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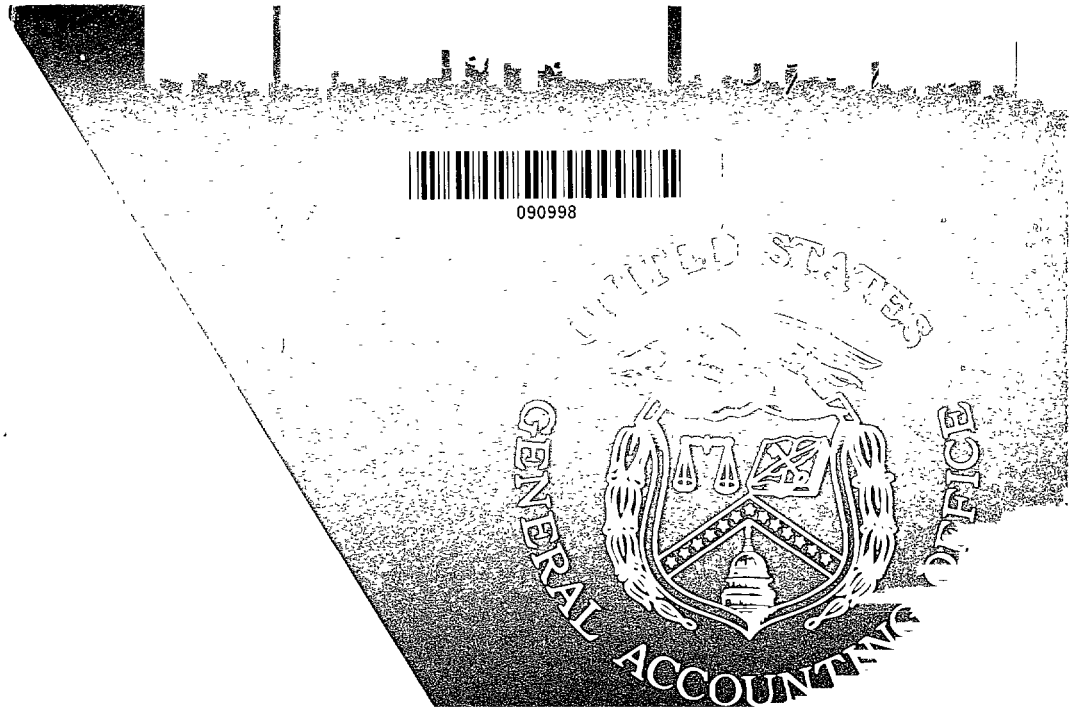

THE GAO REVIEW

SUMMER 1972

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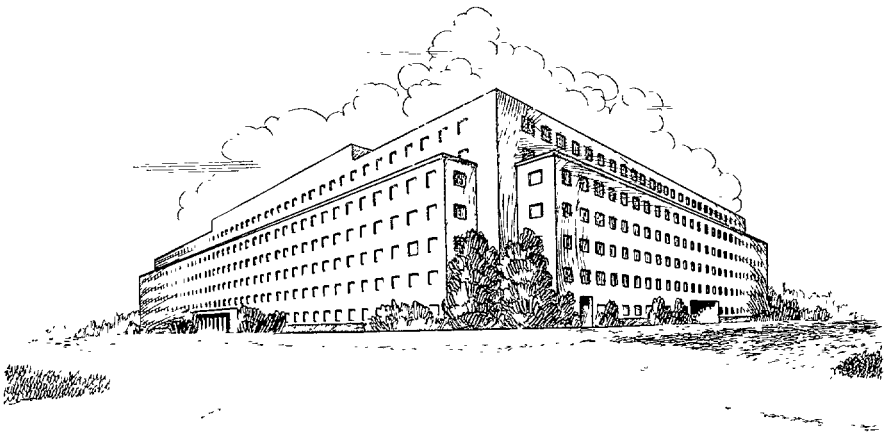

The United States General Accounting Office, established in 1921, is an independent, nonpolitical, nonpartisan audit organization in the legislative branch of the Federal Government. Directed by the Comptroller General of the United States, it is responsible solely to the Congress and serves a key role in the Federal system of checks and balances. One of its major functions is to review the performance of management and recommend improvements in the operation of the various departments and agencies of the executive branch.

THE GAO REVIEW

SUMMER 1972

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Published quarterly for the professional staffs of the
U.S. General Accounting Office

THOMAS D. MORRIS
ASSISTANT COMPTROLLER GENERAL

A Dilemma for Federalism

The following remarks were made at a luncheon on March 30, 1972, in Washington, D.C., honoring the 13 Federal Fellows (five from GAO) and their wives on completion of their 12-week program of assignments to State and local governments. This program, known as the Intergovernmental Affairs Fellowship Program, was begun in 1969 at the urging of the Comptroller General to enable Federal employees to become better acquainted with State and local governmental operations and problems.

Since you have just completed an educational and work experience in eight States, three cities, and two counties, I want to share with you my thoughts about what I see as a major dilemma for federalism in this decade. Untangling this Gordian knot promises to be extraordinarily difficult since forces with which you are now intimately familiar continue to pull their strands in opposing directions, making the knot tighter still. Given our political system, there is no one who can cut the knot as Alexander the Great did. We cannot devise and use instantly a drastic way out of our current dilemma, a dilemma made more difficult because it is also a paradox.

On the one hand we find State and local governments seeking to ease their tremendous financial burdens through the Administration's proposal for general revenue sharing. On the other hand, we see most Federal program administrators and many Members of the Congress demanding better evaluation and greater accountability in existing grant-in-aid programs.

The modern history of grant-in-aid programs in this country began in the 1930's. Since that time, the grant of national funds to State and local governments for a specific purpose, with provision for some degree of national administrative supervision, has become perhaps the most prominent feature of the complex relationships between the levels of government in the American Federal system.

Because these grants proliferated at a tremendously rapid rate, we now find ourselves in an era of "functional" government which seems to have peaked in the mid-1960's. There are now between 400 and 500 continuing categorical grant programs, depending on the definition used. Attempts even to catalog and provide brief descriptions of the programs result in massive documents, as those of

us in the General Accounting Office are excruciatingly aware. The fiscal reasons for the growth of grant programs are perhaps obvious to all of you. Gross National Product is approximately four times higher today than it was 25 years ago, Federal spending is about five times greater, and Federal grants to States and localities are approximately 30 times greater today than they were a quarter century ago.

Partly as a result of this fantastic growth and its many ramifications, good as well as not-so-good, we find ourselves today entering a new period, a period in which greater and improved program evaluation is needed and public retrospection demands that it be done.

The emphasis no longer is on building an impressive record of program initiatives or on projecting the cost-effectiveness of prospective Federal policies. Now the emphasis is on looking to the past to measure what has been accomplished by means of the programs already undertaken.

The forces which have helped to usher in this period are not unknown to you. Several weeks ago the President sent to the Congress a budget calling for expenditure in 1973 of more than $220 billion. Twelve years ago the budget was $98 billion.

The 1973 budget includes a deficit forecast of $25 billion. The President requested the Congress this year to raise the national debt ceiling by $50 billion to a high of $480 billion.

Couple these figures to the state of the national economy. Add on an erosion of public confidence in the efficacy of many public programs, and you come up with a corresponding decline in the willingness of policymakers in the executive and legislative branches to launch new and innovative programs.

This trend began, of course, before the Nixon administration took office. In 1967 and 1968 the Congress amended some of the basic Great Society legislation to provide for program evaluation. And Congress has increasingly called on the General Accounting Office to evaluate the efficiency and effectiveness of Federal agencies and their programs. In fiscal year 1971, for example, GAO in response to congressional requests and as a result of self-initiated work issued a total of 975 formal audit reports. These related to almost every aspect of Federal Government operations from the health and safety of citizens, to problems in procurement, to manpower training, national defense, international activities, and general government.

The responsibility of the auditor in GAO, and elsewhere, embraces three aspects of accountability.

—*Fiscal accountability*, which includes fiscal integrity, disclosure, and compliance with applicable laws and regulations;

—*Managerial accountability*, concerned with the efficient and economical use of personnel and other resources; and, very importantly,

—*Program accountability*, designed to assess whether the programs are achieving their intended

objectives and that the best program options have been selected to achieve these objectives from the standpoint of total cost and outputs.

What does program evaluation involve? According to the Urban Institute it

> * * * is research, the application of the scientific method to experience with public programs to learn what happens as a result of program activities. Evaluation includes the definition of program objectives, the assessment of what difference public programs actually make, and the projection of what reasonably could be expected if the programs were continued or expanded. The purpose of evaluation is to provide objective information to program managers and policy makers on the costs and effects of national programs and local projects, thereby assisting in effective management and efficient allocation of limited resources.

To use an example, program evaluation should tell administrators whether a program like the Neighborhood Youth Corps has met its objective of keeping potential dropouts in school. It should also provide them with a basis for predicting what the results of continuing or extending the program are likely to be.

In 1969, Robert Finch, then Secretary of HEW, told a House committee why evaluation is needed.

> Evaluation is a necessary foundation for effective implementation and judicious modification of our existing programs. At this point, evaluation is probably more important than the addition of new laws to an already extensive list of * * * statutes * * *. Evaluation will provide the information we require to strengthen weak programs, fully support effective programs, and develop those which simply are not fulfilling the objectives intended by Congress when the programs were originally enacted.

There are additional reasons why evaluation is important.

—The past decade has made the Nation aware of the need to establish priorities among domestic problems and to plan their solutions carefully.

—To meet most of our major needs in such areas as education, housing, and health will require massive commitments of money and manpower over long periods of time.

—The increased competition for limited resources makes it imperative to examine critically the social and economic benefits associated with what we are doing and what we plan to do.

—The consequences of any particular Federal program subtly and indirectly affect much more of society than the intended recipients. Consequently, the impact of Federal programs is being seriously questioned by the larger society. The whole thrust of the movement to protect and reclaim our natural environment is but one dramatic example.

Any meaningful evaluation process, then, must address two primary questions. First, what are the provisions for management accountability, i.e., efficiency in utilizing resources? And second, what are the provisions for program accountability, i.e., effectiveness in accomplishing objectives?

So much for evaluation and accountability, one loop of federalism's Gordian knot. What about the other,

the administration's general revenue sharing proposal?

The President's proposal would give Federal revenues to governors and mayors and their legislative bodies with no restrictions on how these funds may be used and no accountability to the Federal Government on how they are spent. The proposal assumes that accountability will be exercised at the polls when the people vote for their State and local officials.

Many of us feel that this procedure will relax the discipline on taxing authorities to account for the way tax revenues are spent. Moreover, if Federal audits are used to bring some semblance of accountability into the system, the problem would still be far from solved. First, the concept of general revenue sharing is that Federal payments would be commingled with State funds and subsequently with local funds. This would mean that Federal audits would have to include the total of Federal, State and local funds, truly a gargantuan task. Second, such action would represent a Federal intrusion into State and local affairs, which would be objectionable to many at the Federal, State, and local levels.

Last summer a small group of eminent scholars and government administrators representing the Federal, State, and local levels met for 3 days in Hartford, Conn., to ponder "Problems and Response in the Federalism Crisis."

At the conclusion of their intensive discussion and debate most of the participants could be counted in one of two groups: those who approved general revenue sharing but favored major changes in the administration bill or those who would abandon general revenue sharing altogether and seek to provide additional Federal assistance to States and local governments through other means.

The Hartford Seminar generally agreed that the current plan does not deal adequately with "fiscal mismatch," the contention that States and local governments face far greater difficulty than does the Federal Government in raising revenues to meet the demands placed upon them. To some degree a mismatch does exist and so the seminar was unanimous that some kind of Federal action was demanded. But insofar as local fiscal problems arise because inappropriate functions —welfare and education—are made the financial responsibility of local government, the solution may not be to pass funds down to the localities to help them support those functions, but rather to reallocate upward the basic financial responsibility. The seminar was unanimous that the Federal Government should assume administrative responsibility for the public assistance program that is now administered by the States.

To many of those in the Hartford seminar the failure to seize upon the opportunity to bring about State tax reform was a major weakness in the revenue sharing program. The introduction of a broad new form of financial assistance into the intergovernmental system presents a chance to influence State and local tax structures that may never appear again.

Tax reform is only one aspect of governmental reform at the State and local levels. Other areas needing re-

form which were cited include the vitality of the States, their structure, and their role; and the adequacy of our whole structure of units of local government to cope with the increasing problems of a complex urban way of life. The Hartford participants felt that as a condition of its grants, the Federal Government is dutybound to make certain that the recipient administrative organizations attain at least a minimum level of competence. Yet general revenue sharing ignores that necessity and, in the view of many, would actually reinforce institutional weaknesses.

The seminar agreed with the criticisms of categorical grants which are familiar to all of us. There are too many categories. They are too narrow. They are too rigid. Many have lost their relevance. The conditions imposed by administrators are frequently too detailed and too arbitrary. They result in red tape, misunderstanding, delay, tension, and conflict between administrators at different governmental levels. They enhance the authority of program specialists at the expense of governors and mayors, and lend themselves to influence and control by special interest groups.

Yet with all the acknowledged deficiencies of the existing categorical system, it has succeeded in concentrating the national energies on certain priority problems—the plight of the poor and the black, the needs of the cities, environmental pollution, and so on. Moreover, many of its deficiencies can be overcome. We in the General Accounting Office strongly feel in both word and deed that if the categorical grant system is to be improved this can only come about through greater intergovernmental cooperation. GAO's commitment to this purpose is reflected in its support of the Intergovernmental Affairs Fellowship Program (IGAFP).

A small agency by Federal standards, our total staff numbers less than 5,000, some 3,000 of whom are professionals. Yet in each year of the IGAFP's short life, we have sent five of our best staff members to participate in the program because we believe in it. If I'm not mistaken, of all the executive branch agencies, only HUD has matched GAO's level of participation.

As you concluded your assignments with State and local governments, I'm sure you parted with a deeper awareness and a more sophisticated understanding of federalism. Through your experiences you know more fully that the separation of governmental functions between the Nation, the States, and the localities is no longer a fundamental key of the Federal system. With relatively few exceptions, any significant function of government is now likely to involve some input by all three major levels of government.

The division of labor and activities between and among the various units is in a constant state of flux and change. In many functional areas the interaction relationships are so complex that only specialists enmeshed in that area have a real grasp of the allocation of responsibility and decision-making power. Some changes in these divisions of responsibility are always

being made, and large and important changes are frequently debated, especially in times of strain and tension. We are now in such a time.

EDITOR'S NOTE:

The five GAO participants in the current program were:

Name	*GAO Division*	*Assignment*
Robert E. Allen	Resources and Economic Development Division	West Virginia
Arthur D. Gross	Cincinnati Regional Office	Jackson, Miss.
Roy J. Kirk	Resources and Economic Development Division	Richmond, Va.
Stanley J. Stancukas	Chicago Regional Office	Fulton County, Ga.
Stephen J. Varholy	General Government Division	Pennsylvania

National Performance

* * * there is no nation on this earth that has done as well in as short a time for as many people in as many ways as has this democracy of the United States of America.

John B. Connally

Secretary of the Treasury

Speaking before the American Society of Newspaper Editors,
Washington, D.C., April 19, 1972.

ROBERT STOYANOFF AND BILLY C. BOWLES 721582

Productivity Measurement—The Work Sampling Way

This article discusses the first GAO assessment of the reasonableness of plant labor costs using the work sampling technique.

In June 1970 the President created the National Commission on Productivity to insure a national concern with the importance to the Nation's economic strength of continued productivity improvement. This concern stems from the fact that productivity in this country, although on the upswing, is nevertheless lagging behind that of other industrialized countries.

In the face of vast expenditures by Government in support of various programs, it is important that the taxpayers' dollars be expended prudently. The national budget's largest expenditures are earmarked for defense. Congress is constantly seeking new ways to reduce these expenses. The Department of Defense is consequently much concerned with improvement of contractors' performance and is currently engaged in comprehensive should-cost reviews. The General Accounting Office is also involved in this area and performs industrial management reviews of activities at Government facilities and defense contractors' plants to appraise their productive efforts and capability as well as the reasonableness of labor expenditures.

Contract pricing is an important effort which is particularly perplexing due to difficulty in determining the reasonableness of costs, especially where the end item or system is complex and taxes the state-of-the-art. The importance of realistic measurements of productivity on which to base manpower costs—usually the biggest factor in contracts—cannot be overemphasized. A fundamental problem of productivity measurement is the difficulty

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of obtaining directly qualitative measures of output and input, consistent in scope and coverage, and therefore, the inability to accurately estimate cost and establish reasonable prices. Hence, substitute measures or approximations must be used. In other words, productivity must be measured in some manner which will assure its proper evaluation and foster improvements particularly in those areas which appear to be deficient and carry a large proportion of the overall cost.

To appreciate the importance of productivity let us examine the American standard of living. Today, approximately two consumers are supported by one worker. As the average age of the population increases, the working population decreases. Therefore, we may expect that one worker will support three or more consumers in the near future. It follows then that the demand for increased productivity will continue to rise, and public concern and management controls surrounding it will intensify. In the end there will be two choices. Either we must increase productivity in some manner and learn to maintain it at the proper level, or conversely, pay higher prices in support of inefficiency.

What Is Productivity?

The importance of clarifying the meaning of the term "productivity" is stressed here for the purpose of rectifying common misconceptions prior to advancing our thesis. Basically, the most common expression deals with output per man-hour. Productivity in this sense is a rough measure of effectiveness with which we use our most important productive resource—labor.

We use the term "productivity" in a narrower sense in this article since there are many other implications and issues which are beyond the scope of our work. Therefore, it may suffice to say we are concerned only with apparent labor effort. For the purpose of the study described in this paper, manpower was cataloged only in terms of the type of activity being performed, and no qualitative assessments were made in terms of efficiency or effectiveness. We were actually concerned with overall plant labor effort or activity rather than an individual's performance.

The reader is cautioned not to confuse productivity with efficiency or effectiveness. Efficiency is a term which expresses—in percentage—the ratio of useful output to the total input. Effectiveness, on the other hand, simply implies proven capability to produce the required effect or end result. Productivity, efficiency, and effectiveness are obviously interrelated, but they must be studied individually and oftentimes from differing perspectives. For example, the economist's basic concern is productivity in the broadest sense as it relates to the Gross National Product, whereas, the industrial engineer's concern is productivity as it relates to maximizing output in relation to input in specific areas.

The search for a means of measuring and defining productivity is as old as mankind, and man's first efforts are lost in antiquity. Many techniques and units of measure are constantly being developed and refined as the demand

for precision and pressure for higher output increases. It is only natural that the better we can measure productivity the more we can hope to improve it by simply being able to isolate areas for improvement. This aspect, therefore, is becoming of great concern to GAO, and we are beginning to develop a capability of dealing with problems associated with manpower utilization through the application of exotic techniques tested and proven over many years by business and industry. As Comptroller General *Elmer B. Staats* stated in his article "Potentials for Management Improvement" in the Winter 1971 issue of *The GAO Review*, "Much of our recent work has indicated to us that managers everywhere are developing new or increased awareness of the importance of human effort as a critical resource."

GAO's New Approach

We are currently using work sampling—a technique by which labor content, output, or idleness may be evaluated—to augment our audits of contractors' plants and Department of Defense maintenance depots. In other words, a new interrelationship has been developed by a merging of audit and engineering principles and techniques. This concept was outlined by *Gerard J. Marks* in his article "Utilizing Engineering Principles in Auditing" in the Spring 1972 issue of *The GAO Review*. Specifically, he proposed an interface of industrial engineering principles with traditional audit practices.

In connection with this unique concept, this article illustrates an actual example of the application of work sampling in an industrial environment relative to manpower utilization. Essentially, this technique was used to develop a work distribution profile of labor at a defense contractor's aircraft plant, i.e., how labor's time is utilized during the average work day. Therefore, work sampling must be placed in the proper context in order that the reader may appreciate its potential and limitations.

What Is Work Sampling?

Work sampling is a technique based upon the laws of probability which can be used to obtain a profile of labor activities for almost any type of operation. In other words, it is a means of observing, recording, analyzing, and reporting the activity of all personnel within a designated area. Work sampling is a relatively inexpensive way to determine, with reasonable accuracy, an organization's productivity and to pinpoint the problem areas requiring management attention whether it is reorganizing the work flow, balancing the workload with the work force, or improving supervision.

Work sampling must be based on generally accepted statistical concepts and industrial engineering principles tailored to fit the specific plant conditions existing at the time of the study. The statistical concepts are based on the mathematical theory of probability which is that a small number of chance occurrences tend to follow the same

distribution pattern as that in the entire population of occurrences. The study must be structured so it will yield the type of information required in our audits and not inadvertently penalize the contractor.

In accordance with acceptable work methods and statistically reliable results, all observations must be random, unbiased, and independent. The average rather than abnormal condition must be emphasized so that projections and conclusions based on the study will be reasonable and meaningful.

The work sampling method requires less time—from one-third to one-half fewer hours—to obtain a greater sample of the work and a broader coverage of an entire group than other engineering methods. Sample data also can be tested statistically to determine whether they are accurate and whether the number of observations is sufficient. In addition, because work sampling does not require continuous observation of employees, it produces fewer complaints from staff and less disruptions in the normal work routine.

Work sampling is generally capable of (1) determining the profile of labor activities or equipment utilization, (2) detecting inefficient methods and practices, and (3) setting work performance standards. Ideally, the study should be based on one of the three end purposes cited above although a well-structured and directed study can provide details on the first two categories simultaneously. The third area requires consideration of work pace by highly experienced observers.

The Actual Study

Concern for reasonableness of labor costs being charged to cost-type contracts in an aerospace contractor's plant prompted our study of labor productivity. Accordingly, the primary objective was to measure the level of productivity prevailing in the aircraft assembly line. This task was complicated considerably due to the mammoth size—approximately 18 acres—and complexity of the work environment (see fig. 1).

This study was designed to provide a profile of direct labor activities represented by effort expended in three basic work categories: (1) direct productive, (2) indirect productive, and (3) nonproductive. One must assume that all three are necessary in the performance of the assembly task although in varying degrees. Obviously, the direct productive category should exceed the other two to the greatest extent possible. Since work situations differ, work sampling elements will also differ. It follows then that the elements selected must be useful in solving the problem or attaining the desired objective. Each element must be clearly defined so that any observer will make no mistake in identifying it because the success and acceptance of the study results depend on the quality of the observations.

The purpose of this study was not to set standards, to examine methods, or to recommend specific improvements, but rather to get a picture of worker activity under plant conditions as they existed at the time of the study. The reader can best appreciate this ap-

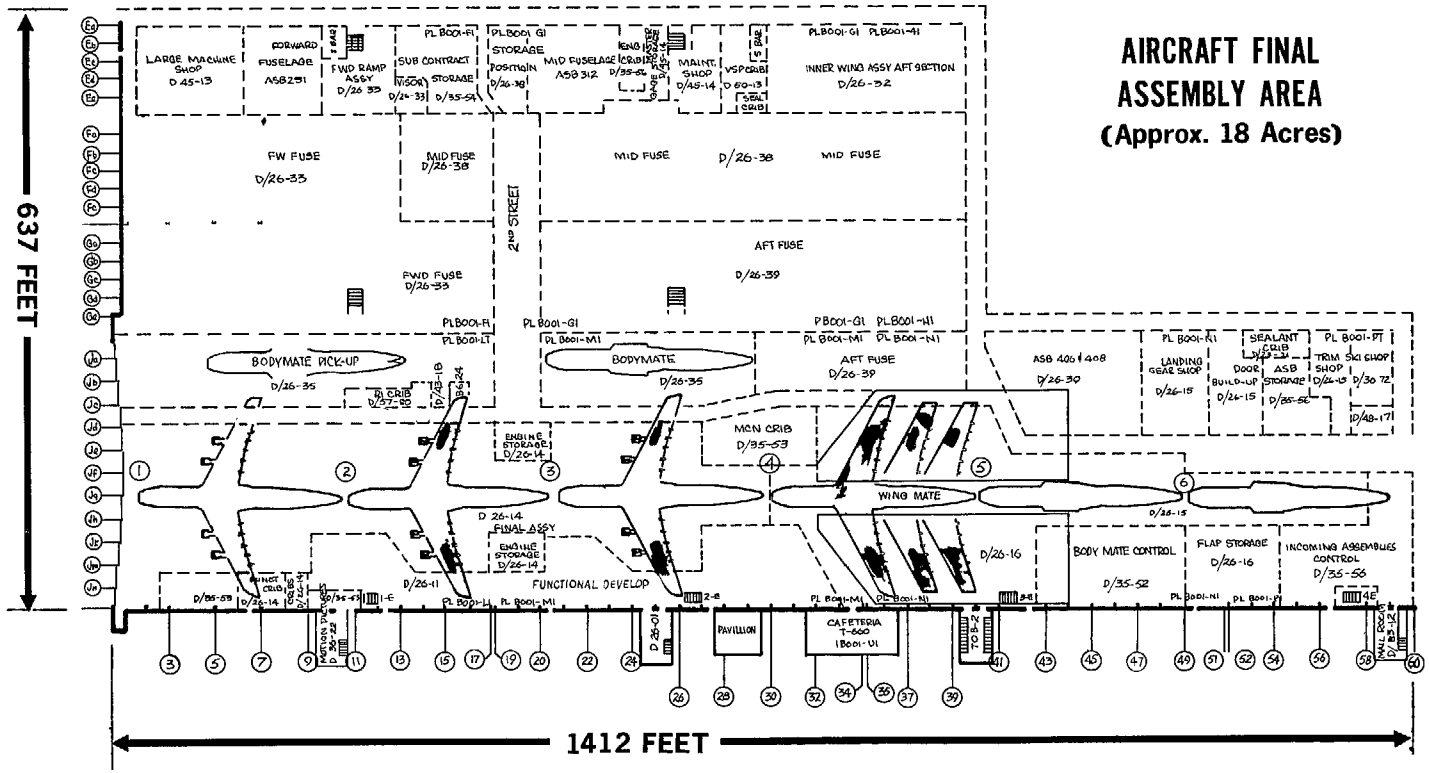
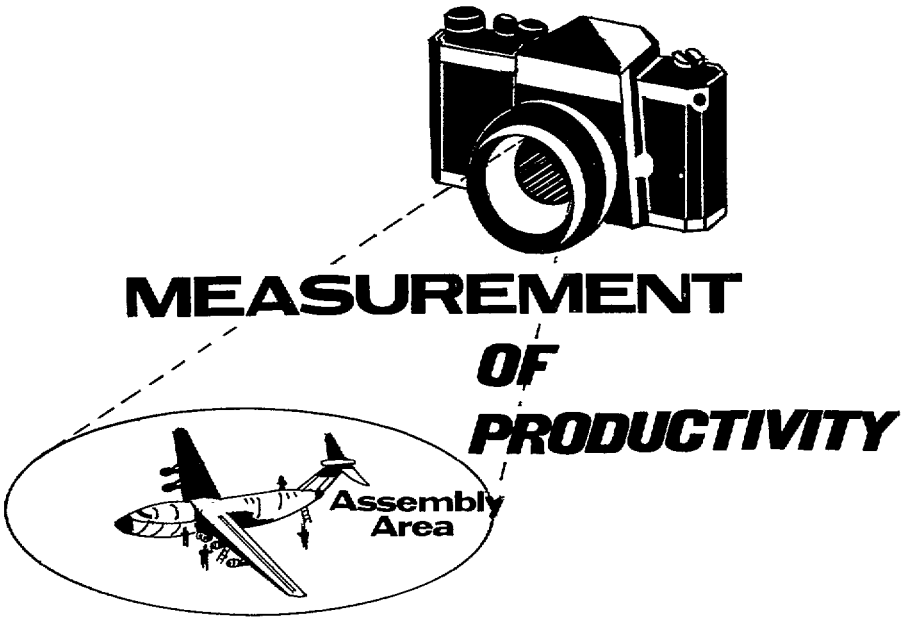


Figure 1

PRODUCTIVITY MEASUREMENT

Figure 2



proach by imagining that we simply took a "picture" of direct labor engaged in aircraft assembly in order to develop a profile of the work force activities (see fig. 2). The "picture" is in actuality a mosaic of thousands of "freeze-motion" observations of the employees representing our sample. The formulation of such a composite requires following eight vital steps (see fig. 3).

After establishing the objective, we elected to use work sampling in support of our audit since it provided the most expedient means of executing our work. When the decision to use work sampling was firm, the next step was to insure that the contractor's management and labor cooperation was secured. Otherwise, the results would not have been usable or their effectiveness could have been considerably reduced. We then had to establish study parameters and resolve the myriad of details associated with this type of endeavor.

Another important task was to train auditors to perform as observers. Auditors proved to be exceptionally suited for this type of activity by virtue of their training in being objective, having inquiring minds, and being self-starters. The observers were able to perform on the "floor" after about 3 days of orientation—theory and practice—on work sampling. Due to time constraints one can expect overlap between training and criteria development. This condition cannot be avoided and is taxing to both observers and coordinators alike.

Another important aspect is the need for flexibility. For example, certain ad-

Figure 3

PRIMER ON WORK SAMPLING

1. Determine Objectives
2. Determine Applicability of Work Sampling
3. Assure Cooperation
4. Define Scope of Study
5. Formulate Study Considerations:
    a. Structure and direction by a competent person
    b. Observer selection and training
    c. Observations at work center level
    d. Randomness of sampling
    e. Custom tailor to existing conditions
    f. Elements of observation
6. Establish Controls and Adhere to Them
7. Make Conclusions Consistent With Objectives and Details of Study
8. Discuss Findings With Contractor

justments and changes—although always within the prescribed criteria—have to be expected, at least up to and including the first 3 days of the study.

The first step of criteria development is to define the labor universe and establish the labor sample (see fig. 4). Next we had to select the departments or work centers—based on a breakdown of major subassemblies—to be included in the study and assign these to the nine observers. The shaded areas in figure 5 represent the subassemblies covered in our sample.

It is extremely important that all steps involving statistical concepts be based on randomness to avoid bias. For this reason we were in constant contact with the GAO statisticians to assure conformance with accepted statistical norms in order that the final results be uniform, usable, and most of all, acceptable.

Equally important was to detail elements or activities for the three work categories under which selected employees were to be observed at prescribed random times. These elements of labor activities were carefully established with consideration given to the experience of the observers, physical constraints, plant limitations, and the end objective of the study.

We then developed stringent controls which we applied throughout the study. These consisted of daily chartings of accumulated data to gauge progress, random visits to the "floor" by the coordinators, and discussions with the observers upon the completion of their daily routines. Stringent controls were necessary to assure adherence to prescribed rules and uniformity among observers, so that the objectives of the study would be met.

Figure 4

STUDY DATA

Universe	
Direct labor	1,402
Work centers	79
Sample	
Direct labor	206
Work centers	[1] 23
Other	
Observers	9
Days of observation	10
Observations	17,052
Output	Not measured [2]
Work pace	Not evaluated [3]
Methods	Not evaluated [4]
Tools, equipment, layout, etc.	Not evaluated [4]

[1] Work Centers based on identifiable segments of aircraft assemblies including the completed aircraft.
[2] We attempted to, but were unable to, determine output.
[3] Observers were not qualified to measure this aspect.
[4] Although these factors were not a part of the study, the observers made comments relative to them when obvious deficiencies were noted.

We selected the aircraft final assembly area for examination because (1) it was a significant, concentrated segment of the contractor's work force, (2) assembly activities were well suited to the application of industrial engineering techniques, and (3) the Defense Contract Audit Agency had suspected excessive idle time in that area.

Using statistical random-sampling techniques, we selected for observation about 200 of 1,400 hourly direct labor employees involved in assembly operations. During a 2-week period, we made over 17,000 observations of these employees to determine the extent to which they were engaged in direct productive effort, indirect productive work, or nonproductive activity. All observations were plotted on a daily basis to gauge overall progress. The plot serves as a control and also to tell us when the "hump" effect—a natural phenomenon involving increase in work pace during the initial phase of a study—has ended and labor activity has "normalized." During this study labor "normalized" during the fifth day (see fig. 6).

The study showed that 43.5 percent of the employees observed were involved in craft work; that is, they were physically working on assembly of the aircraft or its components. The study showed also that 30.9 percent of the workers were engaged in support activities necessary for the performance of the craft work. These activities include the functions of job prepara-

Figure 5

AIRCRAFT SUB-ASSEMBLIES

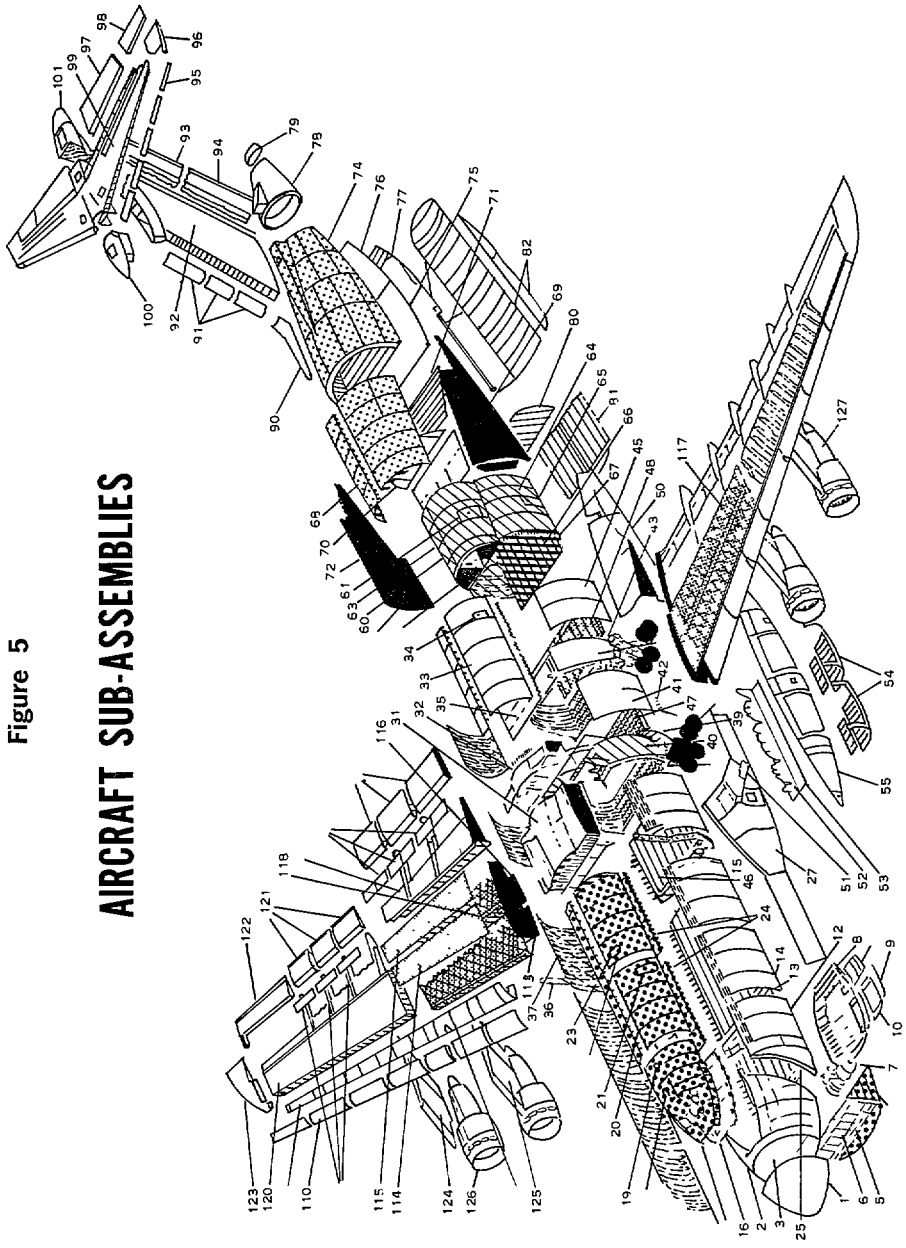
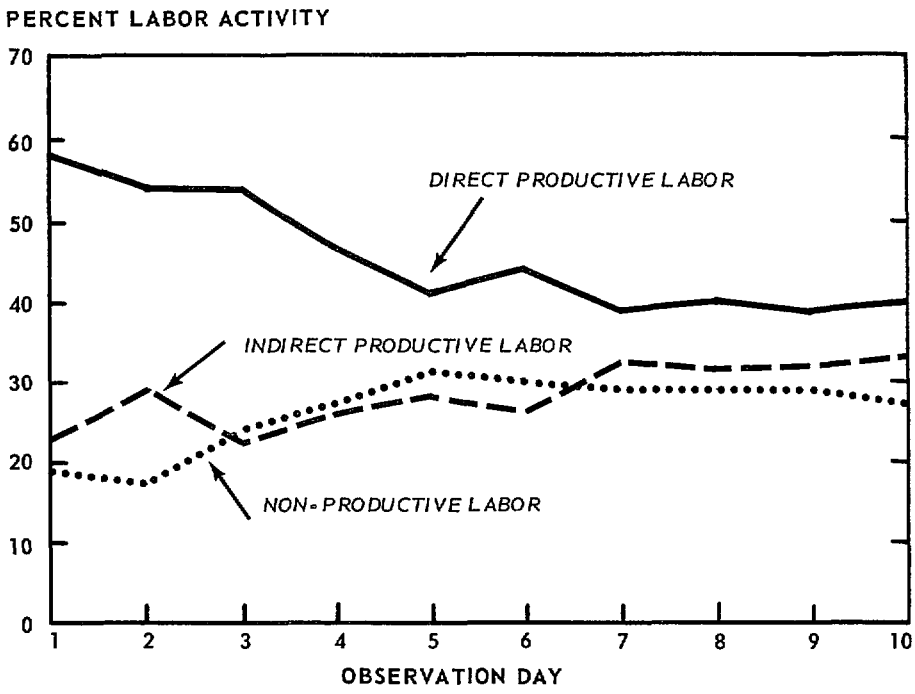


Figure 6



tion, planning and analysis, walking, and talking. The percentage of time involved in other activities, such as personal, housekeeping, and unavoidable delays, fell within a range generally considered to be acceptable within the industry (see fig. 7).

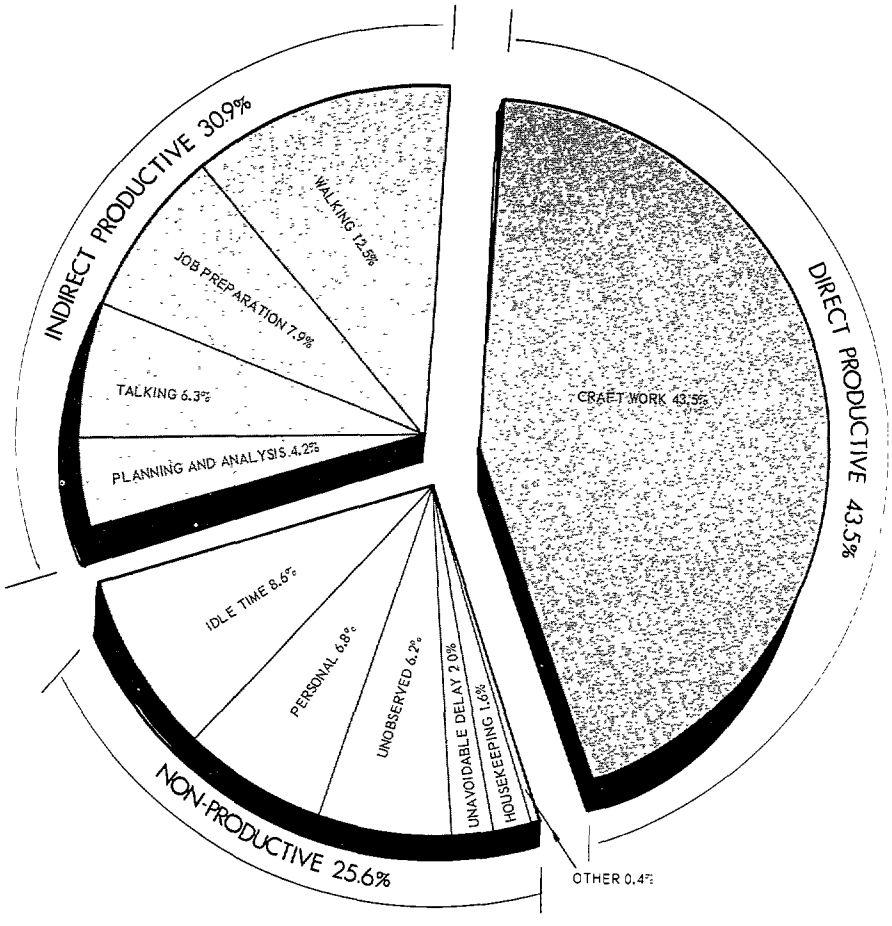
Our analysis further showed, however, that about 8.6 percent of the production assembly employees were idle. Industry work standards do not provide for any idle time, and the company officials told us that an allowance for idle time was not included in their procedures for establishing work standards. It was also noted that about 6.2 percent of the employees were absent from their work stations at the time of our observations, and we were unable to determine their whereabouts through discussions with supervisors or coworkers.

We attempted to obtain comparable data for worker activity from the aerospace industry and found that their statistical information was not compiled in a similar manner. Therefore we were unable to compare the data we obtained with those of other aerospace contractors.

We presented the results of our

Figure 7

WORK SAMPLING STUDY RESULTS



study to the contractor and Air Force officials and pointed out that management attention should be directed toward reducing the amount of time spent in support activities necessary for the performance of craft work. We advised them that idle and unobserved time should be reduced to an absolute minimum. By reducing the time spent in these categories, we believe that the contractor could materially increase labor productivity.

Company officials stated that they found the results of our study both informative and, as a whole, largely representative of performance condi-

tions in the aircraft assembly area. They also expressed concern over the incidence of idle and unobserved time and indicated that they would increase management emphasis in this problem area.

Subsequently, the contractor imposed more stringent controls over the activities of its employees and announced that its employment level would be reduced by about one-third by the end of the year. However, we were unable to ascertain what portion of this reduction was related to the findings of our study. The work sampling criteria developed and used for the study were well received by the Air Force, and we were advised that they plan to organize and train a team to perform similar studies in the future.

Conclusions

This first comprehensive work sampling study performed by GAO was successful largely because it represented a cooperative effort between auditors and engineers. The cooperation and courtesy extended us by plant management and labor afforded us the necessary freedom of movement required by the observers. The excellence of the observers resulted in findings which were supportable and creditable in every respect.

Based on the success of this study, it is anticipated that GAO will engage in further work sampling studies useful in assessing manpower utilization. Many other fertile areas exist where this technique can be successfully used, limited largely by the imagination of the auditor. For example, the office-type operation is a possible area where work sampling can be applied, as are hospitals, warehouses, shipyards, and post office facilities.

As a byproduct, the observers usually accumulate a number of pertinent remarks dealing with deficiencies observed during the period of the study. These can be used in support of audit in other areas such as production control, work performance standards, material handling, plant layout, policy matters, and the like. During our studies we found that the observer, by his intimate contact with plant operations, could feel the "pulse" of the plant, and thereby pinpoint inefficient practices otherwise not easily detectable.

Work sampling is not a panacea for solving all audit problems, although when carefully applied, and approached in a professional manner, results can be extremely rewarding. Work sampling is also relatively inexpensive in terms of time and effort when compared to the value of data accumulated. Projected annual savings, as a result of this study, should amount to over $2 million, provided the "idle" and "unobserved" categories are adequately controlled by management. Our return on investment would be considerable since we applied approximately 165 man-days toward this effort or the equivalent of about $19,000.

In the writers' opinion, work sampling is an indispensable tool as a part of the "audit kit" and, when applied to manpower utilization audits, its potential is virtually unlimited.

EDITOR'S NOTE:

The results of the work sampling study described in this article were officially reported to the Congress on February 18, 1972, in the Comptroller General's report on "Audit of Payments From Special Bank Account to Lockheed Aircraft Corporation for the C-5A Aircraft Program During the Quarter Ended December 31, 1971" (B-162578).

Accountability and Incentive

Knowledge at subordinate levels that actual results will be critically reviewed by supervising echelons has a salutary effect. Desire for commendation for good performance, and for escape from criticism for poor performance, is a strong incentive to one who knows that he will be held accountable. Such incentive is not exploited nearly enough by management in the federal government.

Herman W. Bevis

In "Tightening the Federal Purse Strings," *Harvard Business Review*, May/June 1959.

KENNETH A. POLLOCK

721583

Computer Work in the Region

This article, which was originally prepared for oral presentation, outlines what one regional office has done in ADP work. It should be of interest to both regions and Washington groups in light of the Comptroller General's October 22, 1971, letter indicating his "clear intent to have the divisions intensify their audit work involving ADP. . . ."

The San Francisco Regional Office (SFRO) has been active in data processing work and computer audit work since the days of first-generation computers. We have participated in, and made contributions to, almost every Government-wide ADP study made by GAO. We helped turn the crank on the lease-versus-purchase jobs in the early 1960's, made recommendations for improved operational management practices at defense contractor installations, and reported on poor utilization of data processing equipment at both Federal and State levels (at the State level Federal money was involved). We did the COSMOS review, carrying it from start to finish (that was the first "Mahon-requested" review and it set the pattern for all subsequent Mahon reports on logistics systems). We were early users of AUDITAPE in our work, and we were among the first regions to do successful audit work based on our own locally written computer programs, including some on third-generation machines.

Today San Francisco is working on four to five computer audit applications at any given time, in addition to straight computer assignments. By applications I mean that the computer is used in the accomplishment of an audit assignment although the audit is not basically ADP-oriented.

We estimate that our applications so far have saved about $30,000 in audit time and have helped develop findings worth over $1.3 million. On some jobs, the audit probably could not have

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been performed without the aid of the computer.

We are now using about 30–40 hours of computer time per month on these applications and have established some excellent working arrangements. For example, we have literally been given the key to the 1401 computer room at the Stanford Linear Accelerator Center. We have unlimited free use of that machine evenings and weekends and are obligated only to replace the paper used. We get 1401 time for about $2.50 an hour from the Treasury and for about $3.50 an hour from the Navy.

We have to use a variety of equipment because no single available configuration has the capability for all our applications and because the equipment is not always available when we need it. Our own "peripheral equipment" is growing and we recently purchased a special cabinet to hold our approximately 80 reels of magnetic tape.

By and large, for AUDITAPE jobs, we operate the equipment ourselves: hanging tapes, pushing buttons, loading cards, etc. About eight to 10 auditors are working on ADP assignments at any given time; most of the group is AUDITAPE-capable. Some others, not assigned to the group, have had AUDITAPE experience.

We have provided SFRO-written programs for work at Defense Contract Administrative Services Regions in Los Angeles, Philadelphia, and Detroit. Last year a *GAO Review* article —our second on computers—won a prize for a San Francisco Regional Office man. SFRO staff men have twice addressed the Federal ADP Council of Northern California and we have spoken before the Electronics Application Research Forum. We are charter members of an EDP auditing forum organized in 1971 in San Francisco in conjunction with the Institute of Internal Auditors. Other members include IBM, Wells Fargo, Standard Oil of California, Del Monte Corporation, and Stanford University.

There are many publications in the field which are useful to offices engaged in ADP activities. In addition to all those SFRO receives free—*Datamation, Business Automation, Computer Decisions*, etc.—we subscribe to *Computerworld* (weekly) and *Data Management* (a monthly DPMA magazine).

Our ADP Track Record

Our track record in computer work was achieved primarily because of a keen staff interest in the area and our belief that great potential existed to do meaningful work. We received encouragement from the Office of Policy and Special Studies ADP group to participate in computer assignments, and some were initiated upon our suggestions. Our regional manager has given sympathetic consideration to our efforts, has always been willing to go to bat for us, and has made sometimes painful decisions to assure that interested staff are available for computer work.

The favorable SFRO environment has been a critical factor. When interest and motivation are combined in an

atmosphere in which staff members are encouraged to innovate and pioneer, the results are almost always positive. This is not to say that we didn't get our noses bloodied on occasion by a recalcitrant machine or bad data, or that we won't slip again in the future, but we do have tangible results which point in the direction of even greater benefits from future work.

We have attempted to stimulate further interest in ADP work by developing and giving to all staff a 1-day regional AUDITAPE seminar. We try to get across a few basic points in this course, such as:

—How to recognize a potential application in audit work.
—What generally can be done in the way of audit assistance.
—What information should be obtained before calling in a "computer type."

We divide the group into teams, present a problem from real life, and have each team develop its own solution including running its application on the computer. The actual hands-on experience has been quite stimulating for our men.

Interested staff are encouraged to study the area, and we have made good use of IBM's programmed instruction courses, "Basic Computer Systems" and "Introduction to System/360." Some of our staff are taking programming courses in COBOL, and we have sent a number of men to such short Civil Service Commission courses as "Computer System Analysis," "ADP in Supply Management," and "Auditing in the Computer Systems Environment."

On an experimental basis, we have been holding monthly meetings of those assigned to ADP work. The meetings, generally lasting 1 to 2 hours, are spent in discussing current audit applications, problems encountered, solutions devised, and areas for future work. (We are conducting a post mortem on a recent not-too-successful job, on which we were given bad data by the agency, to see what can be done to prevent such situations in the future.) If time permits, a staff member may present a short talk on a matter of current interest, e.g., documentation. We are encouraging publicizing of our applications in our local newsletter to keep staff aware of our existence and capabilities.

The Future

To expand staff capability and to increase their knowledge, we have recently:

1. Examined the use of videotape-assisted instruction (VAI) courses on computers. Specifically, in the region, we have looked into the offerings of four companies and have tentatively identified the vendor whose techniques and coverage appear best suited to our needs. We have requested an allotment to purchase a course of general applicability, "Controls in Data Processing Systems," and plan to evaluate the course and to report to OPM on the desirability of extending this approach to other computer-related courses as well. An obvious benefit of VAI is shipping the tapes anywhere for use by

any region or Washington component. We think this method holds great promise for GAO.[1]

2. Established a policy of ascertaining what utility-type programs are available at computer installations in our region, examining them as to potential audit applicability, and obtaining the program and allied documentation for our use when it does appear to be of possible value to us. We intend to publicize the existence of these programs so that when other regions have a need for them we can supply a complete package for their use. The utility programs include various types of sorts (disc, tape, etc.), reformating methods, language conversion, card-to-tape routines, merges, print programs, etc. By early January we had 21 packages; some on cards, some on tape—mostly 1401 oriented. We have contacted Honeywell to obtain similar routines for H–200 series and larger equipment.

3. Kept our eyes open for additional work and passed the following information on to Washington for further consideration:

—Evidence of poor planning for ADP by a major DOD component in our region.

—Evidence of misclassification of computers as communications equipment and their exclusion from the GSA inventory.

—Evidence of intentional classification of computers as laboratory equipment to avoid computer procurement procedures.

—Other matters which have been noted but have not yet been passed back, including other incorrect reporting to the management information system operated by GSA, lack of proper accountability records for computer equipment, etc.

We are anticipating the development by the Division of Financial and General Management Studies of a long-range ADP program which will be translated into specific work programs by the operating divisions. Among the assignments we hope to land is a joint GAO/private industry effort to establish guidelines for effective utilization of third-generation equipment. Similarly, we are hopeful that we will participate fully in related training programs which are to be devised. We certainly hope to make our mark in GAO computer work even more in the future than we have in the past, and we are confident that we will be able to do it.

[1] Since this article was written, the course has been purchased and tested. Based on an evaluation of the results by the author and *Albert Shanefelter, Jr.*, assistant director for staff development, Office of Personnel Management, additional tapes will be purchased and used in both Washington and the field offices.

JOSEPH DI GIORGIO

721581

What To Do About ADP?

This article develops the premise that ADP operations, systems, and techniques need to be better understood and that auditors must know what their real concerns are when auditing in an ADP environment.

Articles in *The GAO Review*, GAO regional office compilations of successful applications of computer-assisted audit techniques (CAATs), the recently published summary of case studies of auditing in a computer-based systems environment, and prior reports on ADP are solid evidence of the actions taken to meet the responsibility and opportunity which ADP brings to the General Accounting Office. Nevertheless, the internal study of GAO capabilities for review of ADP activities completed in September 1971 contains the observation that "we have just scratched the surface of our opportunities." This statement is not subject to serious challenge.

We find that limited satisfaction with our progress is expressed with increasing frequency. Specifically, there is a growing recognition that one technical aspect of auditing which will assume increasing importance in the 1970's is the question, "What to do about ADP?"

A partial answer to that question can be found in the following statements.

> Where government agencies use ADP methods in their financial management *and operating systems*, it is incumbent upon the auditor to concern himself with those systems in two ways:
>
> 1. He should consider examining into the efficiency, economy, and effectiveness with which the agency *acquires and uses* ADP equipment.
> 2. He should *utilize ADP methods* in making audits of operations with respect to which data is stored and processed in electronic computers (for example, inventories of supplies and materials or personnel resources)."[1] (Italics supplied.)

It is my view that many of us will find it necessary to expand on these statements. To do so, we must become more involved with ADP and seek a

[1] *E. H. Morse, Jr.*, "The Expanding Role of the Auditor in Government Operations," Oct. 13, 1971. Speech delivered before the Federal Government Accountants Association and the Institute of Internal Auditors.

Mr. DiGiorgio, formerly director, European Branch, has been assistant director responsible for ADP in the International Division since October 1970. Prior to that time, he helped teach the "Principles and Practices of Auditing in an ADP Systems Environment" course at the Civil Service Commission.

more precise definition of what the auditor's "concerns" really are, so that some significant impact can be made on our growing ADP-related responsibilities.

There seem to be two significant problems which now stand in the way of an orderly and significant increase in the involvement of GAO's professional staff in ADP work. They are:

1. *What and how much*—Communication to our supervisory audit staffs in effective layman's language of what the Office views the responsibilities imposed and the opportunities provided by ADP to be and what a reasonable involvement effort entails.
2. *Commitments to training and application*—Gaining and maintaining a high level of support and participation by the supervisory and audit staff in training and in coverage of ADP activities and systems and in the use of CAATs.

Consideration of the question, "What to do about ADP?," would also disclose that it is desirable that we increase our involvement in ADP because:

1. It can make GAO and each operating group more productive and more responsive to the Congress.
2. It can provide satisfying and challenging work experiences to the professional staff.
3. It can help us to recognize and acquire the degree of competence required to satisfy professional standards applicable to audit work in an ADP environment.

I believe a better understanding of the more significant responsibilities and opportunities, at both the supervisory and staff levels, can stimulate a productive increase in auditor-generated involvement in ADP. Furthering this understanding is the objective of this article.

The Need for a Frame of Reference

It is likely that organizational and procedural changes and increased budget support will permit a more constructive channeling of efforts and a significant increase in total man-years allocated to ADP work. However, a common and current frame of reference of the significant aspects of ADP should also be available and used. This background data should identify the major aspects of ADP and provide a *convenient basis* for recognizing and considering the more significant responsibilities and opportunities that now exist.

Problems With Defining Responsibilities and Demonstrating Opportunities

The internal ADP study group does not appear to have had too much difficulty in identifying some of our responsibilities. They identified many GAO practices and plans related to ADP activities, both Government-wide and at individual agencies, in a review they made of the legislative record. Their study notes that GAO has frequently acknowledged the importance of ADP audits in hearings before the House Government Activities Subcom-

mittee (1967 and 1969), the Joint Economic Committee (1970), and in other hearings. For example, during the Joint Economic Committee hearings, GAO referred to its past and future coverage of ADP through selected reviews of the planning and installation of computers; controls over computer operations; acquisition and utilization of computers, peripheral equipment, and software; and the effectiveness of computers as they support program operations.

Although the identification of *GAO responsibilities* seems easy enough, we could have problems when we try to develop adequate staff resources to meet the growing requirement for ADP-related work, to determine the relative significance and priority of various ADP areas, to specify the technical competence and the extent of coverage which seem to be needed to review these areas, and to visualize their report potential.

Identifying and quantifying *opportunities* poses a different problem. The potential benefits of using CAATs for a specific audit objective can be generalized and even estimated before use, or measured after use as we have done on some applications. These measurements are often judgmental. More difficult to demonstrate or measure is the net cost which can be attributed to the opportunities we miss because we do not systematically consider, at appropriate times in the planning and performing of our audits, the magnetic file data available in any automated data processing system (ADPS) which are related to audit objectives. Neither do we always consider the contribution this data could make to broader and more significant coverage, to more effective recommendations, and to a quicker less costly audit effort. Sometimes we also fail to recognize opportunities to reduce cost or to improve management information through evaluations of the data processing activities and operations.

Some Areas of Responsibility

Some appreciation of the many facets of ADPS and ADP activities can be obtained through a limited study of (1) a summary of ADP costs and functions,[2] (2) the tabulation included in the recent ADP study questionnaire setting forth a number of ADP activities and functions (detailed below) which can be reviewed by GAO, (3) the outline of the systems analysis and design section of the CSC course on "Principles and Practices of Auditing in an ADP Systems Environment," and (4) GAO guidance on ADP.

To illustrate—an analysis of the cost summary would show that in the fiscal year 1971 computer-related costs for the computers we could review (3,486) were $2.3 billion, comprised primarily of personnel (51 percent), rental (18 percent), contract services (12 percent), and capital costs (10 percent). An analysis of man-years by function, first available for fiscal year 1970, would show that the trend is toward a significant increase in costs related to

[2] General Services Administration, "Summary of ADP Activities on Cost, Manpower, and Utilization in the U.S. Government," fiscal year 1970.

software development and that hardware costs are becoming less significant proportionately. We would also find that the major functions performed are key punch and verifying (18 percent), programming (15 percent), and systems analysis and design (10 percent).

An analysis of that part of the ADP study questionnaire (see p. 28), which was sent to directorate- and professional-level staff within GAO, will show that the productive work visualized ranged from broad ADP policy matters to evaluations of the effectiveness of DP installations, including reviews of the adequacy of data gathering, computer processes, and output need.

Most of those contacted in the study said the areas listed above deserved and needed coverage. The need for a common understanding of what each listed function is may be indicated by the relatively large percent of respondents who expressed no opinion on the need and the extent of coverage of these listed functions.

Major Programs or Activities Associated, Supported, and Dependent on Computerized Data Processing Systems

There are many programs which can be identified with one or with several related ADPS. Often these systems utilize data banks and management is particularly dependent on the efficiency with which reference files or records (tapes/discs), used to complete programmed decisions and actions, are updated and maintained.

It would seem that when programs or activities are significantly dependent on the reliability of the operations of computer systems, we would need to (1) have the controls and operation of the system reviewed by the operating groups responsible for the program and (2) see that they have a computer audit specialist assigned to their staff from the outset of the audit.

Since many of these major ADPS will have been developed entirely or substantially with outside consultant assistance, competence in evaluating the initiation, administration, and performance of contracts with computer support organizations seems important.

The foregoing discussion of responsibilities and opportunities provides a brief introduction to the nature of ADP activities. It also suggests that the operating group, if not supported with a computer audit specialist staff when conducting preliminary surveys and reviews, would have difficulty in detecting significant and potentially deficient ADP activities and in comparing the indicated potential with other programs, activities, or operations in their areas of responsibility. It is also possible that the significance of certain ADP activities from a multiagency point of view might not be appreciated.

With What Must the Auditor Concern Himself?

It is appropriate at this point to attempt a clarification of the ADP-related "concerns" of the auditor and consider the extent to which they suggest that specialist capabilities would need to be developed. Is it enough for

ADP FUNCTIONS AND ACTIVITIES WHICH CAN BE REVIEWED BY GAO

Deserve Coverage		Present Work			
Yes	No	Adequate	Inadequate	No Opinion	
					Output Need Validation
					Standardization Efforts-- Languages, Data Elements and Codes, File Structures, etc.
					Documentation Practices
					Installation Effectiveness
					Communications Aspects of ADP Systems
					Utilization Practices, Including Time Sharing
					Software Acquisition/Management
					Validity of Data Input to GSA-OMB ADP Management Information System
					Research in ADP Technology
					Planning and System Design
					Procurement Decisions
					Verification of ADP Cost/Benefit Studies
					Input Controls
					Other -- please identify _____
					Other -- please identify _____
					Other -- please identify _____

us to say that each operating group needs to keep informed about the structure of its agency's data processing organization, computer equipment, and operating practices? Should we be more specific and say that the auditor is concerned with the answers to the following questions?

When to study and test the controls over the computerized portion of a data processing system (systems audit)? Does the auditor need to perform a satisfactory evaluation of the internal controls (machine, programmed, or external) applicable to an ADPS when the impact on financial statements of the computer processed data is material and where this evaluation is thereby essential prior to statement certification to meet the requirements imposed by generally accepted auditing standards? It seems reasonable that this review of internal controls would be required (by extending application of the general audit standards applicable to attest situations) prior to approval of any agency accounting system which is dependent upon a computerized processing system. What about controls over *nonfinancial* (function- or operation-oriented) ADP systems, when the data they provide to management for decision and action is relied on as current, correct, and complete, and the reliability of this data is implied in our conclusions and recommendations?

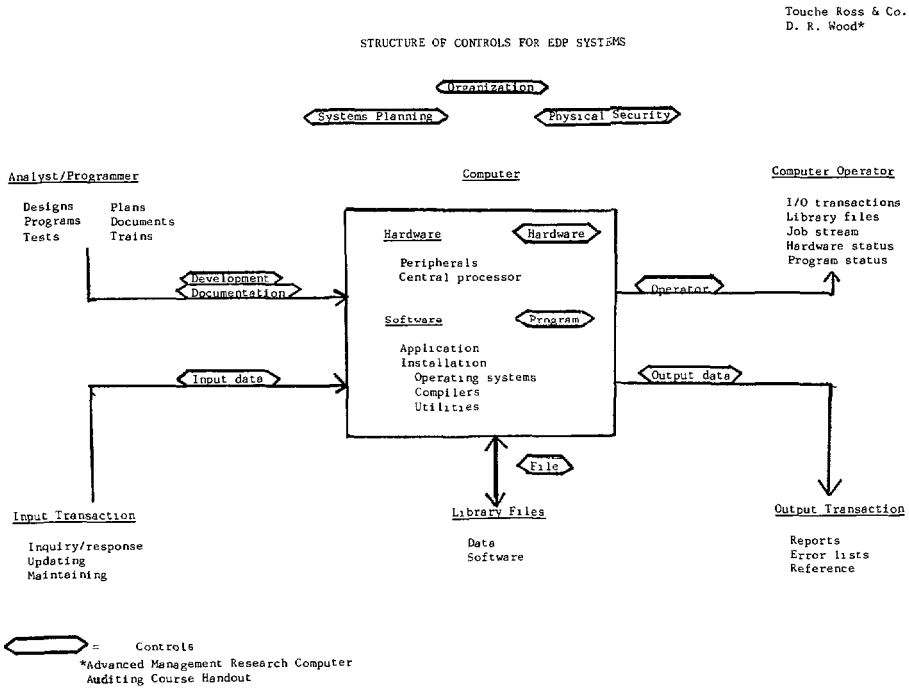
When to use general, custom, client, manufacturer utility, auditor prepared programs, or inquiry to select and analyze transactions to carry out audit procedures and attain audit objectives? Normally these would be used to expedite and expand on our performance of the normal audit procedures of matching, selection, and analysis; to reduce the cost of this work; and to permit access to and the use of data available only in machine readable media.

When to review management and operation of data processing activities? There must be some agreement on standards of performance before evaluations of the reasonableness of the management and operation of increasingly costly data processing activities can be made.

The illustration which follows highlights the structure of controls for EDP systems. It can help the auditor direct his audit efforts when he needs to study and test the organizational, administrative, and processing controls related to an ADPS and when he needs to determine if the management and operation of ADP activities are significant and effective.

We may further crystalize the auditor's areas of concern if we relate the scope and objectives of ADP reviews to report objectives. For example, reviews may be made of:

1. The activities of *one data processing organization* to evaluate the extent to which its objectives are being effectively attained (effectiveness reviews).
2. *Various aspects* of data management activities and operations (multiagency and Government-wide reviews).



3. A *specific ADPS* or of one significant aspect thereof (management deficiency reviews; system product reliability reviews).
4. *Selected material aspects* of the design, development, and implementation applicable to ADPS for any agency or program (multiagency and Government-wide review).

In GAO the auditor's real concerns also include the need to plan for satisfying those responsibilities established (1) by the policy which requires that work programs be examined to be sure ADP techniques are applied when feasible and (2) by GAO testimony before congressional committees concerning the study and review of various ADP activities. Accordingly, each operating group must know the responsibility it has for these requirements and must also recognize that this involvement with ADP may require some technical capability.

The auditor may fulfill his concern with these requirements more effectively if he is made aware of the problems which the programming and performing groups may have in promptly detecting the opportunity for an economic application of ADP techniques. He should learn when and how to test the reliability of any ADPS which produced the data collected and considered in a specific audit and how to recognize indications of significance or deficiency in ADPS or ADP activities.

The Need for Computer Audit Specialists

It may not be sufficiently apparent

from the foregoing that much of the responsibility for ADP work and the opportunities it may provide are in the operating groups. Accordingly, an actual increase in involvement in ADP work is essentially at their discretion. The following discussion may help to clarify these observations.

Preliminary Surveys and Reviews

Although the internal ADP study group recommendations put the responsibility for planning and executing Government-wide reviews in the Division of Financial and General Management Studies, they did not disturb the traditional responsibility of the operating groups to conduct preliminary surveys and reviews to determine, within their respective areas of responsibility, when:

1. An ADP activity is significant.
2. An ADPS and the data it generates (report products) are significant to the point that management may be dependent on them for effective control of the specific programs or activities under review.
3. Deficiencies are likely to exist in either significant ADP activities or ADPS.

My review of a recently circulated Computer Control Guideline published by the Canadian Institute of Chartered Accountants and of GAO's case studies of auditing in a computer-based systems environment nourish further my inclination to believe that these duties will best be met through the use of preliminary survey and review teams comprised of ADP specialists (data processing specialists) and ADP-trained auditors (computer audit specialists).[3]

This approach could lead to a more effective use of scarce ADP resources and help provide sound ADP coverage if the team members have sufficient recent ADP experience to assure a productive application of effort to the assignment. We should recognize that the maintenance of a viable ADP specialist staff may require that we provide the ADP specialist groups with a practical means for identifying, and when justified initiating, any productive ADP work which would not be done by the responsible operating group.

Possibly you will agree that preliminary survey and review efforts cannot be expected to be too productive unless they are undertaken with ADP specialist support after consideration of the areas in which detailed examination work may be necessary.

I also feel the operating group must recognize that a demonstration of the practicality and appropriateness of using CAATs will require some knowledge of the computer organization and activities which generate the magnetic media data in which they are interested. The operating group must also recognize that it must give the computer audit specialist their audit objectives; the sequence and steps comprising each audit procedure to be performed; and the specific data to be compared, summarized, or analyzed;

[3] Cutting; Guiltinan; Lilly, Jr.; and Mullarkey, "Technical Proficiency for Auditing Computer Processed Accounting Records," *Journal of Accountancy* (October, 1971), pp. 74-82.

as well as the description of the format of the product which the computer is to produce.

It may follow that we should *require* that the research and survey which occurs concurrent with the development of tentative plans to initiate new assignments consider:

1. The potential contribution that the narrative and the flow chart documentation describing any significant ADPS, which process data and produce the reports used in managing the activities under consideration for review, could make to the audit objectives which the audit group may want to satisfy.
2. The need to evaluate the management and operation of data processing activities because of the significance of cost or the possible impact of inaccurate, delayed, or irrelevant computer processed information on effective management of a specific program, activity, or project audit area.

Training and Its Application

Recent experience shows that a high rate of obsolescence can be expected in any ADP capability we may attempt to establish through orientation-type training programs.

This can be attributed in part to the fact that much of the priority work which the audit staffs have done has not *required* the use of CAATs. Further, most of the work they have done has not included a study or evaluation of ADP systems or operations. A reasonably continuous application of CAATs and consideration of the requirements and criteria applicable in evaluations of ADPS or ADP activities is needed to reduce the loss of the ADP capabilities we acquire.

It also seems clear that technological change and complexity and the need for a continuous upgrading of training and for application of the skills acquired can be expected to limit the responsive capability of the general auditor in the operating groups. Accordingly, if the benefits of CAATs are to be realized, an ADP specialist's competence should be available to the audit managers and site supervisors particularly when collecting data to survey a potential audit area and subsequently when making determinations of the audit scope and procedures it would be appropriate to attempt.

Recognizing the Problem of Effective Specialist and Auditor Interaction

At various points in this article, I have alluded to the factors which can affect the coordination of the functions of the general auditor with the capabilities of the computer audit specialist or the data processing professional. Contributing to the coordination difficulties are:

1. The uneasiness likely to exist in the general auditor due to limited knowledge, experience, and confidence, when dealing with ADP techniques or activities, technical subtleties, and jargon.
2. The failure to appreciate the value of a review of ADP system documentation related to the

activities under audit in order to understand what management intended the factors governing programmed routine decisions or exception to be.

3. The failure to recognize that neither the system narrative, the logic chart, or the source program prepared by the programmer, can be taken as guarantees of the object program which was run to process the data under review.

Many of the comments made in the article "Concepts of Auditing and Systems Analysis" [4] seem to apply as well to the ADP specialist-general auditor interface problem. A paraphrasing of this article, generally substituting ADP specialist for systems analyst, CAATs for analytical techniques, and ADPS and ADP operations for systems and programs, would illustrate the problem. Most pertinent, I think, are the commentary and general observation sections which suggest in part that there is room for our traditional audit approach to embrace analytical approaches that make possible reasonable conclusions, after giving appropriate consideration to the cost of the various approaches. These sections also suggest that incorporation of the concepts of systems analysis into GAO audit approaches will be an essential ingredient in *broadening the scope* of our review work. In my opinion, these identical points can be made about the use of CAATs and the coverage of ADPS and ADP activities.

A broader understanding of the responsibilities and opportunities which ADP brings to the Office may help us to achieve a more effective interface and to increase our involvement in ADP.

Some Useful Guidance

The *Auditing and EDP* text by Gordon B. Davis, published by the American Institute of Certified Public Accountants (AICPA); the Air Force *Guide for Auditing Automatic Data Processing Systems* (1966); and the GAO book of case studies of auditing in a computer-based systems environment all include useful guidance.

I think, however, that the general auditor would find chapters 10–12 of *Auditing and EDP* most useful. In these chapters the author explains, with appropriate reference to general audit standards, why the control framework in which electronic data processing is performed *must* be considered; what competent evidence is, as it relates to organizational and procedural controls and the operation of computer programs at specific times;[5] the need for advance arrangements for computer time and operators and to obtain, test, and control computer programs and files; and how the auditor assures himself that a computer program used for transaction analysis is performing correctly what he intended.

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[4] E. H. Morse, Jr., *The GAO Review* (Spring, 1971), p. 23.

[5] See also John and Nissen, "Evaluating Internal Controls in EDP Audits," *Journal of Accountancy* (February, 1970), pp. 31-38.

What Needs To Be Done and Who Should Do It?

As our understanding of the responsibilities and opportunities in ADP-related areas increases, we may find it useful, in the interest of functional coordination, to clarify or elaborate on the primary responsibilities of the Division of Financial and General Management Studies, the operating divisions and groups, and the regional and branch offices.

Assignment of the primary responsibility, for the following illustrative tasks, would probably depend on the plan of organization and operation adopted by the Division of Financial and General Management Studies and the other divisions, and on the availability of specialized staff in the operating division.

Operating Group Functions

Responsibility in multiagency or program results reviews for:

—Initiating computer systems audit appraisals at headquarters locations to minimize overlapping or duplicate system reviews which could otherwise occur in regional and branch office areas.

—Assuring consistency in computer programmed comparisons and analysis to permit a projection of results.

Responsibility in deficiency reviews and surveys for:

—Acquiring knowledge of the major data processing systems potentially useful in meeting the established job objectives.

—Considering the applicability of CAATs to the job.

—Being aware of the availability at the jobsite of any software retrieval package and the applicable magnetic records which might be needed.

Regional and Branch Office Functions

Responsibility for acquiring knowledge of:

—Activities of *major* data processing installations and of ADP support and review activities in their areas.

—Functions of major ADP systems (including data element content) and any major "unique" locally prepared program activities.

—Inquiry, utility, generalized retrieval, or custom program access potential.

Conclusion

Hopefully my comments have not reflected a view from another ivory tower. They are intended to be informative and useful in the practical world of operations in which most of us dwell and where "doing"—generally accompanied by considerations of effective staff utilization, time allocations and schedules, and impatience—dominates the day-to-day activities.

Accordingly, I have tried to relate the responsibilities and opportunities I commented on with current GAO work priorities and objectives and with the organizational components which would appear to be primarily involved.

Contracts Weakened by Poorly Defined DP Words

By David H Greenberg
Special to Computerworld

stantial number of computer hardware and software contracts are found invalid and unenforceable

Many contracts within the computer industry use such words as downtime software, hardware, systems analyst senior programmer, maintenance, etc without specifically defining these terms

False Assumption

These words are used constantly by people in the industry and appear to the attorney as words of art which he therefore assumes have definite meanings within the industry Yet these words do not have clearly definable definitions Let s take a few of these words of art and see if we all agree on what they mean

$3 Billion of Idle Computer Time in U.S., Formal Request, Review of Proposals Eases Evaluation of DP Consultants

By Bruce H Frank
Special to Computerworld

In the last several years the use of consultants in the computer industry has increased and the questions of how to select and deal with them has become extremely important to those involved Unfortunately, many people in the industry are novices in dealing with outside contractors

A person who wishes to buy consulting services must detail to the consultants he is considering, both the work required from them and the terms and conditions of purchase of this work This should be done in the form of a request for proposal

These requests should contain the technical specifications for the project, and items such as

Accomplishments of Brooks Bill Cited, Agencies Urge More Implementation

CW Washington Bureau

WASHINGTON D C – Citing problems typical of a major computer user, the agency triumvirate that oversees the Federal Government's ADP told the House Government Activities Subcommittee that a great deal remains to be done in effectively implementing the Brooks Bill

Specifically mentioned were problems concerning the emergence of companies supplying system-compatible peripherals, standardization and software

of Standards (NBS) – also cited accomplishments in implementing the five-year-old Brooks Bill, known as P L 89-306

Said Robert L Kunzig, GSA administrator, "P L 89-306 has enabled GSA alone to achieve overall reduced costs of approximately $1 1 billion" – in hardware procurement ($339 6 million), procurement of magnetic tape and other supplies ($92 6 million), reutilization of government-owned equipment ($448 8 million) and sharing of gover

the taxpayers to manage this costly equipment efficiently and effectively '

Dwight A Ink, assistant director of OMB said that one of the most important developments within the computer industry, the emergence of independent peripheral suppliers, has presented the government with opportunities in the form of lower prices and higher quality products "

At the same time, it has pre-

Agencies Don't Like Gov't. DP Management

A blistering attack on the federal adpe management program has been unleashed by members of an inter-agency advisory committee The Office of Management and Budget (OMB) General Services Administration (GSA) and the National Bureau of Standards (NBS) seem to have construed their authority and responsibilities quite narrowly and the result has been a lack of leadership and a drift in management, ' says the group's report

Executives Seen Unhappy With DP

NEWTON, Mass – Top executives in most major corporations are dissatisfied with the performance level of their data processing operations, according to a survey by International Data Corp (IDC) Because the problems named are mostly internal, however IDC forecast continued industry growth - almost 13% for 1972, to over $9 8 billion

"Top management has found application software development far too slow and the results disappointing but most companies are now increasing control to make existing activities more effective, rather than curtailing budgets," noted C Oakley Mertz, manager of IDC's EDP Industry Corporate Planning Service

From a management attitude survey of 50 high financial executives, IDC concluded that the primary problems stem from non-EDP-oriented managers' inability to describe their operations adequately to DP units

In leaving out "unimportant" details, the manager unknowingly lengthens the development process by a significant margin

Army DP 'Loses' 100 Trucks

By Joseph Hanlon
Of the CW Staff

WASHINGTON, D C – The Army "lost' 100 trucks valued at $1 5 million because it forgot to list them in its computerized management information system (MIS) according to a General Accounting Office (GAO) report

An MIS isn't much good if the data is not put into it in the first place, and data in the Army system was so poor the Army was "unable, with any degree of reliability, to determine its needs for equipment " the report declares

Much equipment was never listed or was listed incorrectly When the GAO found the 100 trucks, they had been in storage for almost a year "and could have been used to fill urgent needs during the storage period" if anyone had know of their existence

In addition to problems caused by clerical errors the GAO also found the Army had no procedure for listing equipment in transit undergoing assembly or owned by one command and stored by another

I have also pointed to some constraints on effective action. This summary may be useful in your planning and provide a point of reference and some criteria to facilitate and encourage the doing and reviewing of ADP work.

The composite of recent *Computerworld* articles shown above is a small sample of the variety and significance of problems which are often associated with ADP operations. It may more concretely illustrate the potential benefits to be derived from an increased involvement in ADP.

Possible Individual Efforts

The view most often expressed by professional, academic, and business writers is that it is more practical to train auditors to be effective in an ADP environment than it is to train ADP specialists (programmers or systems analysts) to be auditors. I suggest that all auditors become reasonably familiar with organizational guidance on ADP. Their career development plans should include a practical means of increasing their capabilities in ADP and of gaining practical experience, possibly as members of ADP specialist groups.

This kind of self-generated action seems to be needed to put technical resources where they are most needed, to make possible a productive ADP specialist and auditor interaction in the conduct of the work of GAO, and to approach the professional horizons expressed by the AICPA. The alternative to increased auditor involvement

is likely to be an increasingly specialized and isolated technical staff and a continuing separation of the ADP specialist from the work requirement, the responsibility, and the opportunity for maximum application of that technical competence.

Possible Group Efforts

I believe that the role GAO can play in ADP in the years ahead will depend on how well we meet the challenge of increased professionalization through our *collective* efforts now. These efforts could take the form of a task force consideration or development of:

1. A study of known ADP commitments to classify the tasks involved, by responsible division, technical skill level needed, time frame for coverage, and level of coverage.
2. A basis for recognizing significant aspects of ADP and potential deficiencies.
3. A procedure to obtain a consensus on practicability, priority, and approach and to identify the staff interested in specific ADP work planned.
4. A method for allocation of computer specialist resources to the Division of Financial and General Management Studies and to other divisions and operating groups.
5. The optimum organization for coverage of indicated ADP commitments, responsibilities, and objectives.
6. How to overcome impediments to increased involvement in ADP work.

A receptive climate now exists for any organizational changes which may be necessary and for a career ladder in ADP. Awareness of the unmet ADP responsibilities and opportunities is growing at all organizational levels. The momentum generated by the consensus of views reflected in the internal ADP study group's report and the perspective and tasks and methods discussed in this summary should help. A new start, and for some of us a first step, in meeting our ADP responsibilities and in optimizing our ADP opportunities can now be made.

HOWARD G. RHILE, JR.

How To Prepare Workpapers With a Computer

All of us have, at one time or another, prepared seemingly endless workpapers by painstakingly extracting, classifying, and tabulating large volumes of information to arrive at a few precious subtotals for a lead schedule. The author illustrates how the power of the computer can be harnessed to relieve this drudgery.

During a recent assignment, we were required to determine the amount of excess equipment (trucks, rifles, etc.) that the United States turned over to the Vietnamese Army in fiscal year 1971. We found that we could obtain overall figures on the acquisition cost of such equipment, but we could not get a breakout in a format which would be useful for a meaningful analysis.

The records we examined were in the wrong sequence (e.g., one printout was in requisition number sequence—fine for verifying deliveries, but not very good for our analysis), too voluminous, or had deliveries of excess items interspersed with other deliveries. Another printout did not have the proper coding and still another was incomplete. The computer, which had provided us with reams of data useful for other aspects of our review, had killed us with kindness.

How were we going to get our information without an inordinate amount of manual extracting, classifying, scheduling, and tabulating?

We had just about decided to use the time-honored technique of "writing around" the lack of information when we decided to try to beat the computer at its own game. Accompanying one of the printouts which we had received previously was the punched card deck used to prepare the printout. There were about 3,000 cards in the deck. They had the proper codes punched in them and contained the data we needed (e.g., number of items delivered, stock number, etc.). We telephoned the Navy shipyard in Hawaii and asked if we could use their equipment to extract the data we needed

Mr. Rhile is a supervisory auditor of the Far East Branch, International Division, in Hawaii. He joined GAO in 1965 after earning a B.S. degree in accounting from Temple University. Before transferring to the Far East Branch in 1969, he was a member of the Civil Division.

from the cards. They agreed, and the next morning we went out.

First, we went to a machine called a "sorter" where we (1) extracted all the excess delivery cards from the deck (about 500 cards) and (2) sorted the excess delivery cards by type of equipment. Then we went to a UNIVAC 1005 computer where we tabulated the cards, using a generalized program developed by the shipyard, and obtained subtotals by type of equipment. Total elapsed time was 55 minutes including the time used to drink a cup of coffee with the manager, explain what we wanted, and fix the cards that had jammed in the machine.

We came back to the office, stapled the printout to a workpaper, inserted the heading and source, and the information was ready for use.

What is the lesson, if any, in this story?

I believe that it points up the need to think in terms of how we can benefit from the computer's power and flexibility in our work. A job which would have taken a week to do manually was done in less than an hour.

More importantly, however, it demonstrates the need, when planning reviews, to consider how the computer can help us to achieve our objectives and make provisions to obtain the needed data. We were lucky. We had the data available in a machine-readable media (punched cards) and a good working relationship with the shipyard. We should not, however, have to depend on serendipity to get the most out of the computer!

ANTHONY J. GABRIEL

A Task Force Approach to Auditing

GAO staff members are frequently assigned to committees of Congress to furnish direct assistance in their studies and investigations. The experience gained by auditors in applying techniques that differ from the traditional auditing approach can be useful to GAO and the staff members participating.

The author describes a year's experience in reviewing three "guns and butter" programs using a task force approach while assigned to the House Appropriations Committee.

The General Accounting Office has repeatedly emphasized the importance of broad-based reviews and timely completion of its work. The Surveys and Investigations Staff of the House Appropriations Committee has similar objectives and must report to the chairman of the committee in sufficient time for hearings on appropriations. This article describes my participation with the committee in utilizing a task force approach to meet critical reporting deadlines for three broad-based studies—the Food Stamp Program in the Department of Agriculture, manpower in the Department of Health, Education, and Welfare (HEW), and the Navy's F–14 and the Air Force's F–15 fighter aircraft programs. This article describes the approach and staff resources used, the report processing procedures, and the broad scope of the three studies.

Task Force Approach

A team is formed for each study to perform all auditing and investigative work, i.e., to plan, perform, and report on the work directives as approved by the chairman, House Committee on Appropriations. All reports have a deadline to assure that the information contained therein will be made availa-

Mr. Gabriel is an audit manager in the Federal Personnel and Compensation Division. He joined the General Accounting Office in 1956 as a member of the Civil Division. The following year he transferred to the Philadelphia Regional Office and had varied audit experience there for over 10 years, including congressional committee and overseas assignments. He returned to Washington in 1967 and held a staff position until 1970 in the Office of the Comptroller General. He holds a Bachelor of Science degree in accounting from the University of Scranton. He is a certified public accountant (Virginia) and a member of the American Institute of CPAs and the Federal Government Accountants Association.

ble to the chairman in sufficient time for hearings on appropriations. The time required for a study varies with the size of the activity or program and the scope of the directive. A normal study takes about 6 months and consists of the following three phases, each of which requires about 2 months to perform.

—Developing background and other information at the headquarters activity.
—Performing the field work.
—Writing and reviewing the report.

No geographical boundaries or functional constraints are imposed on the team; it is a highly flexible unit and reviews the program in its entirety on a nationwide or, if necessary, worldwide basis. The team works as a complete unit or may be subdivided into subunits depending on the number of areas and varied objectives cited in the chairman's work directive. The team primarily relies on interviews with top management officials in Government and industry. Reviews of detailed information contained in files are held to a minimum.

Staff Resources

The Food Stamp, HEW manpower, and F–14 and F–15 fighter aircraft programs were staffed with 10, five, and six men, respectively. Except for the study of the fighter aircraft programs, the teams consisted principally of accountants and lawyers. In that study, a propulsion expert and an aerodynamicist were assigned to follow up on areas covered in a prior study (such as the comparison of performance characteristics of the two aircraft) and to evaluate current technical problems.

The study of the Food Stamp Program with 10 men was about twice the size of the teams assigned to the manpower and fighter aircraft studies. This was due to the need to give nationwide coverage at Federal, State, and local levels and submit a report to the committee's chairman in about 30 days.

Report Processing

After completing its work at headquarters and field activities, the team drafts a report which normally takes from 4 to 6 weeks. The draft is submitted concurrently to the director of the Surveys and Investigations Staff and his three assistants for review. The director and the three assistant directors are responsible for the overall management and conduct of the studies. One assistant director serves in the capacity of a deputy to the director. Each of the other two assistants is directly responsible for the conduct of civil and defense studies, respectively. The purpose of the review process is to have the four members of the directorate review the report at the same time, regardless of the subject matter, and quickly obtain and incorporate their comments.

The review, retyping, editing, and reproduction of the report takes from 5 to 10 days from the date the team completes the draft report to the date

the director signs and issues the report to the chairman of the committee. There are no requirements to submit a draft report to the agency for comments on the team's findings and recommendations. Agency comments are developed for the report during the general conduct of the study.

Food Stamp Program

The chairman requested an investigation into the Food Stamp Program. In essence, he wanted as much pertinent information on the following questions as could be compiled in about 30 days.

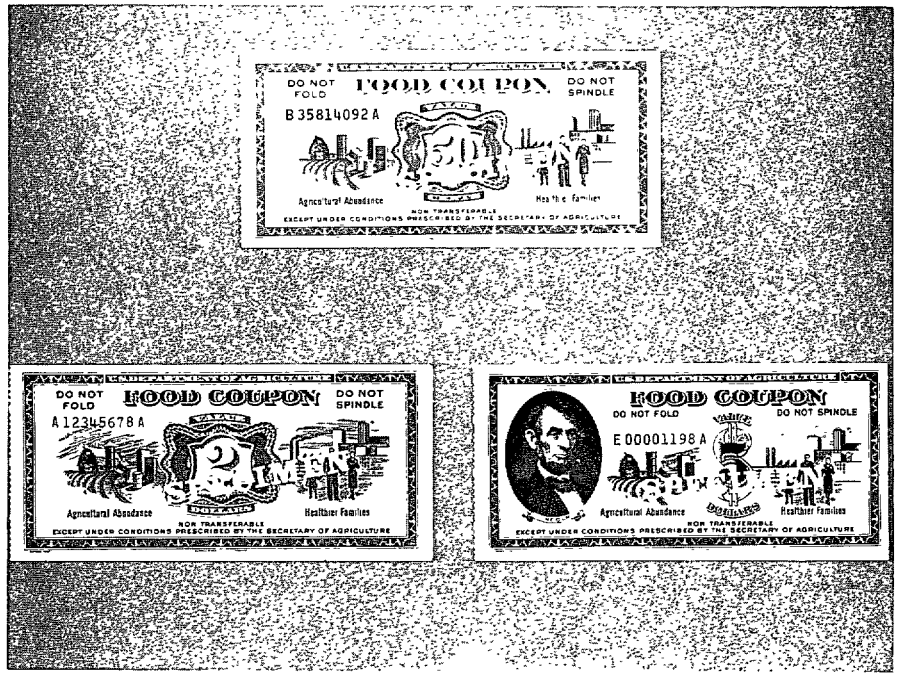
—To what extent did illegal or improper activities such as theft, fraud, trafficking, and counterfeiting of food stamps exist in violation of program directives and procedures?

—What avenues were available to Federal, State, and local administrators to assure compliance with laws and regulations?

—What views were held by responsible officials on ways to improve program administration and to eliminate illegal or improper activities?

Staff members of the committee, in discussing the request, believed that a high incidence of violations might indicate administrative controls were either inadequate or not being properly exercised.

I was assigned the "ticket"—designated team leader—for this assignment; investigators from the FBI had it for the other two studies. The leader



has overall responsibility for the team's planning and performance, and for meeting the report deadline. Upon receipt of the chairman's request, the situation seemed critical because of the short deadline, but not impossible. I was confident that, with a sound plan and a multitalented and broadly experienced team of eight FBI agents and two GAO auditors,[1] there were adequate resources to meet the challenge.

I prepared a work plan to be used nationwide at the Federal, State, and local levels of government to be visited. The plan included procedures to identify the types of violations being reported to agencies responsible for administration and enforcement of the program and directed a review of the reported violations to determine the causes or reasons for them. In addition, the team was instructed to interview officials and examine procedures regarding the administrative and accounting controls in the program from the time the stamps were printed at the Bureau of Engraving and Printing to the time of their release by issuing agents at the local government levels.

I prepared an internal control questionnaire for use in the study, to be applied as a guideline in examining accounting and administrative controls at the various operating levels of the program, where applicable. Incidentally, we have been called a few things in the past, but on this food program assignment the term "bean counter" was heard a few times. The plan also provided for the team to obtain suggestions from responsible officials on ways to improve program administration and tighten controls over the program.

The work was broad in geographic scope, as well as covering many Federal, State, and local activities. At the Federal level, work was performed at the Food and Nutrition Service (FNS), the agency responsible for administration of the Food Stamp Program; the five FNS area offices and 12 FNS local offices; the Office of the Inspector General of the Department of Agriculture, the agency responsible for enforcement of the Food Stamp Law and regulations; the Bureau of Engraving and Printing and the Secret Service, both of the Treasury Department; and the U.S. Postal Service.

At the State and local levels, we obtained information from nine State agencies charged with administration and/or supervision of the program, from nine counties affiliated with the program on behalf of the State agencies, and from a Federal Reserve bank and a national bank which served as the major issuing agent for one of the States visited.

The report was responsive to the three areas outlined in the chairman's request. In addition to including suggestions and recommendations obtained from responsible officials, the team members' own recommendations on ways to eliminate certain prohibited acts were included in the report. The entire job, including the final report, took a little over a month and as a consequence, it was available for the chairman's use at the hearings.

[1] *Francis P. Carrigan* from the Procurement and Systems Acquisition Division was the other GAO auditor who participated in the study.

HEW Manpower Policies

The chairman requested an inquiry into the personnel policies and practices of the Department of Health, Education, and Welfare as they related to the hiring and utilization of personnel. Direct Federal manpower in this Department totaled about 112,000 man-years of effort; available estimates showed that the Department also supported about 704,000 man-years of non-Federal employment in State and local governments, universities, nonprofit research institutions, and private contractors.

A five-man team was formed to consider HEW manpower policies and practices and to identify possible problems such as more staff than is necessary to carry out programs at the levels intended by Congress. The team was also asked to examine the buildup of regional offices during the last few years to determine if that decentralization resulted in more efficient or less efficient use of the total personnel of the Department.

The study involved a broad-scope multiagency approach at the Office of the Secretary and its six operating agencies, all located in the greater metropolitan Washington and Baltimore area. We also visited three regional offices of the Department and interviewed officials at State and local governments, at universities, at a regional education laboratory and at the Center for Disease Control. In addition, we developed and used a questionnaire to obtain from State officials information about their evaluation of the effectiveness of services provided by HEW regional offices.

The entire assignment, including the writing and processing of the report, took about 6 months to complete. The report, which took the team about 2 months to write and process, was well received by the chairman and the committee. During the hearings, one of the committee members stated that the team's report contained many findings which would be useful to HEW and to the committee. The report was printed in its entirety in part IV, fiscal year 1972, Department of HEW hearings before the Subcommittee of the House Committee on Appropriations (pp. 1061–1166).

Fighter Aircraft Programs

The Survey and Investigations Staff submitted to the House Committee on Appropriations prior to the fiscal year 1972 hearings a report which identified certain problem areas in the development programs in the F–14 and F–15 fighter aircraft programs. The chairman requested that further and continuing inquiry be made to determine the progress of each service toward resolving problems identified in the earlier report and other problems which might arise.

The chairman also wanted specific information about:

—The projected unit cost of the various aircraft quantities under consideration, with emphasis on cost overruns as well as recent design or engineering changes which may have an effect on ultimate cost and performance.

—The ability of each contractor to meet the original and/or revised design characteristics.
—The progress of contractors in meeting program milestones as to time and cost.
—The adequacy of program management procedures, if deficiencies were identified.

The broad approach of the same team of six men reviewing the two aircraft programs concurrently was useful from the viewpoint of comparing the specifics of Air Force and Navy management and performance, schedule, and cost aspects of the respective programs.

We performed work at numerous activities of the Department of Defense such as the F–14 and F–15 project offices, Defense Contract Audit Agency's field sites, plant representatives' offices, and test centers. Also cost control, schedule, and performance characteristic data were reviewed with the major aerospace contractors—Grumman Corporation, McDonnell Douglas, Pratt and Whitney, and Hughes Aircraft. From two National Aeronautics and Space Administration Centers, we obtained views from technically qualified personnel on designs of the airframes and engines.

The study was still in process when I returned to GAO. The director subsequently informed me that he submitted the report to the chairman on March 15, 1972, prior to the hearings scheduled before the House Committee on Appropriations for fiscal year 1973 funding. The elapsed time for the total job was about 8 months.

Conclusion

A task force approach has several distinct advantages—speed, flexibility, and broad program perspective. This results from a single group's responsibility and capability to review and understand the significant aspects of the total program. Thus, significant time is saved by eliminating the need to prepare detailed audit programs and communicate all pertinent information to others. Also, a better team understanding of the program speeds up development of the field work as well as report writing. This together with a quick, single-level report review process contributes to timely completion of assignments.

It is recognized that in such broad studies, because of the need to obtain information quickly and to meet reporting deadlines, sound judgment and trade-offs as to the amount of depth and detail that can be pursued are prime considerations. Therefore, it may not always be possible to reach evaluative conclusions and recommendations in time for hearings. This in many situations is not considered a severe limitation because congressional committees have a need for factual data and some independent observations about the operations of a program that can be useful in their own decisionmaking process.

I am not suggesting a task force approach as a *modus operandi* for all of GAO's operations. On the contrary, an approach should be tailored to meet the needs of the division or group to most effectively accomplish its assignments. Under the current reorganiza-

tion of GAO, however, changes are occurring to enable the Office to respond more effectively to increased demands for broad-based and program-type reviews and to speed up completion of our work. Perhaps, a task force approach such as the one I have described or some variations of it can be used for some programs to meet these demands.

EDITOR'S NOTE:

The chairman of the House Appropriations Committee, George Mahon, wrote to the Comptroller General on February 24, 1972, about Mr. Gabriel's work with the committee.

"Recently, Mr. Anthony J. Gabriel returned to the General Accounting Office from his assignment with the Staff. Mr. Gabriel did an outstanding job and was a fine representative of your organization. He served in the capacity of a team leader on one of the studies and was directly responsible for the successful completion of the investigations to which he was assigned."

A Good Question

LTC David Pemberton, Inf., USA, and a former Army installation comptroller, poses this question in suggesting that the Department of the Army should devise a special medal for its auditors.

> How do you find fault, constructively criticize, and make painful recommendations—and still be a nice guy?

Cited in *Armed Forces Comptroller*, Spring 1972.

PAUL S. CARPENTER 721585

The Audit Team: An Organizational Innovation

This article reviews the work-team approach to managing unique, one-time assignments and compares it to the functional or traditional approach. The author makes some suggestions for possible GAO application.

Are hierarchy, unity of command, and span of control—the classical principles of organization—still valid for the performance of all GAO assignments? Many voices today are saying that bureaucracy is obsolete and that the traditional principles no longer apply universally. These voices are telling us that bureaucratic rigidities frequently burden an organization when its greatest need is to be adaptive and responsive to rapidly changing objectives, problems, and environment.

Traditional organizations function primarily on a vertical basis and depend almost completely on a strong superior-subordinate relationship to insure a unified effort. Individual managers tend to identify boundaries of responsibility and specialization. With very small organizations this presents few problems since the functional manager can maintain lateral as well as vertical staff contact to insure mutual support and understanding of interfunctional goals.

This purely functional approach does not work effectively, however, when a task involves the coordinated effort of many different organizational subsystems and people with a variety of specialized skills. Unique management relationships evolve in the performance of a large, single-purpose assignment that may cut across interior organizational flows of authority and responsibility, and which may even extend outside to independent organizations.

The capacity to be adaptive and responsive is greatly enhanced through a work-team organizational structure where organizations are molded around tasks. Teams are oriented to specific assignments and are created, altered, disbanded, and created anew as assignments require. Typically, a

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Phenomenon	Team Approach	Functional Approach
Line-staff organizational dichotomy	Vestiges of the hierarchal model remain, but line functions are placed in a support position. A web of authority and responsibility relationships exists.	Line functions have direct responsibility for accomplishing the objectives; the line commands, staff advises.
Scalar Principle	Elements of the vertical chain exist, but prime emphasis is placed on horizontal and diagonal work flow. Important business is conducted as the legitimacy of the task requires.	The chain of authority relationships is from superior to subordinate throughout the organization. Central, crucial, and important business is conducted up and down the vertical hierarchy.
Superior-subordinate relationship	Peer to peer, manager to technical expert, associate to associate relationships are used to conduct much of the salient business.	This is the most important relationship; if kept healthy, success will follow. All important business is conducted through a pyramiding structure of superiors-subordinates.
Organizational objectives	Management of a project becomes a joint venture of many relatively independent organizations. Thus, the objective becomes multilateral.	Organizational objectives are sought by the parent unit (an assembly of suborganizations) working within its environment. The objective is unilateral.
Unity of direction	The project manager manages across functional and organizational lines to accomplish a common inter-organizational objective.	The general manager acts as the head for a group of activities having the same plan.
Parity of authority and responsibility	Considerable opportunity exists for the project manager's responsibility to exceed his authority. Support people are often responsible to other managers (functional) for pay, performance reports, promotions, and so forth.	Consistent with functional management; the integrity of the superior-subordinate relationship is maintained through functional authority and advisory staff services.
Time duration	The project (and hence the organization) is finite in duration.	Tends to perpetuate itself to provide continuing facilitative support.

work-team organization is responsible for completing an assigned objective within cost and profit or benefit goals, and to established standards. The objective is usually one requiring special management attention and emphasis over a relatively long period of time. Projects lasting only a few weeks, however, can be accomplished with a minimum of disruption by teams or task forces.

David Cleland compares the work

team to the functional approach as shown on page 47.[1]

The work-team approach can provide the arrangement, emphasis, and control necessary to counteract any weaknesses, functional or otherwise, that could impair successful completion of the assignment.

Evolution

One problem that management has had in adjusting to the philosophy of the team approach is its frequent failure to understand it. The concepts of the work team are still evolving. Stages have come and gone in which different titles and degrees of responsibility have been associated with the position of the team manager.

The construction industry recognized very early the need for a system of management that called for a unifying agent in the ad hoc activities involved in the construction of one-time, costly projects such as dams or freeways. With this base laid by construction, project management in the manufacturing of technical products evolved naturally. When large manufacturing contracts came to the airframe industry, its members were quick to notice the similarity and to develop a type of project management well suited for their own needs. Similarities between heavy construction and airframe manufacture may be noted. In both cases there is a major job, substantially separate in itself, of finite duration, for one or a very few customers, involving something at least slightly different from that which has been done before.

The need for a unifying agent in these large projects was the motivation for the development of a team- or project-type organization superimposed on the traditional and functional organizational structure. Forerunners of project managers were known as "project expediters."[2] They did not perform line functions but instead informally motivated those persons doing the work. The project expediter's main concern was with schedules and he depended upon his personal diplomacy and persuasive abilities to remove obstacles to the management process. He was probably the earliest kind of work-team manager.

Ranked above the project expediter in terms of time and responsibility was the "project coordinator."[3] His role in the organization was more formal and was concerned with the synchronization of organizational activities directed toward a specific objective in the overall functional activities. His limited independence was reflected in his freedom to make decisions within the framework of the overall assignment objectives. He did not enter actively into the management functions outside of his particular organization. The project coordinator had specific functional authority in certain areas such as budgeting, release of funds, and release of authority to act as in the dispatching function in the production control environment.

[1] This chart which appeared in David I. Cleland's article, "Understanding Project Authority," *Business Horizons* (Spring, 1967), p. 66, is reprinted with permission of *Business Horizons* and Professor Cleland.

[2] David I. Cleland, "Project Management," *Air University Review* (January, 1965), p. 16.

[3] *Ibid.*

The project manager today is in every sense a manager. He actively participates in all of the organic functions such as planning, organizing, directing, and controlling the organization around a specific assignment. Many of the people who feel the force of his leadership are in organizational units separate from the project manager's parent unit.

Environment

The work-team manager is in a unique position. Because of the nature of his authority and the great demands put upon him by his superiors, he lives in a matrix of decisionmaking. His world is often overshadowed by clouds of uncertainty, risk and crisis. He must be in the frame of mind that Harry S. Truman was in when he stated that "the buck stops here." He must meet crises head on, resolve the problems, and take the full responsibility for the outcome of his decision. Continually he has the decision of what to trade off between. Should he sacrifice time to save some cost, should he modify the work plan to save some cost, should he modify the plan to save some time, or should he do nothing and hope for the best?

Whatever he decides is the proper course of action, it is imperative that he avoid that crippler of so many projects, a loss of momentum. If an assignment ever gets bogged down, needless waste of both time and material will be the result. The whole purpose of the work-team approach is to effectively organize a competent group of individuals who are able to accomplish a specific task in a given period of time. That time period is usually defined as the minimum period required for the assignment. The sense of urgency which usually permeates a work-team assignment at its inception must not be allowed to waver. The manager must continually point out the direction so that those in his organization will never lose sight of their goal.

The sphere of activity in which the team manager is engaged calls for a modification of the traditional concepts of superior-subordinate relationships. His is the environment of the professional and the perfectionist. He must readily understand that it is the analytical mind that produces the concepts by which the project attains its goal and at the same time that it is the integrative mind that brings all of these concepts into a systematic and intelligible whole. For this reason these professionals should be treated as professionals. They should be given minor supervision, adequate working quarters, and privacy.

The major problem encountered in working with the professional perfectionist is time. In the completion of his task the perfectionist cares little about time schedules. He is proud of his research, his work, and his accomplishments and rarely will he understand measures that seem to obviate the perfection of his performance. The manager has the responsibility of persuading these individuals to meet the time requirements.

In dealing with professionals, it should be understood that the obse-

quious manager would lose their confidence, trust, and support. A wise manager invests time and effort in learning the personal characteristics of each man. He will tend to deal with them individually in a helpful manner, yet he must be firm and candid in giving them feedback about both their technical and interpersonal performances.

Applicability to GAO

Generally, the team approach can be effectively applied to a one-time undertaking if it is (1) definable in terms of a specific goal, (2) infrequent, unique, or unfamiliar to the present organization, (3) complex with respect to the interdependence of the various parts of the overall task accomplishment, and (4) of great importance to the organization.[4]

Examples of GAO assignments on which the audit team could be used effectively are (1) assignments on which work is to be done in a large number of agencies, (2) large congressional request assignments requiring careful and detailed analysis as well as rapid completion, and (3) unfamiliar and complex assignments requiring more skills and abilities than are usually found in the traditional site audit group, such as ADP specialists, statisticians, systems analysts, and econometricians

[4] C. J. Middleton, "How to Set Up a Project Organization," *Harvard Business Review* (April, 1967), p. 74.

Assignments such as the above often cannot be carried out effectively under the functional organizational structure for one or more of the following reasons: First, organizational units are often jealous of their "territorial claims" and fight to promote and preserve prerogatives rather than work toward a unified organizational objective; second, more frequent and quicker decisionmaking is required on such assignments and it is slowed by the passing of intergroup problems through all levels of the organization which often delays or prevents important decisions from being made; third, the total perspective of an assignment is lost among functional groups; and fourth, functional groups performing repetitive tasks often lack the flexibility, responsiveness, and skills necessary for coping with new and rapidly changing assignment requirements.

The work- or audit-team approach is not a panacea, however. It appears to be most effective when the number of individual skill categories to produce a given result is large, when top management is committed to McGregor's Theory Y managerial perspective,[5] and where many professionals are expected to exercise considerable discretion.

[5] Douglas McGregor's Theory Y is a managerial perspective which presumes that people are inherently industrious and creative and that they want to make a contribution. This contrasts with Theory X which states that most workers are lazy, irresponsible, and untrustworthy, and that they require close supervision if results are to be achieved.

STEPHEN L. KELETI

721536

Comprehensive Survey of a Government Agency

The Comptroller General, in a recent speech, stated that surveys should allow us to be selective in choosing areas for detailed review and avoid situations where we would be chasing rabbits when we might be chasing elephants or bears. The survey described was used to sort out the elephants and the bears from the rabbits at the Food and Drug Administration.

The Agency

The Food and Drug Administration (FDA) is a constituent agency of the Department of Health, Education, and Welfare (HEW). FDA is administered by a Commissioner under the direction of the HEW Assistant Secretary for Health and Scientific Affairs. The Commissioner is charged primarily with the administration of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301), as well as portions of nine other acts.

FDA has implemented programs under this legislation to attempt to achieve what it considers as its basic mission—consumer protection. Its activities are directed toward protecting the public health by insuring that foods are safe, pure, and wholesome; drugs and devices are safe and effective; cosmetics are harmless; products are honestly and informatively labeled and packaged; dangerous household products carry adequate warnings for safe use and are properly labeled; and interstate travelers are afforded adequate levels of sanitation and control of health hazards.

The Environment

In 1960, the moneys appropriated to FDA totaled about $14 million and by 1972 had increased nearly seven-fold to about $100 million. (The President's budget message for fiscal year 1973 requested $144 million for FDA.) During this period, interest in consumer protection vaulted FDA into the national spotlight. The (Senator)

Mr. Keleti is a supervisory auditor in the Manpower and Welfare Division. He holds a Bachelor of Science degree in accounting from Saint Joseph's College, Philadelphia, Pa., and has done graduate work at the American University. Mr. Keleti is a member of the Federal Government Accountants Association.

Kefauver hearings on drug efficacy in the early 1960's and the thalidomide episode which resulted in the birth of deformed babies attracted the attention of the Congress and the Nation. More recently, several other consumer "scares" such as mercury contamination in swordfish and tuna, and polychlorinated biphenyls in medicated feeds, made the public wary of the effectiveness of FDA's consumer protection. Consumer interest in FDA probably reached its peak in the summer of 1971 with the tragic death of an individual who had eaten the contents of a can of vichyssoise soup containing botulism.

Until mid-1970, GAO had not assigned a permanent staff to audit FDA. Limited work had been performed, primarily by the Washington Regional Office to review accounting methods used in establishing fees for certain testing services performed by FDA on a reimbursable basis and to respond to specific congressional requests.

However, with the increasing growth and complexity of the food, drug, and cosmetic industries, and the increased consumer interest in these products, the Congress more and more turned its attention to the policies, programs, and actions of FDA. Because of the growing interest of the Congress and the public, the time appeared ripe for GAO to take a look at FDA activities.

The Survey Begins

A Civil Division assistant director was initially assigned responsibility for reviews of FDA activities. One staff member was assigned in May 1970 to compile background information on the agency's programs and activities. It became readily apparent that the limited staff would be unable to gain, within a reasonable period of time, a total view of the many and diverse activities for which FDA is responsible. The Detroit and Boston regional managers made staff available to conduct, together with the Civil Division staff, an in-depth survey of all programs and activities of FDA. In September 1970, the participating staffs held a meeting at FDA headquarters in Rockville, Md., to discuss the scope of the survey, obtain agreements as to staffing, and identify areas of responsibility.

The overall objective of the survey was to relate FDA's programs to the objectives of the authorizing legislation to determine if FDA was implementing the legislation as intended by the Congress. We decided to undertake a comprehensive survey of the legislation, policies, programs, and procedures of FDA to obtain a base of knowledge that would be beneficial for planning purposes. The survey was planned accordingly to identify those FDA programs and activities which appeared to have potential for future audit work and to assist the Office in establishing priorities for conducting detailed reviews. We established this as the first goal of the survey.

We stressed the importance of having each staff obtain and retain sufficient knowledge about FDA to carry out the necessary detailed examinations as a second goal. Both regional

offices agreed to commit no less than two staff members to FDA's assignments on a long-term basis (2–3 years). We recognized that the survey would require the expenditure of several hundred man-days but believed that the mounting congressional and public interest in FDA warranted such an expenditure.

A close working relationship between the participating staffs would be essential during the entire survey, so we encouraged extensive use of the telephone and frequent personal contact between participating staffs to resolve questions as they arose. To supplement these contacts, progress reports were exchanged between regions. Also, a midsurvey meeting was arranged to discuss information obtained and to exchange points of view on potential audit areas.

The survey included the activities of each of the four bureaus of FDA—the Bureau of Foods, the Bureau of Drugs, the Bureau of Veterinary Medicine, and the Bureau of Product Safety. To facilitate coverage of FDA's activities, we divided its responsibilities into five major areas of emphasis—foods, drugs and devices, product safety, veterinary medicine, and fair packaging and labeling. In each of the areas various activities were identified on which we wished to obtain information.

The survey was conducted at FDA headquarters in Rockville, Md., and Washington, D.C., by Civil Division staff, and by the Boston and Detroit Regional Offices at two selected FDA district offices—Boston, Mass., and Detroit, Mich.

Role of Boston Regional Office

With the objectives clearly in mind, the Boston staff began the survey at the FDA Boston District Office, compiling data on 29 programs relating to three major areas of FDA activity—foods, product safety, and veterinary medicine. Although most of their work could be performed at the district office level, the Boston staff also visited the FDA headquarters in Rockville on numerous occasions to obtain supplementary data and FDA headquarters' policies on certain matters. The Boston and Civil Division staffs also kept in constant communication by telephone. This assisted both staffs in obtaining the total story on each of the activities under review.

One of FDA's prime responsibilities is to insure that foods are safe, pure, wholesome, and nutritionally adequate. FDA carries out this mandate primarily through inspection of food plants for such potential problem areas as sanitation, salmonella, and microbiological contamination. To become familiar with the type of inspections performed by FDA and with the procedures and techniques used by FDA, the Boston staff accompanied FDA inspectors on inspections of food and fish manufacturing plants. This on-the-job experience gave the Boston staff not only a firsthand view of the type of work performed by FDA inspectors, but also a feel for the sanitary conditions of the plants. To read about "dirty" plants in FDA inspection reports was one thing, but to actually see rodents crawling through raw materials or around finished prod-

ucts certainly put things in perspective for the Boston staff.

The Boston staff also spent 2 weeks at the Bureau of Product Safety's headquarters in Cincinnati, Ohio, to obtain information about the Bureau's programs.

Role of Detroit Regional Office

The Detroit staff, with responsibility for reviewing activities of the Bureau of Drugs and implementation of the Fair Packaging and Labeling Act, set out to obtain data on 20 different programs at the FDA Detroit District Office. Like their Boston counterparts, the Detroit staff periodically visited FDA headquarters and kept in constant communication with the Civil Division staff.

As the name of the agency implies, food and drugs are the two main bulwarks of FDA. As Boston was solely responsible for food activities, the Detroit staff was assigned sole responsibility for the complex area of drugs.

As in the foods area, the FDA monitors the activities of drug establishments primarily through inspections of plants, supplemented by the collection and analysis of drug samples. The Detroit staff accordingly arranged to accompany FDA inspectors to a number of drug firms to obtain a firsthand view of drug inspections.

Role of the Civil Division

The Civil Division staff, when not responding to requests from the two regional offices for information, carefully researched the legislative history of the 10 pieces of legislation which provided the basis for FDA's programs and activities. Because certain FDA programs were centralized in FDA headquarters, the Civil Division staff also obtained information about cosmetics, medical devices, and premarket clearance of drugs and participated in inspections of food and drug plants by the FDA Baltimore District Office for orientation purposes.

Midsurvey Meeting

A midsurvey meeting of the three staffs was held at FDA headquarters in Rockville, Md., in January 1971. Since each staff had been intensely involved in learning about FDA's operations for about a 4-month period, we believed they would benefit from an exchange of information on their progress.

At this meeting each staff identified the FDA programs they had reviewed, discussed the objectives of each of the programs, and tentatively identified potential audit areas. In addition, agreement was reached on the format of an internal planning document to be prepared at the conclusion of the survey and on the responsibilities assigned to each of the staffs.

The following schedule presents a brief outline of the planning document and identifies the responsible staff.

The heart of the planning document was to be chapter IV—the identification of those areas which appeared to warrant detailed review. We agreed that all work would be completed by the end of February 1971 and that a

Chapter		*Responsible Staff*
I	Introduction A. Objectives B. Scope	Civil
II	Background Information Organization	Civil
III	Legislative Authority A. General statement of responsibilities B. Analysis of 10 major statutes concerning FDA	Civil
IV	Synopsis of potential areas A. Brief description of potential audit areas B. General trends of activity which cross areas of responsibility C. Time frame for performing detailed reviews	Civil Boston Detroit
V	Foods A. General statement B. Areas audited during survey 1. Identification of area 2. Observations, findings, etc. 3. Conclusions, opinions 4. Recommendations	Boston
(Each of the remaining chapters were to contain parts A and B identical to the above section.)		
VI	Drugs	Detroit
VII	Product Safety	Boston
VIII	Fair Packaging and Labeling	Detroit
IX	Veterinary Medicine	Boston
X	Cosmetics	Civil
XI	Medical Devices	Civil
XII	Investigational New Drugs/New Drug Applications	Civil

final meeting would be held early in March 1971 to discuss potential audit areas identified by each of the three staffs and to assign priorities for accomplishing detailed reviews. We agreed that each of the two regional offices would, upon completion of the survey, undertake one lead region assignment immediately and undertake a second lead region assignment 1 month later.

In early March, the final meeting was held at FDA headquarters. Each staff discussed the potential audit areas they had identified and were critiqued in turn by the other two staffs. We agreed on seven potential areas warranting detailed review and established priorities for undertaking the assignments. The plan was presented to the responsible associate and assistant directors for approval.

We decided that one additional meeting should be held at the end of March 1971 to brief the Commissioner of the Food and Drug Administration

and his top staff on the scope and results of the survey and to discuss those areas in which GAO intended to start detailed reviews immediately. This meeting was held on March 25, 1971.

We discussed the results of the survey and identified four areas for immediate review: (1) sanitation conditions of food manufacturing establishments, (2) drug monitoring activities, (3) legal problems affecting FDA's regulatory activities, and (4) the national shellfish sanitation program. Our presentation was well received by FDA officials and has subsequently led to a series of meetings between GAO and FDA officials on each detailed review undertaken.

The planning document was issued in May 1971 and stands today as a comprehensive summary document of the Food and Drug Administration's programs and activities.

Conclusions

The 1,400 man-day expenditure by the Civil Division and the Boston and Detroit regional offices constituted a rather large investment.

Here was an agency on which GAO had little information. Although a small budget agency—$100 million was appropriated for fiscal year 1972—the consumer protection activities of FDA affect the lives of every person in the United States. In addition, strong congressional interest in the area of consumer protection, as well as the interest of consumer advocate organizations, dictated that GAO take a close look at FDA.

As an alternative approach often followed by GAO, we could have identified a few programs for survey and started detailed reviews on the most promising. Or we could have taken one of the four FDA bureaus, surveyed its activities, and started detailed reviews on the most promising. But would either of these approaches have identified those areas administered by FDA which needed our priority attention? With the limited staff with which GAO operates, shouldn't we establish priorities and identify those areas which are the most significant and where we can best utilize our manpower?

Of course the answer to the latter question must be affirmative. The comprehensive survey of FDA enabled GAO not only to become totally familiar with the operation of the agency, but also to pinpoint significant areas for review which would most benefit the agency, the Congress, and the public.

As reported in *The GAO Review* (Winter 1972), the Comptroller General, in addressing the 7th International Congress of Supreme Audit Institutions in Montreal, Canada, stated that preliminary surveys:

> * * * should be made to obtain necessary background and other working information for use in making the audit. I would like to add here simply that what this amounts to is that, to save time in the long run, we can be more selective and thus avoid situations where we would be chasing rabbits when we might be chasing elephants or bears.

In my opinion, the comprehensive survey of FDA allowed us to identify elephants and bears rather than rabbits.

Recognition should be given to the following individuals who participated in the survey and contributed to its success.

Civil Division

Dean K. Crowther, associate director
Willis L. Elmore, assistant director
Morton A. Myers, assistant director
Stephen L. Keleti, supervisory auditor
Gary L. Whittington, supervisory auditor
Charles J. Miller, auditor
Watt P. Sammons, Jr., auditor

Boston Regional Office

Joseph Eder, regional manager
Louis Lucas, assistant regional manager
Kenneth Croke, audit manager
Robert Bontempo, supervisory auditor
Walter Dunbar, supervisory auditor
Edmund Kelley, auditor
Alfred Vieira, auditor

Detroit Regional Office

Charles H. Moore, regional manager
John A. Dowell, assistant regional manager
Robert O. Gray, audit manager
Robert Rogers, supervisory auditor
Gerald H. Springborn, supervisory auditor
Hi Barber, auditor
Norman Stein, auditor
David Rowan, auditor

EDITOR'S NOTE:

As of May 1972, audit work on FDA assignments associated with information obtained during the comprehensive survey has resulted in:

—A report to the Congress on the dimensions of insanitary conditions in the food manufacturing industry (B-164031(2), Apr. 18, 1972).
—Three reports to the Congress in process.
—Five reviews in initial stages.
—Two reports to congressional committees pursuant to requests for reviews.
—Three detailed reviews in process pursuant to congressional requests.

Harold S. Morse

1887–1972

Harold S. Morse, one of the first assistant directors in GAO's Corporation Audits Division, passed away on May 2, 1972, at his home in Wolfeboro, N.H., at the age of 85. Mr. Morse was one of the many members of the public accounting profession who responded to Comptroller General *Lindsay Warren*'s call for help in organizing the Corporation Audits Division, established pursuant to the George Act, approved February 24, 1945. That act—later superseded by the Government Corporation Control Act of December 6, 1945—placed upon GAO responsibility for auditing the financial transactions of all Government corporations in accordance with the principles and procedures applicable to commercial corporate transactions.

Prior to joining GAO on July 30, 1945, Mr. Morse had 40 years' experience in public accounting. Thirty of these were with Scovell, Wellington and Co., where he was a general partner. He started in the accounting field at age 19. At age 21 he and two others formed a partnership in New York City which, after 6 years, was combined in 1914 with the practice of Scovell, Wellington and Co. when that firm opened a New York office. Mr. Morse was in charge of the New York office for many years. C. Oliver Wellington, senior partner, described Mr. Morse's knowledge of accounting and auditing as outstanding, and his ability to evaluate the work of subordinates as exceptional.

Except for two brief interludes, Mr. Morse continued with the Corporation Audits Division until it became a part of the Division of Audits which was established on January 18, 1952. He retired from GAO shortly thereafter on May 10, 1952.

Mr. Morse's experience in selecting personnel for the New York accounting firm was put to use immediately upon his joining GAO. Having this experience and being one of the first of the division's original directorate to report for duty, he immediately took on the task of interviewing applicants for positions with the new division. After sufficient staff was assembled to make a start on the initial audits, Mr. Morse led a contingent to the Canal Zone to make the first audit of the Panama Railroad Company under the George Act. The first report, covering fiscal years 1945 and 1946, contained several recommendations for improving the Company's operations and accounting. All of these recommendations were adopted. Mr. Morse also supervised the audits of the Company for 1947 and 1948.

The Company, originally incorporated under New York law, had to be reincorporated under Federal law to continue in existence. Mr. Morse contributed heavily toward drafting the Federal charter granted on June 29, 1948. Also, he served for 3 months in

1949 as a special consultant with the Bureau of the Budget in connection with the Bureau's study of a proposed reorganization of the Company and the governmental agency known as the Panama Canal. Under the reorganization act, approved September 26, 1950, the Company was renamed the Panama Canal Company and assumed all business activities formerly conducted by the Panama Canal organization, including operation of the Panama Canal.

In 1949 Mr. Morse was assigned the task of developing GAO's program under section 206(c) of the Federal Property and Administrative Services Act of 1949. That section requires GAO to audit all types of property accounts and transactions in accordance with generally accepted principles of auditing. He established a field office of the Corporation Audits Division in New York City in 1951. That office, one of four established throughout the country, was abolished when the Division of Audits was formed.

Mr. Morse's son, Edwin H., who survives him and is now in public accounting practice in California, also served in the Corporation Audits Division.

John C. Fenton,
Assistant Director,
Manpower and Welfare Division

Federal Expenditure Controls—1860 Style

Mark Twain's self-styled record of "variegated vagabondizing" known as Roughing It *is not the kind of literature in which one would expect to find any reference to the Federal Government's comptroller function. But there is one, growing out of Twain's experience as private secretary to his brother who was Secretary of the Nevada Territory. (Nevada was a territory from 1861 to 1864.)*

The Review *is indebted to* David Hanna, *assistant regional manager, Chicago, for calling attention to the following picturesque passages on Federal expenditure "control" in the 1860's by the Comptroller of the Treasury, an organizational ancestor of the Comptroller General.*

Nothing in the world is palled in such impenetrable obscurity as a U.S. Treasury Comptroller's understanding. The very fires of the hereafter could get up nothing more than a fitful glimmer in it. In the days I speak of he never could be made to comprehend why it was that twenty thousand dollars would not go as far in Nevada, where all commodities ranged at an enormous figure, as it would in the other territories, where exceeding cheapness was the rule. He was an officer who looked out for the little expenses all the time. The Secretary of the territory kept his office in the bedroom, as I before remarked; and he charged the United States no rent although his "instructions" provided for that item, and he could have justly taken advantage of it (a thing which I would have done with more than lightning promptness if I had been Secretary myself). But the United States never applauded this devotion. Indeed, I think my country was ashamed to have so improvident a person in its employ.

Those "instructions" (we used to read a chapter from them every morning, as intellectual gymnastics, and a couple of chapters in Sunday-school every Sabbath, for they treated of all subjects under the sun and had much valuable religious matter in them along with the other statistics)—those "instructions" commanded that penknives, envelopes, pens, and writing-paper be furnished the members of the legislature. So the Secretary made the purchase and the distribution. The knives cost three dollars apiece. There was one too many, and the Secretary gave it to the Clerk of the House of Representatives. The United States said the Clerk of the House was not a

"member" of the legislature, and took that three dollars out of the Secretary's salary, as usual.

White men charged three or four dollars a "load" for sawing up stovewood. The Secretary was sagacious enough to know that the United States would never pay any such price as that; so he got an Indian to saw up a load of office wood at one dollar and a half. He made out the usual voucher, but signed no name to it—simply appended a note explaining that an Indian had done the work, and had done it in a very capable and satisfactory way, but could not sign the voucher owing to lack of ability in the necessary direction. The Secretary had to pay that dollar and a half. He thought the United States would admire both his economy and his honesty in getting the work done at half price and not putting a pretended Indian's signature to the voucher, but the United States did not see it in that light. The United States was too much accustomed to employing dollar-and-a-half thieves in all manner of official capacities to regard his explanation of the voucher as having any foundation in fact.

Value of Questioning

* * * there is nothing, nothing, that so clears the mind of the government official as the knowledge that he is going to be subject to cross-examination * * *.

Judge Harold Leventhal

District of Columbia Circuit Court, U.S. Court of Appeals

Speaking on "The Lawyer in Government," during the GAO 50th anniversary lecture series, October 15, 1971.

GAO's Legislative Digest Section

An important part of the work of every member of GAO's professional staff is to be well informed on the laws and related legislative history applicable to the Federal programs, activities, and operations that concern his work. The Legislative Digest Section in the Office of the General Counsel accumulates and maintains files and records which contain such information.

The Section is the repository for histories on almost every public law enacted by the Congress since 1921. Most of these histories are fairly complete from 1935. Attorneys, accountants, and auditors alike find them an invaluable aid in determining congressional intent.

The method used by the Section in compiling these histories has served as a model for other Government agencies establishing similar services. The method is unique in that either the amendments or notations of the amendments are filed with the basic law. This facilitates research because references to all the required material are in one place. A subject and citation index to public laws is compiled at the conclusion of each session of Congress.

The Section also maintains a file on every bill introduced in Congress. The bills are indexed, prior history on the legislation is located and filed with the new bill, and every subsequent action or discussion on the bill is reflected in the legislative folder. The Office of Legislative Liaison and those attorneys handling congressional requests are informed of the content of and the action taken on the legislation. Notification of upcoming hearings and other action on bills is essential to prompt reporting to Congress of GAO views on legislation.

The Section distributes bills, reports, and hearings to the various operating divisions and offices in accordance with a predetermined listing of areas of interest which is periodically revised and updated. Accession reports are made listing titles and reference numbers of the material available in the Section.

All hearings are scanned for references to the Comptroller General or GAO and, in the case of hearings on appropriation bills, an excerpt of the pertinent portion is reproduced and distributed to those interested.

The *Congressional Record* is digested daily. References to the General Accounting Office are reproduced. Action on legislation on the floor and in committee is described and other congressional comments of interest to GAO are highlighted. The *Congressional Record* is also clipped for inclusion of pertinent material in the legislative folders.

The Section also maintains a subject file which contains material not specifically related to a bill or public law.

The Legislative Digest Section is headed by *R. Boyce Harrill.* The assistant chief is *Judith Hatter.*

This section, the GAO Library, the Index-Digest Section, and the Index and Files Section make up the Legal Reference Services of the Office of the General Counsel. The Chief of Legal Reference Services is *Loy S. Shuler.*

Effectiveness Auditing

The ultimate aim of effectiveness auditing is to promote a better fulfillment of goals in public affairs. That is to say:

—agencies should be stimulated and provided with ideas for improving effectiveness.
—the Government should get information on the effectiveness of public undertakings and get an opportunity to follow up the effects and results of the decisions made.
—the general public should get information on the results of government activities.

The effectiveness of government activities is scrutinized by auditing. That is to say:

—analyses are made of agency performance.
—the result achieved by the agency is compared with the goals and objectives set.

Lars Lindmark
Auditor General of Sweden,
Effectiveness Auditing in Government Administration
The Swedish National Audit Bureau, 1971.

The Watchdog Reports

In the 50th anniversary edition of the Review *(Summer 1971), a special section was included under the above heading containing selected excerpts from* The Watchdog *about the comings and goings of some of the people who left their mark on the GAO.*

The Watchdog *began publication in 1942 and is the monthly newspaper of the GAO Employees Association. Since 1948 its publication has been the responsibility of* Carl C. Berger, *Employee Relations Officer, Office of Personnel Management.*

For lack of space, it was not possible to include in the 50th anniversary issue of the Review *all of the items worthy of republication for the benefit of GAO's present professional staff. For this reason, beginning with this issue, the* Review *will continue this section from time to time to present additional news items published over the years by* The Watchdog.

War Plaque

June 1948

The 29 heroes from the General Accounting Office who lost their lives during World War II are now permanently honored with a bronze plaque. The plaque is now mounted on the wall near the main entrance of the 5th and F Street Building.

The memorial was formally presented to the Office in a ceremony May 28 conducted by the GAO Employees Association and the GAO Post No. 48, American Legion, co-sponsors of the ceremony, who also divided the cost of the plaque. The idea for the plaque was suggested by *Virgil Potts* of the Employee Relations Section.

In accepting the plaque, Mr. *Frank L. Yates,* Assistant Comptroller General of the United States, said of the 29 heroes, "They were our representatives in the armed forces . . . they were our associates. . . . They are of us who meet to honor them. . . ."

Over 200 persons attended the ceremonies which were held after working hours on the Friday before Memorial Day in the rotunda of the Main Building. The ceremony was opened with the advance of the colors carried by *G. I. Henderson* and *Irene Corn,* two former servicewomen and members of the GAO Legion Post.

New CPAs

December 1948

On December 7, the directorial staff and supervisors of the Corporation Audits Division were hosts at a dinner honoring the members of the accounting staff who passed the November 1947 or May 1948 CPA examinations. The affair was held in the Officers Mess, U.S. Naval Gun Factory.

Theodore G. Freedlund, who has conducted the general training courses for the staff, introduced the following new CPAs: *Robert F. Brandt, John E. Dorwart, Francis I. Geibel, James H. Hammond, David M. Kramer, Francis W. Lyle, Elmer W. Muhonen, Rudolph F. Olson, Leo Schimel, Ray M. Theuret, R. Scott Tyree, Harvey C. Wright* and *Francis J. Conroy* (now with Accounting Systems Division).

Other guests included Joseph G. Motyka, Secretary and Treasurer of the District of Columbia Institute of Certified Public Accountants; *John F. Feeney*, Executive Officer; *Frank H. Weitzel*, Assistant to the Comptroller General; *T. A. Flynn*, Director of Personnel; *Ralph E. Casey*, Associate General Counsel; and *O. K. Blanchard*, Office of the General Counsel. All of these guests had encouraging words and congratulations to express to the new CPAs.

In addition, Henry S. Owens, Member of Council, American Institute of Accountants, discussed the history, organization, and functions of the American Institute of Accountants and the benefits which accrue to its members. Assistant Director in Charge of Staff, *O. Gordon Delk*, was the toastmaster.

Joint Program for Improving Accounting Announced

January 1949

The broad outlines of a continuing, Government-wide program to improve Federal accounting and financial reporting were announced jointly January 13, by John W. Snyder, Secretary of the Treasury, *Lindsay C. Warren*, Comptroller General, and James E. Webb, Director of the Bureau of the Budget.

The General Accounting Office, the Treasury Department, and the Bureau of the Budget, as the three central fiscal agencies of the Federal Government, are taking the lead in the joint program, with participation by representatives of all departments and agencies.

Work on the project has been underway for the past year, much of which necessarily concerned the accounting problems of the individual agencies. The general policies and objectives which will govern future work on the project were set forth in a joint statement by Secretary Snyder, Mr. Warren, and Mr. Webb. The statement points out:

"Better accounting and financial reporting is an integral part of a broad program to improve efficiency and attain economies in the management of the Government's operations.

"The growth in size and diversity of the activities of the Federal Government and the need for better management have intensified the need for development of more timely, meaningful, and useful financial information. Accounting, as the most important

method of providing financial information, has not kept pace with the many and varied demands thrown upon it. On the other hand, management has not always given the necessary recognition to the importance of the accounting function.

"Improvement in accounting and financial reporting is needed to guide management in all areas of administration, to give the Congress and the citizen a clear picture of what happens to the tax dollars invested in Government, and to reflect the effect of Government operations on the economy of the Nation."

It was also pointed out that the Government's accounting problem is complicated by the fact that not only individual administrative agencies but also the President and his staff agencies, the Treasury Department, General Accounting Office, and the Congress each have interests and needs to be served by accounting results. In addition, the general public is entitled to adequate and understandable presentation of the Government's financial condition and operations. An accounting policy for the Government must, therefore, take into consideration and reconcile as far as possible, all these viewpoints.

* * * * *

The Secretary of the Treasury, Comptroller General, and Director of the Budget emphasized that the joint program embodies their complete agreement that:

1. The maintenance of accounting systems and the producing of financial reports are and must continue to be functions of the executive branch.
2. There must be an audit independent of the executive branch which will give appropriate recognition to necessary features of internal audit and control. Properly designed accounting systems are a vital factor to the effectiveness of such independent audit.
3. Full opportunity is to be afforded to the executive branch for participation in the development of accounting systems as an essential to meeting the needs and responsibilities of both the legislative and executive branches in the establishment of accounting and reporting requirements.

Summing up, they said:

"The successful prosecution of this joint program will give the President better management in the executive branch, the Congress better information and bases for acting upon appropriations and other legislation, and the public a clearer picture of the financial condition and operations of the Federal Government."

H. S. Morse Leaves GAO

May 1949

Harold S. Morse, an Assistant Director of the Corporation Audits Division, has resigned to take effect as soon as his present assignments are completed. At a dinner party, given by members of the staff who had worked for him on the Panama Railroad audits, Mr. Morse was presented with a silver ice bucket.

He was one of the first members of the organization and originally planned to stay only until the organizational phase was past. Although he had considered leaving at an earlier date, he has stayed on at the urgent request of the Division.

Mr. Morse was a partner of the accounting firm of Scovell, Wellington & Company and had retired from that organization at the time that the American Institute of Accountants, in cooperation with the Comptroller General, called upon members of the profession to assist in the establishment of an organization to audit Government corporations.

Mr. Morse was one of the first to volunteer his services. It is in keeping with the spirit and interest he has shown in the development of the Corporation Audits Division that he has consented to return and assist from time to time as he is called upon.

Article by Comptroller General Warren

June 1949

"A vast number of Federal bureaus should be the object of a vigorous, uncompromising, but scientific and discriminating application of the bush-ax treatment," according to *Lindsay C. Warren*, the Comptroller General of the United States, in an article which appeared in the "American Magazine."

"In 20 years Government divisions and units have increased from some 300 or 400 to as high as 1,816 (depending on who counts them) . . . with the heads . . . fighting fiercely to protect their jobs, their departments, their red tape, their functions, and their right to spend in their own way the taxpayers' money."

Mr. Warren pointed out that as Comptroller General he was "concerned at the amount of waste, extravagance, and duplication which shows up in many quarters, and most especially at the tenacity with which the bureaus continue their jobs and their spending after there is no longer any need for them."

He also pointed out that "estimates of extraordinary savings from reorganization must be taken with a grain of salt, for reorganization is more than the reshuffling of agencies. It is also the abolition of the useless and outmoded function, and it should bring to light those far too many cases existing where the function itself must be continued but where the staff "working" on the job is far too great to do what may be needed. Everybody knows that some Government agencies are overmanned and, like sin, everybody is against it. But putting the finger on the particular spot is a task for the expert."

The state of affairs at present constitutes a danger, according to Mr. Warren: "We have reached a crisis in government. If Congress and the President are now unable to put through an honest, widespread, and effective reorganization, they and the taxpayers might as well surrender unconditionally. If the bureaucrats win again, as they have before, we might as well concede that we are through. We shall be forced to confess that governmental affairs cannot be conducted on a busi-

nesslike basis, that we cannot set up clean-cut operational systems, eliminate red tape, or promptly discharge department heads who put their own interests above those of the taxpayers."

Mr. Warren urged that administrators change their point of view "toward the money Congress gives them to spend. Too many bureau heads actually believe that appropriations belong to them and they must spend every cent, even though it may take superhuman planning to be extravagant enough to get rid of it all."

Mr. Warren concluded his article with a remark made by Thomas Jefferson in 1802: "Let us deserve well of our country by making her interests the end of all our plans and not our own pomp, patronage, and irresponsibility."

FROM GAO SPEECHES

Problems in Revenue Sharing

Elmer B. Staats, Comptroller General, speaking on "Achieving Better Cooperation: Washington, California, Los Angeles," to the Town Hall of California, Los Angeles, March 7, 1972:

More than two-thirds of the $44 *billion* proposed in the budget for 1973 for assistance to State and local governments in 1973 will be spent in, or affect directly, metropolitan areas—an increase of over $17 *billion* just in the last 4 years, mainly for law enforcement and public assistance.

A portion of the total proposed outlays for aid to State and local governments is in the form of sharing of Federal revenues. This has been a controversial proposal, particularly the concept of turning Federal revenues over to State and local authorities with no stipulations or requirements as to how they may be used and no accountability to the Federal Government as to how they are spent.

President Nixon has argued in effect that general revenue sharing would place greater responsibility on local governments to determine how governmental programs largely financed by Federal appropriations should be carried out. His message to Congress on this subject concluded, in his words, that "the crucial question is not where the money comes from but whether the official who spends it can be made to answer to those who are affected by the choices he makes."

This is a vastly different concept of accountability for the expenditure of Federal funds than has existed in the past. The normal process by which the Congress authorizes the purposes for which funds are spent, appropriates funds, and then provides oversight as to the efficiency and effectiveness with which the funds are spent would be bypassed.

Congressman Wilbur Mills, chairman of the House Ways and Means Committee, has introduced his own bill in which an attempt is made to strengthen the accountability aspect. His bill is an improvement in some respects over the administration's bill but I do not believe that either provides for adequate accountability to the Congress or to the executive branch.

While it seems likely that the Congress sooner or later will approve some kind of revenue sharing procedure, providing more and more money in this form does not seem to me to be an adequate answer to the gnawing problems of our society. We need to make sure that we use the money in ways that will best contribute to correcting its basic problems. But, most importantly, we should never lose sight of the basic point—at the very heart of our tradition of accountability in the democratic process—that those who tax must also be held to account for the effectiveness with which tax funds are spent.

Value of Independent Audit

E. H. Morse, Jr., Assistant Comptroller General, speaking on "Financial Management Activities in the U.S. Government," before the Financial Management Institute of the Federal Institute of Management, Federal Gov-

ernment of Canada, Ottawa, Ontario, Canada, March 15, 1972:

I do not think I need to compound examples further to illustrate that auditors can contribute greatly to efficiency in the public service. In our case, we prepare almost 1,000 reports every year. These vary greatly in significance, but they are all concerned with some aspect of governmental operation and administration together with suggestions for improvement.

—They may identify opportunities to improve procedures and save money.
—They may include evaluations of how good a job is being done through the spending of public funds.
—They may assess the validity of financial and statistical information used by managers in their decisionmaking or reported to the legislature and the public.

Over and above written reports, we have thousands of continuing contacts with government officials, contractors, or grantees and their operations and all of these may involve constructive discussions and suggestions, many of which never find their way into written reports.

The values of independent governmental auditing are measurable in financial terms to some extent. Last year we identified something like $270 million that the U.S. Government saved as a result of GAO audit activities. We tend to be conservative in these measurements and, in any event, many significant accomplishments are simply not measurable in financial terms. In fact, we consider that our greatest value lies in the bare fact that our very operation, including readiness to make audits and availability to consult with operating officials and congressional committees, promotes greater efficiency and effectiveness in government operations in a way that cannot be given a dollar measure.

Information Systems Priorities

William L. Campfield, associate director, Division of Financial and General Management Studies, speaking on "Progress and Potential of Management Accounting in the Federal Government," at the Graduate Seminar in Not-For-Profit Organizations, College of Business Administration, University of Denver, January 27, 1972:

It is commonplace that a decision can be no better than the information upon which the decision is based. It is also widely accepted that decisionmakers in the United States are, for the most part, "data or fact rich" and "information poor." If these circumstances are only half as accurate as depicted they point up the need for managements, especially in the public sector, to reorder their priorities in accounting and related information systems development work.

It may seem a mild heresy to tell some accountants that the accounting system is not necessarily the first or the most important segment of an entity's information system to be considered.

Just as there is no magic alchemy for use by public managers in determining which programs and activities to tackle first, so too is there an absence of a precise formula for underscoring where the premier thrust should be in accounting and related information system development. Modern management accounting must necessarily reflect the planning and control philosophy of an entity's top management. What data are to be recorded, analyzed, and reported will depend on what kind of information at what point in time will be required by specific responsible managers at each decision level in order to make the most useful decision.

News & Notes

The amendment to the Defense Production Act of 1950 passed in August 1970 which provided for the establishment of the Cost Accounting Standards Board designated the Comptroller General as Chairman and authorized him to appoint the other four members. The law further specified that two of the additional members are to be from the accounting profession; one is to be a representative of industry; and one to be from a Federal department or agency.

On January 21, 1971, the Comptroller General appointed the Cost Accounting Standards Board (Public Law 91-379) was passed by the Congress following an 18-month study by the General Accounting Office undertaken by previous direction of the Congress. In this study, GAO found that such standards were both feasible and desirable. The Board was then incorporated in the amendments to the Defense Production Act, approved August 15, 1970. Funds for the establishment of the Board were approved recently by the Congress.

The Board will have the responsi-

On March 5, 1971, Mr. Staats, Chairman of the Board, announced that the Board had selected *Arthur Schoenhaut* as Executive Secretary.

Mr. Schoenhaut has served the Federal Government since 1950. Until 1964 he was with the General Accounting Office and served as Deputy Director of the Civil Division from 1964 to 1967. Since 1967 he has been Deputy Comptroller of the Atomic Energy Commission.

Mr. Schoenhaut received his B.B. degree from the City College of N.Y.

GAO Office of Federal Elections

New responsibilities for GAO relating to Federal elections were described briefly in the Spring issue of the *Review*. The Federal Election Campaign Act of 1971 became effective on April 7, 1972.

So that candidates for Federal elective offices and political committees would have the information necessary to comply with the numerous requirements of this law, regulations and reporting forms were prepared by a GAO task force and an initial mailing of about 7,500 sets was made on April 3, 1972.

In transmitting these materials, the acting director of the Office of Federal Elections, *L. Fred Thompson,* stated:

> The Federal Election Campaign Act of 1971 (Public Law 92-225), effective April 7, 1972, places specific limitations on the amounts which candidates for Federal elective office may spend for use of communications media in their campaigns and requires candidates and their supporting committees to make certain reports to a designated "supervisory officer". Candidates for the offices of President and Vice-President and their supporting committees report to the Comptroller General of the United States.
>
> Political committees in existence on April 7, 1972, which have funds in excess of $1,000, or anticipate contributions or expenditures in excess of $1,000 in the calendar year, any portion of which will be expended for election of a candidate for the office of President or Vice-President, are required to register with the Comptroller General by April 17, 1972. Both candidates and committees are required to file periodic reports of receipts and expenditures on March 10, June 10, September 10 and by January 31 of each year, and to file pre-election reports on the 15th and 5th days before each primary or general election, convention or caucus, in which they participate.

The materials distributed included:

—Comptroller General's *Manual of Regulations and Instructions.* This manual provides detailed instructions relating to the disclosure of Federal campaign funds for candidates for the office of President or Vice President of the United States and political committees supporting such candidates. It includes guidelines of the Federal Communications Commission on the use of broadcast and cablecast facilities by candidates.

—Committee *Registration Form and Statement of Organization.* This form, Comp. Gen. Election Form 1, is to be used by political committees which support any candidate or candidates for the office of President or Vice President and which anticipate contributions or expenditures of over

$1,000 in any calendar year.

—Forms for *Report of Receipts and Expenditures* for a candidate or for a committee. These forms are identified as Comp. Gen. Election Forms 2 and 3.

—Booklet of *Questions and Answers* pertaining to the Federal Election Campaign Act of 1971. This booklet contains 61 questions and answers to assist candidates, political committees, and others interested or concerned in understanding the law, regulations, and related reporting requirements.

On April 14, the Comptroller General announced the limitations on amounts which candidates for Federal office may spend on communications in the 1972 elections. The Federal Election Campaign Act imposes a limitation on amounts such candidates may spend for campaign use of radio, television, magazines, newspapers, billboards, and telephones used for general voter canvass purposes.

The dollar limitations are specified as 10 cents multiplied by the voting age population of the geographical area covered by the particular election (State, congressional district, or Nation) or $50,000, whichever is greater. The figure thus determined is then increased by the percentage factor by which the cost of living index for 1971 exceeded the 1970 index (4.3 percent). The Comptroller General's announcement of the dollar amounts applicable to each jurisdiction appears in Volume 37 of the *Federal Register*, page 7470.

On April 20, the Comptroller General, *Elmer B. Staats*, announced the appointments of *Phillip S. Hughes* as director of the Office of Federal Elections and *L. Fred Thompson* as deputy director (see pages 90 and 91).

Welfare Reform

In a message to the Congress on March 27, 1972, President Nixon termed the American welfare system a "national disgrace" and called for legislative action on House Bill 1, his administration's bill (passed by the House in June 1971) to reform the system. The section of the message on administration and program integrity presents the following strong indictment of the "system" as presently operated and the case for unified, nationally administered payment procedures.

Those who receive welfare, while they are the most visible victims, are not the only ones who suffer because of the myriad confusions and contradictions of the present welfare mess. The taxpayers are victims as well, for they are paying for a program that not only fails to accomplish its objectives, but is virtually impossible to administer.

Welfare administration is woefully outmoded in this country, with its 1,152 separate State and local welfare jurisdictions. Although virtually all have the same basic programs—Aid to the Blind, Aid to the Disabled, Aid to the Aged, and Aid to Families with Dependent Children—each operates with its own eligibility determination and administrative methods.

In the administrative area, especially, there is nearly an incomprehensible variety of management philosophies, operating policies and methods, and personnel arrangements. Only 20 percent of these jurisdictions have automated management techniques.

Under such conditions, it is not surprising that there are major management problems which exacerbate the skyrocketing costs and add to the growing public concern about welfare. Moreover, because of current open

end financing arrangements, States and localities have what amounts to a blank check on the Federal treasury for this activity.

Thousands of dedicated people are doing their best to operate this ponderous machinery. But this system has been patched and repaired too many times. The frustration of current State program managers has resulted in very substantial support among Governors and State welfare administrators for Federal administration of the benefit payments function.

In recent months we have documented the failings of the current system, including the absence of cross-checks of records in adjacent areas, inadequate verification of income and benefits from a variety of benefit programs, and rapid turnover of personnel.

While decentralized management is highly desirable in many fields and is indeed central to my philosophy of government, I believe that many of these problems in welfare administration can best be solved by using a national automated payments system, which would produce economies and considerably increase both equity of treatment and tightened administration.

Such a unified system—partially modeled on the Social Security system—would reduce errors and provide greater controls for fraud and duplicate payments.

H.R. 1 would require each recipient to have a social security number for identification to prevent duplicate benefits and to facilitate the receiving of recipient income information from such sources as the Social Security Administration, the Internal Revenue Service, the Veterans Administration, and other units.

National administration and standards would also ensure equitable treatment for individuals: they would no longer be subject to conflicting rules in different areas, to delays caused by back-ups, and to the confusing tangle of red tape.

Under such a system, States and counties would be freed to concentrate on social services to recipients, making use of their closer understanding of the needs of local residents.

Responsibilities of Auditor—King County, Washington

The scope of authority and responsibility of the auditor of King County, Wash., who is located in Seattle, is as broad and comprehensive as any we have seen for any auditor in local government. The following information comes from the Second Annual Report of the King County Auditor's Office to the King County Council (January 1972).

Under the County's Home Rule Charter:

> The County Auditor shall be appointed by a majority of the county council, shall conduct, or cause to be conducted, a current post audit of the financial operations of the county government, shall review and report to the county council concerning the effectiveness and efficiency of the programs and operations of the county and shall consult with the county executive concerning the accounting procedures to be used by the executive branch. Annual audits shall continue to be performed by the state in accordance with general law.

In March 1970, the County Council defined the county auditor's responsibilities as being:

1. To determine the extent to which legislative policies are being faithfully, efficiently, and effectively implemented by administrative officials.
2. To determine whether County programs are achieving their desired objectives. This step may provide information on the need for changing, deleting, or modifying programs or program elements through additional legislation.
3. To review both the administrative control and executive control systems as established by the agency or department heads and by the County Executive respectively, to determine that such systems are adequate and effective in accomplishing their objectives.

4. To hold responsible Executive officials accountable to the Council for their use of public funds and other resources put at their disposal. This step involves not only an examination of the financial statements and of the legality of expenditures but also of the prudence of expenditures and the efficiency of the use of all resources including the elimination of wasteful practices.

5. To investigate whether or not laws are being administered in the public interest, to determine if there have been abuses of discretion, arbitrary actions, or errors of judgment; and to encourage diligence on the part of administrative officials.

6. To submit reports to the Council resulting from periodical post audits of each department or account; to this end, he shall have access to examine the books and accounts of all County departments, officials or employees charged with the receipt, custody or safekeeping of public funds.

7. To give the information to the County Council whenever required upon any subject relating to the financial affairs of the County.

8. To make periodic reports to the Council which shall include the following:

(a) To determine as to whether departments, officials and employees, in making expenditures, have complied with the will of the Council, State Laws, and the State Constitution.

(b) To give information of plans as he deems expedient for the support of the County's credit for lessening expenditures, for promoting frugality and economy in County affairs and generally for an improved level in fiscal management.

(c) To report matters concerning the effectiveness and efficiency of the programs and operation of the County.

(d) To be empowered to take exception to improper specific expenditures incurred by any department or person.

(e) To promptly report any irregularities to the County Council.

The county auditor, Lloyd F. Hara, was appointed for a 4-year term in 1969.

Annual Report of the Comptroller General

The Budget and Accounting Act, 1921, specifically requires the Comptroller General to submit to the Congress a report each year summarizing the work of the General Accounting Office. This series of reports provides the most convenient summarization of the operations and accomplishments of GAO that is available and copies of the report are fairly widely distributed.

The report for the fiscal year 1971 went to the Congress on January 18, 1972. The following are selected excerpts from the acknowledgements received.

From Wilbur D. Mills, chairman of House Committee on Ways and Means:

The Report will be a useful item to us and I am most appreciative of your thinking of us. As always, when the need arises, we will look forward to working with you and your staff in gaining assistance.

From F. Edward Hebert, chairman of House Committee on Armed Services:

I want to take this opportunity to express to you my own appreciation, as well as that of the other Members of the Committee and the Committee staff, for the fine cooperation, assistance, and support you and your staff have given the Committee. You have an outstanding team. As you know, we rely upon your organization heavily and we know that you will always be there to assist us and to make an invaluable contribution to the work of this Committee. We look forward to continuing this outstanding relationship during this year and the years to come.

From J. W. Fulbright, chairman of Senate Committee on Foreign Relations:

* * * It is an impressive document and will be most useful to the Committee.

I sometimes have a feeling of guilt at the many requests we submit to you. But that is the fault of your Agency. If your reports were not so thorough and helpful, we wouldn't be seeking your assistance.

From George H. Mahon, chairman of House Appropriations Committee:

If the General Accounting Office, as the "watchdog" of Government administration of expenditures, did not exist, Congress would have to establish one tomorrow.

From John A. Blatnik, chairman of House Committee on Public Works:

It underscores the tremendous contribution GAO is making to improve efficiency in government operations and the savings to the taxpayers which have resulted and will continue to flow from your strong, effective leadership.

From Jack Brooks, chairman, Joint Committee on Congressional Operations:

* * * It is impressive in the range of subjects covered and the measures recommended to improve government operations.

From Leonard M. Savoie, Executive Vice President of the American Institute of CPAs:

* * * I think you do a fine job on this report. Each year's report is more impressive than its predecessor.

From William H. Latham, Executive Director, Society for Advancement of Management:

It is a very significant volume and will serve a most useful purpose in providing important information here at the International Headquarters Office.

From Yasunobu Shiraki, President of the Board of Audit, Japan:

I believe that it shows how G.A.O. has been so active in the various fields and at the same time it gives some suggestions for our auditing activities.

GAO Holds Government-Wide Briefing on Coordination of Data Banks

On March 23, 1972, members of the Washington Regional Office met with 40 representatives from 20 major agencies at the National Science Foundation. The purpose of the briefing was to elicit agency comments on the need for a fully coordinated, Government-wide automated information system for ongoing research. Prior to the meeting, a staff paper describing the tentative, prereport findings was sent to departments and agencies with a request to furnish the official response within 30 days.

A slide presentation using "Vugraphs" designed by the regional office staff illustrated the size of the problem, congressional and executive office interest in complete and reliable data on research projects, the potential utilization of a Government-wide system, and GAO's tentative proposals for achieving such a system. A demonstration of an actual computer-based information system through an on-line terminal showed how the proposed system would be used and the type of questions it could answer.

Agency representatives sat at a large oval conference table equipped with individual microphones. This arrangement facilitated the considerable amount of discussion which dealt primarily with the problems in implementing the proposed system. The interchange of ideas aided GAO representatives in adjusting the report recommendations to gain optimum acceptance while still achieving the basic

Agency representatives are briefed on progress and problems in coordinating information systems for active research projects.

objective of fully coordinated, Government data banks. In addition, the official agency comments received 4 to 6 weeks later evidenced an understanding of the subject that might not have been present without the meeting. The briefing and the ensuing discussion should reduce the time for processing the final report.

Washington Regional Office representatives participating were: *Hyman L. Krieger,* regional manager; *Valdis Karklis,* audit manager; *Ted Knapp, Jr.,* audit supervisor; *Joseph Law* and *Henry Hinton,* auditors.

More Kudos

Continuing the presentation of excerpts from letters of appreciation for the quality of assistance rendered by GAO staff members, the *Review* is glad to quote the following.

From Representative John S. Monagan, chairman of the Legal and Monetary Affairs Subcommittee of the House Committee on Government Operations, February 10, 1972, to *Baltas Birkle,* assistant director, Resources and Economic Development Division, who testified before the subcommittee on defaults on FHA-insured mortgages in the Detroit area:

> The Subcommittee reiterates its appreciation for your cooperation and constructive contribution to its record on this important issue.

From Senator Abraham Ribicoff, chairman of the Subcommittee on Executive Reorganization and Government Research, Senate Committee on Government Operations, March 20, 1972:

My staff and I have found the work done by the FDA-NIH audit team, headed by Mort Myers, to be consistently outstanding. Their work in the area of investigational new drugs and vaccines has significantly served the public interest and reports they now have in progress for the Subcommittee will, I am confident, enhance their fine record.

From Senator John L. McClellan, chairman of the Senate Permanent Subcommittee on Investigations, Senate Committee on Government Operations, March 20, 1972:

Almost ten years ago, when the Subcommittee needed additional personnel to carry out its responsibilities, the General Accounting Office made available to us the services of Joseph J. Shevlin. * * * We had a number of important and extensive investigations under way at the time, and we therefore retained Mr. Shevlin to work with the staff. His value to us increased as his assignment lengthened, and he contributed appreciably to the success of our work. * * * He performed a considerable amount of legal research for us on matters of particular interest to the Subcommittee, and his efforts on our behalf were productive and commendable. * * * On behalf of the Subcommittee, I wish to advise you that we highly valued Mr. Shevlin's services to us.

Thank you for making his services available to us for a period of years. The Subcommittee greatly appreciates your cooperation in our many matters of mutual interest.

From Senator John L. McClellan, March 21, 1972:

In 1962 the General Accounting Office, at the request of the Subcommittee, made available to us the services of a member of your staff, Lynn C. Messick. His services were of such value to us that he was retained for a number of years beyond an ordinary term of service. Mr. Messick always has been a willing worker and whenever it was necessary he worked unusual hours on behalf of the Subcommittee. He carried out necessary liaison with various Government agencies and assisted materially in bringing successful conclusions to investigations conducted during his service with us. * * * Please be assured that we valued Mr. Messick's services with us very highly.

Thank you very much for having afforded us the opportunity to use Mr. Messick's services. We always have been grateful for your cooperation and assistance in our operations.

From Senator John L. McClellan, March 21, 1972:

At the request of the Subcommittee in 1961, the General Accounting Office assigned Thomas E. Nunnally to work with our staff. * * * When he had completed his first assignment, however, his value to the Subcommittee was clearly evident, and he was assigned to other investigations. He provided valuable assistance in our investigation of pyramiding of profits in the missile industry. As you probably recall, he was one of the staff members who had important responsibilities in the TFX contract investigation, during which he was assigned the important and arduous work of examining the financial aspects of the program. * * * He performed outstanding work in this field.

Mr. Nunnally also was assigned to the Subcommittee's investigation of urban riots during the period 1967–1970, to the inquiry into improper practices in foreign aid to South Vietnam, to the Subcommittee's most recent examination of organized crime and its role in the field of stolen securities, and to a considerable number of the other important inquiries the Subcommittee has conducted since he joined our staff. In each instance, his work was uniformly of high quality and I wish to commend him for his efforts.

From Representative John E. Moss, chairman of the Subcommittee on Commerce and Finance, House Committee on Interstate and Foreign Commerce, March 23, 1972:

I would like to compliment for the record

two members of your staff, J. William Gadsby and John N. Balakos, who have for the past year been on detail to the Subcommittee on Commerce and Finance of the Committee on Interstate and Foreign Commerce.

The Subcommittee is conducting an exhaustive study of the securities industry; the first such Congressional study since the passage of the Federal securities law in the early 1930's. Messrs. Gadsby and Balakos have been intimately involved in the conduct of this study. * * * I have found them to be conscientious individuals who work well on their own. They have been of great value to the Subcommittee during the course of this very complex study.

From Representative Don Fuqua to *Dan Soranno,* special assistant to the director, Office of Administrative Planning and Services, March 29, 1972:

Now that the charter which created the Commission on the Organization of the District of Columbia has expired, I want to express to you my sincere appreciation for the friendship and spirit of cooperation we have shared over this past year. I feel that the quality and scope of the Commission report will reflect the close working relationship which we enjoyed. The fine job you did as a member of the Fiscal Affairs Task Force made my chairmanship a very easy and enjoyable job.

The report which we have produced is, therefore, not only a testimony to the excellence of your work, but also to your perseverance. You certainly deserve a lion's share of the respect the report will surely earn.

From Senator Robert Packwood on March 30, 1972, concerning a briefing on the proposed Cascadia Dam in Oregon by *Wilbur Campbell* and *Michael Zimmerman* of the Resources and Economic Development Division, *Martin Fitzgerald* of the Office of Legislative Liaison, and *Leonard Dowd* and *Jack Strayer* of the Portland suboffice:

I just want to say I feel this is one of the best briefings that has been provided for me by any agency. It was extremely well organized and given by knowledgeable and articulate spokesmen. It is a pleasure to have this kind of assistance.

From Frank Sanders, Assistant Secretary of the Navy (FM), concerning *Irving Zuckerman,* assistant director, and *James Oliver,* supervisory auditor, Financial and General Management Studies Division, February 29, 1972:

* * * Mr. Zuckerman's willingness to provide staff assistance to the Navy was one of the major reasons for the Navy's progress in accounting systems. * * * Mr. Oliver's efforts to help the Navy develop and improve its accounting systems far exceeded his expectations and more than lived up to GAO's reputation as the backbone of financial management in the Federal Government.

Increased Recognition for Management Accountants

The National Association of Accountants (NAA) has established a new program for professional recognition of the "management" accountant. If the program is successful, the CMA (Certified Management Accountant) may some day have the status and professional recognition now accorded to the CPA.

The new program discussed in the March issue of *Management Accounting,* NAA's monthly publication, is open to everyone in the management accounting field. To qualify for acceptance, the candidate must have either a bachelor's degree in any area from an accredited college or university or be eligible for graduate studies in business. A certificate in management

accounting will be awarded to candidates who pass an examination to be given by NAA and who also meet experience requirements yet to be established by NAA.

The first examination, to be presented throughout the country in November 1972, will contain the following four parts.

1. *Managerial economics and business finance* including such things as economic environment of business, supply and demand analysis, pricing variance, and sources of corporate capital.
2. *Organization theory, motivation and communication* including management processes, business functions, organizational structures, human behavior and communication skills.
3. *Accountability and disclosure* including internal control features, external reporting, tax accounting and reporting, and some financial statement analyses.
4. *Management accounting for planning control* including planning concepts and techniques for long range and short range, part costing, control concepts and techniques, and standards for cost and revenues and budgeting concepts.

GAO staff members may wish to consider this program in establishing their professional development goals.

How To Communicate and How Not To

A basic standard for GAO audit reports and other communications is that they be presented as clearly and simply as possible. In preparing reports, we do not presuppose that readers have detailed technical knowledge of the subjects of the reports. If used, technical terms are to be clearly explained and technical jargon is to be avoided as much as possible.

This standard of writing is specifically prescribed because of the tendency of professionals to try to communicate with others in terms of the specialized language of their field. That this tendency besets other professions is evidenced by a speech not long ago by Admiral Isaac Kidd, new commander of the Naval Material Command. As reported in *Government Executive* for April 1972, Admiral Kidd remarked as follows in addressing a group of Engineering Duty Officers.

> A last point. You fellows have a reputation * * * of being like doctors or lawyers: you talk in such technical terms that nobody can understand you and that seems to give you great satisfaction. And you become susceptible to the indictment characteristic of the Cabots and Lodges in Boston: you won't talk to anybody else but yourselves. If I've heard this indictment of your types of technical groupings once, I must have heard it two dozen times in the short time I've been back here. Now that's not doing us any good—to have types of observations like that being made about us.
>
> But I'll tell you what: in listening to some of you whom I've sent for, to tell me things —after you've finished talking, I can understand this type of comment. Because I don't understand what the hell you are talking about and I will admit I'm not stupid!

Double Counting Cost Accounting

One of the deficient contract cost

accounting practices cited in the 1970 GAO report on feasibility of applying uniform cost accounting standards involves what is commonly referred to as double counting. This effect results when direct charges are made to a contract for items normally classified as indirect costs without eliminating similar items from the pool of indirect costs which is allocated to contracts.

One of the first two cost accounting standards issued by the Cost Accounting Standards Board in 1972 covers this problem. This standard, effective July 1, 1972, provides:

> All costs incurred for the same purpose, in like circumstances, are either direct costs only or indirect costs only with respect to final cost objectives. No final cost objective shall have allocated to it as an indirect cost any cost, if other costs incurred for the same purpose, in like circumstances, have been included as a direct cost of that or any other final cost objective. Further, no final cost objective shall have allocated to it as a direct cost any cost, if other costs incurred for the same purpose, in like circumstances, have been included in any indirect cost pool to be allocated to that or any other final cost objective.

That the problem is a live one is shown by the following item from *The DCAA Bulletin* for March 1972.

> DCAA auditors evaluated a construction company's claim for reimbursement of additional costs of $5 million allegedly incurred on account of Government delays and/or increases in the scope of work under a NASA firm fixed-price contract for the erection of a rocket test stand. Of $3.2 million questioned by the auditors, $3.0 million was sustained. The auditors' examination revealed that the claim contained numerous estimated costs, such as foremen and watchmen salaries, overtime premium, and equipment rental costs, claimed both as direct and indirect costs. In summary, DCAA auditors relied on actual costs incurred, deleting all contractor duplications, in computing recommended costs for consideration by Government negotiators.

Inflaccounting

To see a new and intriguing term burst upon the horizon of the accountant's language is not an everyday occurrence. *The Economist* for April 8, 1972, presents such a term in a brief column on price-level accounting in Great Britain.

The column discusses a Confederation of British Industry committee study of the problems "posed by the effect on financial statements of changes in the value of money." Referring to the terminology in use of "price-level-adjusted-accounts" and "current general purchasing power accounts," the writer suggests a catchier name—such as inflaccounts and inflaccounting. It could take hold.

Answers on Accrual Accounting

The Journal of Accountancy for March 1972 takes note of GAO's booklet published in 1970, *Frequently Asked Questions About Accrual Accounting in the Federal Government*. As the *Journal* states, this booklet *answers* questions about accrual accounting that have been raised by Federal agencies. As such it remains a good source of down-to-earth information on this highly technical aspect of governmental accounting.

Savings From GAO Activities

In reporting on the Legislative

Branch Appropriation Bill, 1973 (H. Rept. 92–937, 92d Congress), the House Appropriations Committee included the following information on savings attributable to GAO activities for the fiscal year 1971.

While not a revenue producing activity, the *General Accounting Office* estimates savings directly attributable to their operations totaling $267,900,000. The detail of this estimate follows:

(Fiscal Year 1971 Results)

Item	*Amount*
Deposited in the Treasury	$ 17,800,000
Offsets against amounts currently due	7,100,000
Subtotal	24,900,000
Measurable savings resulting from adoption of *GAO* recommendations and suggestions	243,000,000
Total	[1] 267,900,000

[1] Savings of approximately $64 million are recurring and will continue in future years.

The committee recommended an appropriation for GAO of $95,820,000 for 1973, which was $1,180,000 less than requested.

The Senate Appropriations Committee which recommended the full appropriation requested, $97,000,000, also referred to GAO savings. Its report (S. Rept. 92–719) stated:

Total savings attributable to the work of the General Accounting Office for fiscal year 1971, the last full reported year, amounted to $267.9 million, of which $24.9 million resulted from cash refunds and collections. The balance of $243 million includes reductions or elimination of payments or costs that would have been made or incurred, as well as revenues lost except for adoption of recommendations of the General Accounting Office.

Plaudit for GAO Reports

The president of the Congressional Information Bureau, a news reporting service concerned primarily with the maritime and atomic energy fields, recently wrote as follows to the Comptroller General about GAO reports.

On many occasions, the "GAO" issues reports ("B" series) which we are able to put to good use in our activities.

This letter is for the purpose of congratulating you and your staff on the extremely clear and very informative way you have issued the reports based on your own investigations involving government activities and government appropriated projects.

For one of many who of necessity must wade through "tons" of material practically on a daily basis, it is indeed refreshing to pick up one of your reports to Congress, "B", and observe the format thereof, particularly the DIGEST preceding the contents and then the concise manner in which you present the details.

Congratulations again—from a lone taxpayer—to you and your staff.

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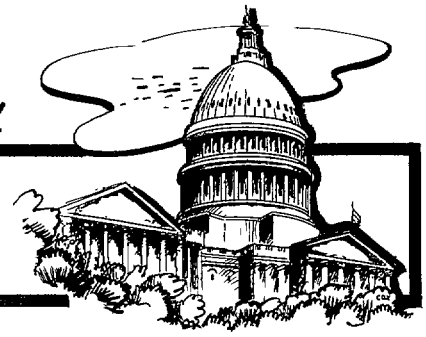
HEARINGS and LEGISLATION



By Judith Hatter
Assistant Chief, Legislative Digest Section, Office of the General Counsel

Access to Records of the Emergency Loan Guarantee Board

As a result of the Secretary of the Treasury's action denying the General Accounting Office access to the books and records of the Emergency Loan Guarantee Board in connection with the Lockheed Aircraft Corporation loan guarantee, Senator Lawton Chiles of Florida introduced S. Con. Res. 77, to make it emphatic that in enacting the Emergency Loan Guarantee Act, Public Law 92–70, the Congress did not intend that the Board should be exempt from the provisions of the Budget and Accounting Act, 1921, or the Budget and Accounting Procedures Act of 1950, or from the authority conferred by any other law on the Comptroller General or the General Accounting Office.

Contending that GAO unquestionably has the basic and continuing authority to audit Government agencies, Senator Chiles stated:

> Public tax money is involved. It is unthinkable that Congress through its investigative arm, the General Accounting Office, does not have the right to monitor the spending of that public tax money.[1]

Subsequently, Senator William Proxmire of Wisconsin announced on the Senate floor that the Secretary of the Treasury had been invited to respond at hearings before the Senate Banking, Housing and Urban Affairs Committee to the charges made by the Comptroller General.

In expressing his view of the records refusal, Senator Proxmire commented:

> I am most disturbed by the allegation that the Secretary of the Treasury has flatly refused to comply with what the Comptroller General has determined is the law in this case. If the Comptroller General is right, such arrogant defiance of the law by a high Government official goes to the heart of our system. It unsettles the people's already shaky confidence in the Government.
>
> Why should a taxpayer, for example, make his books and records available for auditing by the Internal Revenue Service when the Secretary of the Treasury would not make the books and records of a government board available for auditing by GAO?
>
> Unfortunately, the statutes giving GAO access to books and records of Government agencies lack teeth. There appears to be no

[1] *Congressional Record*, Vol. 118, Apr. 19, 1972, p. S 6342.

way to enforce this right. There is no penalty under the existing law for violations of it.[2]

Budgetary and Fiscal Information Needs of the Congress

On the floor of the House, Representative William R. Anderson of Tennessee made the following complimentary comments on the Comptroller General's report on "Budgetary and Fiscal Information Needs of the Congress."

> The Comptroller General should be commended for the manner the recommendations contained in this document were received and the excellent easy-to-understand fashion of the document itself.
>
> It is my hope that the executive branch at the direction of the Office of Management and Budget, will seriously consider adoption of many of the recommendations contained in this document.
>
> The recommendations to the executive branch written in this document, I believe, are basic to restore the prerogatives of Congress over the Nation's revenues.

Mr. Anderson went on to discuss in some detail the impoundment issue which is covered by appendix IV of the report under the title, "Budget Execution and Control by the Office of Management and Budget."

In conclusion Mr. Anderson stated:

> The Office of Management and Budget * * * has resorted to systems of impoundments, reserves, transfers, reprograms, and who knows what other measures to supersede the powers of Congress. It has thus become the second most powerful office in the land, and is indeed the fourth branch of Government.[3]

[2] *Congressional Record*, Vol. 118, Apr. 25, 1972, p. S 6632.

[3] *Congressional Record*, Vol. 118, Mar. 15, 1972, p. H 2103–04.

At a hearing on March 1, before the Joint Committee on Congressional Operations concerning standard budgetary and fiscal classifications and information systems, the Comptroller General outlined GAO's activities to fulfill its responsibilities under sections 201, 202, and 203 of the Legislative Reorganization Act of 1970.

The primary function of GAO as the agent of Congress is to represent the congressional users of budgetary and fiscal information in the executive branch system development effort. Congressional needs for budgetary and fiscal information are grouped into three categories: (1) Federal programs and projects, (2) Federal fiscal policies, and (3) Federal financial actions affecting State and political subdivisions.

The immediate tasks to be undertaken are a definition of the scope of the system to be developed and a detailed plan for incorporating the needs of the congressional users into the system planning and development efforts. (Other participants: Messrs. *Scantlebury*, *Hunter*, and *Fitzgerald*.)

At a subsequent session on April 25, *Donald L. Scantlebury*, director, and *Kenneth W. Hunter*, assistant director, Financial and General Management Studies Division, were again present to answer questions.

Health Facilities Construction Costs

Senator Jennings Randolph of West Virginia discussed on the floor of the Senate the significance of the study of

health facilities construction costs being conducted by GAO pursuant to section 204 of the Comprehensive Health Manpower Training Act of 1971, Public Law 92–157.

Senator Randolph pointed out that, while the bill was before the Committee on Labor and Public Welfare, it was he who added an amendment requiring the study and that he believes reducing or stabilizing health facilities construction costs will become increasingly important as the Congress discusses national health insurance legislation in the coming years.

Concerning the GAO approach to the study he stated:

> * * * I am encouraged by the enthusiasm shown toward this study by the GAO, and I assure my colleagues that the General Accounting Office has initiated a broad-scale study which will include not only the factors having a direct bearing on the "bricks and mortar" aspects of construction but will also include consideration of many other factors which have a bearing on health facility costs.
>
> The General Accounting Office has identified through an intensive state of the art review, significant innovations which should be considered whenever construction of a new hospital facility or an extensive renovation or addition to an existing facility is proposed.
>
> * * * It is my hope that the study is the first of many steps to be taken which will improve the delivery of health care to every citizen at lower cost.[4]

Cost Accounting Standards Board

The Comptroller General in his capacity as Chairman of the Cost Accounting Standards Board testified on April 12, before the Subcommittee on Production and Stabilization of the Senate Banking, Housing and Urban Affairs Committee on 92d, S. 1901, to abolish the present Cost Accounting Standards Board and establish a new independent Board in the executive branch of the Government.

Although the Comptroller General favored placing the Board in the executive branch when its creation was being considered over 2 years ago, earlier concerns for the Board's administrative relationships with executive branch agencies have not resulted in problems. Such a transfer at this time would necessarily disrupt the forward momentum the Board enjoys and has worked hard to initiate through conceptual and operational discussions and other activities. (Other participants: Messrs. *Keller, Schoenhaut, Van Cleve, Dembling, Moore,* and *Blair.*)

Federal Election Campaign Act of 1971

For himself and six others, Representative Samuel L. Devine of Ohio introduced 92d, H.R. 14054, to repeal the Federal Election Campaign Act of 1971, and to revive and reenact the Federal Corrupt Practices Act, 1925. Citing "confusion and a galaxy of contrary interpretations," Mr. Devine contends that if the new law were repealed, Congress could "systematically legislate a reasonable election reform bill, under normal conditions, and pass a good law without being under the

[4] *Congressional Record,* Vol. 118, Apr. 12, 1972, p. S 5988–89.

gun of an impending general election." [5]

Fiscal Responsibility Act of 1972

The Fiscal Responsibility Act of 1972, introduced by Representative Marvin L. Esch of Michigan (92d, H.R. 14057), would change the Federal fiscal year to coincide with the calendar year, require the Congress to establish an annual expenditure limitation, establish a Federal impoundment procedure, and provide for the establishment of a Fiscal Responsibility Study Commission to conduct an analysis of fiscal procedures. The Comptroller General would be a member of this commission.

Navy Shipbuilding Contracts

The Subcommittee on Priorities and Economy in Government of the Joint Economic Committee conducted a hearing on March 27, to discuss certain work done by the GAO concerning claims by shipyard contractors seeking additional compensation from the Navy, the adequacy of cost controls in effect at commercial shipyards, and allegations concerning Lockheed's management of the C–5 program.

The Comptroller General recapitulated major findings on the general subject of shipbuilding including the reasonableness of certain specific shipbuilding claims settlements, cost controls, contractors' subcontracting practices, competitive procurement opportunity increase, contract negotiation practices, and Navy surveillance over shipyard procurement and cost control practices. (Other participants: Messrs. *Gutmann* and *Hammond.*)

On March 30 Senator William Proxmire included in the *Congressional Record* the transcript of testimony by Admiral I. C. Kidd, Chief of Naval Material Command, before the subcommittee on March 28, discussing the Navy settlement of these shipbuilding claims and other related matters.[6]

Intergovernmental Cooperation Act of 1972

On April 17 the Comptroller General presented a statement at a hearing by the Senate Government Operations Subcommittee on Intergovernmental Relations on legislation to improve the financial management of Federal assistance programs and strengthen congressional review of Federal grants-in-aid by extending and amending the law relating to intergovernmental cooperation.

Mr. *Staats* discussed GAO activities relating to Federal assistance programs and offered comments concerning certain provisions of the bill. (Other participants: Messrs. *Scantlebury, Ahart, Moore, Dittenhofer, Staples, Smith,* and *Sperry.*)

Procurement of Architectural and Engineering Services

On March 14 the Comptroller Gen-

[5] *Congressional Record,* Vol. 118, Mar. 23, 1972, p. H 2424.

[6] *Congressional Record,* Vol. 118, Mar. 30, 1972, p. S 5242–54.

eral presented a statement before the House Subcommittee on Government Activities on 92d, H.R. 12807, which would amend the Federal Property and Administrative Services Act to establish Federal policy concerning the selection of firms and individuals to perform architectural, engineering, and related services for the Federal Government.

It is GAO's contention that there can and should be more competition between architects and engineers in the design concept area and in those cases where proposals are technically equal, consideration should be given to the prices proposed to be charged. Further, the laws relating to the 6-percent fee limitation should be clarified. The General Accounting Office does not favor enactment of the legislation and suggested that it be held in abeyance pending recommendations by the Commission on Government Procurement. (Other participants: Messrs. *Keller* and *Sperry*.)

Administration of Welfare Programs

At hearings on March 20, before the Joint Economic Subcommittee on Fiscal Policy concerning administrative aspects of the Nation's welfare programs, the Comptroller General discussed, in the light of GAO experiences, whether such programs can be effectively managed.

Mr. Staats outlined the three basic problem areas in the administration of public assistance programs as they are presently constituted: (1) The complexity and lack of uniformity in the massive Federal-State-local administration of the programs, (2) the difficult problem of insuring an acceptable level of program integrity consistent with reasonable costs of administration and the needs and dignity of intended program beneficiaries, and (3) the problem of providing for the needs of the intended beneficiaries without creating disincentives to seeking employment and becoming more self-sufficient.

Mr. Staats went on to say that the success of program coordination among Federal agencies will depend on how well the programs are managed and, if the public confidence in welfare programs is to be improved, the management of such programs must be equally improved. (Other participants: Messrs. *Ahart, Crowther, Heller, Fogel,* and *Fitzgerald.*)

Fidelity Bonding of Federal Government Personnel

F. Henry Barclay, associate general counsel, at a hearing on February 29, before the Subcommittee on Manpower and Civil Service of the House Post Office and Civil Service Committee on 92d, H.R. 13150, which would provide that the Federal Government assume the risks of its fidelity losses, outlined procedures now in effect for recovering fidelity losses and how the procedures would be affected by the bill, if enacted.

It is GAO's view that a saving would occur if the Government eliminated fidelity bonding and assumed the risks of its fidelity losses because the

cost of the bond premiums far exceeds the claims filed against the sureties. The measure was cleared for the President on May 18. (Other participants: Messrs. *Moore*, *Hogan*, and *Blair*.)

Trust Territory Economic Development Loan Fund

Public Law 92-257, March 21, 1972, 86 Stat. 87, establishes the Trust Territory Economic Development Loan Fund to promote economic development in the Trust Territory of the Pacific Islands through loan guarantees to private enterprise. The Comptroller General is provided access to pertinent documents for audit purposes.

Executive Agency Expenditures Consistent With Intent of Congress

Representative Edwin D. Eshleman of Pennsylvania introduced 92d, H.R. 13077, which would authorize and direct the Comptroller General to hire comptrollers (1) to examine proposed expenditures of the executive agencies to determine if each expenditure is consistent with the legislative intent of Congress with respect to the legislation authorizing it, and (2) if it is inconsistent, to prohibit the making of such expenditure.

Each comptroller would be required to examine the proposed expenditures of one executive agency. In appointing these comptrollers, the Comptroller General is to select the individual most familiar with the agency he would examine.

Tax Reform and the Foundations

On April 21, Representative John B. Anderson of Illinois discussed on the House floor his request that the General Accounting Office conduct a study of the impact of the 1969 Tax Reform Act on private foundations, particularly with regard to philanthropic activities, and recommend corrective legislation. The contention is that the provisions of the law relating to foundations have had the effect of curtailing foundation giving to private colleges, hospitals, and service organizations.

Simplification of Federal Income Tax Forms

Representative Wilmer Mizell of North Carolina introduced H.J. Res. 1063, to create a select joint committee to conduct an investigation and study of methods to significantly simplify Federal income tax returns. The Comptroller General and the Secretary of the Treasury are each to submit to the committee their recommendations for simplification of the forms.

AUTOMATIC DATA PROCESSING

Principles and Procedures for Information Systems

The GAO Study Panel of the National Academy of Sciences' Computer Science and Engineering Board got off to a good start on March 25. *Kenneth W. Hunter* and *Kenneth A. Pollock*, assistant directors in the Financial and General Management Studies Division, and *Joe Eder*, regional manager, Boston, described GAO's interest in obtaining top professional assistance to formulate generally accepted principles and procedures for information systems.

The planning group is outlining the subjects for which principles can be developed and identifying the most knowledgeable people on each subject. Offers of support have been received from the American Institute of Certified Public Accountants, the Association for Computing Machinery, and the Data Processing Management Association.

Congressional Needs for Budgetary and Fiscal Information

On March 1 and April 25, 1972, the Joint Committee on Congressional Operations held hearings on the efforts of the Office of Management and Budget (OMB), the Department of the Treasury, and GAO to implement the standard classifications and data system for budgetary and fiscal information, required by the Legislative Reorganization Act of 1970.

After hearing GAO's testimony, OMB stated that the system requirements are far broader than they had anticipated and said that they would need to add a sizable number of people to their staff to work on the standardization and system development program.

On the GAO side, the group from the Financial and General Management Studies Division that is representing the Congress in the program has been fully staffed for its permanent role. *Kenneth W. Hunter, Peter A. Smith, James G. Williams,* and *Leslie D. Adams* are continuing after 3 years of experience in working with committees' and members' staffs on information problems. They have been joined by *James K. Kardokus* from the Financial Management Group, *Steven C. Virbick* from the former Civil Division, *Rodman K. Reef* from Columbia University, and *M. Thomas Hagenstad* from the Price Commission. In addition, Dr. Carl R. Palmer will join the

group for about 6 months under a Sears, Roebuck & Co. fellowship.

The group is making arrangements to utilize an automated system for documenting and analyzing user requirements developed and operated by the Department of Industrial Engineering of the University of Michigan. The system is being tested now. If it can be used, GAO will be able to more easily and rapidly furnish OMB and Treasury with a uniform, standard set of congressional users' requirements documentation.

An especially difficult task that must be done soon is to define the scope of a directory of sources of budgetary and fiscal information. James Hall, Director, Office of Survey and Review of the Department of the Interior, and his staff and the San Francisco Regional Office will be helping on this definition work.

The Unique Resource—The American Spirit

As a young Nation, we have grown and prospered in an economic climate which rewards good work, which motivates the individual man to improve himself and to take pride in the product he produces. We have searched eagerly for new worlds to conquer—in space, under the sea, in medicine, in education, and in the problems of our urban, suburban, and rural life. This youthful spirit, which thrives on hope, is the root source of change. It has been our trademark since colonial days and it remains a national heritage, in combination with our commitment to the basic value of freedom and human dignity.

National Commission on Productivity Policy Statement,
September 7, 1971.

Phillip S. Hughes

Phillip S. Hughes was appointed director of the Office of Federal Elections, effective May 1, 1972.

The Office of Federal Elections was established earlier in the year to carry out the Comptroller General's responsibilities under the Federal Election Campaign Act of 1971. The Comptroller General is responsible for administering provisions of the act with respect to candidates for President and Vice President and for other matters. (See p. 71.)

Mr. Hughes came to Washington, D.C., from Seattle in 1949 serving at that time as a budget and program analyst in the Bureau of the Budget. He became Assistant Director for Legislative Reference in July 1958 and Deputy Director in 1966 under President Johnson. He was reappointed to this post in 1969 by President Nixon.

Mr. Hughes retired in October 1969 after 21 years of Bureau of the Budget service under 11 Budget Directors and five Presidents. He became Acting President of the National Institute of Public Affairs and a consultant to the Office of Management and Budget, the Ford Foundation, and other organizations. He joined the Brookings Institution in 1971, becoming Director of Public Management Studies.

Mr. Hughes received a B.A. degree in sociology from the University of Washington in 1938 and worked in the fields of management and statistics for Federal and State Governments and in private industry in the Seattle area from 1938 to 1949, interrupted by World War II military service.

He is a holder of the National Civil Service League Career Service Award and the Bureau of the Budget Award for Exceptional Service.

L. Fred Thompson

L. Fred Thompson has been designated deputy director of the Office of Federal Elections.

A native of Georgia, Mr. Thompson began his career in GAO in 1941 in what was expected to be a job for the summer. He remained, however, to attend George Washington University Law School in the evenings and continued his association with GAO after obtaining his LL.B. degree at GWU in 1949. He is a member of the District of Columbia Bar.

Mr. Thompson was drafted into the Army in 1942 and was released as a captain in 1946. He served on active duty again from 1950 to 1953 in the Secretary of the Army's Office of Legislative Liaison. He presently holds the rank of lieutenant colonel in the U.S. Army Reserve.

During his tenure in GAO, Mr. Thompson has worked in clerical, investigative, and legal capacities in Washington, in field offices, and overseas. He was a legislative attorney in the Office of Legislative Liaison from 1960 until the formulation of the new Office of Federal Elections.

Hassell B. Bell

Hassell B. Bell was designated deputy director of the Procurement and Systems Acquisition Division which was established in March 1972 as a part of the 1972 reorganization of the General Accounting Office. In this position, he is in charge of that division's work relating to the acquisition of major weapon systems by the Department of Defense.

All of Mr. Bell's Government experience has been with the GAO, which he joined in 1949.

Mr. Bell was manager of the New York Regional Office from 1952 to 1955. When the Defense Division was formed in 1955, Mr. Bell was placed in charge of GAO work in the Department of the Navy. In 1960, he became responsible for GAO work in the Department of the Air Force. After 3 years in that capacity, he was assigned as principal technical advisor to the director of the Defense Division, William A. Newman.

In 1969 when the Comptroller General established a special group within the Defense Division to provide more emphasis on the acquisition of major weapon systems, Mr. Bell was placed in charge of that group.

Philip A. Bernstein

Philip A. Bernstein was designated regional manager of the Seattle Regional Office, effective July 1972.

Mr. Bernstein graduated from The George Washington University in 1958 with a Bachelor of Arts degree in accounting.

Since joining the General Accounting Office in 1960, Mr. Bernstein has had a wide variety of experience in the former Civil Division. He was designated assistant director effective March 8, 1970, and has been responsible for planning and directing audit work at the Atomic Energy Commission. In 1969 he received the GAO Meritorious Service Award.

Bernard J. Bordenet

Bernard J. Bordenet was appointed senior attorney, Office of the General Counsel, effective April 2, 1972.

Prior to joining the General Accounting Office in the Claims Division in 1942, Mr. Bordenet was employed by the U.S. Patent Office and the Social Security Administration. He was assigned to the Office of the General Counsel, military pay and allowance matters, in 1946.

Mr. Bordenet received his bachelor's and master's degrees in both law and accounting from Columbus University. He was admitted to the District of Columbia and Maryland Bars and the Supreme Court of the United States.

Forrest R. Browne

Forrest R. Browne was designated deputy director of the Federal Personnel and Compensation Division, which was established in March 1972 as a part of the 1972 reorganization of the GAO, effective April 3, 1972.

Mr. Browne joined the General Accounting Office in 1953 in the Kansas City Regional Office. He was appointed regional manager of that office in 1954 and in 1966 was appointed deputy director of the Field Operations Division. On May 2, 1971, he was designated associate director of the manpower group in the Defense Division.

Mr. Browne received a Bachelor of Science degree from New York University in 1944. He is a CPA (Oklahoma and New Mexico) and a member of the American Institute of CPAs and the Federal Government Accountants Association. In 1962 he completed the Executive Development Program at Stanford University Graduate School of Business.

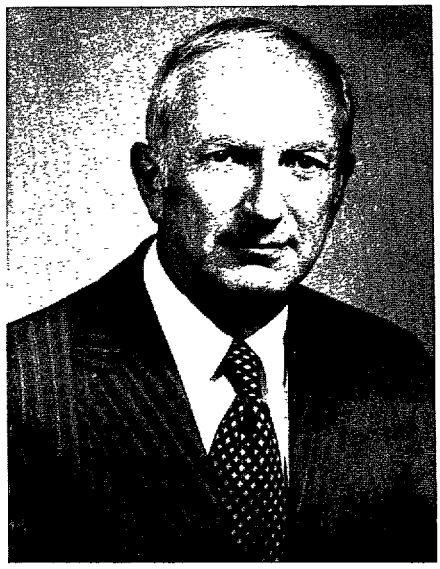
James M. Campbell

James M. Campbell was designated deputy director of the Transportation and Claims Division, effective April 3, 1972, incident to the consolidation of the former Transportation Division and the Claims Division as part of the 1972 reorganization of the GAO.

As deputy director for the Transportation and Claims Division, Mr. Campbell is primarily responsible for all claims adjudication work (except that relating to transportation claims), debt collection, and agency review and assistance work.

Since joining the General Accounting Office in 1941, Mr. Campbell has had extensive experience in the Office of the General Counsel where he served in positions as attorney-adviser and legislative attorney and performed both journeyman attorney work and review work.

He is a graduate of The George Washington University and a member of the District of Columbia Bar and the Federal Bar Association. He has been admitted to practice before the District Court of the United States for the District of Columbia, the U.S. Court of Appeals for the District of Columbia, and the Supreme Court of the United States.



Philip Charam

Philip Charam was designated deputy director of the Resources and Economic Development Division, which was established April 3, 1972, as part of the 1972 reorganization of the GAO. In this position, he will share with the director responsibility for the management and direction of GAO's work relating to energy and environmental programs, principally carried out at the Atomic Energy Commission, the Environmental Protection Agency, the Department of the Interior, and the Corps of Engineers (civil functions).

Since joining GAO as an auditor in 1942, Mr. Charam has served as chief, Chicago Area Office; manager, Dayton Regional Office; assistant director, and most recently as associate director, Civil Division, in charge of GAO work at the Department of Health, Education, and Welfare; the Civil Service Commission; and the Veterans Administration.

Mr. Charam is a graduate of Boston University, College of Business Administration, with the degree of B.B.A. *cum laude.* He is a member of the American Institute of CPAs, the Illinois Society of CPAs, and the National Association of Accountants. In 1962 he attended the Advanced Management Program of the Harvard University Graduate School of Business Administration. He served as a naval officer from 1943 to 1946.

Mr. Charam received the GAO Meritorious Service Award in 1959 and 1961 and the GAO Distinguished Service Award in 1968.

Harley R. Climpson

Harley R. Climpson was designated deputy director of the Office of Personnel Management, effective April 6, 1972. In this capacity, he will assist the director in recruiting, training, and staff development programs and be directly responsible for the management of headquarters personnel staff services functions assigned to the Office of Personnel Management under the GAO reorganization effective April 3, 1972.

Mr. Climpson first joined the General Accounting Office in 1941. He was staff manager in the former Accounting Systems Division from 1951–1954 and staff manager, Office of Staff Management, 1956–1958. In 1967, he became assistant director for staff development in the Office of Policy and Special Studies and, by subsequent reorganization, assistant director, Office of Personnel Management.

Mr. Climpson has also held responsible accounting and auditing positions in the Department of the Air Force, the Public Housing Administration and the Civil Aeronautics Board. During World War II, he served as a convoy communications officer in the U.S. Navy. He is a member of the Federal Government Accountants Association and the American Accounting Association.

Mr. Climpson attended the University of Illinois, later transferring to The George Washington University where he received his bachelor's degree in accounting and took graduate work. He holds an LL.B. degree from American University and is a member of the Bar of the District of Columbia and the U.S. Supreme Court.

Frank C. Conahan

Frank C. Conahan was designated associate director in the International Division, effective April 3, 1972.

Mr. Conahan received his Bachelor of Science degree in accounting from King's College in 1955 and attended the Executive Development Program at the University of Michigan Graduate School of Business Administration in 1968. For the academic year 1972–73, he has been selected to participate in the Senior Seminar in Foreign Policy at the Foreign Service Institute.

In 1955, Mr. Conahan joined GAO in the former Division of Audits. After serving in the Navy from 1956 to 1958, he returned to GAO as a staff member of the Civil Accounting and Auditing Division. He transferred to the International Division when it was formed in 1963 and was designated assistant director of that division in 1968.

Mr. Conahan is a member of the American Accounting Association, the American Society for Public Administration, and the United Nations Association of the United States of America. He received the GAO Meritorious Service Award in 1963 and the GAO Career Development Award in 1968.

Dean K. Crowther

Dean K. Crowther was designated deputy director of the Manpower and Welfare Division, which was established April 3, 1972, as part of the 1972 reorganization of the GAO. In this capacity, he has responsibility for the division's planning, organization, and staffing activities.

Mr. Crowther was an associate director of the Civil Division with responsibility for GAO work in the Veterans Administration and in the Department of Health, Education, and Welfare, except the Office of Education. He had the additional responsibility of acting as the focal point for coordination of all GAO work in the medical and health-related areas.

Mr. Crowther began his service in GAO in 1955. Previously, he was employed by Arthur Andersen & Co. He was also associated with Hot Shoppes, Inc., for 3 years as the assistant to the executive vice president and with Evelyn Wood Reading Dynamics, Inc., for 2 years as controller and vice president.

Mr. Crowther attended George Washington and Benjamin Franklin Universities and holds a bachelor's and a master's degree in commercial science. He also attended the Harvard Graduate School of Business Administration Program for Management Development. He is a member of the American Institute of CPAs, the District of Columbia Institute, and the Northern Virginia Chapter of the Virginia Society of CPAs.

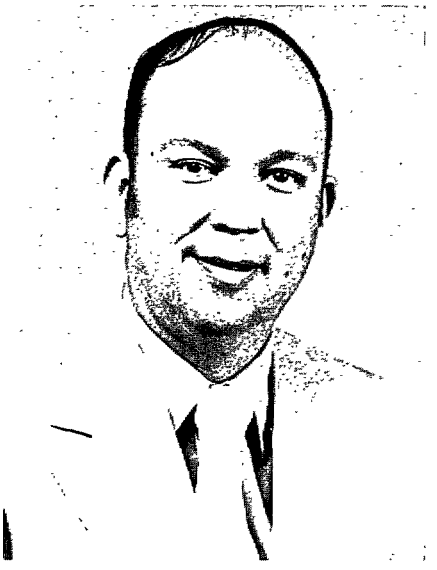
James H. Hammond

James H. Hammond was designated deputy director of the Procurement and Systems Acquisition Division, which was established in March 1972 as a part of the 1972 reorganization of the GAO.

Since Mr. Hammond joined the General Accounting Office in 1937 upon graduating from Western Kentucky University with a B.S. degree in accounting, he has served the Office in various capacities: He has been manager of the Kansas City Regional Office and has also been in charge at the Washington level of the review of various Department of Defense activities. In 1966 he was designated associate director in the Defense Division.

Mr. Hammond is a certified public accountant in North Carolina. He attended the Advanced Management Program of the Graduate School of Business Administration, Harvard University, in 1961 and in 1967 he received the GAO Distinguished Service Award.

Robert W. Hanlon



Robert W. Hanlon was designated manager of the Cincinnati Regional Office, effective July 10, 1972.

Mr. Hanlon served in the Army from 1954 to 1956. In 1958 he received a Bachelor of Science degree from Northeastern University, Boston, Mass., and in 1960 he received a Bachelor of Commercial Science degree from Benjamin Franklin University, Washington, D.C. He joined the Defense Accounting and Auditing Division of the General Accounting Office in 1958. In 1965 he transferred to the Washington Regional Office.

Mr. Hanlon is a member of the Society for Advancement of Management, and in May 1968 he completed the 8th Advanced Management Course sponsored by the Washington, D.C., Chapter of the Society for Advancement of Management. Mr. Hanlon received the Meritorious Service Award in 1964, 1966, and 1967, and the Career Development Award in 1971.

Max Hirschhorn

Max Hirschhorn was designated deputy director for Agriculture and Interior Programs, of the Resources and Economic Development Division, which was established April 3, 1972, as part of the 1972 reorganization of the GAO.

During World War II, Mr. Hirschhorn served in the U.S. Army. He joined GAO's former Division of Audits in 1952, after serving 6 years as a staff member of public accounting firms in New York City. In 1970, he was designated associate director, Civil Division.

A graduate of the City College of New York, he received the degree of Bachelor of Business Administration. He completed the Executive Development Program at Stanford University in 1962 and the Residential Program in Executive Education at the Federal Executive Institute in 1971.

A certified public accountant, Mr. Hirschhorn is a staff member of the Graduate School, Department of Agriculture, and also Chairman of its Committee on Financial Management and Accounting.

He received the GAO Meritorious Service Award in 1959 and 1968 and the Distinguished Service Award in 1970.

James E. Mansheim

James E. Mansheim was designated assistant regional manager of the Denver Regional Office, effective April 2, 1972.

Mr. Mansheim served in the U.S. Army from 1953 to 1955. He holds a Bachelor of Science degree in accounting and a Master of Business Administration degree from the University of Colorado. While on leave from the Office to complete his graduate work, he was an instructor in accounting at the University of Colorado.

Since joining the General Accounting Office in 1959, he has served in the Civil Division, the Denver Regional Office, and the International Division in Frankfurt, Germany.

Mr. Mansheim is a CPA (Colorado) and a member of the American Institute of CPAs, the Colorado Society of CPAs, and the Federal Government Accountants Association. He received the GAO Career Development Award in 1967 and attended the Executive Development Program at the University of Michigan Graduate School of Business in 1972.

Kenneth A. Pollock

Kenneth A. Pollock was designated as assistant director for ADP Research and Development and also acting assistant director for ADP Training, Financial and General Management Studies Division, on March 20, 1972.

Mr. Pollock served in the Army from 1946 to 1949. A graduate of the University of California, Berkeley (1952), and a California CPA (1954), he worked for Haskins & Sells in San Francisco before joining GAO in 1955. He was in charge of the Honolulu suboffice of the San Francisco Regional Office from 1959 to 1961. He attended the Stanford Executive Program in 1966, and the PPBS course of the Civil Service Commission's Executive Seminar Center in Berkeley in 1967. At the time of his move to Washington, he was Assistant Regional Manager, San Francisco.

He is past president of the San Francisco Chapter of the Federal Government Accountants Association and past president of a Toastmasters group sponsored by that chapter. Other memberships include the Commonwealth Club of California, the American Institute of CPAs, the California Society of CPAs, Beta Alpha Psi, the American Accounting Association, and the American Radio Relay League.

Harold H. Rubin

Harold H. Rubin was designated deputy director of the Procurement and Systems Acquisition Division, which was established in March 1972 as part of the 1972 reorganization of the GAO. In this position, he is in charge of that division's technology advancement group.

Mr. Rubin received a Bachelor of Arts degree in government from The George Washington University in 1941 and attended the Advanced Management Program of the Harvard University Graduate School of Business Administration in 1963. He is a CPA in the State of Illinois and a member of the American Institute of CPAs and the Federal Government Accountants Association.

He has had broad experience in GAO accounting and auditing activities since joining the Office in 1936. He served as manager of the St. Paul and Dayton Regional Offices from 1951 to 1955 before being appointed assistant director, Defense Accounting and Auditing Division. In 1961, he was designated associate director of the Defense Accounting and Auditing Division. In 1966, he became responsible for directing examinations of research and development activities of the Department of Defense and the military services and their contractors.

Mr. Rubin was awarded the GAO Distinguished Service Award in 1955 and in 1969.

Willis K. Schuler

Willis K. Schuler was designated a senior attorney, Office of the General Counsel, effective April 2, 1972.

Mr. Schuler joined the General Accounting Office in 1945 after having served 7-1/2 years in the Navy. He was initially assigned to the Accounting and Bookkeeping Division and transferred to the Office of the General Counsel in 1947. He served in the Tokyo Office of the Far East Branch, Defense Division, during the years 1956–1958.

His A.A., LL.B., and LL.M. degrees were earned at National University (now consolidated with The George Washington University). In 1956, he received the Distinguished Service Award and the GAO Suggestion of the Year Award. Mr. Schuler is a member of the District of Columbia Bar.

Fred J. Shafer

Fred J. Shafer was designated deputy director of the Logistics and Communications Division, which was established on April 3, 1972, as part of the 1972 reorganization of the General Accounting Office.

Mr. Shafer entered Government service in 1941 and served in the U.S. Army during World War II. He has received degrees in accounting from Southeastern University and in economics from American University. He has completed the executive programs of the Brookings Institution and the University of Michigan Graduate School of Business Administration. He is a board member of the Transportation Research Forum.

Since joining the General Accounting Office in 1946, Mr. Shafer has held positions of increasing responsibility in the work of the Office. Prior to his present assignment he was the deputy director of the Transportation Division.

David P. Sorando

David P. Sorando was designated deputy director for operations in the Manpower and Welfare Division, which was established April 3, 1972, as a part of the 1972 reorganization of the GAO.

Mr. Sorando was in military service in 1945–1946 and 1950–1952 before graduating from Fordham University School of Business in 1953. He joined the General Accounting Office in 1953 in the New York Regional Office. He completed the Program for Management Development at the Harvard University Graduate School of Business Administration in 1962 and the Residential Program in Executive Education at the Federal Executive Institute in 1972.

Mr. Sorando was the auditor-in-charge of the GAO staff at Syracuse, N.Y., from 1960 to 1964, prior to his transfer to the Cincinnati Regional Office in June 1964. He was designated regional manager, Cincinnati, on January 1, 1967.

Mr. Sorando is a member of the Federal Government Accountants Association and served as President of the Cincinnati Chapter in 1968. He was also Regional Vice President of the FGAA in 1971. He is a member of the Policy Committee of the Federal Executive Board of Cincinnati and President of the Federal Business Association of Cincinnati.

Ralph E. West

Ralph E. West was designated deputy director in the Transportation and Claims Division for transportation matters and division planning, effective April 3, 1972.

Mr. West entered Government service in 1939 and served in the Navy from 1942 to 1945. He received a degree in accounting from Columbus University in 1948.

Since joining the General Accounting Office in 1945, Mr. West has held positions of increasing responsibility in the various phases of the transportation audit, management, and planning activities of the Office. Most recently he has been assistant director responsible for the audit and settlement of transportation payments made by the United States to foreign and domestic freight and passenger carriers. He received the GAO Meritorious Service Award in 1961 and 1962.

Charles M. Bailey

Charles M. Bailey, former director of the Defense Division and, since January 1972, Special Assistant to the Comptroller General, retired on May 12, 1972, after 37 years of Federal service.

Mr. Bailey attended the University of Denver. Prior to his employment in GAO, he was an accountant in private industry. Since joining the Office in 1935, he has had broad experience in GAO's accounting and auditing activities. He performed extensive work in the area of war contract audits and, in 1944, became chief auditor for GAO's Western Zone which, at that time, covered 11 Western States and the territories of Alaska and Hawaii.

In 1952 he was promoted to assistant director in charge of field operations. In July 1954 he was appointed director of GAO's European Branch with headquarters in Paris. During this period he also served as the United States representative on the North Atlantic Treaty Organization's International Board of Auditors for Infrastructure. Upon completion of a 2-1/2-year tour of duty at this foreign post, he was assigned in July 1956 to the Defense Division as assistant director. He was promoted to associate director in June 1958, deputy director in 1960, and director in July 1968, succeeding William A. Newman.

As director of the Defense Division, Mr. Bailey was responsible for the overall direction of most of GAO's accounting, auditing, and investigative work in the Department of Defense, including the Departments of the Army, the Navy, and the Air Force and their contractors.

Among Mr. Bailey's awards are the GAO Meritorious Service Award (1957), the GAO Distinguished Service Award (1968), the Comptroller General's Award (1970), and the National Civil Service League Career Service Award (1971).

John T. Burns

John T. Burns, associate general counsel for transportation and military pay and allowances, Office of the General Counsel, retired on February 4, 1972, after 43 years of Federal service.

Mr. Burns served in the War and Treasury Departments before transferring to the Audit Division of GAO in April 1931. He was assistant chief of the first GAO field audit office in Lexington, Ky., in 1934; was detailed to assist the House Military Affairs Committee in 1935 and 1936; and, in 1936 and 1937, he was chief, Washington Field Office, agricultural conservation program audit.

Mr. Burns transferred to the Office of the General Counsel in July 1937 and was on the military pay and allowance legal work when he left GAO to enter active duty as a captain in the Army in May 1942. Upon his release as a lieutenant colonel in June 1946, he returned to GAO. He was appointed assistant general counsel in 1957 and associate general counsel in 1958.

He received his LL.B. degree in 1930 and his LL.M. degree in 1931 from Columbus University and later attended the Accounting School there for 2 years. He was admitted to the District of Columbia Bar in 1930 and the Bar of the Supreme Court of the United States in 1959.

Mr. Burns was awarded the Legion of Merit by the Army in 1945 and the GAO Meritorious Service Award in 1953 and 1966. He is a member of the Federal Bar Association and is a colonel, USAR (retired).

Oscar B. Carpenter, Jr.

Oscar B. Carpenter, Jr., assistant general counsel for military, Office of the General Counsel, retired March 31, 1972, after more than 35 years of Federal service.

Mr. Carpenter attended Lenoir Rhyne College, the University of North Carolina, and Benjamin Franklin University. He received his LL.B. degree from National University in 1945. He is a member of the North Carolina Bar.

In 1936, Mr. Carpenter entered the General Accounting Office. He worked in the Audit and Claims Divisions before moving to the Office of the General Counsel in 1945.

Stephen P. Haycock

Stephen P. Haycock, associate general counsel, Office of the General Counsel, retired on March 31, 1972, after more than 30 years of Federal service. He was responsible for the overall supervision of activities within the Office of the General Counsel relating to Government contracts.

Mr. Haycock attended Bowdoin College, The George Washington University, and Columbus University Law School. He received his LL.B. degree in 1934 and is a member of the Bar of the District of Columbia. He served as an Assistant U.S. Attorney in Washington, D.C., from 1938 to 1940, and joined GAO in 1941. In 1959 he was appointed assistant general counsel for contracts.

Mr. Haycock is widely recognized by attorneys and administrators concerned with Government procurement as a leading expert in the field.

Rita D. Hornyak

Rita D. Hornyak, senior attorney, Office of the General Counsel, retired March 3, 1972, after more than 31 years of Federal service.

Mrs. Hornyak is a graduate of Boston Business School and of National University School of Law from which she received her LL.B. degree. She is a member of the District of Columbia Bar.

Mrs. Hornyak entered the Federal service in 1940 with the Interstate Commerce Commission and began her service with GAO in July 1943 as an adjudicator in the Claims Division. In 1960, Mrs. Hornyak was appointed as chief, Index-Digest Section, and later became attorney-adviser in the Office of the General Counsel. In June 1970 she received the GAO Meritorious Service Award.

Clarence G. Phillip

Clarence G. Phillip, deputy assistant general counsel, Office of the General Counsel, retired on February 4, 1972, after 37 years of Federal service.

Mr. Phillip received his LL.B. degree from Columbus University School of Law in 1942 and, in November of the same year, was admitted to the District of Columbia Bar.

Mr. Phillip entered the Federal service in 1935 and transferred to the General Accounting Office in 1936. He has worked in both the Claims Division and the Office of the General Counsel.

PROFESSIONAL ACTIVITIES

Office of the Comptroller General

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

The Industrial College of the Armed Forces, Washington, D.C., on "Interface Between GAO and the Department of Defense," February 10.

The Town Hall of California, Los Angeles, on "Achieving Better Cooperation: Washington, California, Los Angeles," March 7.

The Rotary Club of Cincinnati, on "Work of the GAO," May 4.

The Financial Executives Institute Eastern Area Conference, Nassau, Bahamas, on "Governmental Auditing in a Period of Rising Social Concerns," May 12.

Mr. Staats has an article entitled "The Role of the Accountant in the 70's" in the April 1972 issue of *Management Accounting.* Another article by Mr. Staats—"A Broader Scope for Governmental Auditing"—was printed in the Spring 1972 issue of *State Government.*

Robert F. Keller, Deputy Comptroller General, received the Distinguished Alumni Award of the Alumni Association of Benjamin Franklin University on April 29. Mr. Keller was cited for "his outstanding achievement in the field of Government which has brought honor to Benjamin Franklin University."

Mr. Keller spoke before the Denver Chapter of the Federal Government Accountants Association, April 13 on "Commission on Government Procurement and Recent GAO Organization Changes."

E. H. Morse, Jr., Assistant Comptroller General:

Addressed the Financial Management Institute of the Federal Government of Canada in Ottawa, Ontario, March 15, on "Financial Management Activities in the U.S. Government."

Discussed the work of the GAO with the Department of Commerce Science and Technology Fellows, March 8, and with a group of economics majors from Ohio colleges on their field trip to Washington, March 20.

Spoke at the Civil Service Commission seminar on Federal Program Management on "The Oversight Role of GAO," Oak Ridge, Tenn., May 9.

The May 1972 issue of the *Journal of Accountancy* carries a letter by Mr. Morse commenting on Statement on Auditing Procedure No. 49 on internal control.

On March 15, *Thomas D. Morris,* Assistant Comptroller General, was the speaker at a luncheon of the American

Society of Military Comptrollers at Fort Myer, Va. He spoke on the state of the art of management in the Federal Government.

A. T. Samuelson, Assistant Comptroller General:

Conducted the National Association of Accountants Chapter Operations Workshop, Pittsburgh, May 5.

Spoke on "The Congressional Watchdog—GAO" before the Reading, Pa., Chapter, National Association of Accountants, May 19.

Office of the General Counsel

Paul G. Dembling, general counsel:

Spoke to the student body of Duke University Law School on "The Role of the General Accounting Office in the Federal Government," Durham, N.C., March 3.

Participated in the Briefing Conference on Government Contracts cosponsored by the Federal Bar Association and the Bureau of National Affairs, Inc., Philadelphia, March 5–7.

Spoke before the Government Contract Claims Course on "Debarment, Suspension & Blacklisting" presented by The George Washington University and Federal Publications, Inc., Orlando, Fla., April 17–21.

Spoke before the American Bar Association National Institute on "The GAO's Bid Protest Remedy," Washington, D.C., May 11.

Milton J. Socolar, deputy general counsel:

Attended and participated in a course entitled "Living with the General Accounting Office" sponsored by the College of William and Mary in cooperation with Federal Publications, Inc., San Francisco, February 16–19.

Spoke before the Institute for New Government Attorneys program at the Civil Service Commission Training Center on "Controlling Agency Policies and Programs," Washington, D.C., February 24.

Spoke before a joint meeting of the Boston Chapters of the National Contract Management Association and the Federal Bar Association on "Factors Affecting a Successful Bid Protest," Lexington, Mass., April 12–13.

Paul Shnitzer, assistant general counsel:

Participated in a program on Government contracts, cosponsored by the Marshall-Wythe School of Law in cooperation with Federal Publications, Inc., Williamsburg, Va., February 20–22.

Spoke on programs cosponsored by the local chapters of the Federal Bar Association in conjunction with other public and professional groups on the new GAO bid protest procedures, Seattle, Portland, and San Francisco, February 22–26.

Participated in the Briefing Conference on Government Contracts cosponsored by the Federal Bar Association and the Bureau of National Affairs, Inc., Philadelphia, March 5–7.

Participated in Government Contracts Symposia sponsored by the Federal Bar Association, the Metropolitan Bar of St. Louis, the Ameri-

can Bar Association, the National Contract Management Association, the University of Missouri, the Kansas City School of Law, and the Kansas City Bar Association, St. Louis and Kansas City, April 12–15.

Spoke before the Government Contract Claims Course on "Government Contract Claims before the GAO," Orlando, Fla., April 18–20.

Spoke before the Defense Advanced Procurement Management Class on "Problems in Formal Advertising," Warner Robbins Air Force Base, Ga., May 3–4.

Robert H. Rumizen, assistant general counsel:

Spoke before the National Contract Management Association on "The Interim Bid Protest Regulations of GAO," Dallas, March 19–21.

Seymour Efros, deputy assistant general counsel:

Spoke before the Advanced Government Contract Administration Course sponsored by the Small Business Administration in cosponsorship with Louisiana State University on "Recent Procurement Decisions," New Orleans, April 13–14.

Martin L. Glass, attorney-adviser:

Participated in a Government Contracts Symposia, Los Angeles, Seattle, Portland, and San Francisco, February 14–26.

Participated in the Briefing Conference on Government Contracts cosponsored by the Federal Bar Association and the Bureau of National Affairs, Inc., Philadelphia, March 5–7.

Participated in Government Contracts Symposia sponsored by the Federal Bar Association, the Metropolitan Bar of St. Louis, the American Bar Association, the National Contract Management Association, the University of Missouri, the Kansas City School of Law, and the Kansas City Bar Association, St. Louis and Kansas City, April 12–15.

Robert L. Higgins, attorney-adviser:

Spoke before the meeting of the Colorado Broadcasters Association on "Title I of the Federal Election Campaign Act of 1971," Denver, May 16–18.

Office of Legislative Liaison

Martin J. Fitzgerald addressed the Civil Service Commission's Institute in the Legislative Function on March 22 on "Congressional Operations: The Role of the General Accounting Office." He spoke on GAO's organization and functions to the Commission's Congressional Briefing Conference for Administrative, Technical and Secretarial Support Staff, May 16.

Roger L. Sperry spoke on the role of the GAO in assisting the Congress before the Legislative Roundtable for Executives, sponsored by the Civil Service Commission, May 9.

Office of Policy

Allen R. Voss, director:

Has been appointed to serve for the year 1972–73 on the National Publications Policy Committee of the Federal Government Accountants Association.

Chaired a panel discussion on effective writing at the February meeting of the Washington Chapter of the National Association of Accountants.

Represented GAO at the seminar for Government procurement officials and contractor personnel on "Living With the General Accounting Office," held in Atlanta, Ga., sponsored by the College of William and Mary and Federal Publications, Inc., May 3 and 4.

Office of Program Planning

William L. Campfield, associate director:

Addressed the annual banquet of Beta Alpha Psi, Texas Christian University, March 17.

Gave the Cardinal O'Hara Memorial Lecture at the University of Notre Dame, April 19.

Addressed the awards banquet of the Department of Accountancy, Cleveland State University, April 28.

Spoke on "The Audits of Federal Financed Programs" at a training course for CPAs sponsored by the California CPA Foundation and four Federal agencies in San Francisco, May 21.

Mr. Campfield has an article entitled "Improvements in Financial Management in the Federal Government" in the November/December 1971 issue of *Managerial Planning.* He also has an article entitled "A Format for Educating and Developing Federal Accountants" in the December 1971 issue of *The Federal Accountant* for which he won an author's award.

Office of Personnel Management

Leo Herbert, director:

Participated as a panelist at the Third Annual Accounting Symposium of Sacramento State College, Sacramento, Calif., February 12.

Spoke on "Supply and Demand for Doctorates in Accounting" at the N.E. Regional Group Meeting of the American Accounting Association, New York City, April 8.

Led a discussion on "Job Prospects for Business School Graduates in the 70's in the Governmental Sector" at the American Association of Collegiate Schools of Business annual meeting, New Orleans, May 3–6.

Mr. Herbert and *Charles O. Magnetti,* assistant director, attended the Personnel Directors Conference in Charlottesville, Va., April 9–11.

Financial and General Management Studies Division

Donald L. Scantlebury, director:

Spoke before the Northern Virginia Chapter of the Federal Government Accountants Association, February 15, on "Measurement of Governmental Productivity."

Was appointed, March 13, to a 3-year term as a member of the Federal Financial Management Standards Board of the Federal Government Accountants Association. The Board studies, develops, and promulgates financial management standards applicable to Government and professional activities.

Chaired a seminar panel on accounting at the Financial Management Conference presented by the Joint Financial Management Improvement Program, March 20.

Mr. Scantlebury also published a paper "The Structure of a Management Audit Finding" in the March/April 1972 issue of *The Internal Auditor.*

Richard W. Maycock, deputy director, spoke to accounting and public administration students at Brigham Young University, Provo, Utah, February 24, on budgeting and accounting in the Federal Government. On the following day he led a discussion in the Business Faculty Colloquium on the need for improvement in financial management and steps being taken to achieve it.

Keith E. Marvin, associate director:

Participated in a conference sponsored by the Association for Public Program Analysis, March 2, on the topic "Is PPBS Dead?"

Gave a lecture before the Civil Service Commission course in PPB on the role of GAO in providing improved budgetary and fiscal information for the Congress, March 25.

Participated as a panel member at a conference titled "Want To Be an Author?" and was one of the three panel members who spoke on expert views of proper usage of terminology, April 10. This conference was sponsored by the Association for Public Program Analysis.

Harry C. Kensky, associate director:

Was program director and faculty member for a 3-day course in "Planning, Managing, and Reporting for Audit Managers" given at the Interagency Auditor Training Center, March 22–24.

Was panel moderator at the FGAA Philadelphia Chapter's 15th Annual Symposium on "Update—Cost Accounting Standards," May 12.

Was elected director of the Montgomery-Prince Georges Chapter, FGAA, for fiscal year 1973.

Mortimer A. Dittenhofer, assistant director:

Spoke to the Federal Audit Executives Council on "The Audit Standards," February 7.

Made presentations on this subject to the Washington Chapter, Institute of Internal Auditors, February 22; and the Atlanta Chapter, Federal Government Accountants Association, February 23.

Presented a talk on "The CPA and Standards for the Auditing of Governments" to the Society of CPAs, Madison, Wis., April 20; Lansing, Mich., April 24; and Sun River, Oreg., May 11.

Harry J. Mason, Jr., assistant director, received the Beta Alpha Accounting Association Award of LaSalle College in Philadelphia in recognition of his outstanding achievements in the profession of accounting.

Robert V. Farabaugh, operations research analyst, was a member of a panel on Operations Research Evaluation of Health Planning Policies at the 41st National Meeting of the Operations Research Society of America, New Orleans, April 28.

On March 9–11, in cooperation with the National Academy of Public Administration, the FGMS Division conducted a conference in Rockville, Md., on evaluation of welfare programs. The conference focused on current problems, methods, and processes of evaluating the effectiveness of welfare programs. Its purpose was to provide participants with insights that would be beneficial to GAO's evaluation efforts.

Speakers at the conference included Federal and State officials, educators, and consultants who have studied and dealt with the problems of welfare programs.

The 19 GAO participants at the conference were: *Elmer B. Staats,* Comptroller General; *E. H. Morse, Jr.,* and *Allen R. Voss,* Office of Policy and Program Planning; *A. T. Samuelson, Gregory J. Ahart, Dean K. Crowther, Victor L. Lowe, John D. Heller, Morton E. Henig, Ronald F. Lauve, Richard L. Fogel, Thomas F. Rider,* Civil Division; *Stewart D. McElyea* and *H. L. Krieger,* Field Operations Division; and *Donald L. Scantlebury, Frederic H. Smith, Keith E. Marvin, M. A. Dittenhofer,* and *Ralph J. Guokas,* Financial and General Management Studies Division.

The welfare conference was the first in a series of conferences dealing with program evaluation.

General Government Division

Stephen J. Varholy, supervisory auditor, recently completed a 10-week work and study assignment with the Commonwealth of Pennsylvania Department of Health under the Intergovernmental Affairs Fellowship Program sponsored by the Civil Service Commission.

International Division

Oye V. Stovall, director, discussed the role of the GAO with about 35 attendees of the Brookings Institution's Conference for Business Executives on Federal Government Operations, March 6.

Joseph P. Normile, director, European Branch, was elected director-at-large of the Frankfurt International Chapter of the National Association of Accountants at its March 9 annual general meeting.

Frank M. Zappacosta, assistant director, and *James Darlington,* supervisory auditor, spoke on the role and functions of GAO at the Administrative Operations and Management Course conducted by the Foreign Service Institute for State Department personnel, April 14.

Logistics and Communications Division

C. R. Comfort, assistant director, and *Charles C. Loomis,* chief, motor audit branch, were guest lecturers at the Defense Advanced Traffic Management Course, U.S. Army Transportation Course, U.S. Army Transportation School, Fort Eustis, Va., in April.

Manpower and Welfare Division

Gregory J. Ahart, director:

Spoke before the Langley Park

Rotary Club of Maryland about the work of the GAO, February 28.

Participated in a panel discussion on "Intergovernmental Relations and Accountability in Federally Assisted Social Programs" at the 1972 National Conference on Public Administration held by the National Academy of Public Administration, New York City, March 23.

Addressed the Department of Labor, Office of Program Review and Audit National Training Conference, Washingtonian Motel Country Club, Maryland, regarding auditing as it is done in GAO dealing with Labor Department programs, May 15.

Marcus R. Clark, Jr., supervisory auditor, attended the National Institute of Public Affairs' eighth urban affairs conference for Federal officials, Dallas, January 30–February 4.

Procurement and Systems Acquisition Division

Hassell B. Bell, deputy director, met with a group of about 40 graduate students at the Harvard Business School, Boston, on May 10. The general topic of the discussion was project management.

Brassey's Annual, an international journal of military thought, has accepted for publication a 10,000-word article, "Close Air Support: Design of the Mission," by *Timothy D. Desmond*, supervisory management analyst. *Brassey's Annual*, published in Great Britain, is in its 82d year and has seldom included articles by American writers.

Resources and Economic Development Division

Interviews with *Henry Eschwege*, director, *Philip Charam*, deputy director, and *Edward Densmore*, assistant director, formed the basis for an article entitled "Watchdog Audits Environmental Program" in the May 1972 issue of the *Environmental Science and Technology* magazine.

J. Dexter Peach, assistant director, attended the Program for Management Development at the Harvard University Graduate School of Business Administration, Boston, Mass., from February to May 1972.

Walter B. Hunter, assistant director, participated in the Brookings Institution Conference for Federal Management and Program Executives, Williamsburg, Va., April 9–21.

Samuel Sherman, *Clare Rohrer*, and *Alton Turman*, supervisory auditors, attended a 1-week conference of the National Institute of Public Affairs in Philadelphia, Pa., April 23–28.

John Endlich, supervisory auditor, participated in an Atomic Energy Commission Transportation Management Seminar, Oak Ridge, Tenn., March 20–22.

Transportation and Claims Division

T. E. Sullivan, director, attended the meeting of the Revenue Accounting Committee of the Association of American Railroads in Milwaukee, June 12–14. He addressed the committee on the status of the Joint Agency Trans-

portation Study recommendations, pending legislation before the Congress to eliminate slow payments for transportation services furnished the U.S. Government, and proposed changes by the Department of Transportation in the Government bill of lading to adapt it to the standard master format for bills of lading. In addition, he discussed problems of mutual concern in the settlement of rail carriers' accounts with the Government.

Arthur E. Parry, staff assistant, transportation audits, participated in the seminar on Management of Organizations held at the Executive Seminar Center, Kings Point, N.Y., May 14–26.

Field Operations Division

David P. Sorando, regional manager, Cincinnati, attended the Executive Development Course conducted by the Federal Executive Institute, February 6–March 31, Charlottesville, Va.

Daniel L. McCafferty, staff manager, Cincinnati, participated in a panel discussion on future trends in Federal financing at the Futuristic Management Conference held at Eastern Kentucky University, April 20.

Arthur D. Gross, supervisory auditor, Cincinnati, participated in the Inter-Governmental Affairs Fellowship Program, January 10–March 30, Jackson, Miss.

Irwin M. D'Addario, regional manager, Denver, participated in two seminars on Management Performance Reviews, at the University of Colorado Graduate School of Business, February 9, and at the University of Denver Graduate School of Business, February 28. Mr. D'Addario has been appointed to the Committee on Cooperation with Colleges of the Colorado Society of CPAs.

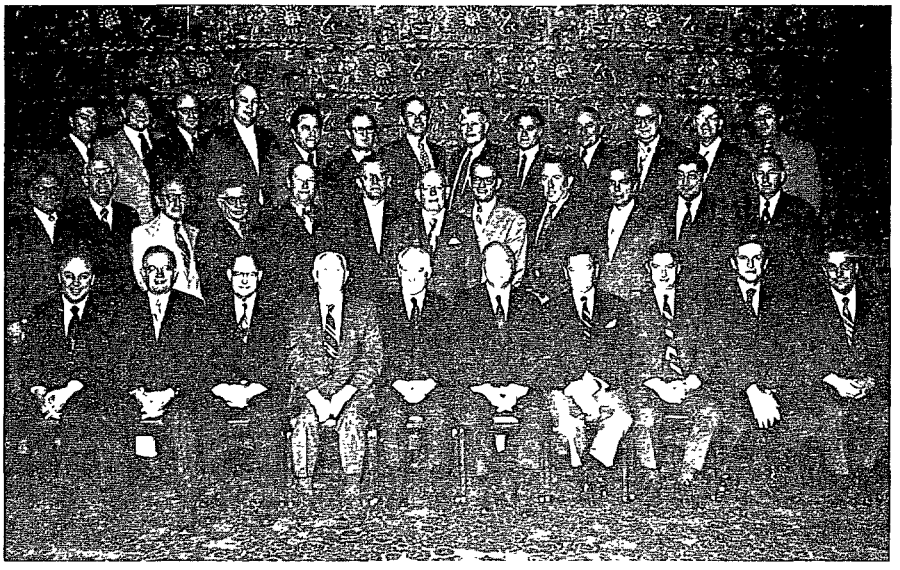
James E. Mansheim, assistant regional manager, Denver, spoke to a group of supervisors of the Denver Department of Welfare, March 31, on "GAO—Its Responsibilities and Audit Approach."

Bernard L. Lowery, audit manager, Denver, spoke to the Denver Chapter, National Contract Management Association, February 24, on "GAO's Auditing Role for the Congress."

Robert A. Correll and *Oliver W. Krueger,* supervisory auditors, Detroit, and *Michael Gryszkowiec,* auditor from GAO's Department of Transportation audit staff, recently participated in a 2-day workshop on computers at the University of Michigan. The workshop was sponsored by the National Highway Traffic and Safety Administration in cooperation with the University of Michigan and the automobile industry to familiarize participants with the university's computer system for analyzing accident data. Data is accumulated throughout the country by investigation teams and transmitted to the university.

During the April 27 Commerce Day activities at the School of Business and Economics, Central Missouri State College, *K. F. Luecke,* assistant regional manager, Kansas City, spoke on the need for business administration talents at all levels of the public sector.

On April 25, *Clifford I. Gould,* assistant regional manager, St. Louis, ad-



REGIONAL MANAGERS' CONFERENCE, APRIL 23-26, 1972, SAN ANTONIO, TEX.

Seated left to right: Donald L. Scantlebury, Director, Division of Financial and General Management Studies; Leo Herbert, Director, Office of Personnel Management; Thomas D. Morris, Assistant Comptroller General; A. T. Samuelson, Assistant Comptroller General; John E. Thornton, Director, Field Operations Division; Elmer B. Staats, Comptroller General; Robert F. Keller, Deputy Comptroller General; E. H. Morse, Jr., Assistant Comptroller General; Milton J. Socolar, Deputy General Counsel; Clerio P. Pin, Director, Office of Administrative Planning and Services.

Standing 1st row left to right: Clyde E. Merrill, Special Assistant, Field Operations Division; Charles H. Moore, Detroit; H. L. Krieger, Washington; Alfred M. Clavelli, San Francisco; William N. Conrardy, Seattle; Stewart D. McElyea, Deputy Director, Field Operations Division; James H. Rogers, Jr., Philadelphia; Walter H. Henson, Norfolk; Jerome H. Stolarow, Los Angeles; David P. Sorando, Cincinnati; Alfonso J. Strazzullo, New York; William D. Martin, Director, Organization and Management Planning Staff.

Standing 2nd row left to right: Jimmy J. Bevis, New Orleans; Deon H. Dekker, Dallas; Philip A. Bernstein, Assistant Director, Resources and Economic Development Division; Robert W. Hanlon, Washington; James J. Jodon, Dallas; Paul C. DeLassus, Dallas; Joseph Eder, Boston; Richard J. Madison, Atlanta; Irwin M. D'Addario, Denver; Kenneth J. Weary, Jr., Kansas City; Myer R. Wolfson, Chicago; Charles O. Magnetti, Assistant Director, Office of Personnel Management; Walton H. Sheley, Jr., Dallas.

dressed the Central Arkansas Chapter of NAA in Fayetteville on the functions and responsibilities of the General Accounting Office.

William Shields, supervisory auditor, Kansas City, spoke to three accounting classes at the University of Nebraska on the General Accounting Office and its purposes and objectives, April 3.

Arthur Zago, audit manager, Kansas City, spoke to the University of Kan-

sas City graduate accounting class, April 20, on the subject of Government contracting.

James E. Cravens, supervisory management auditor, Los Angeles, spoke before the National Contract Management Association, San Diego Chapter, February 23, on "Misconceptions in Research Contracting." He covered the current scope of basic and applied research effort and the phenomenal rate of growth in research funding, the sources of research funds, and the performers of research. Mr. Cravens also participated in a discussion concerning technological risk at an Advisory Board Meeting of the Bureau of National Affairs, Federal Contracts Report, in San Francisco, February 24.

J. H. Stolarow, regional manager, Los Angeles, spoke before the Institute of Internal Auditors, San Diego Chapter, May 21, on "Should Cost." He also spoke before the Institute of Internal Auditors, Inland Empire Chapter, Riverside, Calif., April 19, on "Communicating with the Management Audit Report."

Kelton M. Seelig, supervisory auditor, Los Angeles, spoke to the San Fernando Valley State College Accounting Association on management auditing by GAO, May 3.

George Vissio, Jr., supervisory auditor, Los Angeles, discussed the GAO defense industry profit study, April 17, in a seminar in Administrative Accounting, California State College, Fullerton.

Thomas J. Schulz, supervisory management analyst, Los Angeles, spoke to a public administration class at Long Beach City College, April 5 and 19, on functions of GAO and formulation of public policy at the Federal level.

On April 10, the Norfolk Regional Office conducted a 2-hour seminar for the senior accounting class, Old Dominion University, Norfolk, Va. *James S. Windschitl,* supervisory auditor, discussed the functions and responsibilities of the General Accounting Office; *Walter H. Henson,* regional manager, lectured on the conceptual approach to audits of management performance; and *John A. Stanley,* audit manager, presented illustrative case studies.

Mr. Henson has been appointed Associate Director, Program Committee of the National Association of Accountants.

Valentine Tomicich, assistant regional manager, and *Robert Barbieri,* supervisory auditor, New York, spoke on GAO's role and function to a group of Federal employees attending a course on Federal Administrative Procedures, March 23.

"Accounting Education: For What Purpose?" by *William N. Conrardy,* regional manager, Seattle, was printed in the Winter 1972 issue of the *Journal of Contemporary Business,* published by the University of Washington.

Gary D. McGill and *L. Neil Rutherford,* supervisory auditors, Seattle, jointly addressed the Fifth Biennial Governmental Accounting and Auditing Seminar sponsored by the Oregon Society of CPAs at Sun River, Oreg., May 11, on "Performance Auditing." They also presented this same topic to the Oregon Association of Fiscal and

Administrative Officers at Salem, Oreg., May 12. Mr. McGill also addressed the Western Montana Chapter of the National Association of Accountants, Missoula, Mont., February 17, on "Management Auditing."

Joanne M. Elmslie and *Carl E. Weber*, supervisory auditors, Seattle, were elected secretary and president, respectively, of the FGAA Seattle Chapter for fiscal year 1973.

Robert L. Blackstone and *John M. O'Meara*, supervisory auditors, Seattle, jointly addressed the Seattle Regional Office field staff of the Manpower Administration on "GAO's Role and Function," February 25.

Hyman L. Krieger, regional manager, Washington, conducted a briefing on May 10, for Nasin A. Jafarey, Director of Commercial Audit, Office of the Comptroller and Auditor General of Pakistan. *Joe B. Stevens, John E. Converse, Bernard J. Trescavage,* and *Robert B. Eurich,* supervisory auditors, gave a joint presentation to Mr. Jafarey on the audit of Government corporations.

James B. Deemer, supervisory auditor, Washington, spoke before a joint meeting of the Delta Mu Delta National Business Honorary Society and the Wesleyan Business Honorary Society at West Virginia Wesleyan College on March 13. His topic was "The Types of Audits Performed by the General Accounting Office."

Valdis Karklis, audit manager, Washington, participated in the conference on "United States in the Information Society of the 70's and 80's," New York City, February 14–15. The conference, sponsored by the Senior Executives Council of the Conference Board, included a comprehensive overview of information technology and its implications for decisionmakers in Government, business, education, and politics.

Successful Candidates—November 1971 CPA Examination

Listed below are the employees who passed the November 1971 CPA examination:

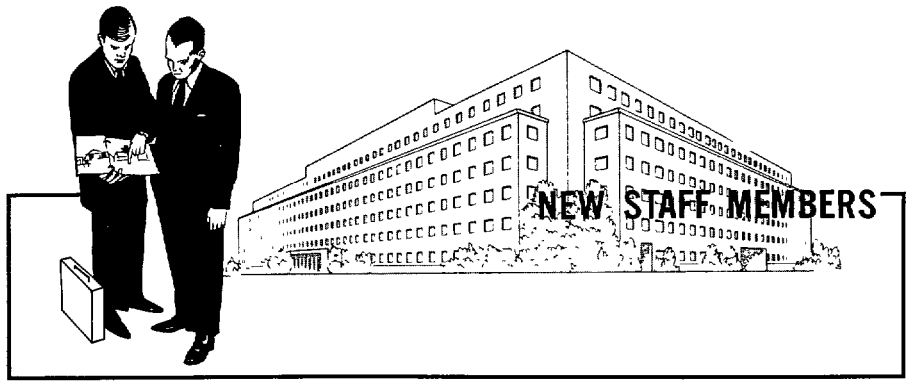
REGIONAL OFFICE

Name	Regional Office	State
Van D. Carlton, Jr.	Los Angeles	California
Gary K. Dragseth	Denver	Colorado
Robert A. Morin	Los Angeles	California
Michael Piazza	San Francisco	California
Richard A. Raker	Los Angeles	California
Edward A. Redding	Philadelphia	Pennsylvania
R. Peter Taliancich	Dallas	Louisiana
David B. Utzinger	Chicago	Illinois
Eugene Wichmann	Chicago	Minnesota
Paul I. Wilson	Chicago	Minnesota

WASHINGTON

Name	Division	State
Richard Lawson	Financial and General Management Studies	District of Columbia
Samuel Oliver	Resources and Economic Development	District of Columbia
Eric Reichley	Resources and Economic Development	Virginia
Robert Rieck	General Government	West Virginia
*Steve Virbick	Financial and General Management Studies	California

*May 1971 CPA Examination



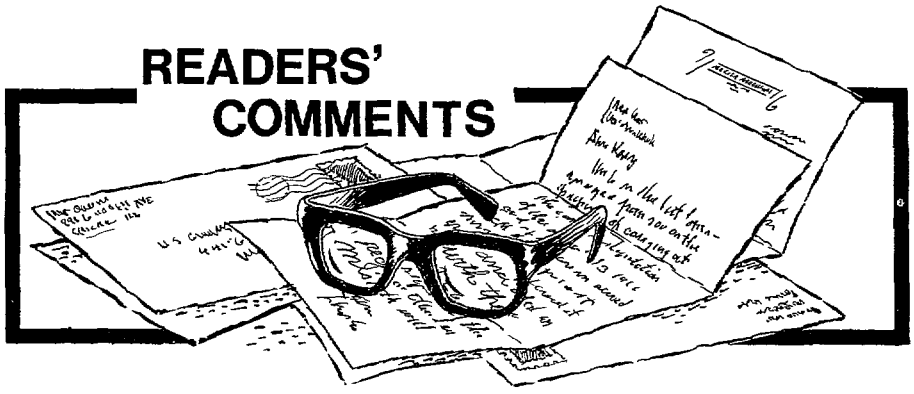
The following new professional staff members reported for work during the period February 16, 1972, to May 15, 1972.

Office of Administrative Planning and Services	Soranno, Donato S.	Commission on the Organization of the Government of the District of Columbia
Office of Federal Elections	Hughes, Phillip S.	Consultant—Executive Office of the President
Federal Personnel and Compensation Division	Kill Kelley, John L., Jr.	U.S. Civil Service Commission
Financial and General Management Studies Division	Anderson, Barry B.	University of Washington
	Chan, Raymond M.	Fresno State College
	Cohen, Wallace M.	Department of Health, Education, and Welfare
	Curtis, Thomas P.	National Science Foundation
	Hagenstad, M. Thomas	Executive Office of the President
	Pichney, Jack	Department of the Navy
	Reef, Rodman K.	Columbia University
	Stout, Larry D.	Department of Agriculture
Logistics and Communications Division	Bailey, Wilbur W.	Department of Defense
Office of Personnel Management	Bensey, Roger L., Jr.	Virginia Polytechnic Institute
	Detweiler, John H.	Oregon State University
	Fair, James M.	Oregon State University
	Hoerer, Richard F.	University of Oregon
	Imbrogno, Frank W.	Duquesne University
	Minnich, John E.	West Virginia University
	Moore, Lynn B.	East Tennessee State University
	Mount, David F.	West Virginia University
	Powell, Joe S. P.	University of South Carolina

	Stolba, Robert J.	University of Maryland
	Tomchick, Edward A.	Pennsylvania State University
Procurement and Systems Acquisition Division	Kezar, Charles A.	Logistics Management Institute
	Moran, David H.	Department of Defense
	Tuck, Richard E.	Planning Research Corporation

Regional Offices

Atlanta	Harris, Alton C.	Florence State University
Chicago	Burns, Atwood L.	University of Illinois
	Carmichael, Robert C.	Consultant—H & R Block
	Lidman, Robert I.	University of Wisconsin
Cincinnati	Barr, Lynwood	Central State University
	Johnson, Aleen M., Miss	Indiana State University
	Ringley, Harold E.	Purdue University
	Shelton, Donald G.	U.S. Air Force
Denver	Campbell, Richard D.	University of Denver
	Rachetto, Paul D.	University of Denver
Kansas City	Nichols, Carole J., Miss	University of Arkansas
Norfolk	Fahrion, David D.	University of California
	Willer, J. Stephen	Kent State University
San Francisco	Bredfeldt, Hans R.	Consultant—Consulting Services
	Lambert, William E.	California State College
	Raube, James D.	University of Utah
Washington (Falls Church)	Berry, Fredrick D.	Alabama State University
	Latourney, Paul D.	University of Delaware
	Petty, John L.	David Lipscomb College
	Shafer, Fred J., Jr.	University of West Virginia



More on Proposal Studies

Congratulations to Mr. Desmond for a good presentation on a difficult area ("A Method and Format for Proposal Studies" in the Winter 1972 edition of *The GAO Review*). Congress has need for the complete and objective "situation pictures" which GAO can make available as assists in decisionmaking.

GAO has tended in the past to process proposal studies with some difficulty, possibly because of the lack of sufficient concrete documentation. It is always easier, furthermore, to look back, or even analyze the present, than to "frame" the future. Yet it is the latter which renders Congress the most assistance in making decisions (and commitments) which are not premature. The true test of professional competence is the ability to provide answers to "how will I do" and "how am I doing" (the future tense is the most important) rather than "how have I done."

If Mr. Desmond's item has a shortcoming, it is the omission of the experiences in processing proposal studies through GAO as well as the results achieved by such studies. This omission, hopefully, will be remedied in future articles on this field of audit.

S. S. Podnos,
Assistant Director,
Procurement and Systems
Acquisition Division.

The author, Timothy D. Desmond, *comments:*

Mr. Podnos' points are well taken. Processing through the Office the first few proposal reports with which the author was associated was arduous. Mainly this was because the studies were very different from our usual work.

The proposal studies covering air-to-ground missiles helped the Congress to decide the postponement of several hundred million dollars for procurement until more missile development

and testing work was done. In this sense a proposal study may indicate savings through postponing or canceling a proposed investment.

On the other hand, another proposal study might serve to recommend a new or added investment; still others may not deal with money at all, but like the one on competitive prototyping, sponsor a new method or policy.

GAO Report on Comparison of Military Research and Development Expenditures of the United States and the Soviet Union

I believe that in general I would agree with most of the findings. I believe it was a very constructive thing for them to have done, and it was very desirable for the Congress to receive it.

George W. Rathjens

Professor of Political Science, Massachusetts Institute of Technology

I find it a sensible and persuasive report.

Richard R. Nelson

Professor of Economics, Yale University

Comments made during the Joint Economic Committee hearings on the economics of national priorities, Part 2, August 10, 1971.

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 June in Washington.

One award of $250 is available to contributing staff members 35 years of age or under at the date of publication. Another award of $250 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 for use by the professional staff members of the General Accounting Office.
2. 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 professional staff members. Submissions may be made directly to liaison staff members who are responsible for representing their offices in obtaining and screening contributions to this publication.
4. Articles submitted for publications should be typed (double-spaced) and range in length between five and 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.

THE GAO REVIEW

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