but a number of alternatives come easily to mind:

 Participating in the efforts of AICPA, State societies of CPAs, and other organizations, such as MFOA.

- Issuing suggested GAAP for municipalities in a companion volume to our "yellow book" of audit standards.
- Supporting legislation calling for the involvement of the Securities and Exchange Commission in municipal securities control.
- Supporting legislation offering incentives to State and local governments for improvements in this area, for example, bonuses attached to revenue sharing.
- Encouraging the creation of an independent board, similar to the Cost Accounting Standards Board, to prescribe such standards.

COMMENTARY

The subject of accounting principles for State and local governments has many angles and there are many viewpoints to consider. For this reason, the editor invited Donald L. Scantlebury, director of GAO's Financial and General Management Studies Division, to comment on Mr. Hefferon's article.

Mr. Hefferon observes, correctly in my view, that accounting principles for municipalities need improvement. Since the General Accounting Office by law has responsibilities for seeing that Federal funds are properly accounted for, GAO has an interest in both State and local government accounting. This is because about 16 percent of Federal funds now go to State and local

governments as grants or revenue sharing.

I believe, as Mr. Hefferon does, that GAO has a definite role to play in improving State and local government accounting practices, and I believe that role should be to bring the Federal view to those who are working to promulgate improved accounting principles. Accordingly, I have been working with the National Council on

Governmental Accounting, a group sponsored by the Municipal Finance Officers Association. The council is presently working on a restatement of the "blue book" mentioned by Mr. Hefferon. In addition, a number of GAO staff members have been working on committees of the American Institute of Certified Public Accountants, some of which are working on ways to improve State and local government accounting principles.

While accounting principles for municipalities need reconsideration, I believe that the lack of annual financial audits is an even greater problem. A recently issued study by the staff of the Securities and Exchange Commission¹ makes it quite clear that most, if not all, of New York City's accounting practices that

contributed to its financial problems were contrary to generally accepted accounting principles. In addition, the city did not prepare annual financial statements, which would have disclosed its problems and improper accounting practices far earlier. More importantly, the city had no annual audit during these years, so no one held its feet to the fire when it veered from generally accepted accounting principles.

It takes both laws and enforcement of those laws to keep the peace. It also takes both good accounting principles and enforcement of their use to prevent situations like those that occurred in New York. Good principles, without enforcement, will be ineffective. The best method of enforcement I know of is an independent annual audit which will disclose any material variances from generally accepted accounting principles.

Donald L. Scantlebury

To See That Money Is Properly Spent

***The bill then provides for the appointment of an official termed the comptroller general, whose duty it is to follow every appropriation made by Congress and see that the money is properly spent. This will be of invaluable service to Congress, as this official, being entirely independent of every other branch of Government, is directly responsible to Congress.

Congressman Thomas S. Williams of Illinois Debates on budget and accounting legislation 1919

¹ Securities and Exchange Commission's "Staff Report on Transactions in Securities of the City of New York," Aug. 26, 1977.

Site Audit of War Contracts in World War II

The move to more prompt and efficient GAO auditing of war contract expenditures resulted in an organization that became the principal forerunner of GAO's present Field Operations Division.

In the foreword to his annual report for 1943, former Comptroller General Lindsay C. Warren called attention to the great impact on GAO of the vast increase in Federal expenditures occasioned by World War II. He also referred to basic changes in GAO's auditing operations to improve the promptness and efficiency with which the auditing of war expenditures was performed.

One of these measures was the establishment of a war contract project audit organization to audit cost-type contracts onsite, that is, at contractor plants. This was a major shift from the centralized post audit in Washington of all Federal expenditures that GAO (and its predecessors) had always made.

Mr. Warren said in his 1943 foreword:

I feel most strongly the obligation which the General Accounting Office has, as the agency of the Congress, to perform a prompt and careful audit of the war expenditures, so that there may be no delay in war production because of doubt as to the validity of payments to war contractors, and so that any illegal or erroneous payments may be recovered while there is vet time. With this in mind, I have instituted a series of measures designed to expedite the war audit in every way possible commensurate with accuracy and efficiency. These measures commenced in the fiscal year 1942, with the segregation of the audit of costplus-a-fixed-fee and certain other war contracts from the regular audit in Washington. They have included the establishment of a war contract project audit organization ***.

Later the annual report says:

*** The field audit of cost-plus-afixed-fee and similar contracts was commenced on an experimental basis during the fiscal year 1942, when experienced auditors were sent to the Detroit, Mich., area to conduct a post audit at the plants of certain large manufacturing concerns, in order to give the contractors and the administrative office prompt notice of the audit action and to permit the retention of certain records in the field until the completion of the contracts. The departments concerned requested extension of the arrangement to other industrial centers and, in accordance therewith, there was set up a war contract project audit organization, for the duration of the war and 1 year thereafter. On June 30, 1943, there were 605 employées engaged upon the war contract project audit at San Juan, P.R.; Edmonton, Alberta, Canada; and 141 localities throughout the continental United States***.

The war contract project work was a major effort by GAO to do site audit work and its institution represented a landmark in GAO's audit history. The War Contract Project Audit Section, as it was officially named, was organizationally a part of the former Audit Division, which was headed by $E.W.\ Bell.$ As brought out in C.E. Merrill's "History of the Field Operations Division" (The GAO Review, Summer 1971), the War Contract Project Audit Section was the principal forerunner of the Field Operations Division that is such a large and vital part of GAO's audit organization that we have today. GAO's field audit work up to that time consisted of preaudits of different kinds of agricultural payment programs. (See J. Philip Horan's "The First Field Audits by GAO," in The GAO Review, Fall 1971.)

Recently, one of the "charter" members of the war project audit organization, G. Ray Bandy, provided the accompanying picture of a 1942 gathering of several of the first GAO auditors to head for the war contract plants in 1942. In transmitting the picture, Mr. Bandy wrote his version of the experience as follows:

As you know field audit of cost-

plus-a-fixed-fee contracts was initiated in 1942 under the direction of E.W. Bell. First assignments were to automobile plants in Detroit and airplane plants in the Los Angeles areas. It was first intended that John Thornton and I be assigned to Detroit but a few days later we were rescheduled for L.A. Kurt Krause, supervisor, and Ellis Stone had preceded us to California and were temporarily quartered at Santa Monica.

Mr. Paul Goshorn and I arrived in L.A. around July 15, 1942, and began a brief survey assignment at the Northrop plant. I then was sent to the Douglas operation at Long Beach and not too long thereafter to Consolidated Vultee in San Diego.

In early July 1943 the Office asked me to establish headquarters in Edmonton, Alberta, Canada, for the audit of contracts pertaining to the construction of the Alaska Highway, the Alaska Pipe Line from Norman Wells in Northern Canada to Prince Rupert, B.C., and the erection of an oil refinery at the latter location.***I was transferred to Seattle in March 1944.

The above history of my involvement in the early years of the field audit may be rather boring to present-day GAOers but I can assure you that I encountered many interesting adventures and at times extremely frustrating experiences.

The enclosed photograph was taken shortly after the initiation of surveys at the aircraft plants in Burbank, Santa Monica, Long Beach, and San Diego.***

Of the pioneering group shown in the accompanying picture, several later became top level officials in GAO's field organization.

G. Ray Bandy—Regional manager, Seattle regional office, 1954-58; deputy director, Field



GAO War Contract Auditors Meet in Santa Monica—1942

From right: _____ McDavid, Charles F. Wells, Ellis S. Stone, G. Ray Bandy, Harry L. Bushong, Frank Gallagher, Kurt W. Krause, ____, Paul and Mrs. Goshorn, John E. Thornton and wife Frances, and Fred Cordua.

Operations Division, 1958-64. Harry L. Bushong—Regional manager, Denver regional office, 1952-54; assistant regional manager, Norfolk regional office, 1954-67.

Kurt W. Krause—Chief of the Great Lakes zone, Field Audit Section, 1952; regional manager, Detroit regional office, 1952–56.

Ellis S. Stone—Chief of the Southeast zone, 1944-48.

John E. Thornton—Chief of the Western zone, Field Audit Section, 1952; regional manager, San Francisco regional office, 1952–54; assistant director for field operations, Division of Audits, 1954–56; director, Field Operations Division, 1956–76. Charles F. Wells—Regional manager, Portland regional office, 1952–60; manager, Portland suboffice of Seattle regional office, 1960–65.

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From Auditing to Editing

A Danish auditor examines GAO's report writing improvement booklet and likes what he reads.

About a year ago the Auditor General of Denmark set up a working group to identify ways to improve their audit reports. A member of that group visited Comptroller General Staats last year and obtained a number of publications which GAO had developed as part of its writing improvement program. One of those publications was From Auditing to Editing-a booklet developed in GAO and published in 1974. This booklet introduced a new concept in teaching writing, namely, how to do it right, rather than what one should not do.

M.H. Spees of the Danish Auditor General's report improvement work group was so impressed with the booklet that he prepared a review of it which was published in the Danish Auditor General's office journal. Before its publication, he asked Harold R. Fine, one of the authors of From Auditing to Editing and now an assistant regional manager in the Cincinnati regional office, for his comments on it. Mr. Spees also said they were interested in translating the booklet into Danish so that they could use it in their auditor training program.

Mr. Spees has translated his review of *From Auditing to Editing* into English and the *Review* is glad to publish it so that GAO staff members can see how others have reacted to our work.

From Auditing to Editing

By M.H. Spees, Rigsrevisionen, Denmark

The book is one of the American GAO's language publications and I was fortunate enough to secure a copy of it. From Auditing to Editing has only one fault—it is in English! This fault is, however, less important than one might think. It is informative to compare it with our own language publication, the contents of which are largely seen as only instruction on how to evade the worst of linguistic pitfalls—how one should not write. The American Rigsrevisionen (GAO) goes much further. With From Auditing to Editing the Americans have tackled the incredibly demanding task of working out a learning book which gives instruction on how one should write reports. I am deeply impressed with the result!

Does such a book interest us? The answer is an unconditional "Yes"! With minor exceptions, the problems one finds in English are identical with those in Danish. *Kancellistilen* (gobbledygook) is first and foremost what is wrong with English writing too. A few examples should be sufficient to make the point:

Passive voice: "Reported by the Secretary" instead of "The Secretary reported" and "The data was furnished by the department" instead of "The department furnished the data."

Gobbledygook expressions: "Of the opinion of" instead of "believes"; "in the event that" instead of "if"; "endeavour to ascertain" instead of "try to find out"; "in accordance with your request" instead of "as you asked for," etc.

Trite expressions: "We noted"; "in this connection"; "attention is called to." One is just at the point of reading these expressions (directly) in Danish.

Dilute verbs: Also here one feels at home: "Give instructions" instead of "instruct"; "effect an improvement" instead of "improve"; "make a decision" instead of "decide"; "take under consideration" instead of "consider."

It is apparently superfluous to point out that these and other faults together produce sentences that are too long. One thing is clear! From Auditing to Editing deals with the same problems we have. And the text is plainly spoken, and easy to read.

In the book, report writers are taught to write without using all the "fine" Norman derived French/Latin words English was saddled with after the Battle of Hastings in 1066. Instead they are told to use the original words. The short, sturdy Anglo-Saxon

words! And here is the interesting point:

If English is freed from the French/Latin influence, and Danish from the continental (German/Latin) influence—both in words and in sentence-building—the two languages are far closer to each other than most people would imagine!

The text is in a book which will teach others about how they should express themselves, and it is written in the recommended style. From Auditing to Editing is, therefore, far easier to read than the majority of English books.

Readers who quite naturally avoid trouble by studying from a foreign book need not let themselves be frightened. It is not possible to cover the positive instructions in the book about how one acquires good report writing skills in this short book review. They can, however, be indicated by the following example of "Line Editing."

[Example omitted.]

The example makes sense because it is taken directly from the text of an audit report and reworked so it does not lose meaning. The facts are not altered. One might get the idea that the American report text, before corrections, reminds him of texts in a Danish report.

Our main problem is sentences that are too long. I should perhaps write—not enough periods. The meaning is in the text between periods. Sentences that are too long are normally

made by shooting one sentence into another or linking two sentences together with such words as "by," "and," and "likewise" or something like that. Sentences of up to 100 words and sometimes more are not unusual. Redundancy and wordiness only partially cover our problem with long sentences.

An extremely interesting point: In Danish we have the "it is" and "there are" constructions. Until I saw From Auditing to Editing I had, like the rest of my countrymen, never been aware of it as a gobbledygook fault. I greatly admire the authors for having found this!

Need For A Strong GAO

***If the Congress is to retain its own means of securing impartial and factual data on Federal financial transactions, its means for insuring that appropriated funds are spent only in accordance with the laws it passes, and its primary weapon for preventing unbridled and unchecked spending, then the Congress must be ever alert to and adamant against attempts to weaken or destroy the powers of the General Accounting Office or to affect its independent status.

> Lindsay C. Warren Comptroller General of the United States 1954

The Chicago Regional Office Adopts A New Image

But will it last? An account of how members of one GAO field office tried to enliven their routine.

During the brief 1977 Spring respite between teeth-cracking cold and vaporizing heat, the Chicago regional office staff decided to do something "worth-while." A true bureaucratic decision—no single individual was responsible. Rather, the staff performed a Vulcan mind-meld a la Mr. Spock.

But what exactly? As a GAO group we had to be cautious of controversy. Even a gift to the city sewer department could raise eyebrows. *Voila!* The zoo (or as we say in Chicago, da soo). No one audits the zoo. No controversy exists there—oh maybe a little hanky-panky in the back stalls, but nothing serious.

Perchance, the nearby Brookfield Zoo was running an adopta-pet campaign to raise funds. By paying an animal's feed bill for one year, one adopts the creature of his/her choice. Ah, the possibilities! We could adopt a gorilla or a tiger as our mascot.

However, upon receipt of the price list, we lowered our sights considerably. At \$1,500 a year, either the gorilla and the tiger have awfully exotic tastes or their appetites are only surpassed by teenage boys. No matter. For \$50 and under we could adopt such striking mascots as the common jird, the sugar glider, and the blue-tongued skink. Think of the image. The Fighting Jirds of GAO. The Sliding Gliders. The Auditing Skinks.

But now, how to collect the funds? An appeal for charity? No, executive agencies always said GAOers have hearts of coal, eyes like a codfish, etcetera, etcetera. Threats? No, after two closeout conferences most auditors are inured to curses, evil eyes, and the Bronx cheer. A rigged election? Perfect! Every Chicagoan's

Mr. Stendell is a supervisory auditor in the Chicago regional office. He has an M.B.A. degree from the University of Chicago and a B.S. degree from the University of Illinois. He is a CPA (Illinois) and a member of the American Institute of Certified Public Accountants and the Illinois Society of Certified Public Accountants.

dream come true, a chance to be a kingmaker.

Thus, the announcement was made. For a period to be decided by the TCEJ (thoroughly corrupt election judge) (the author), any person in the region could cast one vote for the animal of his/her choice for 50 cents. At first, the timid voted with one measly vote apiece. Soon, however, the devious ward heelers weighed in. A notorious Notre Dame alumnus threw two votes to the cock-ofthe-rock. A female auditor countered with four for the bat-eared fox. Then the real heavyweights stepped in the ring. An assistant regional manager from the south wards stuffed in 10 votes for the nine-banded armadillo. Even a Washington headquarters visitor threw in two votes during one of his frequent sojourns in the regional hinterlands.

As with most contests, the field narrowed to two prime contenders—the red spitting cobra and the nine-banded armadillo. The lead see-sawed between the two as the \$50 target was approached. Smear campaigns were started. Opponents claimed that a venomous reptile was not a good symbol for GAO; others said it was very appropriate. The armadillo was accused of being cowardly, of curling into a ball when attacked; some thought that was fitting also.

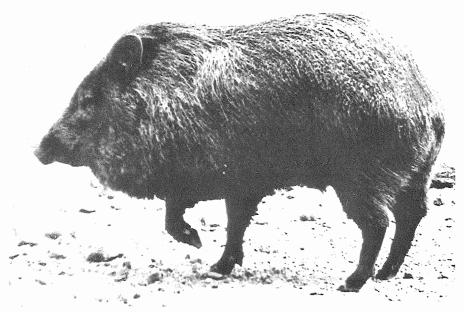
As the final tallies were being counted, the last fix was made. In a devastating blitz that left commentators grasping for puns, the infamous south side of the office struck again. A supervisor

delivered 10 votes for the cobra. The armadillo partisans tried a late rally but fell short. The cobra thus slid to a narrow victory.

However, due to the bureaucratic delays in choosing our creature, we were too late to adopt our first choice—or second—or third. Caucusing with the southside power blocks, the TCEJ settled for a dark horse, or pig in this case. Our adopted mascot was the dreadnought of the New World, the collared peccary.

Albeit our peoples' choice was met with jeers, insults, and general ignorance, the peccary has definite lovable traits. Peccaries, or hairy pigs, usually travel in herds of 5 to 50, with females usually dominant over males. Even more lovable, according to the Brookfield Zoo, peccaries use a scent gland to mark each other and their territory to give odoriferous familiarity to herd members. And, finally our hirsute pigs mark their home range with traditional dung piles.

To celebrate our mascot, several of the contributors attended the zoo's Parent's Day to visit our pig this past June. Although the TCEJ carefully planned the excursion and specified the meeting place, the GAOers and families managed to show up in random places and at various times. One auditor and daughters foolishly trusted another GAOer to get them to the zoo. The GAOer immediately showed his emotional ties to Magellan by heading for Cape Horn, overshooting the zoo by a good 20 miles. Another au-



The collared peccary, master of all he surveys. (Courtesy of the Chicago Zoological Society)

ditor cemented relations with the local police by informing the gendarme at the gate that he was there "to visit the pig."

A certain regional manager allegedly dragged his family all over the zoo and managed to walk by the peccaries no fewer than four times before zeroing in on the pen. We never did manage to get all 32 people together at one time to root for our pig.

The pig, however, was worth the assorted bumbling and confusion. The peccary pen is not often visited, compared to the glamour pusses like the lions, tigers, zebras, ad nauseam. Name one major bank that has a pig as its symbol. Name one military unit that calls itself the "Screaming Pigs."

The entire herd was overjoyed

to be visited, admired, and cooed at. The pigs demonstrated their intricate tricks such as grubbing and boundary marking. Our pig soon identified himself. When a sharp noise startled the herd, all the pigs save ours quickly ran into their stall. Ours managed to miss the door twice and finally staggered in sideways. Obviously a Government pig.

The excitement has died down now. We expect our Cape-Hornbound auditors back any day, as we left word with the Guatemalan border patrol to turn them around. Next year, who knows? We may continue with the peccary, or we may hold another election. Perhaps we could get the blue-tongued skink next time—there's magic in that

name.



GAOers laugh as small boy (author's son) is thrown to the pigs. From right: the boy, Aaron Stendell; Lisa Wollenberg; George Stendell; Karen and Merle Frey (in back); Ruthann Balciunas (center); Rick Calhoun; Gerda Stendell; and Hilda Stendell.

From Botswana

I have had occasions to read your publication, The GAO Review and I was very much impressed by it. I think it is very good. I consider it would make an invaluable contribution to our staff training effort and would also help keep our more senior staff abreast of the developments and views on accounting and auditing matters.

C.G. Mogami
Deputy Accountant General
Botswana

Concepts of Accounting for the Cost and Accomplishment of Public Programs

AMERICAN ACCOUNTING ASSOCIATION COMMITTEE ON CONCEPTS OF ACCOUNTING APPLICABLE TO THE PUBLIC SECTOR, 1970–71

In Supplement To Volume XLVII of the Accounting Review, published by the American Accounting Association (1972), appears the report of the Association's Committee on Concepts of Accounting Applicable to the Public Sector. This committee, chaired by Professor Lennis M. Knighton, then of the University of Texas, had but 1 year to carry out its assignment. For such a comprehensive subject, this period of time was short but it did provide incentive to deal directly with fundamentals and to complete the report without delay.

The result is an excellent presentation of basic concepts that is worth study by anyone interested and concerned with governmental accounting and the role accountants can play in producing information for use in managing and overseeing the conduct of government programs and activities.

Part III of the report discusses the concepts of accounting for the cost and accomplishment of public programs and is thus of special interest to GAO staff members. For this reason, it is reproduced, with permission, in this issue of the Review.

MEMBERS OF AMERICAN ACCOUNTING ASSOCIATION COMMITTEE ON CONCEPTS OF ACCOUNTING APPLICABLE TO THE PUBLIC SECTOR, 1970–71

Lennis M. Knighton, Chairman Roy E. Baker

Joseph F. Guy Lincoln J. Harrison Ellsworth H. Morse, Jr. Delmas D. Ray James M. Williams University of Texas

University of Missouri— Kansas City University of Florida Southern University General Accounting Office University of Florida University of Tennessee

PART III, THE COST AND ACCOMPLISHMENT OF PUBLIC PROGRAMS

Since the earliest formulation of accounting theory, an attempt has been made to articulate the concepts of effort and accomplishment in order to provide the proper matching or comparison of data for performance evaluation. In the commercial world, accountants have largely focused their attention on the matching of revenues and expenses. In the public sector, however, the nature of operations and the concepts of revenues and expenses are not relevant to this type of matching, except in those instances where public enterprises (such as municipal utility companies) bill customers for their services and operate on a profitseeking or break-even basis. It is important, then, for this study to examine the relationship of effort and accomplishment as measured in typical government programs.

Effort, as used in this study, is defined as the cost of operations, and Accomplishment is defined as the resulting benefit from operations. The term operations is used broadly here to refer to programs, activities, and all other actions undertaken by a governmental entity. In short, cost is what is given up; accomplishment is what results.

Concepts of Cost

The starting point in distinguishing cost concepts related to the measurement of effort in gov-

ernment programs is to clearly distinguish the cost of acquiring an asset from the cost of using that asset in a program. The first concept is called *acquisition cost*, and it usually is composed of the purchase price of the good or service plus related expenses associated with the acquisition. The second concept is known as *applied cost*; it represents that portion of acquisition cost that is assigned to a particular program, project, or time period.

One of the most basic concepts of traditional accounting is that of asset acquisition cost. Under this concept, assets are recorded on the records at cost; and these amounts remain unchanged until they are written off to operations over appropriate periods of time.

Replacement cost is the amount that would now have to be sacrificed to acquire the equivalent asset; and in many decisions of choice, this concept is more relevant to managerial decisions than the recorded historical cost.

Another important distinction among cost concepts is that of program cost contrasted with total cost to the government and social cost. Program costs are the sum of the assigned historical costs that are applied during a particular period of operations. Thus, program costs include both direct and indirect costs associated with the particular program. Total cost to the government includes all program costs plus administrative overhead for general government. Social cost is the total sacrifice made by the

public to support government programs.

Social cost may be measured as the *opportunity cost* to the public of paying taxes, using resources, and conducting the program in question. Included here, in addition to economic factors, are such items as pollution to the environment, increase in fear and apprehension, and loss of security and freedom. This concept of cost is highly relevant to planning government programs, and it therefore is equally important for control and performance evaluation. Yet, because of the difficulty of operationalizing the concept, we are seldom able to use it in accounting.

The second concept—total government cost—is again a relevant concept if we wish to know how much it costs the government in resources used to carry out a program. However, the problem is one of identifying meaningful concepts of cost association and allocation so that the assignment of administrative costs becomes something more than an exercise in arbitrary calculations.

The most relevant of these concepts for responsibility-center management is that of program cost. Here, direct costs associated with a program are calculated on the basis of resources used. Indirect but related costs can be assigned on the basis of positive correlation, as noted below. These costs are meaningful for management control and should be included in the design of the accounting system.

Where it is desirable to have

inter-period comparisons of performance, as is usually the case in any organization, it is important to understand the concept of positive correlation as it relates to the matching of effort and accomplishment. 12 Very simply, this concept requires that costs, representing efforts, be recognized as expenses in the period when the resulting benefits, representing accomplishments, are realized. Where no cause and effect relationship can be established, there is no positive correlation. This concept is very important to accounting in both the public and private sector.

The assignment of cost of programs, organizations, or accounting periods always requires that some basis be established for computing the allocation and making the assignment. If the problem is merely one of assigning cost to periods of time, it is only necessary to determine which period benefited from the incurrence of the cost. If costs are to be distributed to programs, the question to be answered is: Which program benefited from each item of cost incurred?

Thus, the first step is to allocate the benefits to time periods, and this allocation requires an appropriate interpretation of the point in time when the benefit is realized. Efforts, in the form of costs, are then assigned to the periods in which the related

¹² See Concepts and Standards Research Study Committee, "The Matching Concept," *The Accounting Review* (April, 1965), pp. 368-372.

benefits are recognized. A cause and effect relationship should be established as nearly as possible. Where no such relationship exists, costs should be charged off in the period in which they are incurred unless it can be clearly demonstrated that some decision or control purpose is served by assigning them or computing the allocation otherwise.

When assets are lost, destroyed, or discarded where no benefits result, the government has a loss. Such a loss must be distinguished conceptually from an expense, for by definition an expense is the use of or giving up of an asset to produce some benefit. To the extent that managers are responsible for the control of assets, losses are relevant for inclusion in management reports. They do not, however, become a part of the computation of effort when comparing effort and accomplishment.

Finally, while most assets are of a nature that requires that they be charged off to operations over their useful life, some are clearly not within this classification. One area along the center of debate on this point is the concept of depreciation. When longlived assets are conceived to be of the same nature as unexpired costs, the difference being that of length of useful lifespan, the concept of depreciation can be satisfactorily resolved. For those governmental activities for which it is deemed advisable to evaluate on the principle of matching effort and accomplishment, the assignment of a portion of the cost

of capital items to each period or program is justifiable and appropriate. Contrariwise, for those governmental services which are not to be measured and evaluated in terms of effort and accomplishments, depreciation accounting serves little useful purpose. It serves no useful purpose, for example, to depreciate a monument in a park. Unless the assets are related to operating entities and are used in doing the work of the entity, it is doubtful that their expiration has any significance to the measurement of effort and accomplishment in government.

Assets

The reconciling difference between accrued expenditures and accrued cost is the amount recorded as assets having some future service potential. Expenditures may be classified as either current operating expenses (applied cost) or capital asset acquisitions. Similarly, current operating expenses contain items of current expenditure as well as assets written off currently but acquired previously. The recording of assets defers the recognition of cost as an operating expense.

Normally, assets are defined as those resources or rights held by an entity which have future service potential or realizable (sales) value. In considering resources which are of concern to administrators of governmental units, three broad classes of assets may be distinguished:

- Monetary or financial assets. These assets include cash, investments, and receivables—all being characterized by their liquidity and availability as sources of funds for future expenditures.
- 2) Assets acquired for resale. These assets consist of inventories which are held for direct and immediate resale or which are to be converted into other products and then marketed.
- 3) Consumable assets or unexpired costs. These assets include two major subclasses of assets: those expected to be used in the near future, such as supplies, etc., and those long-lived assets that will render useful service over several future periods of operations.

For most governmental units, the second category of assets (those held for resale) is not a very significant item. However, some governmental units do engage in manufacturing and retailing activities. In such cases, these assets need to be distinguished from those that are purchased and held for use or consumption within the governmental unit itself and which will ultimately become an important item of program cost. Similarly, many governmental units have few long-lived tangible assets; but where these are found, they need to be distinguished from the current operating items such as supplies and prepaid expense.

It can be said that in a large

measure administrative units operating in the public sector have been careful to exercise strict accountability for reporting on the acquisition and use of monetary assets in accordance with legal provisions governing the entities or funds. Much less attention has been given by most governments to current consumable assets and the utilization or expiration of such assets.

The prevailing practice in local governments has been to treat expenditures for supplies and services as expenses of the current fiscal period, with little effort being made to reflect residual amounts which will make some contribution to governmental activities in the following period. This practice has prevailed even though any reliable measure of operating efficiency must consider the effect of these assets. Moreover, the existence of a considerable investment in unexpired costs at the end of any fiscal period should be an important factor in decisions relating to budgets and appropriations.

Long-lived or fixed assets are a special category of consumable assets which have utility or value extending over a number of operating periods. For many governmental units, the investment in long-lived assets is substantial. It is imperative, therefore, in accordance with the overall objectives of accounting, that useful, reliable, and generally acceptable principles be adopted for planning, controlling, and reporting on the acquisition, use, and disposition of such resources.

However, in a large number of situations, accounting practices and procedures relating to fixed assets are woefully inadequate. Too often, no records of the ownership, utilization, and ultimate disposition of fixed assets are kept beyond the information concerning the original acquisition transaction.

Expenses

In various sections of this report, distinctions have been made between expenditures and expenses. It has been noted that expenditures represent cash outlays or the creation of liabilities associated with the acquisition of goods and services. Expenses, on the other hand, have been defined as expired costs. Some of these costs expire simultaneously with the expenditures, and others expire gradually over more than one fiscal period.

One of the principal objectives of accounting is to assign expenses (applied costs) to the periods or programs which receive the resulting benefits. The use of accrual accounting, including the recognition of both deferred and accrued expenses, is necessary to achieve this objective. Such a system is an accrued cost system, however, as contrasted with the accrued expenditure system discussed in Part II. Accrued cost accounting is simply an extension of accrued expenditure accounting, and both types of information should be available from a full accrual accounting system.

Accomplishment, Benefits, and Effectiveness

To justify its existence, every organization must accomplish something. It must have output in the form of tangible goods or intangible services. If the output is in the form of intangible services, as is true with most entities in the public sector, the output is often difficult, if not impossible, to identify.

Even more difficult than the identification of output, however, is the search for answers to questions such as: Why does the organization do what it does? Are there alternative ways of accomplishing the same results? Were the activities performed effectively and efficiently?

In the private sector, the amount of revenue a firm earns has traditionally been used as a measure of accomplishment. Even when the output of a business firm is in the form of service, a pricing schedule is used and quantities of service are determined that correspond to this schedule. Accomplishment is measured as the result of the quantity of services produced multiplied by the unit price, as determined by the pricing schedules. Likewise, in certain segments of the public sector, although the output is intangible, such as the generation and transmission of electrical energy, sales (quantity sold times price) may also be used as a measure of accomplishment.

The problem of identifying and measuring accomplishment is

compounded, however, when output is both intangible and not market oriented. Examples are public education and the protection of life and property. This situation exists with much of the output of the public sector.

Furthermore, effort (measured by accrued cost) and accomplishment (measured by accrued revenue) are used in the business world to derive a figure called "net income." This figure is important to a number of computations and calculations that are made in evaluating the performance of an enterprise operation. To the extent that government engages in enterprise operations, such a figure is also relevant to performance evaluation, although it is by no means the only relevant measure. In other operations, particularly where the organization or program is service oriented, it is both practically and conceptually impossible to derive a "net" figure in numerical terms. It is conceptually possible to speak of the net public gain or loss or the net public good, but it is conceptually impossible to measure the net difference unless both effort and accomplishment can be reduced to a common scale.

The Relationship of Accomplishment to Objectives

It is impossible to speak of accomplishment without some concept or notion of objectives, and it is therefore important here to look closely at the relationship of objectives to accomplishment.

Objectives in most organizations are hierarchical, and the accomplishment of one objective is often the means for achieving still higher objectives. Since the selection of measures of accomplishment depends upon the objectives which are formulated, measures of accomplishment are also hierarchical in nature.

If our objective is to build highways, for example, one measure of accomplishment might be the number of miles of highway built during a period of time. If highways are thought of as being useful only as they serve a higher objective (such as transporting people and goods effectively, efficiently, and safely), a different measure or even multiple measures are suggested. Examples might be the reduction in travel time, the decrease in the accident rate, the increased number of vehicles moved, and the increased average speed of movement.

Not only does the statement of objectives influence the selection of measures of accomplishment, but the selection of measures of accomplishment may also influence the statement of objectives. Objectives often become meaningful only when alternative means of achieving them are considered and when a measure of accomplishment is established. For example, the analysis of alternatives A, B, and C may suggest alternative D, which in turn may be preferable to either A. B. or C. Moreover, the measures of accomplishment which are supplied to individuals may redirect their social and economic

activities, actually changing their objectives. Therefore, the establishment of objectives and of criteria for the measurement of these objectives are actually interacting processes. Not only does the selection of the criteria for accomplishment, benefits, and effectiveness depend upon the objectives which are formulated, but the process of selecting the criteria may also suggest the need for revision of the objectives.

Although analytically the determination of objectives and the measurement of accomplishment may be treated separately for purposes of discussion, operationally they are part of the same system of planning, programming, and budgeting. The recognition of this fact has culminated in recent years in the adoption by some governmental units of planning-programming-budgeting systems (PPBS). PPB is simply a systematic way of dealing with difficult problems of choice. It includes:

- The consideration of alternative objectives and programs and the definition, with as much precision as possible, of programs, output, and resource requirements.
- The development of multiyear planning of desired objectives in relation to program costs.
- Careful consideration of the benefits and costs of existing programs.
- 4) The comparison of alternative courses of action

The systematic analysis of alternatives and an enlarged planning horizon constitute the crux of a PPB system.

Criteria for Evaluation of Objectives

As long as the public sector was considered to be a necessary evil and government outputs were deemed to be of limited value, it may have made sense to emphasize control over inputs only. However, as the accomplishments of the public sector have more and more come to be regarded as public benefits, it has become necessary to shift the emphasis from the control of inputs to the effective allocation of resources for the attainment of objectives. The more sophisticated tools of program analysis, such as cost-benefit analysis, require quantified expressions of program objectives. Criteria for evaluation are needed in order to determine if the objectives have been accomplished and to bring to light problems that require managerial attention. Internally, criteria are needed by the lawmaking body, as the top policy making group, as well as by the various levels of administration. Externally, criteria are needed by potential lenders, citizens, and other governmental units and organizations. Criteria for evaluation, therefore, must be designed with as much care as the program itself.

In a federated system of government, objectives are partially a function of the level of government. National prestige and national security, for example, while of interest to the states, are peripheral to state functions. However, within any level of government there are also different levels of objectives. Since there are different levels of objectives, and hence, different levels of indicators of accomplishment, one of the first problems is the identification of the different levels of criteria for the evaluation of objectives.

Indicators of accomplishment have been classified according to levels by one source as (1) operations indicators, (2) program impact indicators, and (3) social indicators. ¹³

Operations Indicators

These measures are associated with outputs of activities. They are indicators in non-financial terms of what is produced for the money or effort expended. They are largely workload and performance statistics useful for activities below the program level. Examples are number of licenses issued, number of tests administered, etc. While often considered as outputs of departments, they are actually intermediate products of programs.

These measures may be classified as volume indicators, quality indicators, and comparative indicators. The activity "street

lighting" can be used as an illustration of the three classes. "The number of street lights maintained" is a volume indicator. An "illumination index" (kilowatts) is an indicator of the quality of service. The aim is to specify quality in terms of characteristics—duration, content, intensity. While "kilowatt hours of electricity per mile" is an example of a comparative indicator, it can be thought of as variant of the other two classes.

Generally speaking, operations indicators provide very little aid in revealing how well the needs of the citizens are being met. These measures are often selected on the basis of simplicity of understanding and data availability rather than on the basis of relevance. They include the kind of data commonly used for the determination of unit costs by dividing the total cost of an activity for a period of time by the number of work units produced during the same period of time.

Program Impact Indicators

These indicators are related directly to a public need or policy. They are expressed in or implied by the program objectives. Outputs of programs should be described in terms that provide a basis for evaluating actual against planned accomplishment. Examples of this type of indicator are (1) vehicle accidents averted, and (2) wages earned and welfare costs averted due to handicapped persons being made self-sufficient.

Some program impact indi-

¹³ State-Local Finances Project, Output Measures for a Multi-Year Program and Financial Plan—PPB Note 7 (Washington: The George Washington University, 1967), p. 9ff.

cators could possibly also be used as operations indicators at the departmental level; but they are usually too highly aggregated, since a single organizational unit seldom has complete control of a program. To the extent that standards have been developed by specialists in the program areas, these standards may be used for program evaluation.

Social Indicators

These indicators reflect changes in social conditions resulting from a combination of programs but not solely attributable to any one of them. This type of indicator relates to the "quality of life." Examples are family living and home conditions, personal security, and community livability. To the extent that these indicators are available. they aid in answering such questions as: Are we getting healthier? To what extent is pollution increasing? Do children learn more now than they used to? Do people have more satisfying jobs?

Thus, the various performance indicators form a spectrum. At one end of the spectrum are indicators easily understood and applied (quantified) but giving little indication of accomplishment. As the spectrum is traversed, indicators of increasing relevance for program evaluation may be identified. However, they become increasingly more difficult to quantify. At the opposite end, indicators are more closely related to the social objectives of the program than at any point

along the spectrum, but they are extremely difficult to identify and quantify.

Due to the adoption of performance budgeting by some units of government, accountants have in some instances already developed work-load statistics (operations indicators). Conceptually, it should not be too difficult for accountants working with operating personnel to develop meaningful program impact indicators. However, there is a crucial link, sometimes termed a social production function, still to be forged between social indicators that are heavily laden with value systems and the measurement of program objectives and program accomplishment.14

Implications for Accounting

Since governmental programs are not normally undertaken to produce revenue, the accomplishment of any program must be measured in terms of the public good that results. And information disclosing the results of operations in terms of the public good must be collected and processed through the accounting system to the extent possible if effort and accomplishment are to be meaningfully related.

¹⁴ For an example of two excellent studies that discuss these subjects in some depth, see: Charles L. Schultze, The Politics and Economics of Public Spending (Washington: The Brookings Institution, 1968); and U.S. Department of Health, Education and Welfare, Toward a Social Report (Washington: U.S. Government Printing Office, 1969).

Ideally, one would like to know the ultimate social impact of certain program operations, but seldom can this impact be determined. How much does a particular program, for example, reduce the criminal tendencies in society? We need substantial research to see if it is even possible to come up with relevant answers; but even if we do, they are likely to be both controversial and indefinite.

In the absence of impact data, and even if we could get it, we must look to program achievement data as being the most relevant indicators of accomplishment for accounting. Some of this information may be collected and reported in the formal accounting process, but much of it must come from outside the formal system. To be included, this information must be quantifiable, verifiable, and objective. Otherwise, it will have to be derived by special analyses, studies, surveys, statistical methods, or other means. However, whether the accomplishment data is included in the formal accounting system or not, the concept relating effort and accomplishment is unchanged; and the accountant must understand this relationship in order to structure the "effort" information in such a way that it can be compared to "accomplishment" data, however the latter is derived.

Where it is impossible to relate cost data to achievement data, we are forced to fall back on operations indicators. However, operations indicators are something quite different conceptually from program achievement data. For example, the number of students taught is something quite different from the information needed to determine educational achievement in the public schools. Yet, knowing the number of students taught is very useful for many decisions. It is simply one of several indicators that are necessary to reflect achievement in the over-all program, and it must be recognized as such.

In cases of programs for which no really relevant output measures can be identified and quantified, nothing is to be gained by counting the uncountable. In these cases the best solution may be to use operations indicators (workload statistics). Although these relate to program inputs and shed little light on what is accomplished by the purchase and utilization of program resources, they do provide at least a measure of program magnitude. They should not, however, be substituted for program accomplishment data where such data are available.

These distinctions are important for another reason. If one operating statistic (such as number of students taught) is allowed to become the key statistic in a performance standard used to evaluate a program, it may lead to behavior patterns that are undesirable. One can maximize the number of students taught, for example, by lowering the demands made on students so that fewer students drop out of the system and more are able to

enter it. Thus, decisionmakers need to be aware of these possibilities. The information and control system, including the selection of relevant indicators and standards, must promote the objectives that are sought. The selection of relevant indicators with which to measure and evaluate accomplishment is as important as anything done to compute the cost of effort related to that accomplishment.

Finally, we must not forget that the public sector is characterized by complicated systems in which institutional, economic, technical, and political factors interact with one another. Fragmented power is a characteristic of a democracy where government is a system of checks and balances and where decisionmaking becomes a complex balancing of issues, pressures, facts and politics. In a democracy, objectives are often expressions of conflicting value systems, and the "best solution" may be the achievement of consensus through adjustment of conflicting values rather than one which meets criteria of effectiveness and efficiency. Thus in measuring benefits of programs and combinations of programs, political consequences as well as social and economic benefits must be considered by many governmental decisionmakers.

Furthermore, in the allocation of resources by the legislative body, political tradeoffs must often be made between expenditures on one program and those of another. It is very difficult, if not impossible, to develop measures which permit direct quantitative comparisons of the benefits of expenditures for welfare programs with those of expenditures for educational programs, for example; and analysis will have to yield to the judgments of the decisionmaker in situations such as this one. The value judgments of many decisionmakers in the public sector must be based upon the actual and projected outcome of issues which, in a democracy, are settled in the political arena. However, analyses based upon concepts of accomplishments, benefits and effectiveness should make the political cost of ignoring these analyses higher for elected officials. Analysis plays a further role in translating general policy, which may have been derived by political processes, into specific objectives to which evaluation criteria can be applied.

In conclusion, it would appear that the greatest challenges for accountants in the public sector lie in finding ways to implement the concepts of effort and accomplishment so that meaningful relationships may be disclosed for managerial decisionmaking as well as for public accountability on the part of all public officials. No area of concern offers accountants a greater challenge. but no other challenge offers greater promise of exciting rewards and meaningful public service.

A 1939 Look at the Energy Resources Problem

Federal Government concern with the Nation's energy resources and their conservation and prudent use is far from new. On February 19, 1939, President Franklin D. Roosevelt transmitted to the Congress a massive report (435 pages) on the subject.

Titled "Energy Resources and National Policy," the report was prepared by the National Resources Committee, chaired by Secretary of the Interior Harold L. Ickes, and subsequently printed as House Document 160, 76th Congress, 1st Session.

Of more than passing interest is the emphasis of the report on the need for conservation. One conclusion was that both fundamental and applied research should be stimulated and supported by the Federal Government

and this research work should be vigorously pointed in the direction of conservation of these resources, i.e., toward the efficient use of our energy resources in the interest of the national welfare, the avoidance of unnecessary waste in their production and utilization, and the safeguarding in economic health of the industries and populations on which we rely for the development of these vital resources.

In transmitting the report to the Congress, President Roosevelt made these comments which are of especial interest in the light of current efforts by President Carter's Administration and by the Congress to cope with the serious problem of growing energy shortages:

Our energy resources are not inexhaustible, yet we are permitting waste in their use and production. In some instances, to achieve apparent economies today, future generations will be forced to carry the burden of unnecessarily high costs and to substitute inferior fuels for particular purposes. National policies concerning these vital resources must recognize the availability of all of them; the location of each with respect to its markets; the costs of transporting them; the technological developments which will increase the efficiency of their production and use; the use of the lower grade coals; and the relationships between the increased use of energy and the general economic development of the country.

In the past the Federal Government and the States have undertaken various measures to conserve our heritage in these resources. In general, however, each of those efforts has been directed toward the problems in a single field: toward the protection of the public interest in the power of flowing water in the Nation's rivers; toward the relief of economic and human distress in the mining of coal; or toward the correction of demoralizing and wasteful practices and conditions in

the industries producing oil and natural gas. It is time now to take a larger view: to recognize—more fully than has been possible or perhaps needful in the past—that each of our great natural resources of energy affects the others.

It is difficult in the long run to envisage a national coal policy, or a national petroleum policy, or a national water-power policy without also in time a national policy directed toward all of these energy producers—that is, a national energy resources policy. Such a broader and integrated policy toward the problems of coal, petroleum, natural gas, and water power cannot be evolved overnight.

The widening interest and responsibility on the part of the Federal Government for the conservation and wise use of the Nation's energy resources raise many perplexing questions of policy determination. Clearly, there must be adequate and continuing planning and provision for studies which will reflect the best technical experience available, as well as full consideration for both regional and group interests.

Some Federal legislation affecting the energy resources will expire at the end of this fiscal year, other legislation at the end of a few more years. This report sets forth a useful frame of reference for legislative programs affecting these resources and illustrates another approach to the systematic husbandry of our natural resources. Specific recommendations are advanced for solution of the most pressing problems.

Facts for the Congress

***The creation of an independent auditing department will produce a wonderful change. The officers and employees of this department will at all times be going into the separate departments in the examination of their accounts. They will discover the very facts that Congress ought to be in possession of and can fearlessly and without fear of removal present these facts to Congress and its committees.

Congressman James W. Good of Iowa Debates on budget and accounting legislation 1919

An Awakened Watchdog

In the fall of 1957, major items in the news included the Russian launching of Sputnik, U.S. concern with catching up with Russia in the missile field, use of Federal troops to enforce school integration at Little Rock, Arkansas, and the drooping stock market.

GAO was also receiving increased public attention. A notable example appeared in *Newsweek* for October 28, 1957. In his weekly column in that magazine, contributing editor Raymond Moley wrote the following piece on the Comptroller General and the General Accounting Office under the title "An Awakened Watchdog." With permission, the *Review* is pleased to reprint this column—20 years later.

In 1949, the first Hoover commission made a report on the General Accounting Office and the Budget Bureau. In effect, it pointed out that the two agencies had become so encumbered with detail that they were unable to fulfill their original purposes as twin watchdogs over the appropriations and expenditures of the Federal government. This was especially true of the General Accounting Office, over which presided one of the potentially most powerful officers of the government, the Comptroller General of the United States.

This office was created in 1921. The incumbent is appointed by the President with the consent of the Senate. His term of fifteen years substantially renders him independent of any President or Congress, since he can be re-

moved only by impeachment or by joint resolution of Congress for specified cause. He is essentially a servant of Congress.

He determines the extent to which agencies of the government make full disclosure of their financial operations. He checks all income, expenditures, funds, property, and other matters affecting the interests of the public, and as a routine matter determines whether all financial transactions have been made in compliance with the law.

It is most important to note that he has broad powers to make investigations and to report the results with his recommendations to Congress generally or to its committees. In fact, he might well be a one-man, continuous Hoover commission.

Office Revived

Great relief and better order were provided by action of the Comptroller General himself in 1949 and by Congress in its 1950 Budget and Accounting Procedures Act. The way was cleared to more effective supervision of the financial affairs of the government. Then, with the appointment of Joseph Campbell in 1955, there appeared a Comptroller General who had the capacity and courage to exercise the full powers of the office.

Campbell had scarcely settled himself in his office when he issued a statement that exposed the unsoundness and implicit dangers of the Administration's first highway program. His analysis and Senator Byrd's blast resulted in a complete revision.

In 1955, 1956, and 1957, Campbell issued strong dissents concerning bills introduced in Congress designed to permit the TVA to issue its own securities, substantially to expand indefinitely, and to exempt it from any real control by Congress.

In 1957 he demonstrated that so-called military assistance was not always motivated by military considerations; that our aid was often quite out of line with the capacity of the recipient countries to maintain adequate fighting forces; that some of the beneficiary countries having the capacity to do their share in "mutual" aid were shirking that responsibility, and, finally, that our aid was being bestowed on such a scale that might well

commit us to an outlay which we might find impossible or unwise to maintain.

Expert Services

These outstanding reports were only a part of the wholesome contributions of Campbell's office. From the close of the 84th Congress in 1956 to the adjournment of the 85th last summer, the GAO sent to Congress approximately 100 audit and investigative reports and comment upon 700 bills. Moreover, its representatives appeared before committees on many occasions and were constantly in conference with members and staff employees of the committees. It also supplied many expert accountants, investigators, and attorneys for the use of committees. An examination of the hearings of many committees shows not only the substantial nature of the help given by the GAO, but the respect for the office voiced by senators and representatives.

A vast amount of labor still remains to be done from year to year. For hard-pressed members of Congress are constantly bedeviled by the rigged figures of bureaucrats eager to press their favorite projects and by political pressure groups intent upon thrusting greedy hands into Uncle Sam's pocket for dubious special interests. Against this, the Comptroller General is and must continue to be the tax-payers' tireless friend.



GAO Report on Dam Safety

GAO reports are sometimes used by others than the Congress and its committees and members and in ways not anticipated when they are prepared. Since they are public documents and contain much useful information, it is always pleasant to learn of unusual uses.

Recently, Information Officer Roland Sawyer was informed of such a use of GAO's report on dam safety by a loan officer in the World Bank. This report reviewed the dam building procedures and practices of the Bureau of Reclamation, Department of the Interior, and the Army Corps of Engineers to determine whether changes were needed relating to the safety of dams being built (Report no. CED-77-85, June 3, 1977). The review was made at the request of the Environment, Energy, and Natural Resources Subcommittee of the House Committee on Government Operations following the collapse on June 5, 1976, of the Teton Dam in Eastern Idaho that had been built by the Bureau of Reclamation. The resulting flooding caused 11 deaths, about \$400 million in property damage, and a disruption of the lifestyle of thousands of people living in the basin.

The GAO report was critical of many of the design and construction practices of the agencies and contained recommendations for improvement.

The World Bank official had indicated his concern with the quality of several dams being planned for Yugoslavia and has made a copy of the GAO report available to Yugoslavia officials as evidence of the importance of good dam design and construction.



Water gushing through the right side of the 305-foot-Teton Dam in the early afternoon on June 5, 1976. (Bureau of Reclamation photo)

Welfare Fraud

In his message to the Congress on August 6, 1977, on reforming the existing welfare system, President Carter specifically commented on the intention to reduce fraud and abuse in these programs. He said:

The few providers and recipients guilty of fraud and abuse in our welfare programs not only rob the taxpayers but cheat the vast majority of honest recipients. One of the most significant benefits of consolidation of existing cash assistance programs is the opportunity to apply sophisticated management techniques to improve their operation. The use of a central computer facility will permit more efficient processing of claims, reduce the incidence of error in calculating benefits, and facilitate the detection of fraud. No longer will people easily claim benefits in more than one jurisdiction.

We will strongly enforce current programs directed at assisting local officials in obtaining child support payments from run-away parents, as determined by judicial proceedings.

We will ensure that the Department of Health, Education, and Welfare will vigorously root out abuses and fraud in our social programs.

We will work for passage of current legislation designed to crack down on fraud and abuse in our Medicaid and Medicare Program.

At his news conference on the same date, one questioner asked the President how much money he was willing to spend to get fraud out of the welfare system "considering that very often fraud is less expensive to go ahead and pay rather than try to get rid of."

In response, the President said:

The benefits to be derived from eliminating fraud will be realized long before this entire program is implemented. Every time you simplify a system and remove the complexities you eliminate one chance of fraud.

So, in addition to the benefits that will be derived when this entire program goes into effect, we have an excellent chance to realize savings from the elimination of fraud of about \$1.3 billion within the next 2 or 3 years just by simplifying, making more effective administration, a closer cooperation between the local, State, and Federal governments, and the computerization of the existing program, in preparation for the full implementation of this one.

... I can say that whatever amount of money you put into the program to eliminate fraud, either in redesigning computer systems, simplifying the system, putting in more auditors, working closer with the State governments, you get a tenfold return on that expenditure, at least.

Basis of GAO Bid Protest Work

In his testimony on July 27, 1977, before a subcommittee of the Senate Committee on Governmental Affairs, *Paul Dembling*, General Counsel, discussed a legislative proposal (S.1264) which would for the first time provide specific statutory authority for GAO's bid protest function.

At the beginning of his testimony, Mr. Dembling gave the committee members the following useful background sketch on how this function evolved.

A bid protest is a challenge to the rejection of a bid or proposal or to the award or proposed award of a contract. Our bid protest procedures . . . permit an interested party to contest such an action by an agency of the Federal Government whose accounts are subject to settlement by the GAO. The Comptroller General's decision is on the legality of the action under applicable law and regulations.

The Comptroller General has been acting on bid protests for more than 50 years. Exercise of the authority derives from 31 U.S.C. 71 which places in GAO the responsibility for settlement and adjustment of public accounts and 31 U.S.C. 74 which makes GAO's certification of balances of public accounts final and conclusive on the executive branch of the Government. One of the factors is whether the contract was awarded in accordance with applicable law. Initially, agency accountable officers sought GAO rulings on the propriety of payments in advance of disbursements in order to guard against the possibility that GAO might later take exceptions in their accounts.

Advance decisions were later issued at the request of contracting officers prior to contract award. This development was recognition that preventing an improper award is fairer to all parties than taking exception to a payment on an improper award. Later the propriety of an award

was considered by GAO at the request of a bidder as well as the contracting officer or his superior. This procedure is similar to that followed by the Comptroller General in rendering advance decisions regarding all other questions posed to GAO.

Defining "Audit"

Most popular dictionaries define "audit" largely in terms of checking, examining, or verifying accounts. It is therefore heartening to note that at least one of them defines the term also as an evaluation and one not confined to accounts.

Webster's New World Dictionary of the American Language gives as one of several meanings the following: "any thorough examination and evaluation of a problem."

This definition reflects the breadth of meaning of the term that GAO has given it for many years. In the current edition of GAO's booklet *Answers to Frequently Asked Questions* appears the following:

To many people, the term "audit" means checking and verifying accounts, transactions, and financial statements. What does GAO mean by the term?

The term means much more in GAO operations. It includes examining accounting records and financial transactions and statements, but the full scope of a GAO audit also includes:

Checking for compliance with

applicable laws and regulations.

 Examining the efficiency and economy of operations.

 Reviewing the results of operations to evaluate whether desired results, including legislatively prescribed objectives, have been effectively achieved.

Article on Improving Creativity Reprinted

The Winter 1977 issue of the Review included an article enti-

tled "Improve Your Creativity" written by GAO audit managers Charles D. Mosher of Seattle and William F. Laurie of Detroit. The editors of The Journal of Accountancy, published by the American Institute of Certified Public Accountants, thought so well of this article that they reprinted it in their September 1977 issue. In introducing the reprint, the Journal stated:

Though written for GAO auditors, this article also offers advice to practitioners in the private sector-particularly those interested in management auditing.

Here To Stay

***Cost Accounting Standards for negotiated defense procurement are definitely here to stay. They are necessary and they will improve the procurement process, especially as the bugs are worked out. In the end, they will do a lot to restore faith in accounting in contracting, and in auditing. Against the difficulties of achieving CAS goals, you have to set these advantages, even when the advantages are deferred.

> William H. Kincade Staff Director Joint Committee on Defense Production June 1977



By Judith Hatter Chief, Legislative Digest Section

Department of Energy Organization Act

On August 4, 1977, the President signed into law the Department of Energy Organization Act (Public Law 95-91, 91 Stat. 565), which establishes a Department of Energy in the executive branch by the reorganization of energy functions within the Federal Government, in order to secure effective management to assure a coordinated national energy policy.

Section 207 of the law states that the functions of the Comptroller General under section 12 of the Federal Energy Administration Act of 1974 (Public Law 93-275, May 7, 1974) shall apply to the monitoring and evaluation of all functions and activities of the Department under this act or any other act administered by the Department.

These functions include Comptroller General reports to the Congress on studies of existing statutes and regulations governing the Department's programs; review of the policies and practices of the Department; review and evaluation of procedures followed in gathering, analyzing, and interpreting energy statistics, data, and information related to the management and conservation of energy, including but not limited to data on energy costs and supply and demand, industry structure, and environmental impacts; and evaluation of particular projects and programs.

The Department of Energy Organization Act also provides for the establishment within the Department of an Office of Inspector General to, among other things, supervise, coordinate, and provide policy direction for auditing and investigative activities relating to the promotion of economy and efficiency in Department administration or to the prevention or detection of fraud or abuse in programs and operations of the Department. Section 208(b)(5) requires the Inspector General to seek to coordinate his actions with the actions of the Comptroller General, with a view to avoiding duplication.

San Luis Unit Task Force

Public Law 95-46, June 15, 1977, 91 Stat. 225, authorizes appropriations for continuation of the construction of distribution systems and drains on the San Luis unit, Central Valley project, California.

The legislation also requires the Secretary of the Interior to establish a task force to review the management, organization, and operations of the San Luis unit to determine the extent to which they conform to the purposes and intent of the Act of June 3, 1960 (74 Stat. 156), and the Act of June 17, 1902 (32 Stat. 388).

In conducting its review, the task force is required to hold no fewer than three public hearings, at least two of which are to be held in the State of California. January 1, 1978, is the termination date for the group.

The Comptroller General is a statutory member of the task force, together with the Commissioner of Reclamation, the Assistant Secretary of the Interior for Land and Water, the Solicitor of the Department of Interior, members of the general public, and representatives of the State of California and the Westland water district.

Lobbying

On August 2, Robert F. Keller, Deputy Comptroller General, presented the views of the General Accounting Office with respect to the provisions of S. 1785, the Lobbying Reform Act of 1977, before the Senate Governmental Affairs Committee. He discussed at length the enforcement aspects of the proposal.

The bill, which designates the Comptroller General as the official with primary responsibility for administering the law, was introduced on June 29, by Senators Edward Kennedy of Massachusetts, Dick Clark of Iowa, and Robert T. Stafford of Vermont.

On August 5, Senators Charles Mathias of Maryland and Edmund Muskie of Maine introduced the Lobbying Disclosure Act of 1977, S. 2026.

In his discussion of the bill, Senator Mathias stated:

A final problem in all the proposals which is lessened, though not entirely eliminated, by my bill, is the discretionary administration and enforcement vested in the Comptroller General. The Comptroller General for the first time will be given wide powers to monitor the political activities of organizations. One of the lessons we have learned over the past 5 years is the tremendous potential for abuse when government officials are given access to organizational records. For this reason the Comptroller General's powers must be carefully defined and limited.

My bill would apply the Administrative Procedures Act, the Freedom of Information Act, and the Privacy Act to the Comptroller General, and all the records he maintains on lobbying. It would not permit the Comptroller General to have access to contributor or membership lists. It would require the Comptroller General to give notice under all circumstances to any organi-

zation under investigation for violation of the act. Finally, this legislation would not permit any presumptions to be created against an organization which does not comply with an opinion rendered by the Comptroller General.

Outer Continental Shelf Lands Act Amendments Of 1977

The Senate passed and sent to the House of Representatives on July 15 the Outer Continental Shelf Lands Act Amendments (S. 9).

Section 501 of the bill requires the Secretary of the Interior to submit to the Comptroller General reports which list all shut-in oil and gas wells and wells flaring natural gas on leases issued under the Outer Continental Shelf Lands Act. The reports are to indicate why each well is shut-in or flaring natural gas, and whether the Secretary intends to require production on such a shut-in well or order cessation of flaring.

The Comptroller General is required to review and evaluate the methodology used by the Secretary in allowing the wells to be shut-in or to flare natural gas and submit findings and recommendations to the Congress.

Independent Regulatory Agency Information

Public Law 95-87, August 3, 1977, 91 Stat. 445, Surface Mining Control and Reclamation Act of 1977, establishes in title II the Office of Surface Mining Reclamation and Enforcement within the Department of the Interior to, among other things, administer the programs for controlling surface coal mining operations required by the law.

The Office is to be considered an independent Federal regulatory agency for purposes of 44 U.S.C. 3502 and 3512.

Section 3512 requires the Comptroller General to review the collection of information required by independent regulatory agencies, with a view to avoiding duplication of effort by the agencies and to minimizing the burden on business enterprise and other persons.

Independent regulatory agencies, before collecting information, must submit to the Comptroller General plans or forms, to determine whether the information required is available from other Federal sources.

Appearances Before Congressional Committees

GAO officials made 33 appearances to offer testimony before the various committees and subcommittees of Congress during June, July, and August prior to the month-long recess.

¹ Congressional Record, Vol. 123 (Aug. 5, 1977), p. S13929.



Donald C. Kull

After 34 years of Federal Service, including 3½ years as Executive Director of the Joint Financial Management Improvement Program, Mr. Kull retired from the Federal Government on July 1, 1977. He has accepted a position with Science Management Corporation.

Mr. Kull is a graduate (magna cum laude) of Gustavus Adolphus College and has a master's degree in public administration from the University of Minnesota. He worked for the Tennessee Valley Authority from 1943 to 1953 (except for 2 years of military service) and with the U.S. Atomic Energy Commission for the next 20 years. He was appointed the first Executive Director of the Joint Financial Management Improvement Program in December 1973.

Comptroller General Staats has described Mr. Kull's accomplishments as Executive Director of the JFMIP as follows:

During his term the JFMIP has performed significant work in measuring and improving the productivity of Federal workers. The JFMIP has also been a prime mover in encouraging agencies to take a more active interest in money management and for developing a set of guidelines for use by executives in developing operating budgets.

Don Kull played a major role in the establishment of the Institute for Applied Public Financial Management at American University. The objective of this program is to educate government employees and other students in financial and related management skills with heavy emphasis on practical application. This pilot effort has resulted in several universities initiating similar programs. He also had responsibility for JFMIP's participation in cooperative projects with Law Enforcement Assistance Administration and the Farmers Home Administration, the results of which were highly acclaimed by the agencies involved.

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Richard L. Fogel

Richard L. Fogel was designated an associate director in the General Government Division in August 1977. He is responsible for directing GAO's efforts in tax administration.

Mr. Fogel has had diverse experience with the General Accounting Office in the General Government Division, Human Resources Division, and the former Civil Division, primarily in the welfare and law enforcement areas.

He joined GAO in 1969 after receiving a master's degree in public administration from the University of Pittsburgh. He received his B.A. degree in government from Cornell University (1966) and a master's degree in comparative politics from the University of Sussex, England (1967). He is a member of the American Society for Public Administration and has published several articles in professional journals and books on program evaluation.

Mr. Fogel received the GAO Meritorious Award in 1974, the General Government Division Director's Award in 1976, and the GAO Distinguished Sorvice Award in 1976

Distinguished Service Award in 1976.

Other Staff Changes

New Assistant Director

Retirements

General Government Division

Assistant Regional Managers

Johnny C. Finch

Atlanta

James E. Ballou

New Senior Attorney

Seattle.

Robert L. Rissler

Burdell O. Buerger

Reassignments

Assistant Regional Manager Norfolk

Joe B. Stevens



Office of the Comptroller General

The Comptroller General, *Elmer B. Staats*, addressed the following groups:

American University/Mitre Corporation conference on the management of Federal research and development on "Evaluating Federal R&D Programs," Washington, D.C., June 7.

Senior seminar in foreign policy, Foreign Service Institute, Department of State, on "Functions of the General Accounting Office," Washington, D.C., June 14.

The Institute of Internal Auditors' 36th international conference on "The Increasing Importance of Internal Auditors in Today's World," Hollywood, Fla., June 20.

Association of Government Accountants' annual national symposium plenary session on "Responsibility, Accountability, and Disclosure," Washington, D.C., June 27.

Third public affairs seminar for mid-level Federal executives, National Institute of Public Affairs, on "Role and Importance of the Career Federal Servant," Washington, D.C., Sept. 7 and 8.

The Comptroller General published an article entitled "The Bicentennial Conference on the United States Constitution, The Shaping of Public Policy—Issues and Questions for Discussion,—" THE ANNALS of the American Academy of Political and Social Science, Vol. 432, July 1977.

E.H. Morse, Jr., Assistant Comptroller General, addressed the plenary session on GAO audit standards at the 26th annual national symposium of the Association of Government Accountants June 27. His subject was "Where Government Auditors Should Be Headed."

At the symposium he received his fourth AGA author's award for his article entitled "Operational or Performance Auditing of Government Activities," published in the Fall 1976 issue of The Government Accountants Journal.

Mr. Morse attended the General Assembly meeting of the Organization of American States in St. Georges, Grenada. As chairman of the Board of External Auditors of OAS, he presented the Board's first annual report covering the 1976–77 biennium.

Mr. Morse was recently appointed a member of the national advisory forum of the National Council of Beta Alpha Psi.

Mr. Morse was also appointed a member of the long range planning board of the Association of Government Accountants.

Office of the General Counsel

Paul G. Dembling, general counsel:

Spoke on "GAO and Federal Government ADP Procurement" before the American Institute of Industrial Engineers, June 8.

Addressed the Brookings conference for business executives on "Functions of the General Accounting Office," June 27.

Participated in the American Bar Association annual convention, Aug. 6-10 in Chicago.

Paul Shnitzer, associate general counsel:

Participated in the Southern Methodist University's course on government contract administration, June 7 in Dallas.

Addressed the government contract claims course on "Presenting the Claim to the Comptroller General," Aug. 3-5, Costa Mesa, Calif.

Spoke before the American Bar Association annual convention on "Shaker or Mover—A GAO Perspective," Aug. 6-10 in Chicago.

Seymour Efros, assistant general counsel, spoke before the De-

fense advanced procurement management course on "Problems in Formal Advertising," Aug. 4 in Columbus, Ohio.

Johnnie E. Lupton. attorneyadviser, attended and participated in a conference on Federal labor-management relations, sponsored by the New York region, Labor-Management Services Administration, U.S. Department of Labor, June 20-23 in Boston.

Office of Congressional Relations

On July 15, Martin J. Fitzgerald, director, spoke before the Civil Service Commission's executive workshop, on the management of a legislative liaison office.

M. Thomas Hagenstad, legislative adviser, spoke on the role of the General Accounting Office before sessions sponsored by the Civil Service Commission: the institute on the legislative function on June 30 and the legislative operations roundtable for executives on Aug. 2. He was also a member of a panel of department and agency paperwork reduction representatives and spoke on GAO paperwork reduction activities on July 7.

Peter J. McGough, legislative adviser, spoke before the Civil Service Commission's seminar for executives on legislative operations, on the functions of the General Accounting Office on July 22.

T. Vincent Griffith, legislative

attorney, also spoke on the role of the General Accounting Office before the Civil Service Commission's congressional operations seminar for managers on Aug. 4.

On June 21, Samuel W. Bowlin, legislative adviser, spoke before the Civil Service Commission's legislative roundtable, on the role of GAO in congressional oversight.

Office of Policy

Donald J. Horan, director, spoke on GAO's role in evaluating program performance at the Civil Service Commission's executive center, Kings Point, N.Y., Sept. 22.

Jennie Stathis, policy adviser:

Was elected public relations chairman of the District of Columbia chapter of the American Society of Women Accountants for the 1977-78 chapter year.

Participated in the joint annual meeting of the American Woman's Society of CPAs and the American Society of Women Accountants, Sept. 28-Oct. 1, Minneapolis, Minn.

Community And Economic Development Division

Henry Eschwege, director, addressed the Brookings Institute seminar on Federal Government operations for regional administrators of the Department of Housing and Urban Development, Aug. 9.

Don Cluff, assistant director, spoke before the transportation table at the National Press Club on "The Federal Motor Carrier Safety Program: Not Yet Achieving What the Congress Wanted," June 24. He was accompanied by Janet Bonds, Gaston Gianni, and John Vialet.

Energy and Minerals Division

Monte Canfield, Jr., director, addressed the following groups:

The 1977 annual convention of the American Association of Petroleum Geologists on "GAO's Role in Energy Regulation," Washington, D.C., June 15.

The Gulf Management Institute, senior mangement program, energy and Federal policy session on "The Energy Problem: Policy Issues and Alternatives," Washington, D.C., June 21.

J. Dexter Peach, deputy director, addressed the following groups:

The Energy Resources, Conservation, and Development Commission on nuclear safeguards, Sacramento, Calif., June 14.

The 26th annual national symposium sponsored by the Association of Government Accountants, workshop on congressional impact on accountants—in and out of government, Washington, D.C., June 28.

Financial and General Management Studies Division

Donald L. Scantlebury, director, spoke on "Serving Government More Effectively" at the AGA annual symposium, Washington, D.C., June 27.

Harold L. Stugart, deputy director:

Spoke on "Functions of the General Accounting Office" for the Brookings Institution conference for business executives on Federal Government operations, held in the GAO Building on June 6.

Was appointed chairman of the Association of Government Accountant's financial management standards board for fiscal year 1978. Ronald J. Points, supervisory systems accountant, will serve as executive secretary of the board.

Richard W. Maycock, deputy director, and William C. Kennedy, supervisory systems accountant, presented on behalf of Donald L. Scantlebury, AGA National President 1976-77, the AGA Review Guide for Grantees' Financial Management Sytems to the Honorable Bert Lance, Director, Office of Management and Budget, Aug. 3, Washington, D.C.

Walter L. Anderson, associate director:

Spoke on "ADP Auditing and the GAO," at the Wharton Information Systems Program, University of Pennsylvania, June 10 in Philadelphia. Spoke on "Computer Crime in the Federal Government" in a panel discussion at the national symposium of the Association of Government Accountants, June 28, Washington, D.C.

Participated in roundtable discussion on "Data Processing Costs," "Communications Networks," and "Distributed Computing" at the summer meeting of the management systems council of the American Management Association, July 14-15, Hamilton, N.Y.

Kenneth A. Pollock, assistant director:

Spoke on "What the Government is Doing About Auditing Computers" at SHARE 49 (an IBM user association meeting), Aug. 23, Washington, D.C.

Has been named to the program task force for the AIC-PA's 1978 conference on computers and information systems.

George P. Sotos, assistant director:

Spoke on "Improving Computer System Productivity" at the national conference on computer system productivity sponsored by the Society for Management Information Systems, June 29, Washington, D.C.

Spoke on "ADP Operations Audits" at the Energy Research and Development Administration conference of senior data processing officers, July 11, Washington, D.C.

Spoke on "Internal Controls for ADP Systems" at the SHARE 49 conference, Aug. 24, Washington, D.C.

John F. Simonette, assistant director, moderated a panel entitled "Using Financial Information to Control Resources and Make Decisions" at the AGA symposium held in Washington, D.C., June 27-29.

Ernest H. Davenport, assistant director, participated in a symposium on career opportunities and problems sponsored by the University of the District of Columbia on Mar. 29.

Robert J. Ryan, assistant director, and J. Russell Wiltshire, supervisory management auditor, spoke on "The Coordination of Audits of Federally Assisted Programs in Federal, State, and Local Governments," at a Federal Highway Administration workshop/conference in Harrisburg, Pa., on June 23. Mr. Ryan also conducted a seminar on "GAO Audit Standards," for the Interagency Auditor Training Center, in Seattle, Wash., on Aug. 25-26.

W. A. Broadus, assistant director, addressed the Academy in Public Service 1977 faculty development workshop, conducted by Georgetown University at GAO headquarters, Washington, D.C., on Aug. 9. He discussed the different things GAO is doing to facilitate cooperation between Federal, State, and local auditors.

Earl M. Wysong, Jr., assistant director:

Conducted a workshop session on "Management Concerns in ADP Today" at the Annual Symposium for the Association of Government Accountants, June 27-29, Washington, D.C.

Addressed the eighth National Association for Systems Management convention for Venezuela on "Automated Systems: The Auditor's Role," July 13-16 in Caracas.

Was appointed to chair the national ADP committee of the Association of Government Accountants for another term. He was appointed also to serve another term as a member of the national education board of the Association of Government Accountants.

Joseph J. Donlon, assistant director, participated in a workshop entitled "Education for the Government Accountant—What It Is and What It Should Be" at the Association of Government Accountants national symposium in Washington, D.C., June 28.

Frank Gentile, assistant director, and Louis Fink, statistician, conducted a 3-day statistical sampling workshop for Marine Corps auditors at their finance center in Kansas City, July 11–14. Mr. Gentile also was guest lecturer for participants in a course on internal auditing at the American University on July 18. His topic was "The Use of Statistical Sampling in the Internal Audit."

Michael F. Morris, management consultant:

Participated in a conference on system planning and performance evaluation, sponsored by University Sciences Forum and Computerworld, June 19–22 in New York.

Gave a presentation on computer performance evaluation to the AGA workshop seminar on advanced ADP application, Aug. 18 in Washington, D.C.

Charles F. Davidson, computer systems analyst, presented a paper on computer performance evaluation and software physics before the annual conference of the Institute for Software Engineering, Aug. 9 in San Francisco.

John Lainhart, supervisory auditor, and Barry Snyder, management auditor, gave a presentation on "Integrated Test Facility Techniques" to the Security Pacific National Bank ADP audit department, Los Angeles, Calif., on June 16.

Theodore F. Gonter, supervisory computer systems analyst, chaired two sessions, "EDP Auditing in Government" and "Systems Auditability and Control Report (SAC)," at the IBM user group meeting, SHARE 49, in Washington, D.C., on Aug. 23 and 24.

George L. Egan, Jr., assistant director, participated in a workshop entitled "Internal Auditing—A Progress Report" at the AGA national symposium on June 27.

Robert F. Raspen, supervisory auditor, participated in a work-

shop entitled "The CPA's Role in More Effective Government Funding and Contract Administration" at the AGA annual symposium on June 28.

Richard E. Nygaard, audit manager:

Moderated a workshop at the 1977 national symposium on "AGA Chapter Management."

Was appointed a member of the national AGA symposium committee and director of workshops for the 1978 national symposium.

Edwin J. Soniat, supervisory systems accountant, addressed the seminar for advancing managers on "Management Use of Productivity Data," June 28 and Aug. 29 in Oak Ridge, Tenn.

Joseph H. Myers, management analyst, spoke on "Improving Productivity in the Public Sectors" at a joint Department of Commerce and American Institute of Industrial Engineers conference, Mar. 11, Raleigh, N.C.

Robert A. Pewanick, assistant director, has been elected as education director, Washington chapter, Association of Government Accountants.

Gordon Filler, supervisory systems accountant, has been elected as a director of the Association of Government Accountants' Washington chapter.

William C. Kennedy, supervisory systems accountant, accepted an Association of Government Accountants special presidential award presented to the task force that he chaired,

which developed a "Review Guide for Grantees' Financial Management Systems," AGA national symposium, June 29, Washington, D.C.

Powel P. Marshall, supervisory financial systems analyst, received a certificate for outstanding group accomplishment for his contribution to the AGA task force which developed the AGA "Review Guide for Grantees' Financial Management Systems," AGA national symposium, June 29, Washington, D.C.

General Government Division

William J. Anderson, deputy director, addressed a group of Federal managers at Oak Ridge Federal Executive Center on GAO's reviews of program management on Aug. 11.

John M. Ols, assistant director, discussed the role of GAO in auditing Federal programs, with a group of college students from the Washington Center for Learning Alternatives, Aug. 10.

Bill Thurman, assistant director, chaired a workshop on "Status of Attempts to Improve Intergovernmental Systems" at the 26th annual symposium of the Association of Government Accountants in Washington, D.C. on June 29.

Human Resources Division

Gregory J. Ahart, director, addressed the seminar on adminis-

tration of public policy, conducted by the U.S. Civil Service Commission Executive Seminar Center, Kings Point, N.Y., on Aug. 24. His subject: "Policy Analysis and Evaluation."

Carl R. Fenstermaker, assistant director, and William A. Schechterly, supervisory auditor, participated in a panel discussion on the GAO report, "Progress and Problems in Treating Alcohol Abusers," at a conference of State funding coordinators sponsored by the National Association of State Mental Health Program Directors on May 17.

John F. Belz, management auditor, and Thomas P. Hubbs, auditor, Philadelphia regional office, outlined plans for GAO's survey of the Department of Labor's 5-year employment security automation plan, at a meeting of Labor regional coordinators, Aug. 3 and 4 in Washington, D.C.

Logistics and Communications Division

Don Eirich, associate director, participated in a panel on "Completing the Procurement Process," discussing "What GAO Looks For" in audits of computer procurements at the Federal ADP procurement conference sponsored by the American Institute of Industrial Engineers, in Washington, D.C., June 8.

B.W. Sewell, assistant director, addressed the 30th annual conference of the National Association of State Agencies for Surplus Property in Salt Lake City, Utah,

July 18–22. He spoke on GAO and the Federal surplus property donation program.

Jim Murphy, audit manager, participated in the forecasting and planning work group at the 39th Military Operations Research Society Symposium, in Annapolis, June 28-30.

Bob McKenzie, supervisory auditor, was chairman of a panel on audit and evaluation of computer security at the 16th annual technical symposium sponsored by the Institute for Computer Sciences and Technology, the National Bureau of Standards, and the Washington chapter of the Association for Computer Machinery in Washington, D.C., June 2.

Procurement and Systems Acquisition Division

Richard W. Gutmann, director, was a panelist on "Current Procurement Problems" at the National Contract Management Association's 16th annual educational symposium in Los Angeles, Calif., July 21.

John F. Flynn, deputy director, participated in a seminar on "The Renegotiation Revolution" sponsored by the New York Law Journal in Washington, D.C., on June 16.

Morton A. Myers, deputy director:

Attended the Federal Executive Institute's senior executive education program in Charlottesville, Va., May 16 through July 1.

Hosted an orientation seminar for 18 congressional fellows sponsored by the American Association for the Advancement of Science on September 14. The primary emphasis of this seminar was GAO's science and technology role and its relations with the Congress.

Dr. John G. Barmby, assistant director, Osmund T. Fundingsland, assistant director, and Joe W. Johnson, supervisory auditor, participated in a panel discussion on "The GAO Function in R&D" at the Civil Service Commission's Executive Institute on the Management of Scientific and Engineering Organizations, Washington, D.C., on July 22.

Mr. Fundingsland also participated as a panelist on "R&D, Technological Innovation, and the Government" at the 37th annual meeting of the Academy of Management in Kissimmee, Fla., Aug. 15.

Donald E. Day, assistant director, returned in June after spending a 10-month period under GAO sponsorship at the national War College.

R. Stanley LaVallee, assistant director, participated in a panel discussion on the computer mechanization of zero-base budgeting at the Federal ADP User's Seminar, Washington, D.C., on Aug. 23.

Leslie L. Megyeri, audit manager, coauthored an article, "The Role of the General Accounting

Office in Detecting and Reporting Kickbacks," appearing in the winter 1976-77 issue of the National Contract Management Journal.

Dr. Manohar Singh, supervisory general engineer, was elected in August 1977 to be a fellow of the American Society of Civil Engineers.

Nancy C. St. Clair, science policy assistant, is serving as bulletin committee chairwoman and is a member of the ways and means committee of the Silver Spring, Md., chapter of the American Business Women's Association.

Program Analysis Division

Harry S. Havens, director, spoke on "The History and Functions of GAO and the Development of the Program Evaluation Functions," at the Brookings Institution, Washington, D.C., June 20.

Dean K. Crowther, deputy director, addressed the New York City Council on June 6, with regard to setting up a Legislative Budget Review Office to report to the city council. The new office is to have about 100 professionals and will perform a combination of functions similar to those GAO and CBO perform.

Kenneth W. Hunter, associate director:

Participated on a panel on "Planning and Economic Evaluation of Information Systems" at the joint national meeting of the Institute of

Management Sciences and the Operations Research Society of America, in San Francisco, May 10.

Spoke on "Zero-Base Budgeting and Congressional Oversight" at the American Institute of Industrial Engineers' conference on zero-base budgeting, in Washington, D.C., June 29.

Dennis Dugan, associate director, spoke on "Energy Conservation: Are the Secondary Economic Impacts of Primary Importance?" before the Conference on Conservation of Energy in the Distribution Cycle, in Washington, D.C., May 17.

Wallace M. Cohen, assistant director, chaired a panel discussion on "Program Evaluation—The Federal Perspective" at the joint meeting of the Operations Research Society of America and the Institute of Management Science in Philadelphia, Pa., during April 1977.

Joseph F. Delfico, assistant director, participated in a panel discussion on sunset legislation on July 26, sponsored by the Congressional Research Service for senior congressional staff. Mr. Delfico spoke on program evaluation and the oversight process. He also headed a workshop with Michael Kurgan, management analyst, on "Zero-base Budgeting—A Progress Report" at the 1977 symposium of the Association of Government Accountants in Washington, D.C., June 27–29.

Harvey J. Finberg, supervisory operations research analyst,

spoke on January 9 at the 35th annual conference of the Maryland/Delaware/Virginia/District of Columbia Hospital Association on "Why a Data Base?"

Franklin Frazier, management analyst, was elected vice chairman of the Federal Information Requirements Management Council for the 1977-78 year.

James K. Kardokus, assistant director, information requirements group, was recognized for his contributions to the Federal Information Requirements Management Council at a meeting held on June 14. Mr. Kardokus served as chairman of the council for the past 2 years and vice chairman a year earlier.

Field Operations Division

Chicago

Ken Boehne, supervisory auditor, spoke at a career opportunities day sponsored by the Consortium for Public Service Careers, at Northwestern University, Evanston, Ill., Apr. 18. Schools represented at the meeting included Northwestern University, Governors State College, Indiana State University, Indiana University, Northern Illinois University, Roosevelt University, University of Chicago, University of Illinois, and University of Wisconsin. Mr. Boehne discussed "GAO Activities and Employment Opportunities."

Dallas

Francis M. Doyal, audit man-

ager, participated in a seminar sponsored by the American Association of Spanish-Speaking Certified Public Accountants in Harlingen, Tex., Apr. 21. The subject of the seminar was "The Role of the CPA in Federally-Assisted Program Audits, Past—Present—Future."

David W. Irwin, supervisory auditor, served as a panelist for a session on "Future Trends in Auditing EDP Systems in the Federal Government" sponsored by the national conference of the EDP Auditors Association in Houston, Tex., June 27.

Denver

Eva S. Copeland, supervisory auditor, was elected vice president of the Denver chapter of the Association of Government Accountants, May 12.

Arley R. Whitsell, assistant regional manager, was appointed chairman of the education committee of the Denver chapter of the Association of Government Accountants, May 12.

Los Angeles

Joseph A. Sokalski, auditor, spoke on "The Functions of GAO" to an advanced auditing class at California State Polytechnic University, Pomona; to the Accounting Association at Claremont College in February; and to the Bell Gardens-Commerce Rotary Club, May 26.

Richard R. Griswold, auditor, participated in a panel discussion on "Children's Group Homes—

Industry or Service?" at the Child Welfare League of America's Southern Pacific conference, Pasadena, May 11.

Frederick Gallegos, management auditor, has been notified by Science Research Associates that his case study "Medco, Inc.," coauthored with Dr. Peter P. Dawson, has been translated into German with the title "EDV-FALLSTUDIE-MEDGRO GMBH." Mr. Gallegos participated in a faculty curriculum planning conference at California State Polytechnic University, Pomona, Apr. 23.

New York

Joseph Mladinich, auditor, represented GAO at a Federal

career day at Marist College, Poughkeepsie, Mar. 29.

Norman Krieger and Marylee Perillo, auditors, represented GAO at a Federal career day at Brooklyn College, Brooklyn, Apr. 18.

Austin Acocella, auditor, participated in a career day at Manhattan College, Riverdale, Apr. 20.

Seattle

Marvin Case, supervisory management auditor, presented "The Elements of a Management Issue" at the seminar on GAO audit standards sponsored by the Interagency Auditor Training Center, Seattle, Aug. 26.



The following new professional staff members reported for work during the period May 16, 1977 through August 15, 1977.

Claims Division	Beasley, George M., Jr.
	Cassorla, Peris
	Delaney, Hugh
	Glover, Marsha M.
	Graham, Patricia D.
	Johnson, Linda
	Kilian, Charles G.
	Leitner Peter M.

Sheeran, Marte J. Soon, Alan R. Turner, Fielding

Navran, Kenneth L.

Dunkelberger, Janet Heintz, Steven J.

Michelotti, Kopp F. Stachnik, Walter J.

Logistics and Communications Division

Management Services

Energy and Minerals Division

General Government

Division

Wheeler, Charles Van-Lonkhuyzen, J.

Bartlett, Richard H.

Drake, Norma K.

Baily, Kay H.

Genison-Perilman, Caren D. Pratt Institute Heyer, G. John

Kamensky, John M. Rachlis, Mitchell B.

Brooklyn College Legislative Hall University of Illinois University of Chicago American University Pennsylvania State University

Washington University University of Maryland Law School

University of Florida

University of Washington University of Pennsylvania Emory University

University of Pittsburgh University of Pittsburgh

Georgetown University University of Wisconsin

University of Baltimore University of Maryland

Harrisburg, Pennsylvania Small Business

Administration

University of Maryland

University of California

University of Texas University of Maryland

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Rowe, Nancy A. Texas Christian University

Detroit Rivera, Roberto Texas A&I University

Houston Wilt, Donald E. West Virginia University

San Francisco Baker, Karen Purdue University

Annual Awards for Articles Published in The GAO Review

Cash awards are available each year for the best articles written by GAO staff members and published originally in *The GAO Review*. Each award is known as the Award for the Best Article Published in The GAO Review and is presented during the GAO awards program held annually in October in Washington.

One award of \$500 is available to contributing staff members 35 years of age or under at the date of publication. Another award of \$500 is available to staff members over 35 years of age at that date.

Staff members through grade GS-15 at the time of publication are

eligible for these awards.

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.

Statement of Editorial Policies

- 1. This publication is prepared primarily for use by the professional staff members of the General Accounting Office.
- Except where otherwise indicated, the articles and other submissions generally express the views of the authors, and they do not necessarily reflect an official position of the General Accounting Office.
- 3. Articles, technical memorandums, and other information may be submitted for publication by any staff member. Submission should be made through liaison staff members who are responsible for representing their offices in obtaining and screening contributions to this publication.
- 4. Articles submitted for publication should be typed (double-spaced) and generally not exceed 14 pages. The subject matter of articles appropriate for publication is not restricted but should be determined on the basis of presumed interest to GAO professional staff members. Articles may be submitted on subjects that are highly technical in nature or on subjects of a more general nature.

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Denver

John T. Lacy

Detroit

Milo L. Wietstock

Kansas City

Arnett E. Burrow

Los Angeles

Eugene T. Cooper, Jr.

New York

Ngaire Cuneo

Norfolk

Lindsay B. Harwood

Philadelphia

Maurice Sady

San Francisco

John C. Karmendy

Seattle

Alvin S. Finegold

Washington

Val J. Bielecki

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