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# The GAO Review





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## SPIRIT OF '76

*The cover of The GAO Review for the Nation's Bicentennial year has been designed around the well-known "Spirit of '76" painting by Archibald M. Willard that so deftly symbolizes our country's spirit of determination and dedication to move ahead.*

*Willard was a buggy painter and decorator in Wellington, Ohio, who had some limited training in art. Wanting to paint something for the 1876 centennial, he hit upon the idea of the two drummers and a fifer marching into battle after watching such a group during a militia muster day in Wellington. The painting was exhibited at the Philadelphia Exposition in 1876, where it was a very popular attraction.*

*After the centennial, the author painted other versions of the picture; some accounts say as many as 14 were painted. The original, however, is said to be the one owned by the town of Marblehead, Massachusetts.*

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# Career Planning and Development: Which Way Is Up?

*Some myths and some truths for young professionals to consider in planning and developing their careers. This article is based on an address presented by the Comptroller General at the American Society for Public Administration, National Area Chapter, Young Professionals Forum's First Annual Bring Your Own Boss Night on June 3, 1976.*

The "secret of success" is that there is no secret. No *one* formula works for everyone, and no *formula* can be counted on by anyone. This absence of surefire techniques need not discourage you. It evens things up a bit. Your competition may not have as big of a head-start as you think. Furthermore, there is much *you* can do to improve *your* chances of getting ahead.

During the past year we at GAO have taken a long, hard—and *hope a professional*—look at the process of career planning and development. We have challenged and found wanting a large assortment of expensive and demoralizing myths. We have, however, also identified half a dozen principles which seem to be reliable and accurate and which may be helpful to you and your bosses. But before I lead you through a quagmire of muddy thinking, I want to point out that the path we found may not be the only safe path available to you. It is the path that an auditor's tools would find; there may be other truths hidden.

By auditor's tools, I mean a keen interest in the relationship between details and a principle supposedly supported by those details, a calculated skepticism in the face of uncertainty, and a relentless pursuit of the missing piece of information.

## **Myth 1: There Is Room at the Top**

If an organization has 1,000 employees and 1 executive officer (or 2.8 million civil servants and 1,000 executive positions), how can there be room at the top? If we have 600 GS-12s eligible and competent to perform GS-13 work and only enough work for 50 GS-13s, we should not allow all the new GS-7s to expect to be GS-13s.

I believe that aspiration is good for the soul; I also believe that achievement is good for the soul. We should not let our overemphasis of aspiration limit our opportunities for achievement. Must we continue to foster unrealistic aspirations and generate self-perpetuating frustra-

tions? We should understand that growth is not limited if we do not limit what we mean by growth; there is not always room at the top, but the top is not the only acceptable aspiration level. We should identify opportunities to achieve, wherever they are and wherever they lead.

### Truth 1: The Best Opportunity Is the One You Have

It is more than tautologically true that the only opportunities you have are the ones you have. Your best career development opportunity is your current job. If you develop competence at that, you develop something real, presently valuable, and personally rewarding. If you seek improvement, achievement, and success in your current situation, you contribute both to your organization's performance and to your own growth.

If you look for opportunity beyond what is immediately relevant, you may not only shortchange yourself in terms of chances for real growth, but you may also fall prey to a counterproductive surfeit of apparent, but nonsubstantial, opportunity.

Professional societies, universities, private firms, and individual consultants offer a bewildering array of books, correspondence courses, seminars, workshops, and formal courses. Organizations sponsor internal training and development activities. Individuals read books and subscribe to periodicals. There are so many offerings that it would be easy for us to become perpetual professional students just to maintain competence, let alone to grow.

We need to try to (1) define those things which most directly affect our ability to function effectively on our cur-

rent jobs and (2) determine what elements of information and types of development we need to do our present jobs better. Only after we define the purpose of continuing professional education can we make logical decisions about approaches, methodology, and content. What is the purpose of acquiring skills one cannot use, in either an apprentice role as they are honed and improved or in a journeyman role as they are relied upon to contribute to organizational growth?

Please do not view my skepticism about broadened skills as *antidevelopmental*. I am challenging only development which ignores the needs of the employee's current assignment.

But what is being *accomplished* by all this commotion—that is the question. The area of executive development illustrates the problem. Many seminars and programs are aimed at improving a manager's effectiveness as he/she works with people. However, after manager upon manager is sent to these programs, which vary in length from a few days to several months and can cost thousands of dollars, many of the most perplexing problems still exist.

By addressing your *current* needs on your current job you will be solving *present* problems and developing *future* skills.

### Myth 2: The Key to Success Is To Be in the Right Place at the Right Time

Like many myths, this one has just enough of a real tone to it that, even though we know it to be false, we can't quite bring ourselves to disbelieve it. After all, isn't history replete with case after case that carves the validity of this

old saw into the foundation stones of our institutions?

In my own organization we have just completed a series of criteria development workshops which were aimed at identifying "the" criteria for success. I can understand why those who have fallen short of their own aspirations might find comfort in believing the "right-time—right-place" syndrome, but we found such a belief prevalent even among those who had very creditable records of success. For all its admitted importance, you are better off discounting it than believing it.

First, if you accept the myth that *you* can't do anything about your career, you have put control of your destiny in the "hands of gods." Second, and this is an even more subtle tax on your growth, if you believe that any one thing is the key to your success, you may fail to consider a host of other factors.

Let me illustrate by calling your attention to our most cherished representation of success: growing up to be President of the United States. Could anyone doubt that there was *ever* a President who owed his success to anything other than the "luck" of being the right *man* in the right place at the right time? Surely it was at least luck that that baby was born male. Surely it was at least luck that . . . The story goes on with profile after profile of odd coincidence. The coincidence of being conspicuous when it was propitious and of not being conspicuous when that was propitious. I concede the importance of timing, but I deplore reliance on it. We have had 37 Presidents and perhaps 300 million Americans, so the odds on not being President are roughly 9 million to one. (There is no room at the top.)

The paradox here is that success in

the face of such overwhelming odds couldn't be luck, but with the odds so high against you, what else could it be but luck if you succeed? It could be hard work. It could be keen insight. It could be the ability to make friends. It could be a brilliant mind. It could be a good ear for the knock of opportunity. It could be the ability to hustle while you wait.

You will believe what *you* need to believe, but I encourage you to reject this myth. For all of its appeal, in the final analysis it will rob you. If you rely on it instead of *seeking* your own growth, it will disappoint you; if you believe it and you are successful anyway, it will steal your pride.

### Truth 2: All Development Is Self-development

You and I are focusing on career planning and development right at this moment. In spite of concerted, mutual attention, there is nothing I can do to *make* you develop. There is nothing anyone can do to *make* another person develop. No parent can make a child develop. No organization development counselor can make an employee develop.

When we try to make others develop, we ignore basic rules of nature, and the price we pay is enormous. By compromising their control of themselves, we waste our efforts and cheat those we are trying to help. Development is not something management does *to* employees. Development is something managers do *with* employees so *both* develop. But both develop themselves. Your boss has a responsibility to you to help you achieve your potential. He can do that best by providing an environment where

you are encouraged and supported and can function at your level of competence, by providing real answers to your questions, and by making it clear that the power to develop is within you.

### Myth 3: Good Salesmen Make Good Managers

I am not picking on salesmen in citing this myth. It could just as easily have been "good scientists make good managers" or "good auditors make good managers." We injure people by telling them that they are failures if they don't get ahead of their peers; we abuse them by telling them that the only direction they may go is up; we destroy them by creating jobs for them that they can't do.

If one were seeking the incarnation of mischief, what more diabolical plot could he devise than: the reward for good services as the best salesman on the team is being removed from the team, not being allowed to sell, and being asked to do something you can't do—"manage"? The equity in this misdeed is that the organization suffers almost as much as the employee because it loses its best salesman.

There may be good salesmen who are also potentially good managers. We have found good auditors who turned out to be good managers. What I am saying is that our cultural commitment to a narrow definition of success is handicapping us. We need to view achievement where it occurs as success. We need to reward it where it occurs. We need to view achievement itself as a reward. We need to correlate organizational perceptions of success with individual achievement.

I do not know if that means that the

Federal Government should adopt an industrial practice of allowing a compensation hierarchy separate from the organizational hierarchy. But I do know that, unless we improve our understanding of the relationship between successful performance in an organizational function and advancement into managerial ranks, we shall continue to thwart, frustrate, compromise, and stifle genuine development.

### Truth 3: All Development Is Individual

Just as it is true that all development is self-development, it is also true that all development is individual. Your development, as well as that of the people you are responsible for, is personal, unique, and voluntary. I may believe that you should learn more about career planning and employee development. However, even if you agree with me—and you may not—your particular needs will be individual and specific and will depend on what you already know, what you want to know, and where you see yourself going. Thus, even if I force you to engage in a developmental course for your own good, what you learn from that experience is not under my control.

People who *decree* what others need in the way of individual development are, in the best possible situation, wasting their own time. If they have the power to influence others, they will be wasting everybody's time.

Having earlier observed that there is no room at the top, I hope that you are now prepared to accept the notion that not only are there a lot of people stuck in the middle, but we need them there. Who would do the work if all we had were bosses and private secretaries? If

you are counseling an employee on career planning and development—or considering it yourself—understand that growth occurs in directions other than "up"; that career development is personal; that someone who does not aspire to be the chief executive officer need not, and *should not*, be cajoled into target-related developmental experiences nor be browbeaten into adopting inappropriate and ultimately demoralizing aspirations.

One could amend the old saying: "Let sleeping dogs lie—as long as they are not sleeping on the job."

### Myth 4: Career Planning and Development Is a Function of the Personnel Department

Put the responsibility for your career planning and development in any hands other than yours—the professional's and his/her boss'—and you *preempt* development. I *know* that personnel people are dedicated and conscientious, but for all of their conscientiousness and dedication, they cannot run a career planning and development program for you. They can answer questions for you, and they can help acquire the information you need to make informed career-related decisions for yourself, but the instant you vest in them the responsibility for planning your career, genuine growth is foreclosed. Centralized development support is necessary; decentralized, individual development planning is sufficient.

I may have stated this reservation too strongly to focus the emphasis where it belongs: on the individual supervisor/employee relationship. Perhaps you will appreciate the importance of that focus

when I acknowledge that I also overstated my reservations concerning the right-time-right-place myth. There is a major exception to that myth; that is, if you are lucky enough to be associated with the right supervisor. Time after time, when successful men and women are asked about the turning point in their career, they refer to the relationships they had with particular supervisors who took an active, helping role in their *individual* development. (Ever hear someone say the secret of his success was that his agency had a progressive personnel department—even if it was true?)

### Truth 4: Opportunity for Development Should Be Universal

Not everyone will participate in the available developmental opportunities, and those who do will not, and should not, have identical opportunities. The opportunity to develop, however, should be universal. That is the only morally defensible stance; it is also the only economically defensible stance.

I am not saying that the U.S. taxpayer should provide a scholarship fund so that every civil servant who wanted to go to Harvard could go at Federal expense or so first class performers could go to Harvard and the rest could be sent somewhere else. Recall that all development is self-development; all development is individual. I am saying first that the organization must provide whatever information it has about career options, skill requirements, anticipated requirements, etc., to every employee who asks for it and second that, when there are developmental assignments available which would be beneficial to the employee *and* to the organization, they

should be distributed in a manner where all interested employees have an opportunity to be fairly and equitably considered. That consideration should include both the organizational cost of the experience and the anticipated organizational benefit—which may be employee-dependent. The consideration should not be in terms of rewards and deservedness, not if the experience is supposedly justified as a developmental experience.

The one thing you do not need is to confuse rewards, motivation, and incentives with career planning and development. Career planning and development stands on its own; it justifies its own existence in terms of healthier, more valuable, self-sufficient, and productive employees. Mixing career planning and development with rewards and limiting opportunity to those who deserve it will

cost in every way we know of measuring organizational performance.

### Other Myths and Truths

There are other myths and truths which mark off the boundaries of productive attention to career planning and development. But since I believe that all development is individual and that all development is self-development, I know better than to continue describing the structures I see. I hope that the eight statements I have just covered will be helpful to you in your careers. I would like to believe that telling you how I feel about career development will help you to develop careers that feel good for you. In any event, I hope that you are a little less sure about which way is up—for you.

### Some National Objectives

As we begin our third century, there is still so much to be done. We must increase the independence of the individual and the opportunity of all Americans to attain their full potential. We must ensure each citizen's right to privacy. We must create a more beautiful America, making human works conform to the harmony of nature. We must develop a safer society, so ordered that happiness may be pursued without fear of crime or man-made hazards. We must build a more stable international order, politically, economically, and legally. We must match the great breakthroughs of the past century by improving health and conquering disease. We must continue to unlock the secrets of the universe beyond our planet as well as within ourselves. We must work to enrich the quality of American life at work, at play, and in our homes.

*President Gerald R. Ford*  
Philadelphia  
July 4, 1976

## Assessment of the National Grain Inspection System

*The House and Senate Agriculture Committees requested GAO to make a full scale audit of the grain marketing and inspection system and to report its findings to the Committees not later than February 15, 1976—about 8 months from the date of the request. This article describes the planning, executing, and reporting techniques GAO used in meeting this critical deadline.*

During the spring of 1975, the Nation and the world became increasingly aware of serious problems in the U.S. grain marketing and inspection system. Reports of intentional misgrading of grain, short weighing, bribery, and the use of improperly inspected vessels were threatening the credibility of the U.S. grain marketing system, thereby endangering the U.S. position as the largest exporter of agricultural commodities in the world.

The Senate Committee on Agriculture and Forestry and the House Committee on Agriculture, recognizing that they did not have the staff and resources for an exhaustive investigation, asked GAO in June 1975 to fully and completely evaluate the entire grain marketing and inspection system—from farm to foreign port. Because of the importance of grain

exports to the national economy, the Committees stressed that it was imperative that GAO report its findings to them no later than February 15, 1976, so that the report could be used in considering legislative changes in the U.S. Grain Standards Act, the U.S. Warehouse Act, and other statutes affecting the grain marketing and inspection system.

Could GAO respond to a crucial congressional mandate of this magnitude and importance in such a tight time frame?

Our report, which Senator Hubert H. Humphrey described as the most incisive, comprehensive, and helpful report that he had ever read as a Member of Congress, was issued on February 12, 1976, after over 40 GAO staff members spent more than 3,500 staff-days in an intensive 8-month

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review. Included were staff members from Washington; from the Chicago, Dallas, Kansas City, and Seattle regional offices; from Chicago's Twin Cities suboffice, which was the lead region; and from the Far East and European Branches.

During this period, GAO auditors held indepth discussions with importers in 9 foreign countries; visited more than 100 grain elevators; talked with many U.S. Department of Agriculture (USDA) and inspection agency officials in Washington and in the field; circulated questionnaires to over 3,000 farmers, 2,200 country elevator operators, and 23 State inspection agencies; interviewed 22 domestic grain processors and merchandisers; and studied the Canadian grain marketing and inspection system to assist in evaluating the U.S. system.

Obviously the broad scope and narrow time frame of this review required GAO to use some techniques and innovations which are somewhat atypical to the normal GAO review process.

### The Grain Marketing and Inspection System

The U.S. grain marketing and inspection system is extremely important to the U.S. economy. In fiscal year 1975, the United States exported \$22 billion of agricultural products, of which \$12.5 billion was grain subject to inspection under the Grain Standards Act. This act provides for national grain standards and a two-level national inspection system: a primary level operated by State, State, and privately owned inspection agency employees licensed by USDA and a supervisory and appeal, "referee" level operated by USDA.

Under the act, all grain sold by grade in foreign commerce must be inspected by federally licensed grain inspectors. Grain sold domestically, however, is inspected at the buyer's and seller's options.

Grain is graded in accordance with Federal (official) standards developed and maintained by USDA. These standards consist of numerical grades based on such factors as moisture content, foreign material, test weight, broken kernels, and infestation. Licensed grain inspectors examine samples from grain lots and assign the grade (usually 1 to 5) to the grain being inspected. These grades are used in determining the price of grain to the buyer.

In 1975 over 100 State and private agencies and trade associations served 183 designated inspection points. These groups employed 2,800 persons who were licensed to sample and grade grain and perform ship stowage examinations.

### Planning the Review

From the outset it was apparent that substantial help would be needed from many different sources of special talent to augment the work of the audit staff and meet the special needs of the job.

—The Special Studies and Analysis group within the Office of the General Counsel provided legal assistance on a priority call basis and developed a valuable paper on the legislative history of the grain standards and warehouse acts.

—A professional research corporation developed, administered, and analyzed questionnaires sent to farmers.

—The services of consultants, particularly in the area of grain standards, were obtained.

### Audit Approach

Given the broad scope and urgency of the request, the first priorities were to quickly develop a thorough knowledge of the grain marketing and inspection system, devise a work program, and properly allocate all available resources to insure that all pertinent issues were covered.

Since time did not permit a traditional detailed survey, the Washington staff conducted an intensive, 1-week survey at USDA headquarters. Simultaneously, the Twin Cities staff visited a USDA field office and several grain elevators, and held discussions with grain merchandisers and USDA supervisors to gather data on the grain marketing and inspection systems.

With this information as a basic framework, the Washington staff decided to divide the review into four segments—grain marketing, inspection, standards, and foreign complaints about purchases of U.S. grain—and to assign individual staff members to develop a work program and oversee each of the respective segments.

A 16-page questionnaire, developed for use in interviewing foreign buyers, was included in the overseas work program. This questionnaire not only expedited the work overseas but enabled us to get comparable data from all foreign buyers interviewed.

### Kickoff Conference

After the work program for the domestic segment was drafted, a "kickoff conference" was held at the Twin Cities suboffice to (1) finalize the work program, (2) agree on the functions and responsibilities of the participating offices, and (3) decide on the scope and

reporting time frames of the review. Staff members from Washington and each of the participating regional offices attended.

During the first 2 days, the Washington staff met with the Twin Cities staff and revised the work program to incorporate the information obtained by the Twin Cities staff during its visits to grain elevators and discussions with grain merchandisers and USDA supervisors. On the third day staff members from the other regional offices joined the conference to discuss the review and the work program. During the fourth day the entire group visited several grain elevators in the St. Paul-Minneapolis area and tested the work program to insure that it would provide the information needed to properly evaluate the grain marketing and inspection system. On the fifth day, several revisions were made to the program using the ideas obtained the previous day, and a strategy for the scope and reporting deadlines was laid out.

Although the "kickoff conference" marked the end of the formal planning phase of the review, it was evident that, as the review progressed, flexibility to accommodate changes in program direction would be needed. Also, because of the time constraints placed on us by the Committees, it was necessary to begin formulating the report as various segments of the review were completed.

### Carrying Out the Review

In developing the work program, it was apparent that the timely completion of this assignment would depend on the continuous interaction and close communication of the various staffs. Accordingly, a communication system was instituted whereby, as each team com-

pleted a subject area of the work program, it put together a fact sheet enumerating its findings and tentative conclusions. This was sent to the Twin Cities and Washington offices. Important findings were then communicated to the other audit groups by the Twin Cities audit manager. In this way each staff knew of the significant findings of the other staffs.

A team approach was evidenced by the flexibility exhibited by the Washington and regional staffs in terms of where they did their work. The regional offices involved were selected because they were in areas where large amounts of grain were either produced, domestically marketed, or exported; however, at times the work took them outside their regional boundaries. For example, midway through the review it was necessary to expand our scope to include a review of grain inspection operations in the Philadelphia area. Because the Philadelphia regional office was not participating in the review, a member of the Seattle regional office and a Washington staff member did the needed work. Without this flexibility, the work would have been difficult to administer and time consuming. Other examples of flexibility:

- Members of the Kansas City regional office assisted members of the Twin Cities suboffice in reviewing the grain marketing and inspection programs at numerous grain elevators in midwest States.
- Two Washington staff members were sent overseas—one to Europe and one to the Far East—to participate with the European and Far East Branches in interviewing importers in foreign countries.

- A Washington staff member went to the Twin Cities to assist in the completion of a particular phase.
- A Chicago regional office staff member assisted Washington staff members in interviewing a number of grain export company officials in New York.
- Twin Cities staff members visited Canada to evaluate U.S. inspection of U.S. grain leaving Montreal via the Great Lakes and to compare the Canadian inspection system with the U.S. system.
- Seattle staff members spent several days observing the Canadian inspection system at two Canadian ports.

The dedication and self-sacrificing flexibility of all staff members and the cooperation of the regional offices and overseas branches significantly contributed to the successful completion of this assignment.

#### Use of Consultants

During the review consultants were used extensively to supplement the auditors' work. Through these experts, GAO was able to quickly develop a thorough knowledge in such areas as grain standards, the mechanics of inspecting grain, and the intricate workings of the grain marketing system. A professional research corporation was enlisted to help develop, administer, and analyze a questionnaire given to farmers in six Midwest States. Assistance was obtained from USDA's Statistical Reporting Service in selecting the farmers and mailing the questionnaires in four of the States. A consultant and GAO also developed a questionnaire which was sent to country grain elevator operators in four Midwest States.

A unique arrangement was made with one of the consultants. The consultant was asked to identify potential problems in the marketing and inspection of grain. Because he was already studying this area, GAO was able to tie into the research effort, assist and expedite his work, and gain the benefit of his extensive knowledge in the grain area. During one phase of his work, he and some staff members traced the flow of grain from the time it was loaded into an export vessel until it was unloaded at the foreign destination. The purpose of this was to identify what happens to grain during loading, transporting, and eventual unloading. Staff members from the Twin Cities suboffice observed loading at the U.S. port. Staff members from the overseas branch met the consultant when he arrived, just before the grain ship arrived and helped him sample the grain before, during, and after unloading to determine the nature and extent of damage in handling grain.

#### Reporting on the Review

In preparing the initial draft of the report, a substantial amount of time was saved by assigning the responsibility for writing certain segments to the field and for other segments to Washington. In addition, drafting of the report began early in the review.

The first chapter, which included background information on the marketing, inspecting, and weighing of grain as well as statistics on grain supplies and exports, was prepared shortly after the fieldwork began by two Washington staff members assigned to the grain marketing and standards segments of the review.

Because the various field staffs had

submitted fact sheets on various subject areas as the work was completed, both the Twin Cities and Washington offices remained fully attuned to the results of the fieldwork as it progressed. This also enabled the Twin Cities staff to begin preparing a chapter on problems with the national grain inspection system before the fieldwork was completed. In addition, each region submitted unreviewed workpaper summaries to the Twin Cities and Washington offices before going through its respective regional referencing and review process, thus providing the total results of the fieldwork to the report writers as early as possible.

The initial draft of the chapter on foreign buyers' complaints about U.S. grain was prepared by the Washington staff assigned responsibility for that segment and by a European Branch staff member who was detailed to Washington for 3 weeks.

A Chicago regional office staff member prepared the initial draft of the chapter on grain standards under the supervision of the Twin Cities audit manager with input from a consultant and the Washington staff. This staff member worked almost exclusively on grain standards during the review.

The Washington staff also prepared sections pertaining primarily to USDA headquarters activities and sent them to the Twin Cities audit manager for incorporation into the overall report.

#### Report Reviewing and Processing

Reviewing and processing the report was speeded considerably with several innovative techniques and the exceptional cooperation of those involved.

The review of the report by the Agriculture staff of the Community and

Economic Development Division was expedited when the associate director and the reporting assistant spent 2 and 4 weeks, respectively, at the Twin Cities suboffice reviewing and revising the draft during field referencing. Upon their return to Washington with the draft report, final review and processing began immediately.

Techniques which expedited the final review and processing included the following:

- The draft report was typed on the Lexitron machine after the review in the field was completed. Any changes thereafter were simplified by using this machine instead of retyping manually. This was made possible by the Community and Economic Development Division director granting this report priority over all other work for 4 weeks.
- GAO met with officials of three USDA agencies to obtain informal comments on the report's findings and tentative conclusions and recommendations before submitting the report for formal comments. This allowed our staffs to make needed changes to the report at the earliest possible date. Factual summaries were provided to the agencies a few days before the meetings.
- Two staff members from the Twin Cities suboffice came to Washington to help handle agency and internal GAO review comments.
- The report was sent for pre-editing at the same time it was sent to the division director for detailed review.
- While the draft report was at the agency for formal written comments, copies were sent to the Comptroller General, the Deputy

Comptroller General, the Office of Policy, the Office of the General Counsel, the International Division, the Federal Personnel and Compensation Division, the Office of Special Programs, and the Information Office for comments and coordination.

- The Department agreed to provide written comments on the report within a week.
- The Community and Economic Development Division directorate and the Twin Cities audit manager met with the Comptroller General and the Deputy Comptroller General to firm up recommendations and resolve internal review comments.
- Illustrations and photographs were provided to Illustrating Services immediately after pre-editing.
- All offices involved in the final review and processing gave the job top priority.
- A schedule was set up for the final review and processing phase to meet the report deadline, and the professional and secretarial staffs strictly adhered to it by working long hours and weekends.

### Job Success

Was the review a success? What standards should be used in making this determination?

Although the criteria for measuring the success of GAO's reviews is debated continually within our organization and undoubtedly will continue to be debated in the future, no clear set of standards has been developed to allow an auditor to say "Yes, this job was a success." The authors believe that the success of GAO's work and of its reports should be

measured by a number of factors including promptness in fulfilling the Congress' needs, the readability and conciseness of the document published, the clarity and objectivity of GAO's position, and the eventual use made of the work in increasing the economy and efficiency of the programs being audited.

Certainly, our grain inspection report was provided to the Congress on a timely basis and was well received. One Member commented during hearings at which GAO testified:

*At a critical time they (meaning GAO) have presented us with the definitive analysis of the problems of the present systems of grain inspection and weighing; and they have presented us with detailed recommendations for solving those problems. Once again this committee, this Congress, and this country are deeply indebted to the men and women of the GAO.*

Most nationwide articles and commentaries by the news media were also favorable to the report.<sup>1</sup>

There can also be no doubt about GAO's position. We recommended that an essentially all-Federal grain inspection system be established to replace the existing Federal-State-private system. But, the effect of our work in increasing the efficiency and economy of the program being audited cannot really be assessed at this time.

Senate action to amend the Grain Standards Act was very responsive to GAO's recommendations. S.3055, which included virtually all of GAO's recommendations, was passed by the Senate on April 26, 1976. H.R.12572, based on the administration's proposal to

<sup>1</sup> "Assessment of the National Grain Inspection System" (CED-76-71, Feb. 12, 1976).

strengthen the Grain Standards Act, was passed by the House on April 2, 1976.

After several months of debate, the House and Senate conferees agreed on a bill (P.L. 94-582) which was signed by the President October 21, 1976. Although the United States Grain Standards Act of 1976 does not include GAO's primary recommendation, it strengthens the U.S. grain inspection system by providing for Federal inspections at export points not under State inspection as of July 1, 1976, and for Federal inspections at interior points if the inspection agency does not meet the criteria set forth in the act. It also (1) requires supervision of weighing, (2) requires periodic rotation of inspection personnel, (3) strengthens conflict-of-interest provisions, and (4) increases penalties for violations of the act. Whether these changes are sufficient to restore credibility in the U.S. grain inspection system cannot be determined at this time.

### Applicability to Other GAO Assignments

Obviously the amount of resources, both in terms of staff time and expenses (travel, consultants, etc.), expended during this review was not typical of a normal GAO assignment. Likewise, the extremely high priority and urgent nature of our work enabled us to compress the time frame in which our work was done. The methodology of the approach used in this assignment, however, is to a large extent applicable to most GAO work. Also good planning, effective communication, and innovative report writing are the keys to most, if not all, GAO work.

Each GAO assignment, whether it be a study of the grain inspection system or a study of the procurement of C-5A

transport planes, must be approached in a flexible manner so that GAO can provide the Congress with the information it needs to assess the situation at hand. Although many of the techniques used in this review may be applicable to other jobs, more than likely the groups doing other reviews will use those techniques which will provide them the information they need in the time they have.

### In Summary

The techniques used to complete this job in the required time frame illustrate how GAO can, when called upon, respond to a crucial need of the Congress. Could GAO allocate this type of priority and these resources to all GAO reviews? Obviously the answer is no, since GAO has limited resources and must carefully

assign priority work. Most of the techniques used to shorten the normal time frame could, however, to some degree be applied to other reviews and probably have been.

This job, unlike many of GAO reviews and reports, was clearly a success from the standpoint of promptly fulfilling a congressional mandate with a report which was well received and which clearly stated a position that could be used to develop legislation to overcome a problem. The authors believe, however, that too many times GAO staff members who work on reviews never really know whether the job was a success or failure. GAO needs some standards for measuring the success or failure of jobs, so that GAO staff members can better evaluate their efforts toward meeting organizational goals.

### GAO's Standing

... as of today we know that never in its history has the General Accounting Office had the high standing with the Congress, whose agency we are, and never in its history has the Office had such grave responsibilities or such splendid opportunities for making the most of them. We are fortunately free from the breath of scandal which has touched the Executive branch. We are depended upon by Congressional committees, Congress itself, and the public to be non-partisan, factual and objective.

Lindsay C. Warren  
Comptroller General of the United States  
1951

## The Original Grain Inspector

*How a biblical quotation became a part of the legislative record.*

While waiting for the taxi that was to take me to the airport for a flight to St. Paul, where I was to help draft the report on GAO's review of the U.S. grain inspection system (described in the previous article), I sat down in my favorite chair and picked up the top paper from the unread stack that had accumulated on the nearby table. It was a recent issue of a diocesan paper which had been running a series of articles on Old Testament prophets.

This issue had a piece on Amos, a shepherd called to prophesy for a brief period in the reign of Jeroboam II (783-743 B.C.). At that time, Israel's Northern Kingdom was prosperous, but a corrupt city life had developed. In this background, Amos condemned the social injustices of his time and warned of impending punishments.

As I read, both the timing of the article and some of the words seemed particularly ironic. Here I was going to work on a report on the scandal-ridden U.S. grain inspection system, and Amos was talking about corn and wheat and about swindling and tampering with scales. So I opened the Bible and there in chapter 8 of Amos were the words:

*Listen to this, you who trample on the needy and try to suppress the poor people of the country, you who*

*say, 'When will New Moon be over so that we can sell our corn, and sabbath, so that we can market our wheat? Then by lowering the bushel, raising the shekel, by swindling and tampering with the scales, we can buy up the poor for money, and the needy for a pair of sandals, and get a price even for the sweepings of the wheat.'*

Taking a piece of paper, I copied the quotation and put it in my briefcase. As the report draft was being put together in St. Paul and later as it was being polished in Washington, I shared the quotation with most of those who were working on the grain inspection job and mused about using the quotation in the report.

Then, as the draft was typed and we were ready to make copies for the first-level reviewers, I had one of the secretaries type the quotation and I taped it on the original, right under the half-page cover summary. We made two copies and sent them for review. One copy came back with the note, "Great"; the other said, "Interesting but suggest we delete."

That was the end of it, I thought, as we sent the revised draft—without Amos' words—to the next review level. I put the piece of paper back into the

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briefcase, and the copies that had included the quotation were filed in the master report folder.

Then, a few days after the initial copies of the issued report had been delivered to the congressional committees, I received a phone call at home from one of the GAO staff members who had been assigned to help the Senate Agriculture and Forestry Committee in its investigation of the grain inspection scandals. He was at work that day preparing for subcommittee hearings at which the Comptroller General was to discuss our report.

After talking about the job and the report for a while, I mentioned that I had found a biblical quotation that he might enjoy. I read Amos' words to him.

At the hearings a couple of days later, the Chairman of the Subcommittee on Foreign Agricultural Policy, Senator Hubert Humphrey, started reading his opening statement. He said he had once taught a course in the Old Testament prophets and that his favorite was Amos. He said that Amos was the original grain inspector and then he read what Amos had to say. The words were from a different edition of the Bible, but the message was there and it set the tone for the hearings.

The GAO staff member assigned to the committee later said that he had noticed one especially big smile in the audience as Amos became part of the official record.

### Watchwords

We cannot avoid change; indeed we would not want to if we could. The loyal career public servant should not expect to be rewarded solely or primarily for his carefulness in carrying out his superior's directions. Loyalty must also include suggesting alternatives which might better achieve policy objectives, even at the risk of incurring the disfavor of that superior.

*Elmer B. Staats*

Comptroller General of the United States  
Commencement Address at Nova University  
August 1, 1976

ROY J. KIRK

## Implementing the Lead Division Concept

*The lead division concept has evolved in GAO as a way of planning and managing resources to focus as much as possible on major national problems and issues affecting more than one Federal agency. A lead division is a focal point in the Washington headquarters office which is primarily responsible for general understanding, assessment, guidance, and communication on what GAO is doing, has done, and should plan to do in specific major problem or issue areas involving the Federal Government.*

*This article describes how GAO's Community and Economic Development Division carries out its lead division responsibilities.*

After much internal debate, the Comptroller General informed heads of GAO divisions and offices on February 3, 1975, that he endorsed the lead division concept as a way of increasing GAO's effectiveness through planning audits by issue areas. He said:

*The objectives of this concept are basic and simple. They are to improve communications among organizational units of the GAO, to develop and take full advantage of expertise among the various divisions and offices, and to build into operating divisions, to a large extent, the responsibility for planning for forward work programs on a Government-wide basis.*

As of August 1976, GAO's Program Planning Committee, which is chaired by the Comptroller General, identified and approved 29 issue areas to receive priority attention in deciding what audit and evaluation work GAO will do on its own initiative. The committee designated the Community and Economic Development Division as the lead division for six of these areas:

- Domestic housing and community development programs (urban and rural)
- Environmental protection programs
- Food
- Land-use planning and control
- Transportation systems and policies
- Water and water-related programs

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Our primary objectives in carrying out our responsibilities under the lead division concept are to (1) direct and guide GAO's professional staff, through program planning, on reviews needed in the issue area and (2) insure that such reviews are effectively coordinated—regardless of the division making them.

## Coordination of Issue Areas

### Role of a Coordinator

Except for food, our lead coordinators report to an operating group director primarily responsible for an area. This was considered the proper level of reporting for these coordinators, because it is high enough to provide broad coverage of government activities under the jurisdiction of various GAO divisions and low enough to provide close contact with the operating groups performing the planned assignments. The food coordinator and analysis staff report to the director of the division. We have also found it beneficial to establish a committee of all the coordinators—*Roy J. Kirk, David L. Jones, William E. Gahr, Harold Pichney, John L. Violet, and Ronnie E. Wood*—chaired by a deputy director, *Max Hirschhorn*, which meets periodically to discuss planning and coordination ideas and resolve mutual problems.

The coordinators are responsible for Office-wide planning of their lead division areas as well as for internal and external coordination. Coordinators are also expected, in time, to be the most knowledgeable persons in GAO in their respective areas. In other words, in addition to planning and assuring broad coverage of the issues, they serve as focal points within and outside GAO.

They also arrange meetings, confer-

ences, and symposia on the issue areas. Further, after an orientation period and the approval of the issue area program plan by the Comptroller General and the Program Planning Committee, the coordinator is expected to perform at least one major study which will provide him greater insight and planning assistance for the issue area.

### Should Full-time Issue Area Coordinators Be Designated?

Our experience over the last year has shown that lead division coordinators must devote a major portion of their time to lead division activities if the spirit of the Comptroller General's February 3, 1975, memo is to be carried out. As time permits, however, the coordinator will be expected to direct major assignments.

A year ago, we were assigned lead division responsibilities for environmental protection, land-use planning and control, and transportation. We designated a coordinator for each of these areas in March 1975. For two of the issue areas (environmental protection and land use) full-time coordinators were designated. Full-time coordinators were later assigned to the issue areas of housing and community development (both urban and rural) and water and water-related programs. For transportation, the coordinator was to split his time between lead division activities and managing aviation and general transportation reviews.

We adopted this approach primarily because the concept was new and a full understanding was needed of the lead division coordinator's role. Also, criteria for preparing program plans were changing. At times the changes seemed to occur almost daily, and it was difficult

to visualize the magnitude of the job in developing a program plan. We were learning, so we decided to test two alternatives by appointing full-time coordinators in two of the issue areas and a part-time coordinator in the other area.

We learned that the lead division coordinator should be assigned full time. It is not a position which can be worked in as time permits, along with other major responsibilities. We found this particularly so during the initial stages of lead division implementation—when program plans were being prepared or revised. After a plan has been developed and the dust settles, the lead division coordinator can assume additional responsibilities and probably can and should direct at least one major assignment.

Our division is moving in that direction now. The environmental protection issue-area coordinator is project director of an evaluation of air and water pollution control goals and strategies. The land-use planning and control issue-area coordinator is directing a survey of planning for the use of federally owned lands. Other lead division coordinators will take on similar reviews. In the transportation issue area, the coordination responsibilities have been reassigned to a full-time coordinator.

### Internal Coordination

#### Why does GAO need internal coordination?

Not one of our issue areas is confined to a single Federal department or agency, nor to a single GAO division, which is why the lead division concept was established. However, we do at least half of the audit work in each of our areas.

Domestic housing and community development is an area of interest to all

State and local governments are the most concerned, because they are most affected by Federal action or inaction. About 100 assignments related to this issue area are being carried out primarily by our division, the General Government Division, and the Logistics and Communications Division.

The environmental protection issue area encompasses elements in all our lives. It covers environmental protection regulatory programs, the environmental impact statements which are part of the plans and actions of all Federal departments and agencies, and the many Federal laws and programs to protect the natural environment and wildlife habitat against destruction. A number of other divisions are also involved in the area, including the General Government Division, the Human Resources Division, and the Energy and Minerals Division.

Land-use planning and control involves all aspects of land use. The Federal Government owns or controls one-third of the land in the United States. In addition, Federal programs such as housing, transportation, and environmental protection have strong land-use impacts. Our division, the Energy and Minerals Division, and the Logistics and Communications Division are all carrying out work in this issue area.

The transportation systems and policies issue area involves everything and everybody. Transportation is a basic element in our economy. Work is primarily done by our division, the Logistics and Communications Division, and the Procurement and Systems Acquisition Division.

Since water is used by everyone and every industry, the issue area of water

and water-related programs is very important. Most work is being done by our division.

#### What elements are necessary for success?

A simple, reasonable, and effective coordination system must be established for the lead division concept to be accepted. Further, those involved must not hesitate to let responsible individuals know what work they are undertaking and the results. They must agree on the issue area or areas involved in assignments and the extent of coordination needed. Otherwise, roadblocks may develop preventing effective internal coordination. A few always want to protect their own "turf," fearing that someone else will steal it if others know what is being done or planned.

When the issues involved are under the same operating group director, as are housing and environment, a problem is unlikely since the operating group director is in a position of authority for both groups involved. Likewise, when two groups under different operating group directors are involved, the division director has the authority and responsibility to settle any differences. However, when two divisions are involved, overall authority and responsibility does not rest with any individual, and effective coordination may be difficult.

This observation leads us to a final key element of effective internal coordination—a focal point. For GAO the focal point is the Office of Program Planning. Although its role is basically advisory, it has met with success. It provides guidance on the lead division concept, reviews assignment authorizations to assure that the issue areas are properly designated and the assignment is be-

ing coordinated with the responsible groups and individuals, and arbitrates disputes involving the lead division concept.

#### How Is Coordination Carried Out?

The six issue areas are related to some extent, and each coordinator's duties are basically the same. The coordinators can frequently discuss assignments, issue areas, and any and all matters that deal with the lead division concept. This continual exchange of ideas and opinions makes systems more effective.

We decided that the best way to coordinate with the audit sites and other GAO divisions and offices was to communicate our thoughts, ideas, questions, and remarks mostly on an informal basis—through telephone calls, site visits, handwritten notes on drafts, etc. Various formal methods, such as communicating with these groups by memorandum, were rejected. A simple, reasonable, and informal system has a better chance of being effective and being accepted than a system overloaded with paperwork.

Each coordinator should know what reviews in the issue area are being planned and carried out in all divisions and offices, to insure that reviews are effectively coordinated. So our program plans list the assignments to be undertaken in each issue area for about 2 years.

The coordinator, in cooperation with the audit sites involved, selects the assignments to be carried out during the program period. Assignments that do not show up in the program plan are usually unanticipated congressional requests, reviews secondarily related to the issue area, and reviews where the issue area has not been recognized. The

coordinator finds out about these assignments by receiving a copy of the assignment authorization or other information from the group responsible and by reviewing the tentative list of assignments and authorization forms for all offices and divisions.

The coordinator also uses two computer listings, the most important of which is the issue-area report which lists every assignment relating to an issue area identified on an authorization form. The other listing of assignments by department or agency enables the coordinator to be aware of all work at departments or agencies within his issue area.

Coordinators keep abreast of assignments by frequent telephone calls and visits to the audit sites. As circumstances dictate, coordinators accompany operating staffs on field trips. In this way they can provide guidance on the assignment and obtain information which may benefit other assignments.

We meet with congressional committee staffs to

- inform them of the role of the coordinators,
- brief them on ongoing and planned review areas,
- obtain their views on pressing national, State, regional, or local problems, and
- keep aware of pertinent hearings and briefings.

Since our division's activities are principally related to Federal programs and activities, Federal officials with responsibilities in the issue areas are contacted to

- inform them of the coordinator's focal point role,
- recognize their principal concern or problems in the issue area, and

—arrange for meetings to identify and discuss policy changes.

Many of GAO's reviews and actions also have a major impact on non-Federal activities. Therefore, the coordinators meet with both State and local officials to seek their views and discuss issues they consider most pressing. Groups with which contact has been made to discuss lead division issue areas include the National Governor's Conference, the Council of State Governments, and interstate and local government groups.

The private sector can also contribute to understanding and solving some of the problems in the issue areas, and we therefore have found it desirable to identify and meet with private individuals or groups having knowledge and expertise in the issue areas to

- develop a list of experts,
- become familiar with relevant programs at leading universities, institutes, and other organizations, and
- consult with public and private interest groups.

For example, contact has been made with college professors, university research panels, Sierra Club officials, and representatives of the steel industry.

The coordinators participate in various conferences, seminars, panel discussions, and similar events to

- keep up with major issues and discuss them with knowledgeable people,
- resolve possible concerns or clarify views, and
- establish a dialogue with experts, so their counsel and assistance can more readily be obtained in the future.

Since numerous sessions can be at-

tended, coordinators must select those most pertinent.

In addition, much can be learned from related experiences in foreign countries. Information on many foreign countries has been obtained, and Canada and Sweden have been visited to discuss land-use policies. Further exchanges with foreign countries are planned for the other issue areas.

## Program Planning

### What Is Involved in Preparing and Revising Plans?

Giving our coordinators responsibility for preparing issue area program plans has two benefits. First, the audit sites do not have to spend a long time preparing the plans, although they do provide information for the plan. More importantly, the coordinators can look at the issue area from a broader perspective, which facilitates identifying national issues that cut across many Federal agencies and programs. This is one of the keys to the success of the lead division concept.

Program planning takes time and it is not easy; it requires a lot of thinking and information gathering. For example, the environmental protection issue area coordinator spent 2 to 3 months gathering and analyzing information about the environment before identifying the key issues.

To gather this information, a tremendous amount of reading was required. Reams of material have been written about each issue area. Thoughts, ideas, and comments were solicited from GAO audit sites, regional offices, people on the Hill, and agency officials. Opinions of government and private experts were obtained by various methods, including attending conferences and symposia.

After information is carefully assessed

and key issues are identified, the next step in preparing a program plan is to determine what issues GAO could and should review. Priority lines-of-effort statements are then prepared, identifying key problems and the areas in which GAO should direct its efforts. (However, other assignments can still be conducted when there is a special need.) The program plan is then drafted according to established requirements and circulated to other divisions and offices for comment and subsequently to the Program Planning Committee for approval.

Four issue-area program plans—domestic housing and community development, food, environmental protection, and transportation systems and policies—have been approved. The other two plans had been approved under prior guidelines and are being updated to meet the new requirements.

Very few program plans are exactly alike. They are tailored by the division or person who prepares them. However, we believe that certain items should be included:

- Background on the issue area, including scope, perspective, recent trends and outlook, major legislation, and level of effort.
- Lines-of-effort and priority lines-of-effort statements.
- Past reports, current reviews, and future assignments designated as high, medium, or low priority.

A program for our division plan normally covers 2 years. However, this does not mean that we consider it final for that time. As the Director, Office of Program Planning, said in a memorandum to regional managers, we want these plans to be "living documents." We are continually soliciting ideas for potential work from regional offices, audit sites, and others in GAO.

Once the program plans are approved, updating them to reflect changes, such as in priorities, scope, and direction of assignment, is usually not too time consuming.

We expect to formally revise our planning documents every year, to add or delete priority lines of effort and make other changes. At that time, a memorandum to the Comptroller General will be prepared, comparing the planned assignments with what has been done in the issue areas.

### What Are the Benefits of Planning?

Planning with top management review and approval leads to broad coverage of issue areas and serves as a basis for coordinating GAO's work. Further, program plans show GAO officials at all levels what areas the Office will address in the designated issue areas. This especially benefits the regional offices, because they can (1) identify those areas in the plan in which they would like to make surveys or reviews or (2) propose additional potential audit areas.

## Symposia

The title of an issue area sometimes does not provide a clear understanding of its scope. For example, by title alone one cannot tell what Federal activities are included in the land-use planning and control issue area. Some GAO staff members may know that the Government's ownership of vast acreages in the United States (one-third of the Nation) gives it a responsibility to plan the use of these lands. But is the GAO staff generally aware that Federal decisions on the use of public lands also affect adjacent nonpublic lands and that Federal action on housing, transportation, water and sewage, etc., also influence private land-use decisions?

In addition, some lead division issue-area activities cut across GAO organizational lines. In view of the need to obtain knowledge about the subject matter, including scope, and interrelationships between lead division issue areas, we have decided to hold a series of symposia on the issues assigned to our division.

### Organizing and Conducting a Symposium

The mechanics of organizing and conducting a symposium are too numerous to detail here; however, three aspects are important to mention.

Agreement should be reached within the division on the topics to be presented and discussed at the symposium, before speakers and panel members are invited to participate. Suggestions should be sought from other divisions and offices. Attending to this aspect should help insure adequate coverage of the issue area and avoid the embarrassing situation of having to "uninvite" speakers or panel members.

Federal, State, and local governments, as well as private groups, should be represented to insure coverage of the symposium topics from a variety of perspectives. Corporate presidents, congressional committee chairmen, heads or assistant heads of Federal, State, and local governments, and top-level people in private organizations should be sought to participate in the symposium. A letter from the Comptroller General to agency heads, asking them to attend and enlisting their support in obtaining proper agency representation, is important.

It is very useful and beneficial to reserve the last part of the symposium for an in-house session where GAO staff can get together and discuss



- speakers' views expressed during the symposium,
- field/Washington interface in covering the issue area, and
- potential audit areas.

A site for the symposium away from the GAO building is desirable, to insure maximum concentration by the participants on the symposium topics and to minimize interruptions.

#### How Are Symposia Results Used?

Symposia reports, containing speakers' and panel members' presentations, discussions, questions and answers, and suggestions for future work areas, are prepared. These reports are distributed to GAO divisions and offices to serve as a background for the issue area and a source of ideas for future revisions of the issue-area program plans.

#### Land-use Symposium

The first of the series of symposia, on land-use planning and control, was held November 18-20, 1975, at the Quality Inn, Leesburg, Virginia. Its objectives were to

- acquaint the GAO staff with the diverse nature of the issue area, both in the public and private sectors,
- familiarize our staff with recent trends in Federal, State, and local land-use planning and natural resource management activities, and
- discuss proposed audit efforts in the issue area and solicit ideas for future audit areas.

To fulfill these objectives, the topics discussed at the symposium ranged from "Land-Use Planning—What It Is and Why It Is Needed" to "Increased Joint Use of Military Lands."

#### Did the symposium achieve its objectives?

After the land-use planning and control symposium, an evaluation questionnaire was sent to all the participants. Their replies showed that the first two objectives—acquainting the staff with the diverse nature of the issue area and familiarizing them with recent trends in issue-area activities—had been fully met.

As for the third objective—discussing proposed audit activities and selecting ideas for future audit effort—most participants believed it had been satisfied, but some offered suggestions for improvement. These suggestions and others for improving future symposia have been referred to the division coordinators for their use.

Symposia are planned for each of our issue areas. A symposium on environmental protection issues was held May 24-27, 1976, in Annapolis, Maryland.

#### Conclusion

Whether or not the lead division concept is working and worth the effort and cost is not yet settled. A lot of the "bugs" have been worked out in implementing the lead division concept, and it is being accepted more and more throughout the Office. This has resulted in

- better communication and coordination, both internally and externally,
- improved program planning,
- exposure of GAO professional staff to views of top-level officials in the public and private sector, and
- audits that address issues of national concern.

## GAO: Learning To Plan and Planning To Learn

*The adage that "where you stand depends on where you sit" is familiar to those who work in government. The author of this article usually "sits" in a university teaching public administration, which provides a perspective that is different from that of a career civil servant. As an outsider who spent the past year as a faculty fellow on the GAO staff, he offers some thoughts on GAO's organization.*

GAO's mission, broadly conceived, is that of contributing to better government by providing information to the Congress regarding executive branch implementation of public policy. If the formulation of public policy depends, in part, on the quality of information made available to political decisionmakers, GAO occupies a unique position in the policy process. As such, it is important to think about the manner in which GAO is organized to provide information.

During the past decade, GAO has undertaken a number of internal changes to improve its ability to provide the Congress with more and higher quality information on important issues of public policy. These changes have come about because GAO has adopted an orientation toward learning to plan. The purpose of this article is to suggest, however, that GAO consider

an orientation toward planning to learn.

In order to develop the argument for a learning organization, it is first necessary to describe the environment in which GAO operates and the character of its work products. Second, some of the changes within GAO during the last decade will be discussed in terms of what factors in the environment prompted change, how changes were made, and the effects of change on GAO's internal structure. Third, the concept of matrix organization will be suggested as one means by which GAO could adopt a learning orientation, thereby contributing even more significantly to the betterment of government.

#### The Professional Organization in a Political Environment

GAO is obliged to operate in a distinctly political environment; yet its

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credibility—if not its survival—depends upon the apolitical manner in which it conducts its operations. As a result, GAO has necessarily adopted a cautious and rather conservative approach to its mission. However, GAO's reputation for integrity and professionalism has served, in all probability, to keep the executive branch more honest than it otherwise might have been.

Inasmuch as the Congress is an entity of politicians whose members have different values, it is no mean feat for an organization of professionals to have remained untarnished by constant interaction with politics. GAO's leadership must be applauded for maintaining the organization's neutrality. However, in the process of having adapted successfully to avoid the political, GAO's work has assumed a very distinctive character.

In order to make my point, although it is clearly an overstatement, I would suggest that GAO's orientation is negative rather than positive. GAO reports are predominantly deficiency oriented. The emphasis is on identifying, analyzing, and offering prescriptions for weaknesses in executive branch programs and activities. This negative orientation is not accidental.

Chapter 12 of GAO's Report Manual contains a section on "general balancing statements" that is revealing in this regard.

*It is very important that we convey to our readers as fair an impression as we can. Because in planning and conducting our audit work we emphasize matters in need of attention, we must make a conscientious effort to maintain a measure of balance and perspective in our reports.*

GAO's explicit aim, then, is to focus attention on those aspects of Federal programs in need of attention and remedy.

Although others have previously noted the deficiency-oriented character of GAO reports, my purpose in doing so is to call attention to the particular type of learning model that is implicit in GAO's work. In essence, the way to stimulate better government is to find fault, to expose deficiencies. GAO's approach to improving executive branch performance is to articulate what good government is not, rather than what good government is.<sup>1</sup>

Certainly, there are many aspects of Government programs and activities in need of improvement; and to the extent that GAO assists in the process of improving Government operations, its efforts should be duly credited. There is much to be said for the adversarial system, friendly or not, but it is an open question whether the process yields better government. Behavioral scientists have had a longstanding interest in the question of whether criticism or praise is a more effective means of eliciting change, and it may be that GAO's orientation warrants some attention in this regard.

It may be argued, of course, that GAO is not the sole arbiter of what constitutes good government and that GAO's role is—and should be—that of assessing the effectiveness and efficiency of the Federal Government ac-

<sup>1</sup> Having noted that GAO reports tend to be deficiency oriented, and lest I appear to be hopelessly naive, there are some perfectly understandable reasons (internal to GAO and in its relations with the Congress) why this should be so.

ording to criteria determined by the appropriate and duly constituted policymakers. This vision, with which I would concur, is that GAO does not make public policy but appraises the manner in which it is executed. However, this does not necessarily mean that GAO is constrained to function solely as an independent critic.

For the most part, GAO focuses on Government programs and activities or parts thereof. This is necessary and desirable; it is also limited. Government programs may be understood as responses to larger problems. In rendering its appraisals and assessments, GAO learns a great deal about the Government's effectiveness in coping with problems. Yet this knowledge is rarely pulled together in a systematic manner. If GAO's audits were targeted to an understanding of broader problems, and if audit results were better synthesized as a general practice, GAO could gain more comprehensive knowledge about public problems and policies, thereby contributing even more significantly to better government. That is, GAO's assessment function could be coupled with a learning function.

### Change: External Stimulus, Internal Response

To understand how a learning orientation might be developed, it is important to discuss the changes that have taken place recently within GAO, the changes in GAO's external environment that necessitated adaptation, how these internal changes have taken place, and the implications of change for GAO's structure.

The basic change has been one of increasing social complexity. It is almost

commonplace today to remark about the growing complexity and interdependence that characterize American society. One obvious manifestation of increased social complexity has been the resultant complexity of government; this, in turn, has had significant implications for GAO in terms of what it does and how it operates.

When GAO was created, its task was to develop technical competence and to establish credibility. Its work during those early years was almost exclusively devoted to determining fiscal accountability. From this rather modest beginning, GAO's scope of work has broadened considerably over the past 50 years. It is generally recognized, for example, that GAO now performs managerial and program audits in addition to assessing fiscal accountability. Such changes entail quite different time orientations. GAO has moved from an exclusive emphasis on postaudits to monitoring ongoing activities. Furthermore, the broader scope of its efforts suggests that, increasingly, GAO will be asked to provide information to the Congress which is pertinent to future policymaking.

To assert that the character of GAO has been altered within the last decade would be an understatement. As its external environment changed, GAO was obliged to change as well. The Office of Program Planning was created.\* The traditional civil and defense divisional structure was abolished,

\* EDITOR'S NOTE: A program planning staff was established in the Office of the Comptroller General in 1966. In 1971 this function was placed in the Office of Policy and Program Planning, and in 1972 this office was divided into the present separate staff offices—the Office of Policy and the Office of Program Planning.

and several new operating divisions were established. The concept of agency audits gave way to the concept of functional audits, as Government programs and activities assumed an increasingly interagency nature. People with backgrounds other than in accounting were recruited for both entry- and upper-level positions. Issue areas were identified, and—because these cut across divisional lines—lead divisions were designated to be responsible for GAO's efforts in these particular issue areas. The Office of Program Analysis and the Office of Special Programs (now the Program Analysis Division and the Energy and Minerals Division) were established.

Each individual change has meant a marginal adjustment in GAO's method of doing business. Taken together, however, they have effected a rather significant alteration in the way GAO executes its responsibilities. Cumulatively, these changes accord with the Comptroller General's desire to institutionalize, within GAO, a distinctive competence to address issues. The complexity of the Federal Government is far greater than GAO could ever hope to match. Therefore, GAO's management has attempted to maximize the use of available resources. Both formally and informally, the Office and its divisions have become increasingly aware of the need to think present and future audit activities through, from project formulation to project implementation. In short, GAO has been learning to plan.

GAO's incremental approach to change has taken place without altering its basic bureaucratic structure. (See organizational chart.) By choosing to add onto its existing foundation, GAO has elaborated its essentially simple

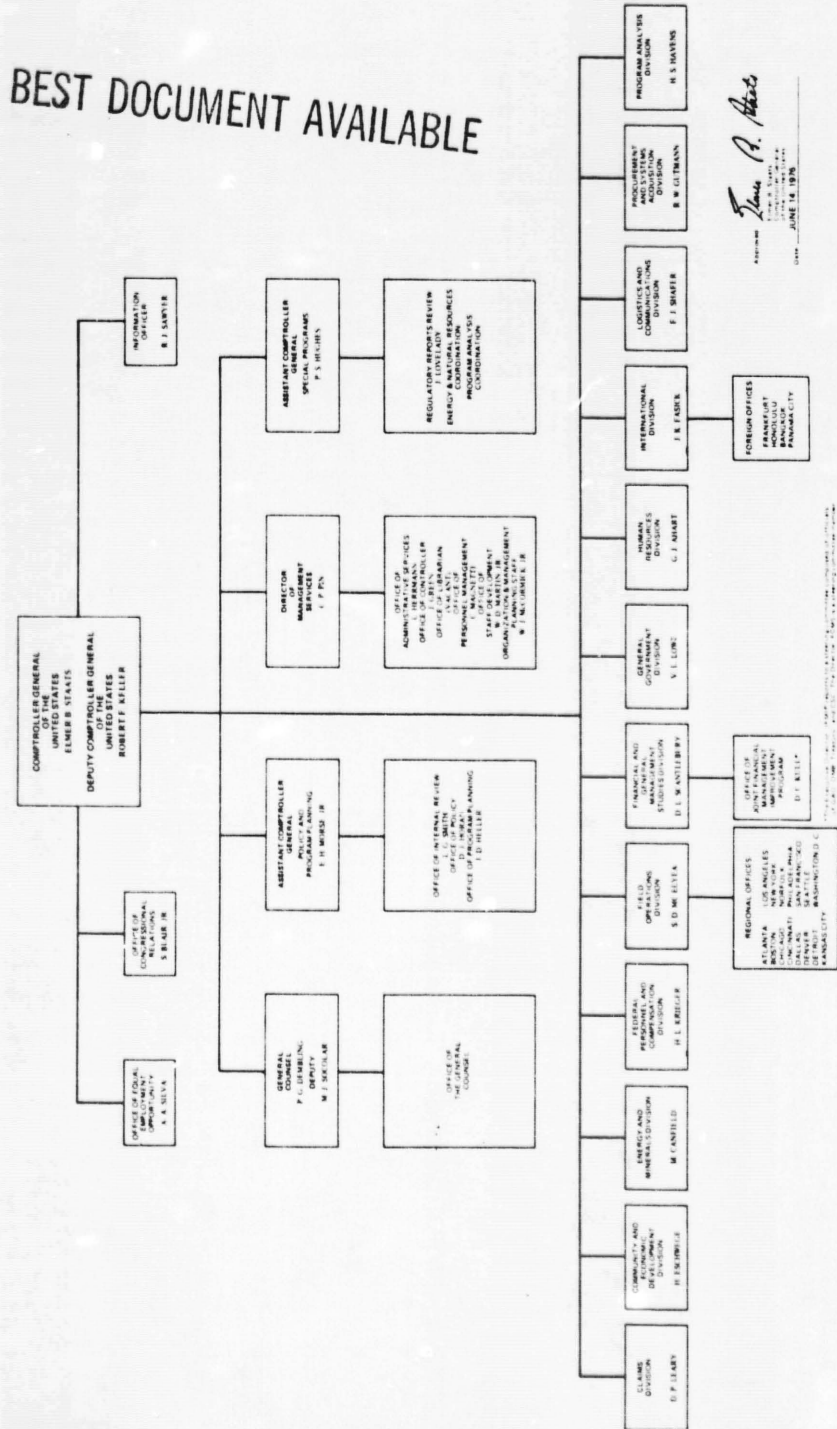
hierarchical structure. As complexity within the Government has been manifested horizontally (i.e., an interagency decisionmaking process), complexity within GAO has been manifested vertically (i.e., an expanded hierarchy). This is not to deny the significance of the changes that have been made, but rather to remark upon the manner in which they were made. That is, in addition to a "flatter" organizational structure, as was envisioned by the 1972 reorganization, GAO now has a "fatter" organizational structure as well.

Issue area planning, for example, was intended to enhance GAO's ability to address issues of policy significance more effectively. Because issue areas cut across divisional lines, this seemed to be a sensible way to improve coordination. In practice, the delineation of issue areas ignored such concerns as territorial prerogatives, and this precipitated the lead division concept as a means for reconciling such matters. (See list of GAO issue areas and lead divisions.) Whether the lead division notion will be successfully implemented remains to be seen.

One important outcome, however, is that decisions regarding interdivisional authority and responsibility have shifted away from the operating level and toward the policy level. In the process of forcing decisions to higher levels, some unintended consequences may become apparent. The greater the number of levels within an organization, the greater the tendency for individuals at different levels to pursue organizational goals according to their own perceptions of reality. Also, the greater the vertical differentiation, the greater the difficulties experienced in integrating work activities. These unintended conse-

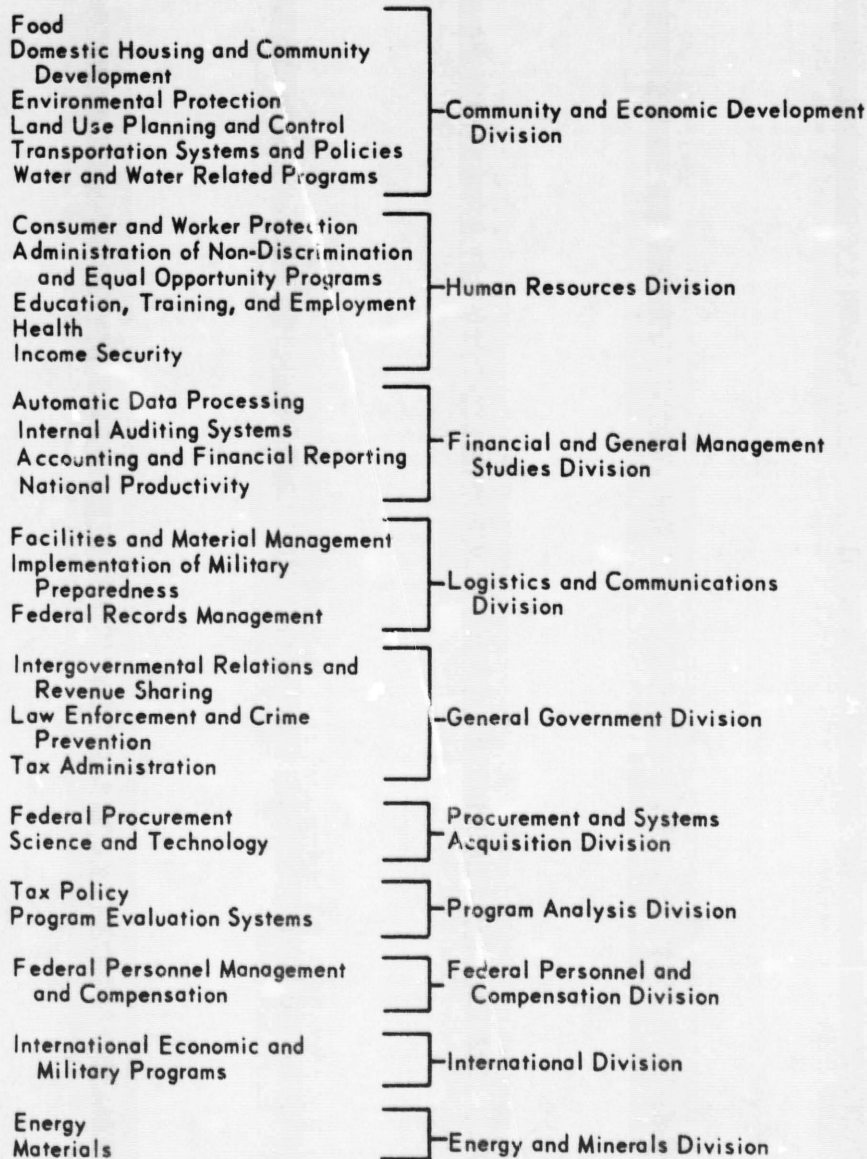
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UNITED STATES GENERAL ACCOUNTING OFFICE



*Thomas P. Adams*  
 JUN 14 1976

### GAO ISSUE AREAS AND RESPONSIBLE LEAD DIVISIONS



quences have the effect of creating additional pressures on people at the policy level of the organization, because policy responsibility and operational authority are distinctly different sorts of activities.

How these tendencies can be mitigated is a matter of speculation. If GAO is to enable itself to address policy-relevant issues more systematically, it is not clear that a hierarchical structure is the only or the most effective means of doing so. In questioning the utility of bureaucratic patterns as the best way of organizing GAO, I am *not* implying that the hierarchical structure should be eliminated. Hierarchy is both necessary and useful; the issue is whether it can be modified to maximize its assets and minimize its liabilities.

In a relatively simple environment, bureaucratic patterns of organization yield maximum efficiency in terms of resource utilization. Because organizational efficiency has been considered the basic criterion for socioeconomic success in our society, hierarchical structures have been with us for nearly a century. In a relatively complex environment, however, hierarchical organizations are both less efficient and less effective.

In principle, authority in bureaucratic systems is based on one's technical competence; but the theory of bureaucracy was developed in a context of greater simplicity than exists today. Increasing complexity necessitates more specialized knowledge and expertise. Hence, in contemporary bureaucratic systems, the authority to make decisions, which is based on position, is frequently different from the ability to make decisions, which is based

on technical expertise. The greater the complexity, the greater the separation between authority and knowledge, particularly in large-scale organizations

The functional utility of hierarchical structures is that they provide the authoritative basis for resource-allocation decisions; thus, they serve needs that are internal to the organization. But, because of complexity and the need for technical expertise, hierarchies are not effective problem-solving structures. The team has come to replace the individual as the principal problem-solving unit in many large-scale, complex organizations; more importantly, team membership is based on technical competence rather than organizational status. Organizational management and task management, then, are different functions.

With respect to GAO, the organizational management—or vertical—structure is firmly established. A task management—or horizontal—structure is virtually nonexistent. Indeed, with the exception of a few ad hoc project teams, GAO's approach to task management has been to coordinate it through the existing hierarchical structure. That is, task-related communications ought to flow freely across divisional lines; instead, they are processed up, across, and down through divisional hierarchies. Not only does this impair the content of communications, but it delays the timely completion of GAO's work products. If GAO seeks to address issues in a more systematic and coherent fashion, a problem-solving structure must be fashioned anew; furthermore, it must be complementary to, not built upon, the existing hierarchical structure.

FIGURE 1  
GAO DIVISIONS

ISSUE AREA UNITS	COMMUNITY AND ECONOMIC DEVELOPMENT	GENERAL GOVERNMENT	HUMAN RESOURCES	INTER-NATIONAL	LOGISTICS AND COMMUNICATIONS	PROCUREMENT AND SYSTEMS ACQUISITION
FOOD	GENERAL AGRICULTURE		FOOD STAMPS	TRADE & DEVELOPMENT	DEFENSE PROCUREMENTS	SATELLITE TECHNOLOGY
HOUSING	LAND-USE PLANNING	INTER-GOVERNMENTAL RELATIONS LAW ENFORCEMENT	DISCRIMINATION		MATERIALS MANAGEMENT	
SCIENCE/TECHNOLOGY	ENVIRONMENT	HEALTH	EDUCATION	TECHNOLOGY TRANSFER		NATIONAL DEFENSE

**The Matrix Model of Organization**

The concept of dual organizational structures noted above is known as the matrix model of organization. An outgrowth of engineering and scientific activities, the matrix model explicitly recognizes the need for, and differences between, resource allocation and problem solving. This concept is not new to GAO.

The December 1975 report of the GAO Task Force on Project Management is an excellent study that has been endorsed by the Comptroller General. In essence, project management involves the creation of a horizontally organized team for the purpose of accomplishing a specific, but limited, objective in a fixed (usually short) period of time. On the basis of its study, the task force concluded that project management had a great deal of merit

but had not really been tried at GAO. And, in view of the fact that only 1 percent of GAO's jobs at that time were of the project management type, it would appear that that outcome pertains more to the difficulty of initiating change than to the difficulties inherent in the concept itself.

Matrix organization is not the same as project management, but the principles underlying both are similar; hence, there is no need to reiterate them here. GAO approximates—but is not in fact—a matrix organization, for there is no complement to the hierarchical structure. What, then, would a matrix model look like in GAO?

Figure 1 shows, in part, both the existing hierarchical structure and a matrix structure. The basic difference between the two is that, in the existing structure, issue area responsibilities are assigned to individual operating

divisions, whereas in a matrix structure, issue areas would be the responsibility of separate and autonomous (though not necessarily permanent) planning units for each issue area.

In a matrix organization, issue area responsibilities would thus be independent of, but interdependent with, divisional responsibilities. Issue area planning would be the responsibility of staff units not alined with divisions; the conduct of audits would be the responsibility of operating divisions. The planning units would not be elite groups, because they would have no decisionmaking authority for organizational operations. They would be neither subordinate nor superordinate to divisions but would serve GAO by improving both coordination and coherence with respect to issue areas.

Planning and operations are entirely different activities; yet they are fused together in GAO's existing hierarchical structure. A matrix approach would separate these two functions. If separated, the role of planning units would be twofold: (1) to formulate issues Office-wide more systematically and comprehensively than is now possible and (2) to extract and synthesize the lessons to be learned from GAO's completed audits, which would improve the coherence of GAO's work as well as provide input to the next planning cycle.

It is difficult at best, within GAO's present organizational framework, to plan effectively. The basic function of GAO is *auditing*, and the reward system is structured that way. A division director's chief responsibility is operational, and most of a division's resources are allocated to operations. Planners work in and for divisions, reporting to

and through division directors. Planning, then, is not—and, perhaps, cannot be—of central importance to divisions. However, planning ought to be a primary concern for the Office as a whole. In terms of both learning to plan and planning to learn, the planning function must be institutionally autonomous.

My intention here is neither to detail the manner in which a matrix model could be implemented at GAO, nor even to argue that GAO should be converted to a matrix model; it is simply to suggest some possibilities. The point is that a mixture of structures would retain the particular competencies of divisions while adding to them. The idea of a matrix organization deserves serious consideration and, perhaps, experimentation, with the objective being to proceed incrementally and to modify as experience warrants.

A matrix model would afford GAO the possibility of becoming highly expert in issue areas—an opportunity unique in the Federal Government. The potential of a matrix model can perhaps be best understood by comparing GAO to the executive branch. Not only is GAO charged with reviewing Federal operations, but, as a microcosm of the Government, GAO's pattern of organization is modeled on that of the executive branch.

For approximately half a century, various Presidential commissions (e.g., Hoover, Brownlow, Ash) have studied ways of reorganizing the executive branch in order to make Government more effective and efficient. In general, these efforts have been serious and systematic; they have also been largely unsuccessful. Why? As social complexity increases, interdependencies become ever more critical.

Hierarchical structures cannot cope easily with interdependencies. Yet the structure of the Federal Government is basically hierarchical. Despite the emergence of interdepartmental decisionmaking for particular types of issues, the executive branch departments are permanent. That is, issue interdependence may be recognized, but it is treated in an ad hoc manner.

GAO, as the Congress' watchdog over the executive branch, is not bound to the existing structure of the Federal Government. By a simple internal reorganization, GAO can increase its ability to manage interdependence, and this is something that Government has thus far been unable to accomplish. The lead division concept is a step in the right direction, but it is essentially an internal mechanism for improving coordination with respect to GAO's particular issue areas; furthermore, it is built into a hierarchical structure. If GAO were to disconnect issue area planning and synthesizing from the conduct of audits, it could look more comprehensively at Government operations and important, policy-relevant issues.

### Matrix Models and A Learning Perspective

The most persuasive argument for adopting a matrix model is the opportunity for GAO to learn. Nowhere else in the Federal system is there an entity that is charged with *learning* how Government might be improved. Because of the pressures of day-to-day business, the Congress and the executive branch are compelled to act and/or react; the constant need to do something drives out the impetus to learn. To a large extent, this is true for GAO as well. However,

the nature and scope of GAO's activities, in addition to its neutral competence, lend themselves to a learning perspective. What exactly is meant by a learning perspective?

One way of explaining it is to contrast GAO's rather negative orientation, as discussed earlier, with a more positive orientation. Rather than focusing exclusively on what doesn't work in Government, GAO has the option of trying to discover what does work and why. The Congress and the executive branch must be concerned with solving problems by means of programs. GAO, in addition to its program audits, might address itself to the problems as well: What is the nature of the problem? How has it been addressed in the past? How effective have the "solutions" been? What can be learned about the problem as a result of GAO's cumulative experiences in program auditing? That is, without changing the nature of its audit activities, GAO can—by adopting a matrix structure—learn a great deal more about how policymaking and implementation might be improved.

Another way of explaining what is meant by a learning orientation is to contrast the following two approaches to problem solving:

- We know what ought to be done and the task is discovering how to do it well.
- We know how to do things and the task is discovering what ought to be done.

In the first approach the ends of action are both known and shared; attention is focused on the means by which ends are to be realized. This is, I think, what GAO has been doing. The second approach assumes that organizations can

act efficiently; attention is focused on determining what is worth doing. This is what GAO might wish to couple with its existing approach.

A third way of explaining a learning perspective is to think of increasing social complexity as a *fundamental, permanent* change in the condition of society. Our present approaches to problem solving were developed in a context of relative certainty and stability; if that context has changed, new approaches to problem solving that will be effective in situations of less stability and less certainty must be learned.

This is reflected in the following dichotomy: learning to plan or planning to learn. GAO has been learning to plan as a means of improving the internal coherence of its auditing. A far more worthwhile objective, in my opinion, and one that does not require a major

overhaul in GAO's operations, is planning to learn. The shift in perspective is far more significant than a simple inversion of words.

It is doubtful whether GAO can adapt successfully to greater *external* complexity and uncertainty by improving its *internal* coordination and control procedures. Conversely, a matrix structure would enable GAO to learn more about—hence adapt better to—the increasing complexity with which society and its government must cope.

In conclusion, a learning perspective is entirely consistent with the adoption of a matrix model of organization. There is no doubt in my mind that a matrix model will come to GAO sooner or later. The real question is whether GAO will act on an opportunity in the present or react to a necessity in the future.

### Getting Our Money's Worth

Important as getting better control of the budget may be—we should not lose sight of the importance of getting our money's worth from old and established programs. From our vantage point, it appears that both the executive and legislative branches have been more concerned with starting new programs than with making certain that those we already have are working satisfactorily or could be improved. All too frequently, in any organization, the tendency is to look at the increases—the add-ons—rather than whether economies can be achieved by making present programs work better, by making them less costly, or by eliminating them entirely.

*Elmer B. Staats*

Comptroller General of the United States  
on proposed Government  
Economy and Spending Reform  
Act of 1976  
March 19, 1976

## Evaluating Benefits and Costs of Auto Safety Standards

*How GAO staff conducted a difficult benefit-cost analysis that showed that the benefits of automobile safety standards to protect occupants in crashes generally exceed their costs.*

In August 1974, the Chairman, Senate Commerce Committee, asked GAO to analyze the benefits and costs of motor vehicle safety standards. In essence, we were to place a dollar value on the benefits of the automobile safety program, i.e., fatalities and injuries prevented, and to compare this with its costs—to give the ultimate or bottom line in program results auditing. The Chairman emphasized his request by pointing out that the Legislative Reorganization Act of 1970 specified that we conduct studies of the costs and benefits of Federal programs at the request of a congressional committee.

We were concerned about this request because our previous work had identified many obstacles which could thwart such an undertaking.<sup>1</sup>

<sup>1</sup> Report to the Senate Committee on Commerce on "Need to Improve Benefit-Cost Analyses in Setting Motor Vehicle Safety Standards" (B-164497 (3), July 22, 1974).

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- No nationally representative accident-cause data was available. Such data is necessary to "quantify" program benefits.
- Separating the benefits of improved automobiles from the benefits of improved highways and driver-oriented safety programs was a problem.
- Manufacturers usually did not reveal the costs of safety features.
- There were no universally acceptable dollar values for lives saved and injuries and accidents avoided. Such values are necessary to "price" program benefits.

### Developing An Approach

Although we recognized all these problems, we also recognized the Congress' pressing need for facts to evaluate this multimillion dollar program. Consequently, we decided to seek the best ac-

FIGURE 1

Model year introduced	Major safety features
1966	Manufacturers installed most items required by GSA standards—seat belts, safety glass, impact-absorbing steering column, safety door latches, recessed dash instruments, padded dash and sun visors, etc.
1969	Head restraints.
1970	Strengthened windshield mounting.
1972	Seat belt warning/light buzzer.
1973	Side door beams.
1974	Crush-resistant roof, ignition interlock.

cident data available and analyze and evaluate it to the best of our ability.

We also knew we would have to make certain assumptions and indicate them in our evaluations. We assumed that each model year of a car would reflect changes in safety, because succeeding models incorporated previous safety features and any new or revised features. The relationship between model year and some of the major standards is shown in figure 1.

Features such as better brakes and windshield wipers and improved highways are designed to prevent accidents; seat belts, padded dashes, etc., are designed to save occupant lives and reduce injuries once an accident has occurred. Since we would be dealing with data from accidents, we were limited to an evaluation of the occupant protection standards.

We also had to limit our analyses to drivers because the number of uninjured occupants involved in accidents often is not reported. Thus, our basic premise was that occupant protection safety could be evaluated by how often drivers involved in accidents were killed or injured in different model year cars.

### Analysis of Data

We decided to analyze North Carolina's accident data because it is relatively accurate, complete, and consistently gathered. We also wanted statistics from a more urbanized State, so we selected New York whose accident data we considered reasonably good.

We contracted with the Highway Safety Research Center of the University of North Carolina to analyze the North Carolina data; our staff analyzed New York's data.

The North Carolina data base was divided into two independent groups because of changes in the accident-reporting system in 1975. The data groups we used are shown in table 1.

Two types of analysis were performed on the data. The first involved raw or unadjusted statistics. Raw data is simple and uncomplicated to use, and results are obtained each year. A second, more complicated series of analyses was performed to adjust for factors—such as speed, weight of vehicles—which might unduly influence the model year safety results.

TABLE 1

	North Carolina	North Carolina	New York
Calendar years in which accidents occurred	1966-72	1973-74	1971-73
Number of accident-involved cars	1,020,000	424,000	861,000

Raw Data

Figure 2 is a graph of the unadjusted statistics from the three data groups. In both States the safety of cars showed a continuing improvement in successive model years until the 1969 or 1970 model.

Because there were different definitions of "serious injury" and because New York has a different environment and different types of accidents, the three files show different percentages of drivers killed or seriously injured.

Adjusted Data

We adjusted the raw data to compensate for factors which might possibly distort the model year results. For example, the severity of an accident depends on many factors, such as speed, weight of the vehicles, and point of impact. Other less apparent factors are: a single vehicle crash contrasted to two or more vehicles colliding; inebriated drivers or sober drivers in accidents; day or night accidents; accidents on high-speed rural highways compared to those in the

FIGURE 2  
FATALITIES AND SERIOUS INJURIES BY MODEL YEAR

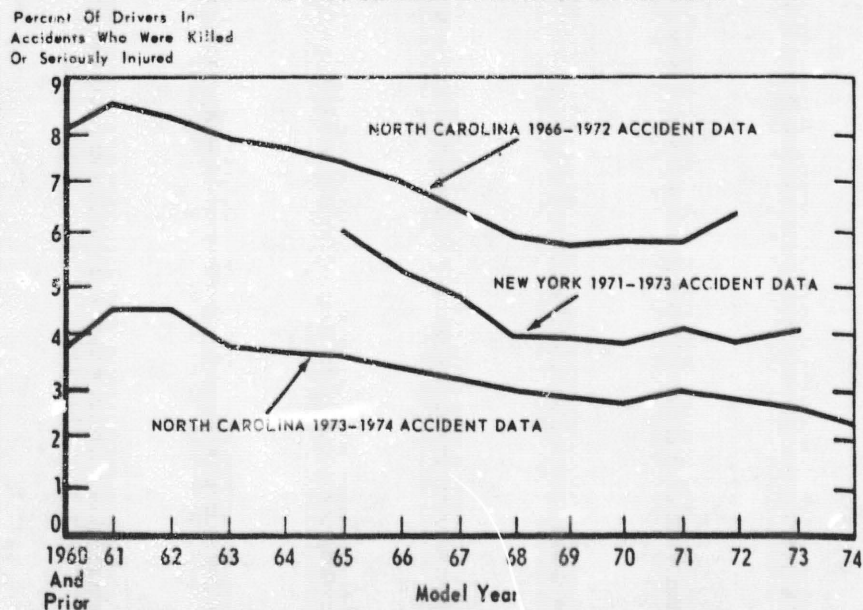


FIGURE 3  
SURVIVABILITY AUTO SAFETY STANDARDS

Major standards	Model years	Improvement in safety compared to '65 and prior models
Seat belts, door locks, padded dash, energy-absorbing steering column	1966-68	15.3%
Head restraint, strengthen windshield mounting	1969-70	26.9
Side door beams, crush-resistant roof, seat belt warning devices	1971-73	27.5

dense traffic of cities; women drivers versus male drivers.

To equalize the factors, we used regression analysis—a statistical technique for measuring the relationship among variables.\* Some of the more important variables used in the regression analyses were:

- Driver injury level
- Calendar years
- Weather conditions
- Locality
- Type of accident (single or multiple vehicle)
- Speed
- Driver's age
- Driver's sex
- Sobriety
- Model year
- Seat belt usage
- Vehicle damage index (TAD)

To thoroughly investigate the relationship between model years and crash survivability, 11 different analyses were performed using different data, files, variables, etc. For example, several analyses used only physical factors that

logically affect accident severity—factors such as speed, weight of the vehicles, and point of impact. Another group of analyses used only factors that statistically affect accident severity (based on a modified chi-square technique). These factors included the driver's sex, weather, and time of day.

Figure 3 shows the results of 1 of the 11 analyses. In general, most of the analyses showed the same pattern of improvement, i.e., improvements in the early and intermediate model year cars, then a leveling off of improvements in later model cars.

Cost of Safety Standards

Federally mandated safety features have been incorporated in about 86 million passenger cars sold in the United States—from the 1966 models through the 1974 models—at a total estimated cost of \$14.6 billion. This amount is based on the 3 major American automobile manufacturers' estimated average cost per car of complying with each Federal standard (including changes) for each model year. The unit cost of all standards grew from about \$40 on the 1966 model to about \$368 on the 1974 model. Of these amounts, the estimate

\* See "Regression Analysis: Does It Have Practical Use?" by William P. Johnston, Jr., and Allan Rogers, *The GAO Review*, Summer 1975.



**TABLE 2**

Model year introduced	Unit costs of standards	Amortized 1966-1974* (millions)
1966	\$ 22	\$ 928.2
1967	21	709.3
1968	36	941.3
1969	18	380.3
1970	2	28.8
	<u>99</u>	<u>2,987.9</u>
1971	2	19.1
1972	15	95.2
1973	14	46.7
	<u>31</u>	<u>161.0</u>
1974	47	44.5
	<u>\$177</u>	<u>\$3,193.4</u>

\* Based on an estimated 10-year car life.

for crash survivability standards alone—those which we were evaluating—grew from about \$22 to about \$177. We computed the amortized cost of these standards at over \$3 billion, as shown in table 2.

**Benefits of Safety Standards**

To estimate the benefits of crash survivability safety features, reductions in fatalities and injuries have to be measured. We took a two-fold approach to this because we believed that the probable reduction in fatalities was the only effect that could be reasonably measured nationwide for comparison with costs. We compared the benefits of safety features and the cost of both fatalities and injuries in North Carolina and then compared the benefits and costs of only fatalities nationwide.

Before we could do either, we had to select a cost to society of a fatality and

an injury—not an easy thing to do. The Safety Administration, a special *ad hoc* committee of the executive branch, and the National Safety Council have made such estimates. They vary widely, depending on assumptions and exclusions of such factors as lost wages, days of hospitalization, value of pain and suffering, and other factors. The three estimates were:

	Dollars per death	Dollars per injury
National Safety Council	52,000	3,100
Ad hoc committee	140,000	2,750
Safety Administration	200,700	7,300

The value of human life or injury is obviously a very subjective matter. We did not judge which one of the estimates was "best." We leave it to the reader to make the final judgment or to select his own set of values.

**A North Carolina Automobile**

Our first approach was to estimate the benefits and costs that occur over the useful life of different model year cars in North Carolina. The benefits of fatalities and injuries prevented are the product of (1) the number of fatalities and injuries prevented per accident, (2) the number of accidents a car is expected to be involved in over its life, and (3) the cost to society of a fatality or injury.

Table 3 compares the benefits and costs for selected model years using the *ad hoc* committee's estimate of benefits. (Using similar computations for the Safety Administration's values almost doubles the benefit-cost ratios, whereas using the National Safety Council's values decreases them by about one-third.)

**TABLE 3**

Model year	Benefits of fatalities and injuries prevented			Unit cost of standards	Benefit/cost ratio
	Fatalities	Injuries	Total		
1966	\$ 70	\$38	\$108	\$ 22	4.9/1
1969	126	98	224	97	2.3/1
1972	154	95	249	116	2.2/1

Injuries are important in the benefit-cost ratios. Reductions in injuries account for about 36 percent of the benefits when the *ad hoc* committee's values are used, by 52 percent when the Safety Administration's values are used, and by 64 percent when the National Safety Council's values are used.

**Nationwide Estimate**

Since North Carolina's accident picture was not too atypical of the Nation, we applied North Carolina's rates of improvement to nationwide statistics on automobile fatalities, as follows.

1. The relative chance of being killed in different model year cars was estimated using 1 of the 11 analyses.
2. The percentage of total cars registered by model year was determined.
3. The chance of being killed for the various model years was multiplied by the percentage of cars registered for any year. This provided annual safety indices for each year.
4. Actual national fatality figures were divided by the annual safety indices to compute the estimated fatalities that would have occurred if there had been no safety features.
5. The difference between actual fa-

talities and the estimated fatalities that might have occurred without standard safety feature is an estimate of the lives saved each year.

6. Lives saved each year are totaled, valued at three different societal cost estimates, and divided by the amortized costs to provide a benefit-cost ratio.

The results of this approach are shown in table 4.

**TABLE 4**

Estimated lives saved	28,230
Value at:	
Each	Total (millions)
\$ 52,000	\$1,468.0
140,000	3,952.2
200,700	5,665.8

The estimated amortized costs of the 1966-70 standard in all 1966 and later models over the same period are about \$2,988 million. Table 5 shows the estimated benefit-cost ratios.

**TABLE 5**

At \$ 52,000	<u>\$1,468.0</u> = 0.5/1
	\$2,987.9
At \$140,000	<u>\$3,952.2</u> = 1.3/1
	\$2,987.9
At \$200,700	<u>\$5,665.8</u> = 1.9/1
	\$2,987.9

We did not attribute any benefits to 1971-73 safety standards because our study showed little, if any, improvement from these model cars. The total estimated costs of these requirements are nearly \$850 million for model years 1971-73.

We also did not attempt to estimate benefits for the 1974 occupant safety requirements because there were not enough accidents to analyze.

The data in this article is based on the Comptroller General's report to the Senate Commerce Committee entitled, "Effectiveness, Benefits, and Costs of Federal Safety Standards For Protection of Passenger Car Occupants" (CED-76-121) dated July 7, 1976.

### Conclusions

Although there are limitations to our study, we believe the results have power-

ful policy implications both for the Congress and the Safety Administration. For example, although this program does not have to be justified on the basis of cost, there still remains the question of whether additional occupant protection standards should be required, since added costs in recent model years have produced little, if any, additional benefits.

So far as we know, this is the first time GAO has conducted its own benefit-cost analysis. Because benefit-cost analysis is a useful tool for providing the Congress with needed program information, we believe GAO will be called upon more and more to perform these evaluations in the future. Such undertakings are risky. The auditor must be willing to defend his work and accept the criticism which is inevitable when one is pushing the state-of-the-art.

### Committee Writing

... in the history of mankind, no committee ever wrote anything that could be enjoyably read.

*James J. Kilpatrick*  
*The Washington Star*  
July 6, 1976

## Auditing the FBI

*GAO's audit of the FBI's domestic intelligence operations, made at the specific request of a congressional committee, provided a challenge to GAO as an organization as well as to the auditors participating in it, and it laid the basis for GAO audits to follow. How these challenges were overcome is discussed in this article by two of the participating auditors.*

For much of its 52 years, the Federal Bureau of Investigation has occupied a unique niche within the United States Government. Its preeminence among governmental agencies can largely be attributed to the man who guided it through 48 of these years and who was an institution in his own right—J. Edgar Hoover. During his tenure, the FBI projected an image of efficiency and incorruptibility. This image was overwhelmingly accepted by the public and by the Congress, which routinely approved the FBI's annual budget requests without question.

However, the FBI did have its critics, who focused on its domestic intelligence programs.<sup>1</sup> Once sporadic, the public questioning of the FBI's domestic intelligence role accelerated after Mr.

Hoover's death in 1972. Factors influencing this acceleration included (1) evidence of widespread political surveillance in policy documents stolen from the FBI office in Media, Pennsylvania, (2) the disclosure through various Freedom of Information Act requests that the FBI had conducted covert operations against black activists, and (3) adverse publicity about the FBI investigation of student activist groups.

Beyond this evidence of abuse, the statutory and executive authority on which the FBI had relied to justify its domestic intelligence investigations was examined and found deficient, both in academic forums and during hearings held by the now-defunct House Committee on Internal Security.

### The Rodino Request

In light of these developments, Congressman Peter W. Rodino, Jr., Chairman of the House Committee on the Judiciary, requested GAO's help in overseeing the FBI. He asked GAO to

<sup>1</sup> The term "domestic intelligence" applies generally to the FBI's efforts to detect and gather information on individuals within the United States who allegedly attempt to overthrow the Government or deprive others of their civil liberties or rights.

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begin with a review of the FBI's domestic intelligence function, focusing on the " \* \* \* policies, procedures, and criteria used by the Bureau to identify and select areas which are to be investigated by its domestic intelligence section \* \* \*." The Rodino request was the first effort by the Congress to exercise oversight of the FBI.<sup>2</sup>

The assignment posed two fundamental challenges to GAO. The first was the FBI's refusal, supported by the Attorney General, to recognize our authority to audit its investigative functions. After a compromise solution was reached on this question, the challenge remained of providing a credible report, despite restricted access to records.

### The Legal Challenge

The Attorney General challenged GAO's authority to review investigative actions of executive branch agencies by arguing that we are limited to examining and verifying accounting records. The FBI's position was that congressional authority is limited to approving or withholding funds for executive branch agencies.

The FBI's legal staff spent weeks researching GAO's authority, examining legal precedent, and interviewing officials within other executive agencies. From this exhaustive research, the FBI legal staff concluded that they could not deny GAO's audit authority. Despite this conclusion, strong dissension on the

<sup>2</sup> After our review began, the Senate and House created select committees primarily to investigate allegations of past improprieties in Federal intelligence activities. In contrast, our review concentrated on the FBI's current domestic intelligence activities.

scope of our audit authority persisted among some Bureau officials. At high-level meetings, the two agencies decided that GAO would proceed with the audit and deal with problems as they arose. The FBI was taking a cautious, wait-and-see attitude, while we wanted to begin the audit promptly in response to the Judiciary Committee's request.

### The Credibility Challenge

The fundamental challenge facing our audit staff was to establish a working relationship with FBI officials so we could elicit their cooperation and establish a basis for future work. At the same time, we had to provide an objective and well-founded report to the Congress and to the public on the Bureau's most controversial program.

The challenge confronting us was particularly acute because of the ground rules accepted for the audit. The FBI was adamant that its investigative files be inviolate, contending that access by GAO or other agencies would severely inhibit FBI agents from getting the cooperation of informants.

To avoid an impasse, we agreed to conduct the audit without access to raw files, provided that (1) specific types of information included in the files were supplied to us (with certain exceptions, such as the names of informants or confidential sources) through extensive, FBI-prepared summaries and (2) we would have access to a limited number of randomly selected documents to verify the completeness and accuracy of information furnished by the FBI. The House Judiciary Committee approved this agreement, but only after we reiterated our position that we had authority to review investigative files and were

proceeding without direct access only to fulfill the Committee's request promptly.

Without access to the files, we had to plan the audit to insure the best verification possible. As the audit plan was formulated and implemented, various steps were taken to insure the reliability of the information gathered.

### Field Office Selection

A fundamental step in insuring maximum opportunity for discovering problems was the decision to audit 10 of the FBI's 59 field offices. The 10 offices were selected to permit analysis of investigations in both large and small cities and in all parts of the country, thus testing policy interpretation and the adequacy of control by FBI headquarters.

### Staff Preparation

The regional staffs participating in this review (Atlanta, Chicago, Los Angeles, New York, and San Francisco) were furnished with considerable reading matter on the FBI and with extensive audit guidelines prepared by the General Government Division. Their diligent review of this material provided a strong basis for beginning audit work in the FBI field offices.

### Case Summaries

Denied access to raw files, we proceeded by having FBI agents summarize the randomly selected case files in a format we developed. These summaries served as a basis for subsequent interviews conducted by regional office auditors. Various controls over the summarization process provided some assurances that the case summaries were accurate. First, the preparing agent and his supervisor signed the summary. Sec-

ond, randomly selected cases generally were not identified to the FBI until agents were ready to begin summarizing. Third, the summarization of 898 cases in 10 field offices constituted a massive job, involving over 50 agents. The press of work and the large number of summarizers would tend to curb any organized effort to withhold the information requested.

Lastly, agents preparing the summaries were aware that high-level negotiations on acceptable verification procedures were proceeding throughout the review. The Comptroller General, *Elmer B. Staats*, and the Deputy Comptroller General, *Robert F. Keller*, played a major role in these efforts, which involved extensive discussions with Representative Rodino; Don Edwards, Chairman of the House Judiciary Subcommittee on Civil and Constitutional Rights; Attorney General Edward H. Levi; and the FBI Director, Clarence M. Kelley. The prospect that the negotiations might eventually lead to direct verification must certainly have been considered by the numerous agents preparing summaries.

### Policy Memorandums

Mr. Rodino's letter asked GAO to analyze the process by which policy was developed for investigating subversive groups. The Bureau retains policy memorandums in its case files, and it argued that these memorandums could not be reviewed because access to investigative files would be involved.

After much discussion, a compromise was reached. The FBI agreed to have headquarters supervisors review files and relate the investigative histories of selected cases in our sample. During interviews with the GAO staff, each super-

visor was to identify important memorandums so that copies could later be made available to us.

This procedure, deficient because of the control exercised by the FBI supervisor, was made more acceptable by later developments. Each memorandum we obtained referred to previous memorandums, which were then requested and obtained, providing a more complete investigative history. After reviewing 898 case summaries and various audit reports of the FBI's Inspection Division, we requested additional memorandums. References in the case summaries and inspection reports to memorandums in our possession verified the significance of the memorandums. This procedure permitted us to reconstruct investigative histories, which, though not complete, could be accepted as reasonably accurate outlines of FBI policy. Copies of selected memorandums were furnished for the GAO field staff's use in interviewing.

#### Good Communication

The scope of the audit, GAO's unfamiliarity with the subject area, and our sensitive relations with the FBI made frequent and effective communication between the regional staffs and the headquarters staff essential. Headquarters personnel made at least two supervisory visits to each regional office during the review.

Three job conferences were held: before beginning work in the 10 FBI field offices, we talked over audit objectives and expected problems; early in the review, we modified the audit guidelines and the case summary format on the basis of our initial experience; and finally, late in the review, we discussed the issues and findings to be featured in congressional testimony and in the final

report. These conferences helped the headquarters staff exchange ideas with the regional staff.

These face-to-face encounters were supplemented by written and verbal contact. Progress reports exchanged with the other audit staffs became more than paper exercises and were used to communicate problems and progress. In addition, the regional staffs had frequent, sometimes daily, telephone contact with the Washington staff to discuss problems or share ideas. These discussions were essential, since they allowed us to quickly share information obtained at one FBI field office with auditors located at the other field offices.

#### Results

The review of FBI domestic intelligence resulted in testimony before two congressional committees and in a final report to the Congress, "FBI Domestic Intelligence Operations—Their Purpose and Scope: Issues That Need to be Resolved" (GGD-76-50, Feb. 24, 1976).

The testimony and final report have been used by:

- the Congress in considering legislation regarding domestic intelligence,
- the Department of Justice in preparing guidelines for FBI domestic intelligence investigations,
- the FBI in changing its domestic intelligence operations, and
- the public in better understanding this important and controversial Government activity.

Working within the limitations imposed upon it, GAO was able to provide a useful and well-founded report, maintaining its own audit standards while developing a working relationship with the FBI.

STEVEN R. GAZDA and  
RONALD J. MACCARONI

## Auditing the Coal Mine Dust Sampling Program

*Two GAO auditors relate their experience in an unusual audit that took them well "behind and below" where auditors normally operate.*

When the Senate Committee on Labor and Public Welfare asked us to look at the coal mine dust sampling program, we had a limited concept of what the work would entail. But we soon discovered that our work would carry us from the mines in Mt. Hope, West Virginia, to laboratories in Pittsburgh, Pennsylvania, and from manufacturing plants in Detroit, Michigan, to lawyers' offices in Washington, D.C. Besides employing the usual auditing techniques, we found ourselves inspecting mines, administering questionnaires, auditing by ADP, and attending a class.

#### Not Just Dust

The Federal Coal Mine Health and Safety Act of 1969 includes provisions to insure a speedy reduction in the levels of respirable coal dust, which causes the disabling "black lung" disease. Respirable dust particles are five microns or

less in size—invisible to the naked eye. The dust sampling program is administered by the Department of the Interior, whose Mining Enforcement and Safety Administration (MESA) has primary responsibility for enforcement.

Mine operators are required to:

- Maintain an average concentration of respirable dust at or below 2.0 milligrams per cubic meter of air.
- Periodically take accurate samples, as prescribed by Interior and the Department of Health, Education, and Welfare, of the amount of respirable dust to which miners are exposed in active working areas of mines.
- Submit samples to Interior for analysis to see if the 1969 act is being complied with.

Dust samples may be taken with any personal sampler approved by Interior and HEW. Dust samples are sent in a sealed plastic enclosure or "cassette"

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containing a dust filter to MESA's Pittsburgh Technical Support Center, where they are weighed and analyzed. Sample weight data is then transmitted to the Bureau of Mines data processing center in Denver, Colorado, where dust concentrations are computed.

To help insure compliance with respirable dust provisions, Interior is to inspect each underground coal mine at least four times a year. If mine operators are not taking the proper number of dust samples or are not following required sampling procedures or if samples show dust concentrations exceeding the 2 milligram standard, Interior is to issue a notice of violation to the mine operator, establish a reasonable time for the operator to correct the violation, and assess a civil penalty.

### Congressional Concern

Interior had reported to the Congress that over 90 percent of all mines were complying with the standards. The Chairman of the Senate Committee on Labor and Public Welfare wrote our Office and stated that, with the energy crisis now facing the Nation, the need to extract even greater quantities of coal from the earth would continue. He was greatly concerned that, in fulfilling this need, miners would again be subjected to levels of coal dust exceeding the demands of a healthy environment. To see whether Interior's reports were accurate, the Chairman asked us to determine the validity of the respirable coal dust sampling procedures.

### Not A Typical Audit

We began in the manner of many audits—by reading lots of background material:

- The act and its legislative history, to see what the Congress intended.
- The Code of Federal Regulations, to see how Interior said it would enforce the act.
- Policy statements, procedures, and manuals, to see how MESA said it would carry out this enforcement program.
- Journals, bulletins, and other literature, to see what coal mining, respirable dust, and dust sampling was all about.

Typically, all this reading was followed by questions, reviews, observations, and tests. However, more than the normal audit work was needed to fulfill the Committee's request.

- Technical knowledge was required to evaluate the accuracy of dust sampling equipment, the weighing of filled dust cassettes, and the equipment manufacturer's quality control system.
- Inspections had to be evaluated and a determination had to be made of operator compliance with required procedures when inspectors were not present.
- The computer system had to be analyzed.
- MESA training programs for mine operators and the operators' understanding of required procedures had to be assessed.

To accomplish our objectives, we had to use somewhat different audit techniques.

### Working With Scientists

We knew from the beginning that we did not have the technical expertise to evaluate the accuracy of dust sampling

equipment, the weighing of filled dust cassettes, or the quality control used in manufacturing and weighing empty cassettes. We decided that, rather than hire a consultant, we would use the Government expertise available at the National Bureau of Standards. At our suggestion, the Committee asked the Bureau to help us to evaluate the adequacy of dust sampling equipment, weighing procedures, and manufacturers' quality control.

Working with their professional scientists was truly a memorable experience. Our relationship was somewhat unique in that both our agencies had a separate commitment to report to the Committee, yet we were to do our work concurrently. We also had to consider the Bureau's findings in our report.

We met with Bureau officials many times to agree on how to approach the work to be done—we from an auditing and they from a scientific viewpoint. It was decided that researching available scientific studies on the dust sampling equipment would suffice for the Bureau to conclude whether the equipment was accurate. Additionally, our staff and Bureau officials visited the dust cassette manufacturing plants to evaluate their quality control procedures.

Perhaps our most difficult task was determining how to measure the accuracy of Interior's weighing of filled cassettes, because the cassettes were destroyed after they were weighed. If we asked Interior to keep some for us, we would have no assurance that we were evaluating normal weighing procedures. After much discussion we decided to establish a "fake" mine—we called it the Maccaroni Coal Company—load and pre-weigh our own cassettes, and process them through Interior's system. This

allowed us to determine not only how accurate the agency's weighing process was but also whether it had procedures to detect cassettes that had been tampered with. We found that the weighing was slightly inaccurate and that Interior did not detect that the cassettes were artificially loaded.

During this experiment, Bureau scientists discovered, somewhat by chance, that the material the cassettes were constructed of lost weight over time. This was a major finding because the amount of dust in loaded cassettes is determined by comparing empty weight with loaded weight. If the empty weight is different from that stamped on the cassettes by the manufacturer because the cassettes lose weight during storage, inaccurate dust readings will obviously occur.

On the basis of its findings, the Bureau concluded that inaccuracies in the equipment, inaccurate weighing, and the cassette weight loss problem combined to make dust measurement at least 20 percent inaccurate. We believe their findings could not have been developed by our staff alone.

### Deep Down Under

The most unusual, interesting, and frightening aspect of the assignment was our visits to coal mines. The first mine we toured was known as a "high coal" mine because the coal seam was high enough that one could walk throughout the mine. Our tour began with a lecture on safety precautions in mines, including an explanation of how to use a self-rescue unit—a special breathing apparatus to be used in the event of an explosion caused by excess methane gas.

After the safety lecture, we were taken



GAO auditors leaving "low coal" mine in coal cars. From left: Ron Maccaroni, a coal mine official, James Ellis, and Steve Gazda.

to the mine entrance and lowered some 800 feet into the mine on a "man-trip", which is a small cart lowered down an incline by cables. At the end of our man-trip ride we began our trek through the water, muck, and coal dust to observe the workings of a real live coal mine.

We were fascinated to see how the "continuous miner" would grind away at the coal seam and dump the coal in electrically powered carts. It was then carried to hampers where it was spilled onto belts that transported it to cleaning plants on the surface. We saw how long bolts with plates on the end were used to hold up the mine's roof and how heavy canvas and large fans were used to direct air currents to dissipate methane gas.

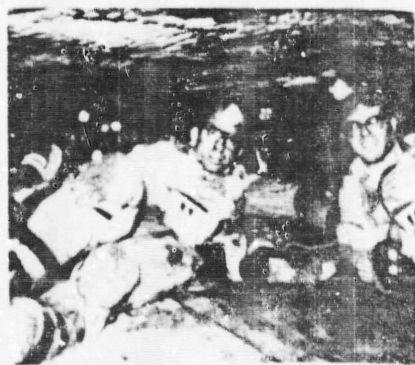
Throughout our tour, inspectors accompanying us noted several unsafe conditions, including large amounts of methane gas causing water to bubble on the mine's floor. Inspectors returned to the mine the next day and closed it because of the unsafe conditions.

After completing our tour of the high coal mine, we proceeded to another mine, which exposed us to different conditions. As we approached the mine, the inspector informed us that the wood stacked near the mine's entrance was

not for burning in the mine operator's fireplace but for supporting the roof. The mine, known as a "low coal" mine because of its thin seam, did not exceed 30 inches in height, except where coal was loaded on cars to be transported to the surface. In places it was less than 2 feet high.

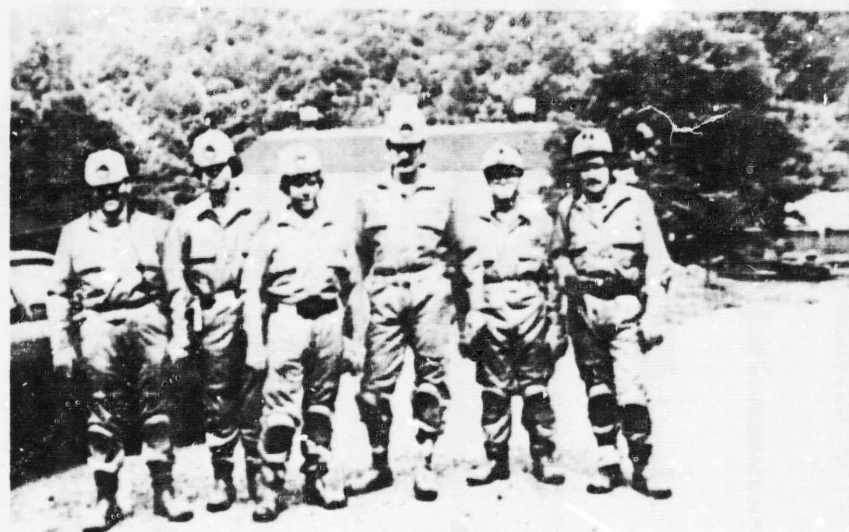
We entered the mine in an empty coal car, which took us about 3 miles into the mountain. We then disembarked from the car and crawled a short distance to where the "flying carpet" was waiting to carry—or, more appropriately, drag—us to where coal was being mined. The flying carpet was a belt about 3 feet wide and 25 feet long attached to a battery-operated car which would pull it through the mine.

After riding the carpet, we had to crawl about another 100 yards. We then saw miners on their hands and knees or on their sides operating machinery that cut the coal and then loading it on belts that carried it to the cars which transported it to the surface.



On "flying carpet" in low coal mine. On left, Edgar Eitz, NBS scientist who assisted GAO; on right, Bob Smith.

Our tours of mines on this day were only a prelude to the experiences each of us would have going to other mines to



GAO auditors after leaving "low coal" mine. From left: Ron Maccaroni, James Ellis, Pat Kalk, Bill Powell, Bob Smith, and Steve Gazda.

observe dust conditions, sampling practices, and inspection procedures. We inspected a total of 14 mines and observed several improper sampling practices. Bureau of Standards representatives stated that the types of improper practices we noted could bring the total error rate of dust samples to as high as 50 percent.

### Questioning Mine Operators and Miners

Although we were able to discuss the respirable dust control and sampling program with company representatives and miners during our visit to coal mines, we wanted to obtain greater coverage of both groups' views on the program. We elected to give questionnaires to each group.

To solicit the views of mine company representatives, we mailed question-

naires to all companies with active mines in the Mt. Hope District. The Financial and General Management Studies Division helped us design questionnaires to obtain comments on:

- Participation in and value of MESA's dust sampling course.
- Adequacy of MESA's inspection program.
- Success of the dust sampling program.

Questionnaires were mailed to 167 companies. A followup letter was sent to those not responding to our initial inquiry. We eventually received responses from 125 companies. The information received was then keypunched and, using standard programs, the results tallied to provide us with various analyses.

The miner questionnaire was administered in a more interesting way. We selected four local unions and attended

their monthly meetings to distribute the questionnaires. We hoped to gain some insight into how well companies were conducting their dust control and sampling program and how well MESA was enforcing the program. The interesting aspect of this portion of our assignment was the locations of the meetings and the miners' attitudes. After combing the mountains for the meeting places, we found they ranged from the basement of a small union to a dilapidated theater. The miners' reactions to us at the meetings ranged from reserved to disturbed.

Although the local unions we selected were large, we found meeting attendance to be small, so we were able to obtain only 67 valid questionnaires. We tallied the results of these questionnaires manually. The results of both questionnaires added emphasis to several important points in our report.

### ADP in Different Ways

As with many audits, we found ADP and GAO's technical assistance staff to be very helpful on this assignment.

Early in the assignment, we used these resources in testing the accuracy and controls of Interior's ADP programs for monitoring dust accumulations and issuing notices on sampling requirements. The Norfolk region technical assistance staff reviewed the ADP program and designed a test deck for analyzing its accuracy and control. The Denver region technical assistance staff applied the test deck at Interior's ADP center in Denver and analyzed the results, identifying certain weaknesses in Interior's ADP program.

Another way we used regional ADP equipment and technical staff quite extensively was in analyzing the impact of

violation notices and penalties on mine operators' compliance with dust standards. We reviewed files to record the number of violation notices, dates they were issued, dates violations were corrected, and the dates and amounts of penalty assessments and collections. This information was entered into Denver's computer terminal for developing various statistical analyses. The results showed that, although many violation notices were issued, penalty assessments and collections were not prompt and were a questionable deterrent to violations of dust standards.

### Auditor Goes to Class

As part of its enforcement program, MESA conducts a class for mine company representatives on dust sampling requirements, equipment, and procedures. Since we had already noted violations of sampling requirements and improper sampling procedures, we thought it worthwhile to attend one of the dust sampling classes.

Posing as a mine company representative, an auditor attended one of the 2-day classes. Our notions proved correct, for we found that the procedures being followed improperly by operators were not adequately explained in the classes.

### It All Adds Up

We employed techniques used on most audits, but we also had to use some different techniques to evaluate sampling equipment, sampling procedures, computer analysis, inspections and training.

The techniques used all contributed to a worthwhile assignment. It was beneficial to the Congress because we found

that, even though dust conditions in mines had improved, weaknesses in the sampling program made it virtually impossible to determine how many mines were complying with statutory dust standards. These facts were reported to the Congress in testimony and in a report entitled "Improvements Still Needed in Coal Mine Dust Sampling Program and Penalty Assessments and Collections" (RED-76-56, Dec. 31, 1975). The assignment was also beneficial to the staff involved, for it provided them with unusual experiences and a feeling of accomplishment.\*

\*EDITOR'S NOTE: In addition to the authors, the GAO staff consisted of *Alfred Brown* of the Community and Economic Development Division; from the Norfolk regional office, *George Anthony*, *William Powell*, *Paul Latta*, *Patrick Kalk*, *James Ellis*, *Durwood Powell*, *James Beusse*, and *Lawrence Davis*; from the Denver regional office, *Robert Smith*; and from the Financial and General Management Studies Division, *Brian Keenan* and *Jerry Conley*.

Two of the above staff members were subsequently further involved in mine safety problems for the Senate Committee on Labor and Public Welfare. The Chairman of the Committee, Senator *Harrison A. Williams, Jr.*, wrote to the Comptroller General on June 23, 1976:

*On March 9, 1976, an explosion in a coal mine in eastern Kentucky took the lives of 15 miners. Two days later, a second explosion in the same mine took the lives of another 11 men, including three Federal mine inspectors. The Committee on Labor and Public Welfare launched an immediate investigation into the disaster pursuant to its oversight responsibilities under the 1969 Coal Mine Health and Safety Act.*

*In order to make a comprehensive and complete investigation, it was necessary for the Committee to request assistance from the General Accounting Office. I am very pleased to advise you that the response to our request was immediate and wholehearted. The auditors assigned to work with the Committee on this investigation performed admirably, and through this investigation, the Committee was able to answer many questions as to why and how such a disaster could have happened. More importantly, through their efforts, remedial legislation can be planned to prevent further loss of life in the future.*

*The GAO persons who assisted in this endeavor were Messrs. Fred Brown, Patrick Kalk, and Frank Pavlak. I was particularly impressed with their professionalism and their extreme dedication to the task at hand. Although the investigation demanded long hours and giving up weekend leisure time, there was no complaint or letdown in enthusiasm by these individuals.*

## Productivity Measurement— A Management Tool

*A review of how productivity measurement can be used as an effective management tool.*

Despite significant progress in recent years, productivity improvement in the Federal Government has had a relatively low level of impact. It has been affected by inflated rhetoric and shifting emphases from one fashionable managerial technique to another.

In Federal experience, productivity improvement has been weak in motivation, purpose, and achievement primarily because it has been accorded very low status by political and career executives. The reason for this is simple—there are few, if any, incentives for these executives to focus their concerns and resources on efforts to improve productivity of programs they administer. Not only do managers lack incentives, but they are likely to encounter built-in penalties if they attempt to bring about improvements.

Operating officials regard arbitrary productivity cuts, taking away all savings achieved and across-the-board reductions, as disincentives to using productivity data. Undoubtedly some

cases of apparently arbitrary actions result from lack of meaningful productivity data or failure to present available data effectively. In other cases there may have been inappropriate action in applying general productivity goals to specific situations where they do not fit or in mandating unrealistic productivity goals. Budget and program officials at all levels need to work together to find ways to deal with the problems of incentives and make productivity an institutionalized management tool.

Experience has shown that there is no great mystery about the "how" of achieving significant and measurable productivity improvements. Most, if not all, of the management techniques involved are old, familiar tools of financial management, industrial engineering, and behavioral science. But, it should be noted that productivity is an after-the-fact evaluation tool. Unlike many work measurement systems that are used as daily measurement tools, productivity examines trends and the reasons for

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changes in these trends. However, few agencies have active productivity improvement programs, and the concept of productivity as a pervasive consideration in the management process remains comparatively rare.

The following is a summary of some of the major areas in which productivity measures can be useful in the management process.

### Setting Goals

Most agencies, either through established management-by-objectives programs or other means, are accustomed to establishing goals for their current and future operations. Too often, however, these goals are general in nature and difficult to assess in terms of accomplishment. A productivity measurement system can be a means of making the goals more specific and meaningful by showing direction toward attaining the goals, recognizing, of course, that not all goals are quantifiable.

Productivity goals, in order to be meaningful, have to be specific to the organization. The productivity goals established in any given period for individual agencies should be based on the specific potential for productivity improvement in each agency. There is no logical basis for identical percentage targets that would apply uniformly to each agency and program. Experience shows that productivity changes have occurred at very different rates in different agencies and at different times for a variety of reasons.

Therefore, since both in the short and long run the potential for improvements in productivity of an organization varies, both among units of the organization and from year to year, the actual

percentage change in productivity of an organization should not be viewed as a direct indicator of the quality either of its management or of its labor force. Such an evaluation requires additional information and judgment regarding the difference between potential and actual change in productivity and an estimate of the contribution made to increase the potential.

With the development of a productivity measurement system and productivity goals, the next step is to integrate the measures and goals into the budget process.

### Budget Justification

For many years there has been a requirement that agencies submit productivity improvement data in support of the annual budget estimates (OMB Circular No. A-11, sec. 24). Implementation of productivity measurement techniques produces the technology necessary to satisfy this requirement. However, past measures of productivity data by budget reviewers have discouraged program managers from providing productivity data in the budget review process. Such actions as arbitrary productivity reductions, lack of rewards for self-imposed productivity improvement, and across-the-board cuts have all added toward inhibiting the full integration of productivity measurement into the budget process. Significantly increased use of productivity data is unlikely to occur unless changes in budget policies are made which will encourage the use of such data and counteract the negative factors.

The use of productivity data and specific goals can contribute to better projections of resource needs and the



review by others of those needs. In particular, with the help of productivity data, it may be possible to analyze budget estimates in terms of volume of output projected, productivity rates anticipated, and prices of resources. Separate analyses can be made of the major components of output and input. Such analyses can be carried out at different levels of detail, which may be appropriate at the different stages of the review.

### Cost Reduction and Organizational Improvement

The greatest immediate value of productivity measurement is its potential to contribute to improvements in productivity and hence savings of manpower and money. Productivity data may be helpful in at least two ways. First, it provides a history of what actually happened to productivity under a variety of conditions. This information may be drawn upon in formulating plans for increasing efficiency in the future. Secondly, measures of productivity may be used as a followup device to determine how well the goals for productivity improvements are actually being achieved.

Analysis of productivity data can make possible more informed judgments about the effects on productivity of various actions or events, such as introduction of a new type of equipment, centralization of operations, changes in legislation, or changes in systems and procedures. Such analysis may be used both as a part of the postaudit and in formulating plans for organizational improvements.

Management analysis studies usually project improved operating situations resulting in reduced resource requirements in terms of reduced dollar costs,

reduced material consumption, and reduced staffing requirements. Productivity measures can be used in preimplementation and postimplementation audits or analyses. The first assures the accuracy of the assumptions and calculations, while the second evaluates the actual savings realized.

Reduced resource requirements should result in achievement of the previous level of output with fewer resources or increased output with the same resources. This improvement should be reflected in a productivity index. The productivity index thus offers another means of validating management improvement studies. Requests for capital investments to replace existing facilities or equipment or to improve a physical process are stated in terms of reduced operating costs and productivity improvement. Managers should be held accountable for the forecasted productivity gains. Productivity measurement would serve as an aid in determination of whether forecast operating conditions are being achieved. It will also serve to highlight lagging areas in need of review.

### Ongoing Control of Operations

A functioning system containing one or several measures of productivity will provide a periodic report on the efficiency of the organization and will bring to the attention of management departures from the past trends, from the planned goal, or from the pattern of change in comparable organizations.

Productivity measures may be used as a unifying framework for bringing together the various fragmented management components such as budget, personnel, internal audit, and management

analysis. Each component can contribute to management improvement through the use of productivity data. However, coordination of efforts is essential if any significant impact on performance improvement is to be made.

Productivity measures may also be used to bring together the different types of management information, particularly for data generated through budgeting, cost accounting, work measurements, or personnel management evaluations. Sometimes, the diverse information already on hand is not fully used because of the lack of common focus and comparability of form.

The financial data, when related to the measures of output, can indicate the actual cost of the output produced and its changes on the per unit basis in the course of time. Also, the total unit costs may be broken down by types of cost. Changes in the total may be analyzed in terms of components. Further, as a by-product of productivity measurement, trends in prices paid by the organization for its inputs can be established, and the separate effects on unit cost of change in the quantity of resource inputs and of changes in prices paid can be ascertained.

Where a detailed work measurement system exists, it may be possible to analyze the end-product outputs in terms of their component work process or units. Similarly, on the input side (with the help of accounting data) the detailed use of the individual resources, such as various labor skills or types of machinery, may be analyzed in terms of their effect on productivity, possibly in some degree of organizational detail. An integrated arrangement of management information, including both organiza-

tional productivity measurement and detailed cost accounting and work measurement, can be used in both detailed analysis of past changes in productivity, and in developing plans for future productivity improvement.

### Improvement Motivation

To improve productivity, individuals with government agencies must take strong action. They must commit themselves to specific productivity goals, specify performance criteria, and make decisions in an open and participative manner. People will persist in behavior which is aimed toward increased productivity when the activity is individually satisfying and rewarding. For this behavior to persist, it has to be consistently rewarded. The consistency and effectiveness of reward is a function of reinforcement. Positive reinforcement means that rewards are used to encourage people to perform in a desired manner. There are three necessary conditions for successfully motivating people:

1. Desired level of performance should be known and clearly stated.
2. People should be rewarded for specific increases in level of performance.
3. Rewards should follow desired performance as closely as possible.

Therefore, the objective of positive reinforcement must be considered in developing a productivity program. The measures will help to gauge performance. For people to be encouraged and motivated, they must know where they stand. Productivity measures provide an objective means for rewarding performance. The most obvious incentive is money,

where higher pay or salary is to be a reward for higher productivity. This can be in the form of either individual or group incentives.

There are, however, several constraints to implementation of monetary incentives. The first, and most obvious, is scarce funds. The second is the automatic longevity pay increase structure. The third is restraints imposed by job classification systems.

There have been several attempts to overcome these obstacles. One approach has been a concept called "productivity bargaining." This is a joint method of negotiating pay increases for employees based on increases in productivity. Productivity bargaining means that employees share directly in the savings realized through joint labor/management productivity efforts. Several local governments are trying this approach. In addition, the Bureau of Engraving and Printing is exploring a "Scanlon Plan" approach where Federal employees would share in productivity savings. The key to any of these approaches is that a suitable productivity measurement system must first be developed.

The setting of productivity goals within the framework of a management-by-objectives system will help motivate managers to take an interest in productivity. Once goals are established there is accountability, commitment and involvement on the part of managers. However, the system must be used by top management in reviewing organizational performance if managers are to be motivated to reach their productivity goals.

### Accountability

A sound productivity measurement system fosters accountability on the part

of managers. Productivity measures the rate of change in efficiency. It measures the change in the relationship of products or services produced to resources used. It gives visibility in terms of specific numbers as to the change in efficiency of a program's operations. By giving visibility in terms of rates of performance, productivity measurement makes managers accountable for performance. It forces managers to explain poor performance and provides a vehicle for documenting good performance.

A good system also prevents sweeping statements about inefficiencies in government by providing factual data on efficiency to the Congress and the public.

### Conclusions

The real payoff in the use of productivity measurement will come from the analyses by individual agency managers of their areas of responsibility. Effective use of productivity measurement will result in a determination of:

- The trend of productivity over time.
- Obstacles to productivity improvement.
- Actions responsible for improvement.
- Identification of future improvements.
- Budget application of productivity data.
- Validity of other performance measurement systems, such as work measurement.
- Impact of changes in the relationship of overhead to direct production workers.
- Impact of changes in the relationship of labor costs to staff years.

Some of the potential uses of produc-

tivity measurement have been examined in this article. These surely are not all of the uses that may be made, and some of the uses are no more than concepts of utility at the present time. Productivity measurement, like other management data, must be kept in its proper perspective in the overall management information scheme. It should be used with care and caution, not to the abandonment of existing management information, but as an overall integrating factor.

Various approaches to developing the proper methodology of productivity measurement should be thoroughly explored to find the most reasonable approach for each organization to obtain an acceptable relationship of resources and outputs. These approaches should provide the foundation for an overall productivity improvement program.

### Burden of Non-Producers

Those who claim that they have a right to be non-productive because others are non-productive, too, are ignoring the basic fact that everything that is consumed must be produced by somebody. And anything that expands the number of non-producers, or the amount they consume, puts an extra burden on the producers. It can't be any other way.

*Tom Elkins*

Manager, KNUI Radio Kahului, Hawaii

April 1976

## Don't Stifle A Secretary's Potential

*By delegating more functions to secretaries, supervisors can help them reach their full potential as administrative assistants and help themselves at the same time.*

Secretarial assistance is vital; without the skills of our secretaries, GAO would be unable to function. The productivity of each division and office is dependent upon the work of its secretaries.

Changes in GAO take place frequently. Not only has reorganization occurred, but also the changing nature of auditing has altered the auditor's work greatly. This impermanence requires flexibility from the professional and support staffs.

One area where little change has occurred is in secretarial work. Major responsibilities include such things as typing, filing, answering the telephone, handling the mail, and receiving visitors. These skills are essential to the smooth operation of any work unit. However, the routine nature of much of this work does not help secretaries to develop their careers. For the most part, secretaries want to be in this field because they enjoy their work. However, they *want* and *need* more responsibility in performing as true administrative assistants.

The Federal Personnel Manual, is-

sued by the Civil Service Commission, states that supervisors are responsible to their employees, as well as to their organization, for orientation, motivation, training, counseling, appraisal, evaluation, safety and health, professional and technical competence, and career development.

This list may seem lengthy when you attempt to relate it to a secretary's day-to-day performance. Ask yourself:

- Is the secretarial job being done effectively now?
- Am I delegating work to the person that increases his or her overall potential and usefulness to the office?
- What changes can I make to enhance career development and maintain high morale among the support staff?

As the assistant director of personnel development, I would like to share with supervisors and managers some thoughts about the potential of our support staff.

In 1975, several members of our training staff surveyed all audit sites and

some headquarters offices and interviewed supervisors and secretaries. (These findings also apply, for the most part, to the regional offices.) Our purpose was to assess secretarial training needs. Through these discussions, we found that most managers are interested in developing their support staff, but they shy away from delegating additional responsibilities for various reasons:

- It might affect office productivity adversely.
- They cannot promote the secretaries to a higher grade commensurate with the increased responsibility, even though they perform or are capable of performing duties beyond the grade in which they are classified.

One popular course at headquarters for the support staff is shorthand—either the basic or the refresher course. Unfortunately, few managers rely heavily on shorthand skills. Most secretaries would like to be given dictation whenever possible. Although draft reports do not totally lend themselves to shorthand dictation, elements of a report could be recorded on dictation equipment to increase productivity.

As a supervisor, if you feel uncomfortable about dictating to a secretary, you should consider taking a course in the art of dictation, offered by the Office of Personnel Management upon request. Proficiency in this area takes some practice.

Another concern of the managers interviewed was the need for a course for secretaries in report processing. Such a course is now available, but some of the secretaries who have taken it say that they do not process reports and that

auditors could use the course rather than secretaries. However, this administrative activity could be done by the secretaries with a minimum of assistance from auditors.

Another responsibility that many secretaries could assume is writing letters and memos for which they have the necessary information. Although some secretaries have assumed this function, it would be another challenge for those who have not had an opportunity to do so.

Since secretaries help a staff in so many ways, they should be included in staff meetings which relate to their work. This would enhance the esprit de corps, since secretaries are a vital part of a work team.

Another area in which many secretaries could assume more responsibility is editing communications. Since the secretaries use the *GAO Operations Manual—Supplement for Secretaries and Typists*, they are in a position to make sure materials are prepared correctly. Editing for correct punctuation, capitalization, spelling, and careful proofreading should be delegated to the secretaries.

Periodically interview the secretaries under your supervision to see how they feel about their work. They have ideas about responsibilities they can handle. Getting their ideas and finding out what they like or dislike about their work will do a great deal to show them that someone really cares.

The benefits of increasing secretarial responsibilities are numerous, but some of the most important ones would seem to be:

- Increased productivity through reallocation of duties.
- Higher job satisfaction and

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improved morale because of delegating administrative tasks and additional responsibilities.

- Increased assistance available to staff.

Increasing their administrative func-

tions would enable capable secretaries to realize their full potential, free auditors from some of the administrative work, provide continuity in the work of an office, and help to attract and keep high-quality support staff.

### Strength in Short Words

There is strength and force in short words, words that blast and boom, throb and hump, clank and chime, hiss and buzz and zoom. There is grace and charm in short words, too, in words like lull and hush and purr. There are short lush words like dank, muck and drench; and short dry ones like crisp, parch and husk.

Give me words that work hard at their job, that pry and push, that slash and hack, that cut and clip, that chip and saw. Scan the best sales job in print, and you'll find them rich in short words that tease the taste, make glad the eye, whet the nose, and please the ear. There's nip, twang, bite and tang in short words. They're sweet, sour, tart, or dry, as the need be. There are words you can hear like the swish of silk, soft words with the feel of swan's-down, words with a smell like musk, smoke, cheese, mint and rose—all of them good sales tools. Yet, oft as not in talk or script, we'll force the use of some long, hard word and with it blunt the keen edge and dull the sharp point of what we want to say.

*Source not known*

VINCENT M. DESANTI and  
MATTHEW J. VELLUCCI

## New Information for the Congress: The Congressional Sourcebook

*How GAO is responding to part of the new responsibilities, imposed by the Congressional Budget and Impoundment Control Act of 1974, for providing the Congress better information on Federal programs and activities.*

Since 1921 when it was established, GAO has been a major investigative arm of the Congress, focusing primarily on audits of Federal programs and activities and demonstrating where waste and inefficiencies have occurred. Two years ago, however, the Congress substantially expanded GAO's responsibilities. Title VIII of the Congressional Budget Act of 1974 (Public Law 93-344) assigned to the Comptroller General certain responsibilities for helping the Congress obtain and use information. The overall intent was to foster more effective, prompt, and efficient reporting of data and information to the Congress.

Among other things, title VIII specifically legislated that GAO (1) develop

and maintain an inventory and directory of sources and information systems containing fiscal, budgetary, and program-related data and information, (2) develop and maintain central files of fiscal, budgetary, and program-related data to facilitate their use by the Congress, and (3) monitor recurring reports and streamline the reporting process.

The congressional sourcebook project addresses all these areas of concern. In early 1975 a one-volume prototype edition of a sourcebook was produced; this year, a data base on magnetic tape, consisting of three separate files, was created, and a three-volume series of directories, representing the contents of the data base, was published and dis-

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Matthew J. Vellucci is an independent information consultant who has participated in the sourcebook's development and production and is a member of the Information Resources Development Group. Mr. Vellucci holds an M.S. degree from Columbia University. This article is based on a paper he delivered at the annual conference of the American Society for Information Science on October 5, 1976.

tributed in October. These products represent the first outputs of what will be a continuing effort within GAO.

### Scope of the Project

The sourcebook project encompasses three parallel efforts. Shortly after the issuance of the prototype sourcebook in early 1975, three separate inventories were initiated by the Program Analysis Division. These inventories were to obtain information, as well as related documents, pertaining to the following specific types of files or records:

1. Reports issued by executive departments and agencies which are provided to the Congress on a recurring or periodic basis.
2. Reports on evaluations or audits of the programs and activities of executive departments and agencies.
3. Budgetary, fiscal, and program-related information sources and systems maintained by executive departments and agencies.

While the overall project has concentrated on the executive branch of the Government, the program evaluations inventory has included data from a sizable body of GAO audit reports and studies dealing with executive agency programs. Most likely, as the project develops, pertinent information from the private sector will also be added to the data base.

Another limitation of the data is that the inventories have specifically been restricted to nonclassified information. Although the project, including both the data base and the published volumes, is specifically undertaken for the benefit of the Congress, the sourcebook series has been widely disseminated through-

out the country to a variety of audiences, such as State governments, educational institutions, public interest groups, and libraries. In addition, copies are available for sale through the Government Printing Office. Thus, the project voluntarily limited its data collection efforts to information that could be considered in the public domain.

### Recurring Reports Inventory

The recurring reports inventory identifies executive department and agency reports which are submitted to the Congress on a recurring or periodic basis in accordance with one of the following stipulations:

- The reporting requirement for submittal to the Congress is specifically mandated by law.
- The report is periodically submitted in response to a continuing formal or informal request from a committee or Member of Congress.
- The report is voluntarily submitted on a recurring basis, although there is neither a statutory requirement nor congressional request for its periodic submittal.

The types of reports contained in the recurring reports file include such standard items as annual reports of the departments or agencies, as well as materials more difficult to obtain. Many of the reports submitted to the Congress are either in letter form or are provided as mimeographed or photocopied attachments to letters. Others may be in more regularly printed form, but receive only internal distribution. Thus, GAO has begun to accumulate a body of documents and information resources that is largely unknown to others outside the agencies or the Congress.

Also, it should be noted that only "final" reports are included in this inventory. Feeder reports, whose information and data are subsumed in a larger report, have been systematically excluded from the inventory effort. In all, this inventory identified 748 recurring reports of the 89 executive departments and agencies that were canvassed.

The ultimate purpose of this particular inventory is to enable GAO to monitor executive branch reporting, and thereby to apprise the Congress, through various analyses of such items as the effort and costs involved in producing these reports, whether they represent a burden on the agencies that could be lessened and whether they are reports which, for one reason or another, could be eliminated without undue detriment to the Congress' responsibilities.

### Program Evaluations Inventory

The program evaluations inventory identifies, for fiscal years 1973 through 1975, selected reports which evaluated or reviewed the programs and activities of 18 executive departments and agencies. These reports include studies conducted by the agencies themselves as part of their regular monitoring processes or by GAO as part of its regular responsibilities and in response to specific congressional requests. They also include studies performed by outside consultants and organizations through agency-sponsored grants and contracts.

This inventory differed from the recurring reports inventory in that it did not attempt to obtain a copy of every report it identified. It relied on information, through checklists or whatever other form, which would sufficiently

identify and describe the report or study in question. Thus, although approximately 1,800 reports are cited in the program evaluations volume, only a few hundred hard copies of the reports were received through the inventory efforts and subsequently abstracted for publication.

### Information Sources and Systems Inventory

The information sources and systems inventory focuses on major operational systems within the executive branch which provide budgetary, fiscal, or program-related information, either for internal agency use or for others. In addition, this inventory identifies major information sources or resources of these agencies, such as catalogs and handbooks, and describes facilities, such as information centers, networks, and libraries.

The overall purpose of this inventory is to help the Congress foster the development of standardized data processing and information systems throughout the Federal Government. Hence, in cooperation with the Office of Management and Budget, the Department of the Treasury, and the Congressional Budget Office, GAO canvassed 89 executive departments and agencies. Responses from 63 were received, which resulted in the identification of over 1,000 sources and information systems. Through this effort, another comparatively substantial resource collection of documents, many of which are not widely available outside the agencies, has been accumulated by GAO.

The end result of all three inventories is represented by the congressional sourcebook tapes and published volumes. Through the creation of a new

data base, the Congress has been provided with information it did not previously possess or previously available information packaged in newer ways so that it becomes more meaningful. The following sections illustrate how this has been done.

### Project Methodology and Techniques

The sourcebook project has been essentially a highly controlled coordination process, based on the premise that the value of information is significantly higher when the interrelationships between files produce a total resource which imparts new insights and perspectives and newer meaning from older information. Although each of the three inventory groups conducted their work independently of each other, their efforts were coordinated in the areas of data recording, document processing, and review.

One of the most important mechanisms used for coordination was the development of a standard inventory data form. This form was to be used by all three groups in recording the information they had collected in a uniform manner. Repeated discussions were held with representatives from each of the three groups as to the data elements required in the data base, which in turn would be the information elements displayed in their respective published volumes.

To clarify their ideas, the groups drew up sample data input forms and formats to illustrate how the information was to be recorded. After reviewing and comparing all the sample forms drawn up, they decided that one format could accommodate the requirements of all

three groups. The primary reason for this was that the larger number of 18 data elements to be included in the data base were common to all three inventories.

The standard inventory form was supplemented by a short guide for completing the inventory forms. This guide contained a few general instructions, as well as specific explanations, instructions, and examples keyed to each of the fields represented on the form. The guide was designed to help assure the transfer of data to the forms in an accurate and consistent manner. The guidelines also helped to assure a certain amount of quality in the data recording process.

A control numbering scheme also was uniformly applied by all three groups. This scheme consisted of an 8-digit agency/citation identifier, prefixed by a letter code (R, E, S) denoting each respective inventory effort.

The congressional sourcebook project is a collaborative effort. The novel nature of the work desired, particularly the developmental and technical aspects, as well as the limitations of time and staff, dictated the need for an outside contractor to perform the data entry; file building; and automatic text processing, indexing, and photocomposition tasks. In addition, the contractor was required to perform a comparatively limited amount of bibliographic citation and abstracting.

Using the same coded fields devised by the project coordinators, the contractor directly fed the data from the input forms into a computer. Batches of the entered data were then submitted via printout to the project coordinators and the inventory staffers for editing and review prior to the automatic composi-

tion of galley pages. A final review and editing pass of the galleys was made by GAO staffers before preparation of camera-ready copy.

### Indexes

Special man-machine efforts were expended in developing the subject indexes to the sourcebook volumes. After the computer eliminated unwanted words, a keyword-in-context (KWIC) index listing was generated for each volume. The terms were derived from both the titles of the source entries and the abstracts. The KWIC listing was then edited by GAO staff for purposes of eliminating additional unwanted terms, as well as for developing a two-level conceptual vocabulary of terms.

Although the machine facilitated the display of potential index terms, the development of the vocabulary was essentially a subjective manual effort. Terms associated with each major index term which could serve as subterms were highlighted on the KWIC listing by the GAO project staffers. These markings were then returned to the contractor for automatically generating a second, keyword-out-of-context (KWOC) index listing main terms, subterms, and citation titles. This man-machine indexing technique afforded considerable flexibility in initiating a structured and concept-derived subject index which will eventually form the basis of a GAO thesaurus for future sourcebooks and related documentation efforts.

In addition to the specialized subject indexes, a series of other unique indexes has been created. In the recurring reports volume, a law index provides full legal citations which list the short title of an act, the public law number, U.S. Code references, and nonstatutory ref-

erences. A similar law index also appears in the evaluation volume.

The recurring reports volume also contains a congressional recipient index, which lists the committees and subcommittees of the Congress to which a particular report is regularly submitted. The program index in the evaluation reports volume provides an important access point for relating particular programs to specific agencies. It also provides, at a quick glance, an overview of the extent to which particular programs or activities have been reviewed or evaluated for effectiveness.

Lastly, in all three volumes, through a budget classification index, an attempt has been made to relate the functional code of the U.S. budget to the particular entries denoting programs and activities.

### Difficulties, Benefits, and Results

Because this project was an initial, developmental effort, the information collected via the inventories has not been as comprehensive or complete as we would like. The inventory groups have realistically attempted to get only a broad-brush view of their particular areas of concern. More complete efforts will await future inventories and sourcebook tasks.

Despite this, some difficulties of scheduling, and unanticipated design problems which caused production delays, the congressional sourcebook project is viewed generally by both GAO and by the Congress as being of great importance for their work. For the first time, in handy compilations, an indication of the range of Federal programs and activities can be consulted and

referred to, thereby making followup of certain matters easier.

Another result of the project is that now the sourcebook data base has become part of the Congressional Research Service's SCORPIO<sup>1</sup> system within the Library of Congress, and has thus become more accessible to the Congress. This has also expanded the information components of SCORPIO to include not only bibliographic references and legislative digests, but also data on Federal reports, programs, and information systems.

Because of our data base, it is now possible to reformat and combine elements from the three different inventories. We will, for example, be able to produce "minisourcebooks" on specific topics. In the area of food stamps, to cite a specific topic, we can query all three files and, in response, see what recurring reports have been made of the subject, what program evaluation reports have been prepared, and what other information sources and systems might exist on the topic. Compiled together with, say, GAO audits on the same subject, we then have the makings of a potentially useful new information resource for auditors and researchers.

Another important outcome of this project is that GAO is now seeking means to improve information management as it affects policy and practices governing the reporting process. An In-

formation Resources Development Group has been appointed by the Comptroller General to develop a plan for information resources management which will be concerned with both the sourcebook efforts and with other related GAO information activities.

Besides making successive refinements in the congressional sourcebook project, which will be a continuing effort, GAO plans to use the same techniques developed for the sourcebook project to produce bulletins and abstract catalogs of all GAO reports, decisions and opinions, testimonies, and speeches. The result of this work will be more integrated and efficient use and management of information within GAO.

In summary, by taking information already available from different sources, and by synthesizing this information in new packages using the newer automated technologies, GAO has broadened the available information resources of the country in significant new ways, to the benefit of the Congress primarily, but also for the country at large.

**EDITOR'S NOTE:** In addition to the authors, the Information Resources Development Group includes Dorothy A. Fisk and Jane Benoit of the Office of Administrative Services and Melvin Eagle, Robert J. Greaney, Ramesh Paul, and Prasad Nair, consultants.

ELLSWORTH H. MORSE, Jr.  
ASSISTANT COMPTROLLER GENERAL

## The Legendary DeHaven Loan

*Did Jacob DeHaven personally extend financial and material assistance, in the form of a loan, to General Washington when he badly needed it during the Revolution?*

What really happened will probably never be known after the passage of so many years. But the legend still persists that during the American Revolution, when General George Washington badly needed financial and material help for his army during the dark days of Valley Forge in the winter of 1777-78, one Jacob DeHaven of Pennsylvania came through with a loan of \$450,000—\$50,000 in gold and \$400,000 worth of supplies. And, so the story goes, the loan was never repaid by the Government.

No original documentation of the alleged loan has survived. But within the DeHaven family, which has since spread all over the United States, the conviction still survives that such a loan was made and that the U.S. Government never recognized the liability or the service rendered at a very critical time in the Nation's history.

In the years since, numerous DeHaven descendants have tried to convince the U.S. Government that there was such an unpaid loan and that the Government should repay the descendants to discharge this "debt of honor."

### GAO Involvement

The General Accounting Office usually ends up directly involved in such efforts because of its statutory responsi-

bility to adjust and settle all claims by or against the United States. This function dates from 1817, when it was vested in the Treasury Department by the Act of March 3. It was transferred to GAO when the office was independently established in 1921.

Persons interested in the DeHaven loan seldom know that GAO is the place to go in seeking information about the matter. As a result, they have generally addressed their inquiries or requests to the President of the United States, to different offices in the Treasury, or to Members of Congress. Since 1921 all such inquiries have ended up in GAO, as has the file on this subject accumulated by one of GAO's predecessors—the Auditor for War Department.

### 1975 Inquiry

The latest inquiry on the alleged loan came from a Member of Congress in November 1975. He sent along a copy of part of a printed history of the DeHaven family<sup>1</sup> dealing with "the Jacob DeHaven Revolutionary Loan" and asked for a report on the United States' liability with regard to the DeHaven heirs.

<sup>1</sup> Howard DeHaven Ross, *History of The DeHaven Family* (4th ed., The Panick Press, New York, February 1929).

<sup>1</sup> Subject-content-oriented retriever for processing information on-line.

The GAO report was short and reflected essentially the same position that had been taken for many years. Under the Act of February 12, 1793, claims against the United States for anything occurring before March 4, 1789, had to be filed before May 1, 1794. Since no record, either of the alleged loan or of a claim for repayment within the specified time, exists, no liability could be recognized.

### Earlier Inquiries

The 1975 inquiry was preceded by a parade of similar inquiries from a variety of "DeHaven" sources over a long period of years. In our Bicentennial year it is of some interest to look back over some of these claims, since they link a little-publicized GAO function and the turmoil of our Revolutionary years.

The earliest direct inquiry surviving in the GAO files on the DeHaven loan was made 76 years ago. In December 1900, the Auditor for War Department received a letter inquiring about a newspaper report that the DeHaven claim was soon to be adjusted. The Auditor's office replied simply that it had no information on any congressional action to settle the loan.

The handwritten draft response, still in the file, reflects some of the same caustic commentary by a GAO reviewer that sometimes characterizes similar operations today. The draft letter referred to "the claim of Jacob DeHaven, who it is alleged loaned General George Washington \$50,000.00 during the year 1877, . . . ." The reviewer vented his or her wit on the drafter by noting on the draft: "Was George Washington alive in 1877? Sorry I didn't meet him."

Other inquiries and expressions of interest:

1901

A DeHaven from the State of Washington also referred to a news clipping that the claim had been allowed and wanted to know if it was true. "If so I claim my share as one of the Heirs."

1906

A gentleman from Ohio referred to a newspaper report that the claim had been allowed but said his wife's mother (a DeHaven who had engaged a law firm in Washington to press the claim for repayment) had heard nothing. He wanted to know if it had been allowed or even if there was a claim. This writer addressed his questions directly to President Theodore Roosevelt because, "A friend advised me to write to you as you was Just and would Know all about it."

1916

A resident of Washington, D.C., wrote the Auditor for War Department claiming to be an heir. The reply took a different tack from the earlier ones. This time it said:

*. . . it appears that there was at some time a claim pending before Congress in behalf of the heirs of Jacob Haven, or Jacob DeHaven, and for any information concerning the action taken by Congress, you should correspond with the Clerk, House of Representatives. . .*

1926

The first inquiry after GAO came into existence in 1921 was from a lady in Kansas City who asked if there was a record or claim of a loan by Jacob DeHaven of \$5,000. The response, as before, was that there was no information in the records of "this office" about the matter, nor was there any record of congressional action.

1928

A member of the DeHaven family in Ohio wrote directly to President Calvin Coolidge:

*I have always admired your justice in the way you have managed the affairs of State, and would ask your influence in Congress and the Senate to act upon the payment of the DeHaven loan. . . . All my Ancestors were true Americans and loyal to the Republican Party.*

The President's office referred the letter to GAO, which provided the same kind of response as before: it had no information on hand on the matter.

1929

A letter from a descendant in Iowa wanted "to know how to go at it to get claim paid." This letter, referred to GAO by a Member of Congress, drew a response from Comptroller General *J. R. McCarl* that: "An examination of the files of this office fails to show that such a claim has ever been filed in the accounting offices."

1933

President Herbert Hoover received this plea from an old lady in Pennsylvania:

*My uncle Jacob DeHaven lent George Washington \$450,000 during the suffering at Valley Forge. . . . I am the last one living of the old stock and I will be eighty-two in March. There never has been a war but what our people have been in it and helped to save it. I wouldn't have written this letter if it wasn't for the depression. I can't work but if I have to go to the poor house I think the government owes it to me. . . . I heard your speech at Valley Forge*

*. . . the way you spoke I thought you would try to get this debt paid.*

This letter found its way to GAO, and the elderly writer was favored with the somewhat standardized but unsatisfying response that GAO had no information about the loan but that Treasury's Division of Bookkeeping and Warrants might have.

1946

A DeHaven descendant in Colorado tried the "shot-gun" approach. He wrote three letters on the same day—two to the Register of the Treasury and one to the Comptroller of the Treasury—requesting information on the loan. All ended up in GAO, and the writer was informed that GAO had no information.

1947

A Senator quoted a letter from a constituent in California who claimed her great-grandfather loaned the Government thousands of dollars in the Revolution, "but as yet it has not been paid." GAO's response, signed by Comptroller General *Lindsay C. Warren*, was the same as before: no information in GAO.

This time the writer wrote a lengthy letter right back to the Comptroller General, stating "Now I know this was an honest & just loan, and as my former relatives did not get the pleasure of enjoying it, I cannot understand why we that are left should not receive the pleasure of enjoying it." But the GAO response was the same as before, although it did note that "repeated searches have been made with no record having been found."

1951

A letter from Ohio enclosed a copy of a research memo prepared by the Li-



brary of Congress in 1939 at the request of a Member of Congress. This memo, apparently not previously known to GAO, referred to the Library staff's inability to find any reference to the loan after searching through volumes of papers of the Continental Congress, papers of Robert Morris, Board of Treasury reports, Register's accounts, and papers relating to unsettled claims. Robert Morris was mentioned because the loan was alleged to have been made through him.

The Library of Congress memo also cited a petition of the heirs of Jacob DeHaven recorded in the *Congressional Record* (January 19, 1877) "to refund the money advanced by said DeHaven to carry on the Revolutionary War" and its referral to the Committee of Revolutionary Pensions. Not long after, a Member of Congress from Missouri obtained consent "for the withdrawal from the files of The House of the papers in the claim of Jacob DeHaven." Nothing further is mentioned, and we don't know what consideration, if any, the Committee gave the petition; why the papers were withdrawn; or what happened to them.

1954

A Washington lawyer wrote that a DeHaven descendant had written to him about the claim and wondered what happened to the law firm that had been engaged around 1895 to help a group of descendants press the claim. GAO's response was that it had no information.

1955

A Member of Congress requested information on the claim. The response, signed by Comptroller General Joseph Campbell, noted that "Numerous inquiries concerning the loan have been

received from various heirs and others asserting an interest in the matter. Recurrent searches failed to disclose any record of the loan."

1959

A lady in New York who claimed to be a DeHaven heir wrote to the Treasurer of the United States wanting to know if there was any expectation of "this money being released to the heirs." In responding, GAO for the first time disallowed the "claim" by calling attention to the requirements of the Act of February 12, 1793.

1963

A DeHaven in California wrote "I am one of the heirs. Is there any amount of money left for the heirs. If so please reply. . . ." He also received a disallowance letter.

1973

A member of the DeHaven family poured it on in a letter to President Richard Nixon. "It was because of this loan that the U.S. is now one of the most powerful nations in the world, and not subject to British [*sic*] rule." GAO told her about the 1793 law also.

1975

In May a Senator transmitted a letter from three DeHaven descendants who had solicited his assistance. They wrote:

*Soon we will celebrate our Bicentennial. We feel our ancestors made an enormous sacrifice for a new and floundering country and their faith in their Government should be acknowledged—now more than ever. Without their faith and assistance, who can be sure our country would be intact as we know it today. And yet, in spite of several efforts to*

*secure payment by other descendants of the brothers, this loan has never been repaid.*

They also sent along a copy of a statement printed in the *Congressional Record* for September 8, 1966, when Congressman Thomas M. Pelly of Washington introduced a relief bill which would have authorized the Treasury to pay \$50,000 in full settlement of this "debt of honor." With his statement, Mr. Pelly included the lengthy brief prepared by the Washington law firm engaged by a group of DeHaven heirs in 1894 to help them press their claim. The brief is lengthy but devoid of any convincing evidence about the alleged loan. (Mr. Pelly's bill was not enacted).

The Director of the GAO Claims Division informed the Senator that information was lacking on the loan and that the 1793 law required that all claims against the United States relating to actions before March 4, 1789, be filed before 1794.

As noted earlier, the latest inquiry received by GAO came in November 1975. None have been received in 1976.

## Was There Such a Loan?

All of the searching that has been done over the years to try to verify whether Jacob DeHaven did make his loan to General Washington has been fruitless. No original documentation has ever been found, and members of the family itself have never been able to produce any.

The sum of \$450,000 was no small amount in Revolutionary times. It would seem that if the transaction took place, someone would have been aware of it, made a record of it, or mentioned it in a diary or correspondence, but nothing has come to light. Washington's papers and others provide no clues to those who have checked them.

So the story has to be looked upon as a legend. But legends do not die. They live on. As long as GAO remains responsible for settling claims against the United States, it can expect further inquiries about Jacob DeHaven's alleged loan, to be answered with patience, courtesy, understanding, and bureaucratic consistency.

## Disclosure

Disclosure—whether by the authorities or by an alert press—remains the most important social guarantor of moral behavior. But not all public or private business can be conducted in the open; hence the need for ingrained personal morality.

Leonard Silk  
New York Times  
Aug. 31, 1976



*The following items from past issues of The Watchdog, the monthly newspaper of the GAO Employees Association, Carl C. Berger, editor, are republished for the benefit of GAO's present staff.*

#### **S. Warren Dies In Helicopter Crash**

December 1964

Stanley S. Warren, assistant director, Defense Accounting and Auditing Division, died in the crash of a U.S. Army helicopter in Korea on November 23.

Mr. Warren was born in New York City and graduated from the Wharton School of Finance and Commerce, University of Pennsylvania, where he received a B.S. degree in economics. Except for the period from 1953 to 1955 when he served in the U.S. Army, Mr. Warren had been engaged in the audit of Department of the Army activities since joining the staff of this Office in 1952.

He started with the Office as a GS-5 and his outstanding work earned him rapid promotion. He was made an assistant director in the Army Group of the Defense Accounting and Auditing Division in June 1963 at the age of 33.

Much of Mr. Warren's effort in the past few years was on reviews of the materiel readiness in the Department of

the Army. He was returning from a visit to the site of a review of a combat unit north of Seoul, Korea, at the time of the crash.

#### **F. J. Shafer Is Assistant Director**

January 1965

Fred J. Shafer has been designated as assistant director of the Transportation Division by Joseph Campbell, Comptroller General of the United States.

Since joining GAO in 1946, Mr. Shafer has held positions of increasing responsibility in every phase of the transportation work of the Office, and he has a wide variety of experiences with the civil and military transportation activities of the Federal Government, both in the United States and overseas.

Mr. Shafer entered the 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.

#### **Sheley, Manager of Dallas Region**

January 1965

Walton H. Sheley, Jr. has been designated manager of the Dallas regional office of the U.S. General Accounting Office.

Mr. Sheley was graduated from Memphis State University with a B.S. degree in accounting and has attended the Executive Development Program at the Graduate School of Business at Stanford University. He is a certified public accountant in the State of Tennessee and a member of the American Institute of Certified Public Accountants. He served in the Army during World War II.

Mr. Sheley has had diversified experience in accounting and auditing since joining GAO in Dallas in 1954 and has been manager of our New Orleans regional office since June 1963. Prior to coming with the Office, he was associated with public accounting firms in Memphis, Tenn.

#### **W. Henson, Manager in New Orleans**

January 1965

Joseph Campbell, Comptroller General of the United States, announced the designation of Walter H. Henson as manager of the New Orleans regional office.

Mr. Henson was graduated from the University of Illinois with a Bachelor of Science degree in accounting and recently completed the Executive Development Program at the Graduate School of Business, Stanford University. He is a certified public accountant in the State of Washington and a member of the Washington State Society of Certified Public Accountants.

He has had broad experience in accounting and auditing since joining the GAO in Seattle in 1957. Prior to that time he was associated with a national public accounting firm.

#### **Bernard Sacks, Assistant Director**

February 1965

Joseph Campbell, Comptroller General of the United States, announced the designation of Bernard Sacks as assistant director, Civil Accounting and Auditing Division.

Mr. Sacks received a Bachelor of Business Administration degree from the City College of New York in June 1950. He majored in accounting. He was employed as a business manager and auditor in private industry until August 1951, when he joined the staff of GAO. He served with the U.S. Army from September 1944 to August 1946. Mr. Sacks has had extensive experience in planning and directing a wide variety of audit and investigative assignments for the Office. He has been a certified public accountant in Maryland since May 1962 and is a member of the American Institute of Certified Public Accountants.

#### **Marvin Colbs, Assistant Director**

April 1965

Marvin Colbs has been designated as assistant director of the Defense Accounting and Auditing Division of GAO.

Mr. Colbs served in the U.S. Army from January 1945 to September 1946. He received a B.S. degree in accounting from Temple University in January 1950 and has been a CPA in Pennsylvania since April 1951. He is a member of both

the Pennsylvania Institute and the American Institute of Certified Public Accountants. Mr. Colbs was engaged in public accounting in Philadelphia until November 1955 when he joined the staff of GAO in Dayton, Ohio. He transferred to the Washington office in July 1963.

In both Dayton and Washington, Mr. Colbs has had extensive experience in a wide variety of audit assignments in the Department of the Air Force and the Department of Defense.

**Strazzullo Is  
Norfolk Manager**

July 1965

Frank H. Weitzel, Acting Comptroller General of the United States, has announced the designation of Alfonso J. Strazzullo as manager of the Norfolk regional office.

Mr. Strazzullo was graduated from La Salle College with a B.S. degree in accounting and has attended the Executive Development Program at the Graduate School of Business Administration at the University of Michigan. He served in the U.S. Navy during World War II.

Mr. Strazzullo has had diversified experience in accounting and auditing assignments since joining GAO in Philadelphia in 1954. He previously was associated with a public accounting firm.

**DiGiorgio, Director of  
European Branch**

August 1965

Joseph DiGiorgio has been designated as director of the European Branch, International Operations Division, GAO, with headquarters in Frankfurt, Germany, according to Frank H. Weitzel, Acting Comptroller General of

the United States. Mr. DiGiorgio succeeds Edward T. Johnson who is returning to Washington.

Mr. DiGiorgio received the degree of Bachelor of Business Administration from Pace Institute and recently attended the Executive Development Program at the University of Michigan. He served in the U.S. Army from 1943 to 1946. He is a certified public accountant in the State of New York and a member of the American Institute of Certified Public Accountants.

Prior to joining the staff of the General Accounting Office in August 1950, Mr. DiGiorgio was associated with a public accounting firm in New York City. Since joining the General Accounting Office, he has assumed positions of increasing responsibility in Washington and in the New York regional office where he has recently been serving as audit manager.

**E. T. Johnson  
Is Associate Director**

September 1965

Edward T. Johnson has been designated associate director, International Operations Division, of the General Accounting Office, according to an announcement by Frank H. Weitzel, Acting Comptroller General of the United States.

Mr. Johnson received a degree of Bachelor of Laws from the University of Baltimore in 1934 and is a member of the Maryland Bar and a certified public accountant in Maryland.

He served in the U.S. Army during World War II, leaving the military service in 1946 with the rank of lieutenant colonel.

Mr. Johnson has had extensive experience both in the Government and in

private industry in legal, accounting, and management fields. Since 1953 he has been continuously with GAO in positions of increasing responsibility as deputy director of the Claims Division; legislative attorney in the Office of the General Counsel; assistant director of the Defense Accounting and Auditing Division; and associate director of that division. Since August 1963 Mr. Johnson has been director of the European Branch of the Office, responsible for carrying out the functions of the Office in the European area, including the Near East and North Africa.

**Ahart Is Assistant Director**

October, 1965

Gregory J. Ahart has been designated assistant director, Civil Accounting and Auditing Division.

Mr. Ahart is a graduate of Creighton University, Omaha, Nebraska, from which he received a B.S. degree, and from Georgetown University, Washington, D.C., from which he received a Bachelor of Laws degree. He is a certified public accountant, Nebraska, and a member of the bar, Virginia. Mr. Ahart attended the sixth session of the Program for Management Development at the Harvard University Graduate School of Business Administration. Mr. Ahart has had extensive experience in planning and directing audit and investigative assignments in the General Accounting Office.

**Keller Wins  
Rockefeller Public Service Award**

November 1965

Robert F. Keller, General Counsel of the U.S. General Accounting Office, is the winner of a Rockefeller Public Service

Award in the field of law, legislation or regulation, according to an announcement by President Robert F. Goheen of Princeton University.

Mr. Keller, 52 years old, has been in the career service of the Federal Government for 30 years. He is a native of Washington, D.C.

The awards, given annually since 1960 to men whose careers in the Federal Government have been marked by sustained excellence in service to the nation, were conceived and financed by John D. Rockefeller III and are administered by Princeton University. There is a cash award of \$10,000 in each of five categories.

Mr. Keller believes that good people stay in Government service throughout their working days for two main reasons.

"You may take a Government job, as I did, because it is expedient when you are young," he explained. "I started as a GS-3 clerk in the GAO while I was going to law school. This was in the depression days, when many young people sought ways and means to finish their education. But I found it a wonderful place to work—for two reasons.

"First, I think there are opportunities to move up as fast in Government as in private industry. Every time I thought of leaving, I received a promotion. Second, the work carries a broader responsibility than that ordinarily found outside of Government—a constant challenge, with problems affecting more things and far more interesting than most programs in private industry."

The legal work for which Mr. Keller is responsible is widely diversified and requires decisions on matters presented by every branch of the Government, every department and agency and in practically every field of law.

This undoubtedly accounts for his remaining with GAO, except for 3½ years during World War II when he was on active duty as ensign, lieutenant j.g., and lieutenant with the Navy. After his return to GAO from military service, he served as a legislative attorney, then Assistant to the Comptroller General on policy matters, and since October 1958 as General Counsel with a staff of 191, of whom 106 are attorneys.

Mr. Keller was graduated from Western High School in Washington, and attended George Washington University. He obtained his L.L.B. from the Washington College of Law of American University. In 1952, he won a Bachelor of Commercial Science degree in accounting from Benjamin Franklin University, Washington, D.C. All his education above high school level was completed at night. In 1961, he also completed the Management Course of the American Management Association, his first daytime study experience.

#### Ahart Gets Jump Award

May 1966

Gregory J. Ahart, assistant director, Civil Accounting and Auditing Division, was presented with a meritorious award from the William A. Jump Memorial Foundation for exemplary achievement in public administration. The presenta-

tion was made by Frank H. Weitzel, Assistant Comptroller General, in his office on May 6. The award, in the form of a certificate and citation, was given in recognition of Mr. Ahart's contribution to the efficiency and prestige of the public service. Elmer B. Staats, Chairman, Board of Trustees, William A. Jump Foundation, signed both the certificate and citation.

#### Eckert Leaves GAO

July 1966

Comptroller General Elmer B. Staats announced the retirement from the General Accounting Office of Charles Edward Eckert, legislative attorney, to accept a staff position with the American Hospital Association.

Mr. Eckert joined GAO in 1934. He worked in several divisions, being appointed as an attorney in the Office of the General Counsel and to his present staff position in the Office of Legislative Liaison. For the past 16 years he has represented the Office in its relations with the various committees of the Congress.

EDITOR'S NOTE: With this issue, the *Review* completes the reprinting of selected news items of interest to GAO professional staff members, culled from issues of *The Watchdog*, the monthly newspaper of the GAO Employees Association, before *The GAO Review* began publication in 1966.



## News & Notes

### Effective Counseling

Frank Davis, assistant to the director of GAO's Office of Personnel Management, came in for some deserved public attention not long ago in the sports world. It seems that sportswriter Jerry Gandy of the *Richmond Independent* interviewed Frank's nephew Rick Jennings, who was drafted this year by the Oakland Raiders football team. He had played at Maryland and during the interview paid great credit to his uncle for his wise counseling and for steering him toward a football career. Some excerpts from the column published in the July 15, 1976, issue of the *Richmond Independent*:

*Rick Jennings credits a sports-minded uncle for his presence in the Oakland Raiders' Santa Rosa training camp, instead of possibly behind bars. Looking back on his childhood, Oakland's 11th round draft choice from Maryland realizes that he kept bad company as a youngster.*

"The worst thing I ever did was steal some hubcaps," Jennings remembers. "My uncle realized I was going to become a juvenile delinquent and convinced me to build a ladder to success through sports."

*Jennings' football ability enabled him to obtain a college education. His two closest friends weren't lucky enough to have a concerned uncle while they were*

*on the streets of Washington, D.C. While Jennings was going to the Peach, Gater, and Liberty Bowls, they were going to jail—one for rape and the other for drugs and possession of a weapon.*

"My mother's brother, Frank Davis, was an outstanding high school athlete in Washington, D.C., but he chose a Navy career over college," Jennings explains. "He has a government job now and has been like a father and brother to me."

*Basketball and tennis were Jennings' favorite sports and he enjoyed track and baseball, but Uncle Frank's influence spurred him on in football.*

At the time this issue of the *Review* went to press, Rick was a member of the Oakland Raiders team, having survived the preseason squad cuts.

### Near Mishap in Alaska

GAO audit work is not always as devoid of danger as some might think. Not long ago, two GAO auditors had such a close brush with certain death near Juneau, Alaska, that one of them experienced nightmares for several nights thereafter. The following account of the incident was written by Steve Calvo, one of the auditors involved, and published originally in GAO's Seattle regional office *Newsletter* for July 1976:

Before leaving Seattle for Juneau with Dave Connolly and Helmer Tellhed to audit the Alaska Power Administration, I told Dave of all the close calls I'd had flying in Alaska. Flying on this job proved no different.

On May 7, we scheduled a 20-minute flight from Juneau to Snettisham, the location of the agency's hydroelectric project. Since seven people were making the trip, we used two Cessna 180 float planes. Dave, Ralph Alps (the project superintendent), the pilot and I were in the lead plane. The pilots were instructed to fly the path of the project's transmission lines so we could observe where avalanches had knocked down towers and the relocation of the transmission lines.

When the planes took off from Gastineau Channel, it was raining, the ceiling was 1,500 feet, and visibility was 3 miles. The pilots flew directly to the path of the transmission lines and about 5 minutes from Juneau, while flying at a 1,000-foot elevation, we noticed helicopters below us dropping logs into the channel. This was part of a clearing project for the relocation of the agency's lines. While we auditors and the pilot were watching the helicopters below us, a sudden cry came from the project superintendent, who was sitting behind me. I quickly looked forward, and directly in front of us was another helicopter with steel cables hanging from it, cutting across our path.

It seemed like I could have reached out and grabbed the cables, but before I knew what had happened, the pilot put the plane in a dive that banged our heads on the cabin's ceiling, letting us pass under the dangling cables by barely a foot. The

pilot pulled the plane out of the dive before we hit the water. For the next few minutes, we sat in shock and disbelief over our near mishap.

The pilot blamed the chopper pilot, but all I know is if it hadn't been for the project superintendent's warning cry, they would still be trying to fish us out of the channel. Fifteen minutes later we arrived and toured the Snettisham hydroelectric plant. The plant's powerhouse was built within a mountain, which was quite an engineering accomplishment. The project was impressive, but everyone's mind was still on the near tragedy. When we flew back to Juneau, I was sure to keep looking straight ahead until we landed. Before joining GAO, I experienced many anxious moments while flying in Alaska, but this was the worst.

### GAO Review Articles Reprinted

In recent months, the following articles originally published in the *Review* were reprinted:

From the summer 1975 issue:

"Totals May Not Add Due To Rounding" by Robert P. Kisse (Cincinnati regional office), reprinted in the December 1975 issue of *The U.S. Army Audit Agency Pamphlet*.

From the winter 1976 issue:

"Journey Through the Corridors of Power: Assignment to a Congressional Committee" by Bernard J. Trescavage (Washington regional office), reprinted in the *Congressional Record* for July 29, 1976 (S12773-4).

### GAO Recognized in Political Party Platforms

GAO is an independent, nonpartisan, and nonpolitical agency in the legislative branch of the U.S. Government. Its

basic role is to make audits and evaluations of Government programs and activities for the use of the Congress in its legislative and oversight operations and to promote more efficient, economical, and effective operations of governmental activities.

In the light of this role, it is of interest to note that the platforms of both the Democratic and the Republican parties for the 1976 Presidential election campaign mention GAO, although in different ways.

The Republican platform includes several proposals for reform of the Congress, including:

*A complete audit by the General Accounting Office of all congressional allowances and appropriate disciplinary measures for those who have violated the public trust.*

In the section on Government reform and business accountability, the Democratic platform states in part:

*There must be an ever-increasing accountability of government to the people. \* \* \* To assure that government remains responsive to the people's elected representatives, the Democratic Party supports stepped-up congressional agency oversight and program evaluation, including full implementation of the congressional budget process; an expanded, more forceful role for the General Accounting Office in performing legislative audits for Congress; and restraint by the President in exercising executive privilege designed to withhold necessary information from Congress.*

### Off-budget Programs

GAO views on the tendency to exclude

Federal programs and activities from the national budget were succinctly expressed by Assistant Comptroller General Phillip S. Hughes not long ago. In testifying on budgeting of Federal financial incentives for energy development before the Energy Task Force of the Senate Budget Committee on July 27, 1976, Mr. Hughes stated:

*\* \* \* we support the basic philosophy and recommendations of the 1967 President's Commission on Budget Concepts which urged "a unified budget—with complementary components—which will put an end to competing measures." There has been a significant departure in recent years from this concept through the growth of off-budget programs. Outlays for existing off-budget programs are estimated at \$11.1 billion for FY 1977 \* \* \*.*

### Cornerstone of the GAO Building

Twenty-five years ago, on September 11, 1951, the GAO Building was officially dedicated, with speeches by President Harry S. Truman and Comptroller General Lindsay C. Warren. The ceremonies included laying the cornerstone on which is inscribed, for anyone's inspection, the names of top officials involved in getting the building built and dedicated.

But what went inside the cornerstone?

For those interested, here is what was sealed inside the stone during the dedication.

Copies of dedication addresses by President Truman and Comptroller General Warren.

Copies of seven basic laws providing GAO with audit and other authority.

Copies of five laws authorizing and funding the construction of the building.

Inscription on cornerstone of Old Pension Office Building—occupied by GAO from 1926 to 1951.

Inscription on cornerstone of new building.

Photograph of Old Pension Office Building.

Photograph of new building in various stages of construction.

Photographs of Comptroller General Warren and Assistant Comptroller General *Frank L. Yates*.

Volume 29—Published Decisions of the Comptroller General, 1949-50.

Copy of House Report No. 1441, 81st Congress, *The General Accounting Office—A Study of its Functions and Operations*.

Annual Reports of the Comptroller General for fiscal years 1922 and 1950.

Current issues of postage stamps and coins.

September 11, 1951, edition of a Washington, D.C. newspaper.

Independent Offices Appropriation Act, 1952 (which included GAO).

Dedication ceremony invitation and program.

GAO telephone directory—May 1951.

Federal Budget in Brief—fiscal year 1952.



The Associated Press  
(Reprinted with permission)

#### GAO ATTACKS THE MANY-HEADED DRAGON OF GOVERNMENT WASTE.

This depiction of GAO's efforts to save money and otherwise improve Government operations accompanied a recent Associated Press story on GAO, carried by many newspapers August 22, 1976.

Written by AP news feature writer John Barbour, the story described numerous examples of GAO work, many of which resulted in savings. Interviewed in preparing the story and mentioned in it were John Anderson, of the Procurement and Systems Acquisition Division and James Black of the General Government Division.

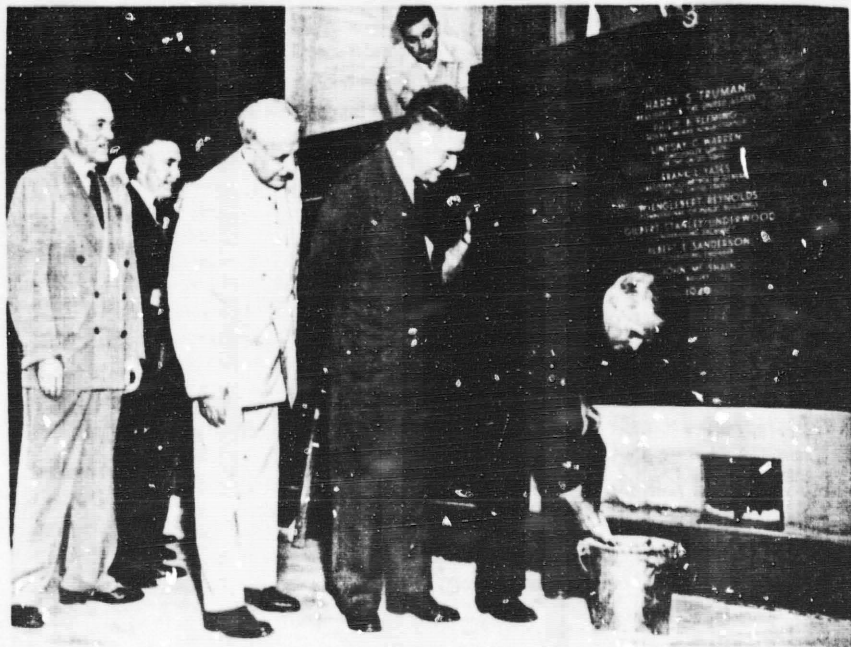
#### Savings for the Taxpayers

GAO audit work produces millions of dollars in savings each year which can be measured. In addition, many other benefits that grow out of these operations are not susceptible to measurement in financial terms.

GAO's Seattle regional office *Newsletter* for July 1976 reported on the following two cases, widely different in nature, that illustrate how alert, careful and persistent audit work can lead to financial savings for taxpayers and better

management of governmental programs:

Because the Seattle regional office team of *Howard Boock*, *Joe Gibbons*, and *John Liles* had their minds in gear when they reviewed the Defense Department's operation and maintenance of wastewater treatment plants, they saved the taxpayers about \$12 million. During a field visit to Hawaii in October 1974, they learned that the Navy thought it had to extend the outfall line from its treatment plant 2 miles farther into the ocean to meet new State standards.



*Handwritten signatures and notes at the bottom of the photograph.*

Further inquiry, triggered by our audit, resulted in clarification of State regulations and a ruling that the Navy was not required to build the 2-mile out-fall line to meet State water quality standards. Thus, persistence on the part of the audit staff in resolving the application of a questionable requirement resulted in locking the barn door before a very expensive horse got out.

At about the same time, *Dick Long, Ron Thompson, John Sisson, and Dick Gillisse* applied a combination of good old-fashioned GAO stubbornness, skepticism, and sound auditing techniques (along with a good strong assist from *Ron Bononi, Calvin Durham, and Stephen Hachten* of GAO's Los Angeles regional office) to cause the Air Force to recover nearly \$2.5 million from the Boeing Company under the Truth in Negotiations Act—an act GAO midwived back in 1962.

This act essentially provides that, if a contractor furnishes Government negotiators with cost data that is not ac-

curate, complete, and current, and this causes the negotiated contract price to be significantly increased, the Government can recover the excess price without having to prove bad intent on the part of the contractor.

A survey by *Dick Long and Joanne Sylvia* in 1974 of Boeing's negotiated contract to produce short-range attack missiles had indicated potential defective pricing. The Defense Contract Audit Agency reviewed the proposal in the possible overpriced areas identified in the GAO survey, questioned certain proposed costs, but tentatively concluded that defective pricing had not occurred.

Because of Dick's experience in auditing defense contracts, he was not convinced that defective pricing had not occurred. The GAO team performed additional work that successfully proved that the contract was greatly overpriced. Neither Boeing nor the Air Force agreed with our team's exact figures, but when the dust settled, the taxpayers were richer by \$2,386,500.

### GAO Competence and Independence

GAO has provided invaluable service to the Congress and the country. The reasons for GAO's success are its competence and its independence which together result in the ultimate findings and recommendations of GAO having unquestioned credibility.

*Senator Abraham A. Ribicoff*

*Congressional Record*  
July 26, 1976

## Legislative Developments



BY JUDITH HATTER

*Chief, Legislative Digest Section*

### Energy Conservation and Production

Public Law 94-385, August 14, 1976, 90 Stat. 1125, Energy Conservation and Production Act, provides in title I, the Federal Energy Administration Act Amendments of 1976, for an Office of Energy Information and Analysis within the Federal Energy Administration which is to be responsible for establishing a National Energy Information System. The procedures and methodology of the Office are to be subject to an annual performance audit review conducted by a professional audit review team, whose chairman is to be designated by the Comptroller General.

Title IV of the law, Energy Conservation in Existing Buildings Act of 1976, makes provision for grants to States and Indian tribal organizations for financial assistance in connection with projects for weatherizing dwelling units, particularly where elderly or handicapped low-income persons reside.

The Comptroller General is provided access to pertinent records of any projects receiving financial assistance.

Title IV also provides for the guarantee of loans, notes, bonds, or other obli-

gations incident to energy conservation and renewable resources.

The Federal Energy Administrator must consult with the Secretary of the Treasury and the Comptroller General incident to terms and conditions for termination of a guarantee and assurances necessary to reasonably protect the interest of the United States when a guarantee is issued.

The Comptroller General is provided access to records of recipients of Federal assistance.

For each fiscal year ending before October 1, 1979, the Comptroller General is to report to the Congress on the activities of the Federal Energy Administrator and the Secretary of Housing and Urban Development under title IV and amendments to other statutes made by this title.

Each report submitted by the Comptroller General is to include:

1. An accounting, by State, of expenditures of Federal funds under each program authorized.
2. An estimate of the energy savings which have resulted.
3. An evaluation of the programs' effectiveness in achieving the energy conservation or renewable re-

source potential available in the sectors and regions affected.

4. A review of the extent and effectiveness of compliance monitoring of programs and any evidence as to the occurrence of fraud.
5. Recommendations concerning improvements in the administration of programs and additional legislation which is needed to achieve the purpose of the title.

### Antirecessionary Program

The Public Works Employment Act of 1976, Public Law 94-369, July 22, 1976, 90 Stat. 999, authorizes a local public works capital development and investment program and also establishes an antirecessionary program.

Title II of the law—Antirecession Provisions—requires the Secretary of the Treasury to make payments to State and local governments to coordinate budget-related actions by such governments with Federal Government efforts to stimulate economic recovery.

A statement of assurances is required before payment by the Secretary. Among the delineated items to be included in the statement is an assurance that the State or unit of local government will use fiscal, accounting, and audit procedures which conform to guidelines established by the Secretary of Treasury after consultation with the Comptroller General, and that the Secretary and the Comptroller General will be provided access to records the Secretary may reasonably require for purposes of reviewing compliance with the title.

The Comptroller General is to investigate the impact which emergency support grants have on the operations of

State and local governments and on the economy. Within 1 year after enactment, he is to report the results of the investigation to the Congress, together with an evaluation of the macroeconomic effect of the program and recommendations for improving the effectiveness of similar programs.

The Congressional Budget Office and the Advisory Commission on Intergovernmental Relations are to conduct a study to determine the most effective means by which the Federal Government can stabilize the national economy during periods of rapid economic growth and high inflation through programs directed toward State and local governments. There are requirements for coordination and consultation with the Comptroller General and the inclusion of the opinions of the Comptroller General concerning the study in a report to the Congress on the study's results.

### Gifts to Foreign Countries

Public Law 94-350, July 12, 1976, Foreign Relations Authorization Act, Fiscal Year 1977, 90 Stat. 823, adds a new section 20 to the act providing certain basic authority for the Department of State (Public Law 885, 84th Congress) which requires that any expenditure for gifts for persons of foreign countries which involve any funds made available to meet unforeseen emergencies arising in the Diplomatic and Consular Service be audited by the Comptroller General. He is to report to the Congress to such extent and at such times as he determines necessary.

### Durable Medical Equipment

On August 23, Congressman Charles A. Vanik of Ohio introduced H.R.

15210, to amend title XVIII of the Social Security Act to make it clear that payment may be made under the supplementary medical insurance program for wheelchairs and other durable medical equipment furnished on a lease-purchase basis.

In his remarks on the floor, Mr. Vanik refers to a GAO report, "Need for Legislation to Authorize More Economical Ways of Providing Durable Medical Equipment Under Medicare," and to the testimony of Gregory J. Ahart, director, Human Resources Division, on May 17 before the Ways and Means Oversight Subcommittee which strongly supported the purchase, rather than rental, of durable medical equipment for patients who will need it on a long-term basis.

### Synthetic Fuels

H.R. 12112, for additional assistance to the Energy Research and Development Administration for the advancement of nonnuclear energy research, development, and demonstration, provides for Federal loan guarantees to accelerate the commercialization of synthetic fuels.

The General Accounting Office report, "Evaluation of Proposed Federal Assistance for Financing Emerging Energy Technologies," was the subject of testimony by Phillip S. Hughes, As-

sistant Comptroller General, on August 30, before the House Interstate and Foreign Commerce Subcommittee on Energy and Power and the House Science and Technology Committee.

Also commenting on the report on September 2 on the floor of the House, Congressman George E. Brown, Jr., of California, stated:

*Many Members were concerned with the conclusions of this report, which were quite negative toward synthetic fuel demonstration projects, at least partly because the GAO report differed so dramatically from other reports on the same subject.<sup>1</sup>*

### General Accounting Office Testimony

Thirty-six appearances before congressional committees and subcommittees were made by GAO officials during June, July, and August, to offer testimony on a variety of subjects, including the Federal Government's procurement and use of automatic data processing resources, NASA's program planning and control system, zero-base budgeting and program evaluation, and medicare costs.

<sup>1</sup> *Congressional Record*, Vol. 122 (Sept. 2, 1976), p. E4833.



Ralph V. Carlone



Ralph V. Carlone was designated an associate director in the Energy and Minerals Division, effective September 12, 1976. He is responsible for audit and analysis of energy research and development programs.

Mr. Carlone served in the U.S. Marine Corps from 1957 to 1960. He joined GAO after graduating from Bloomsburg State College in 1964 where he majored in accounting. He served in the Civil Division and later in the Resources and Economic Development Division. Mr. Carlone has had diverse assignments, including responsibilities for audits at the Veterans Administration and the former Atomic Energy Commission and for directing GAO's work in the area of nuclear energy research and development.

In July 1975 Mr. Carlone attended the Fourth Dartmouth Institute at Dartmouth College. He also participated in an advance study program on energy policy in March 1975 at the Brookings Institution.

He is a member of the Washington chapter of the National Association of Accountants. He received the GAO Meritorious Service Award in 1973.

## Other Staff Changes

### New Assistant Directors

#### International Division

John E. Watson

#### Program Analysis Division

Allan I. Mendolowitz  
Arthur J. Corazzini

### New Assistant Regional Managers

#### Denver

Arley R. Whitsell

#### Kansas City

David A. Hanna

#### Philadelphia

Frank D. Etze

#### San Francisco

Larry J. Peters

#### Washington

Jimmy J. Bevis

### New Senior Attorneys

John J. Mitchell, Jr.  
Robert A. Evers  
Alan S. Zuckerman

### Other Designations

#### Office of Controller

Richard L. Brown  
Chief, Budget and Financial Planning  
Staff

### Retirements, Assistant Directors

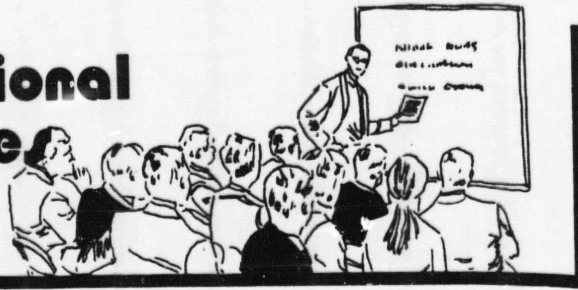
#### Financial and General Management Studies Division

Mortimer A. Dittenhofer

#### Human Resources Division

Roy S. Lindgren

# Professional Activities



## Office of the Comptroller General

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

Annual Meeting of the Association for Public Program Analysis on "Importance of Balanced Analysis in Evaluating Public Programs," and "The Role of Analysis in Evaluating Public Programs," Washington, D.C., June 11.

Annual Conference of the Eastern Region of the International Personnel Management Association on "Personnel Management: The Starting Place," St. Thomas, Virgin Islands, June 15.

Senior Seminar in Foreign Policy, Foreign Service Institute, Department of State, on "Role and Functions of the General Accounting Office," Washington, D.C., June 17.

The Brookings Institution's Conference for Business School Faculty Fellows on "Role of the General Accounting Office," Washington, D.C., June 21.

American Council on Education's Board of Directors Meeting on "Functions of the General Accounting Office," Washington, D.C., June 28.

Annual Meeting of the National Association of College and University Business Officers on "Performance Management in Higher Education," Washington, D.C., July 13.

Nova University, Graduate Program in Public Administration, Commencement Exercises, on "The Role of Public Administration in a New Era," Ft. Lauderdale, Fla., August 1.

Public Program Management Seminar, East Tennessee chapters of Association of Government Accountants and American Society for Public Administration, on "Accountability in Government," CSC Executive Seminar Center, Oak Ridge, Tenn., August 3.

Following are recently published articles of the Comptroller General:

"Impact of the Federal Election Campaign Act of 1971," *The Annals of The American Academy of Political and Social Science*, May 1976.

"Government Auditing—Yesterday, Today, and Tomorrow," Joint Conference Report, Intergovernmental Audit Forums, *Initiatives for Improving Governmental Audits*, New Orleans, La., January 14–16, 1976, June 1976.

"Government Auditing—Yesterday, Today, and Tomorrow" (adapted

from an address to a joint conference of the Intergovernmental Audit Forums), *The Government Accountants Journal*, Summer 1976.

"Importance of Financial Data in Evaluating Federal Energy Programs" (April 28, 1976, speech before the American Gas Association-Edison Electric Institute Accounting Conference), *Proceedings, A.G.A.-EEI Accounting Conference*, April 26–28, 1976.

"Improving the Climate for Innovation—What Government and Industry Can Do" (May 11, 1976, speech at the Annual Meeting of the Industrial Research Institute, Inc., Boca Raton, Fla.), *The International Journal of Research Management*, September 1976.

*E. H. Morse, Jr.*, Assistant Comptroller General, addressed the Civil Service Commission's seminar on "Administration of Public Policy" at Kings Point, N.Y., September 2. His subject was "Accountability in the Administrative Process: The Role of the General Accounting Office."

## Office of the General Counsel

*Paul G. Dembling*, general counsel:

Addressed a Procurement and Grants Seminar sponsored by American University on "Legal Remedies," June 15.

Moderated a panel on "Special Problems Related to Costs and Profits" before the National Contract Management Association 15th Annual National Symposium, July 22–23, in Los Angeles.

Spoke on "Attorney Fees Under Gov-

ernment Contracts" before the American Bar Association annual convention, August 9–10, in Atlanta.

Mr. Dembling was elected to a 3-year term as a member of the Council of the American Bar Association Section of Public Contract Law.

*Paul Shnitzer*, associate general counsel:

Attended and participated in the American Bar Association annual convention, August 7–11, in Atlanta.

Spoke on "Claims in GAO" and "Debarment and Suspension" before the Government Contract Claims Course sponsored jointly by Federal Publications, Inc., and National Law Center, George Washington University, August 17–19, in San Francisco.

*Robert L. Higgins*, assistant general counsel, addressed a Federal Labor Management Relations Conference sponsored by the Department of Labor on "The Role of the Comptroller General in the Federal Labor Management Program," June 23, in Minneapolis.

*Martin J. Fitzgerald*, assistant to the general counsel:

Spoke before a group of executive agency employees attending the Civil Service Commission's "Institute in the Legislative Function" on "The Role of the GAO in Support of the Congress," July 1.

Addressed a Congressional Briefing Conference sponsored by the Civil Service Commission on "The Role of the GAO in Providing Support to the Congress," July 22.

*Ronald Wartow*, senior attorney, spoke before the Defense Advanced Procurement Management Course on

"Problems in Formal Advertising," August 12, in Fort Lee, Va.

### Office of Policy

*Donald J. Horan*, director, spoke on GAO's role in evaluating program performance at the Civil Service Commission's Executive Center, Kings Point, New York, August 19.

*Maurice Moody*, accountant, spoke on opportunities in the Government at the Shippensburg State College Minority's Summer Program Panel Division on Career Choices, Shippensburg, Pa., July 29.

### Community and Economic Development Division

*Steven Sternlieb*, supervisory auditor, participated as speaker and discussion panel member at the National Food Loss Conference in Boise, Idaho, on September 12-15.

### Energy and Minerals Division

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

The American Public Power Association Conference on "Energy: America's New Frontier," Anaheim, Calif., June 14.

The National Academy of Public Administration Workshop on Government Organization for Energy Affairs, Washington, D.C., June 22, 23.

The Resources for the Future National Energy Outlook Conference, Reston, Va., August 15-17.

The Washington Representatives of

the American Petroleum Institute, Washington, D.C., September 2.

*J. Dexter Peach*, deputy director, participated in a "Seminar on Policy Integration in the Senate" sponsored by the Congressional Research Service, Washington, D.C., September 8.

### Federal Personnel and Compensation Division

*Donald G. Goodyear*, assistant director, addressed the Atlanta Federal Personnel Council in Atlanta, Ga., on June 22. His subject was "Progress and Problems in Federal Equal Opportunity Hiring Practice."

### Financial and General Management Studies Division

*Donald L. Scantlebury*, director.

Participated as a panelist in the Plenary Session on "Sound Financial Reporting in the Public Sector" at the AGA Symposium, June 16, Philadelphia, Pa.

Participated as a panelist in an auditing research symposium on August 13 at New York City. He spoke on "The Needs for Research into the Problems CPAs Face in Contracting for and Performing Broad Scope Audits."

*Harold L. Stugart*, deputy director.

Participated as a panel leader for the Association of Government Accountant's 25th annual symposium held in Philadelphia, Pa., June 16-13. The subject discussed was "Multidiscipline Audit Staffs—How to Make Effective Use of Other Disciplines."

Participated in a discussion panel before a meeting of the American Institute of Certified Public Accountants in Atlanta, Ga., on August 19. The topic discussed was "Should There Be Specialization and in What Areas?"

*Walter L. Anderson*, associate director.

Conducted a 1-day panel on "The Future of Automatic Data Processing" at the National Computer Conference in New York City, which lasted from June 7 through 10.

Spoke at the American Management Association's Management Systems Division Council meeting on July 8, at Hamilton, N.Y. He spoke on "The Process of Preparing and Issuing GAO Reports on Automatic Data Processing."

*Harry C. Kensky*, associate director, moderated a workshop on "Auditing Accounting Systems: Are We Doing Enough?" at the Association of Government Accountants' National Symposium in Philadelphia on June 17.

*Kenneth A. Pollock*, assistant director.

Spoke at the National Computer Conference, New York City, June 10, on "Computer Systems Auditability and Control," based on his experience in developing a paper on advanced system auditing concept; as a member of the AICPA Computer Audit Standards Committee.

Addressed the Government Management Information Sciences Conference on June 23, in Denver, Colo., on the subject of "Minicomputers."

*Robert Meyer*, assistant director, was elected Director for the Finance Com-

mittee of the Washington chapter Association of Government Accountants for the 1976-77 year.

*Robert J. Ryan*, assistant director.

Moderated a panel on "Breakthroughs in Intergovernmental Auditing" at the 25th annual symposium of the Association of Government Accountants, June 18, in Philadelphia, Pa.

Was nominated to serve as a member of the Committee on State and Local Government Accounting of the American Institute of Certified Public Accountants for the period 1976-77.

*W. A. Broadus, Jr.*, assistant director, was elected secretary for the new Public Sector Section of the American Accounting Association.

*Ernest H. Davenport*, assistant director.

Addressed the American Institute of Certified Public Accountants Council on May 5, in Boca Raton, Fla., on "Minority Recruitment and Equal Opportunity."

Was elected Treasurer of the D.C. Institute of Certified Public Accountants for 1977.

Was reappointed Chairman of the American Institute of Certified Public Accountants' Minority Recruitment and Equal Opportunity Committee.

Was selected as Chairman of AGA's National Symposium Committee for 1977.

*George L. Egan*, assistant director.

Moderated a workshop on "Guide for Financial Audits of Federally Assisted Programs" at AGA's annual symposium, on June 17 and 18, Philadelphia, Pa. *Robert Raspen*, supervisory auditor, assisted as a panel member.

Participated, both as a consultant and lecturer, at the Department of Labor's National Auditors' Conference on "Audit Management" San Antonio, Tex., August 30 to September 2.

*Gordon Filler*, supervisory systems accountant, was appointed Chairman of the Washington chapter of AGA's Competition Program Committee for the 1976-77 year.

*David E. Bryant, Jr.*, supervisory auditor, was a panel moderator for a 6-hour workshop based on a booklet recently published by the Comptroller General entitled "Lessons Learned About Acquiring Financial Management & Other Information Systems" at AGA's national symposium in Philadelphia on June 17.

*Erwin W. Bedarf*, supervisory psychologist, served as Finance Co-chairperson for the Sixth Congress of the International Ergonomics Association held from July 11-16, at the University of Maryland, College Park, Md.

*Robert A. Pewanick*, accountant-in-charge, was appointed Chairman of Newsletter Committee (Editor) of AGA's Washington chapter for program year 1976-77.

*Herber Bouland*, operations research analyst, was elected as a Board Director for the Association for Public Program Analysis.

*Herbert R. Martinson*, operations research analyst, participated on a panel which addressed the use of "Experts/Specialists" in auditing at AGA's national symposium in Philadelphia, Pa., June 19.

*Martin E. Caulk*, supervisory computer systems analyst, was elected Chairman of the Chesapeake Division of the Association For Systems Management.

### Joint Financial Management Improvement Program

*Donald C. Kull*, executive director, was inaugurated as President of the National Capital Area chapter of the American Society for Public Administration for the year beginning July 1, 1976.

*Herbert S. Millstein*, program manager, conducted a workshop on "Integration of Financial Management Information Systems" at the 25th annual symposium of the Association of Government Accountants, June 18.

*Brian L. Usilaner*, assistant director, addressed the Statement Management Group of New Jersey on "Total Performance Measurement—Concept and Approach," August 3, Trenton, N.J.

*Edwin J. Soniat*, supervisory systems accountant

Conducted a workshop on "Measuring Productivity in Financial Management" for the National Association of Government Accountants at Philadelphia, Pa.

Made a presentation on "Federal Productivity" at a Productivity Conference sponsored by the University of Minnesota, St. Paul, Minn., July 22.

*Joseph Myers*, management analyst:

Made a presentation on "Productivity Measurement—An Auditing Tool" before the National Conference of State Legislators at Kansas City, Mo., on September 9.

Addressed the Prince Georges County Budget Staff on "Performance Measurement—A Tool for Improvement," September 9, Upper Marlboro, Md.

### General Government Division

*Bill W. Thurman*, assistant director, served on a panel which discussed the proposed Intergovernment Coordination Act of 1976 at the Tenth Annual Conference of Regional Councils on June 5 in Hollywood, Fla.

*Art Goldbeck*, assistant director, spoke on "Revenue Sharing—What to Expect in the Years Ahead" before a group of 160 local government officials at a seminar entitled "Grantsmanship and Federal Funding for Local Programs" in Washington, D.C., on June 8.

*Richard B. Groskin*, supervisory program analyst, chaired the workshop on program evaluation in criminal justice administration at the 1976 national conference of the American Society for Public Administration in Washington, D.C., April 21, 1976.

*Earl Walter* has completed the Federal Financial Management Self-Study Research Project.

### Human Resources Division

*Gregory J. Ahart*, director, participated in the Second Robert Wood Johnson Foundation Conference, Boston University, Boston, Mass., on June 11-12. Subject: "Continuing Medical Education."

*Patrick E. Daly*, supervisory auditor, was one of three panel members discussing "The Federal Government and the Small Private College" at the 21st National Meeting of the Council for the Advancement of Small Colleges. The panel discussion was held at Georgetown University, Washington, D.C., on June 15.

*William A. Gerkens*, supervisory auditor, participated in the Civil Service Commission's 12-week Intergovernmen-

tal Affairs Fellowship Program. He worked as a staff assistant to the County Executive in Jackson County, Mo., between April 5 and June 11.

*John D. Zyks*, supervisory auditor, addressed a doctoral seminar of the University of Pittsburgh's Graduate School of Public and International Affairs on June 7. The topic was evaluating the effectiveness of equal employment opportunity programs.

*Sandra J. Roupp*, supervisory auditor, participated in a panel discussion on "Federal Accountability" at the National Conference of the National Association of Student Financial Aid Administrators in Washington, D.C. on July 22.

*Alan S. Zipp*, supervisory auditor, spoke on "Problems in Implementing Third Party Liability Programs under Medicaid" before a meeting of State and Federal officials responsible for third party programs. The meeting was sponsored by HEW's Social and Rehabilitation Service, in Chicago on July 29.

### Logistics and Communications Division

*Fred J. Shafer*, director:

Was a panelist at a conference on Employment Opportunity, Economic Stability, and Productivity at the Chataqua Center for Education, Religion, and the Arts in Jamestown, N.Y., on August 23-25.

Participated in the Joint Automatic Control Conference at Purdue University on July 29-30. He discussed the "Social Effects of Automation in Manufacturing—The Relationships Among People, Materials and Technology."

*Bernard Sewell*, assistant director, spoke on GAO's work in the area of Federal surplus property at the 29th Annual Conference of the National Association of State Agencies for Surplus Property, in Myrtle Beach, S.C., on July 19-21.

### Procurement and Systems Acquisition Division

*Richard W. Gutmann*, director, spoke on "GAO's Interaction with the Department of Defense" at the Defense Systems Management School's Orientation in Systems Acquisition for General/Flag Officers and senior civilian executives, Fort Belvoir, Va., on June 25.

*John F. Flynn*, deputy director, discussed GAO's views on the Renegotiation Board at the 15th National Symposium of the National Contract Management Association in Los Angeles, Calif., on July 23.

*Morton A. Myers*, deputy director, organized and hosted an orientation seminar for 15 congressional fellows sponsored by the American Association for the Advancement of Science on September 13. The primary emphasis of this seminar was GAO's science and technology role in the legislative branch.

*Frank P. Chemery*, associate director:

Attended the Federal Executive Institute's Senior Executive Education Program in Charlottesville, Va., May 9 through June 25.

Spoke on the role of GAO in major weapon systems acquisition at the Navy Logistics Management School, Washington, D.C., on August 13.

*C. William Moore, Jr.*, assistant director, and *L. Patrick Samsell*, supervisory

auditor, were elected Director at Large and Director for Manuscripts, respectively, by the Washington, D.C., chapter of the National Association of Accountants for the 1976-77 chapter year.

*Osmund T. Fundingsland*, assistant director, addressed the First Annual Meeting and International Symposium of the Technology Transfer Society in Los Angeles, Calif., on June 25. He spoke on "GAO's View of Federal Focus for Technology Transfer."

*Dr. Manohar Singh*, supervisory auditor, authored a paper, "The Theory and Practice of Technological Forecasting," which was published in vol. 34, no. 11, of *The Journal of Scientific and Industrial Research*.

*Hugh R. Strain*, supervisory management analyst, participated in a Seminar on Canadian Defense Posture and NATO at Georgetown University's Center for International and Strategic Studies in Washington, D.C., on July 28.

### Program Analysis Division

*Harry S. Havens*, director, participated in the Canadian Institute of Chartered Accountants Annual Conference session on "PPB in the Federal Government Revisited" in Vancouver, Canada. He spoke on "An Appraisal of U.S. Experience with PPB" September 21.

*Wallace M. Cohen*, assistant director, and *Bruce Thompson*, senior analyst, were participants in a panel discussion on evaluation and assessment of large scale computer models. The discussion, sponsored by the Ad Hoc Congressional Modeling Group, composed of congressional staff members with an interest in computer applications, was held Thursday, June 24, in the Wilson Room of the Library of Congress Building.

*Annette Rooney*, supervisory budget analyst, and *Tom Karras*, operation research analyst, were participants in a Civil Service training course on August 10 entitled "Design and Management of a Program Evaluation." The 2-hour presentation was entitled "Program Evaluation and the GAO."

### Field Operations Division

#### Dallas

*Forrest R. Browne*, regional manager, made a presentation on June 16 to the Region VI Federal Regional Council on the subject of the Intergovernmental Audit Forum and its activities. He also taped a quarter-hour TV interview covering the background and activities of the General Accounting Office for a program titled "Know Your Government," which was scheduled to be telecast in July to the local viewing area.

#### Detroit

*John R. Rygiel*, management auditor, passed the Michigan May 1976 CPA examination.

#### Los Angeles

*William W. Parsons*, assistant manager, participated on a panel at the National American Society for Public Administration Conference in Washington, D.C., April 20. The topic of the panel discussion was "Federal Energy Policy: Organizational Approaches and Program Coordination." On May 10, he spoke to the Los Angeles chapter of the Association of Government Accountants on "GAO's Role in the Energy Program." "Improving Federal Productivity" was the title of an article which he

had published in the Spring 1976 issue of a local magazine.

*Victor Ell*, audit manager, presented the theory, approach and application of operational auditing at the Continuing Education Workshops for Accountants program at California State University, Los Angeles, September 25.

*Frederick Gallegos*, management auditor, authored the article "Efficient Use of Time Sharing Resources" which appeared in the EDP Auditors Association Magazine, Fall edition. During the winter 1976 quarter, Mr. Gallegos taught a COBOL programming class at California State Polytechnic University and also appeared on the University's television program to discuss the "Use of ADP Techniques in GAO Audits."

#### New York

*George Anthony*, assistant manager, and *Susan Tschirhart*, supervisory auditor, conducted a 2-day seminar on operational auditing for the New York City Comptroller's audit staff on August 5-6. Mr. Anthony also has been appointed to the faculty advisory council of the Department of Public Administration, Baruch College, the City University of New York.

On March 22, *Sam Piscitell*, staff member, addressed the accounting department of Marish College. He spoke on "Program Results Reviews."

On March 12, *Bill Rooney*, staff member, addressed the accounting department of Rutgers University. His topic was "The Organization and Functions of the GAO."

On March 30, *Vince Raimondi*, supervisory auditor, and *Rosemary Kalinowski*, staff member, spoke before the Accounting Society at Fordham University. Their topic was "The Organization

and Functions of the General Accounting Office."

On March 30, staff members *Frank Minore* and *Mike McCloskey*, spoke before the St. Francis College (Brooklyn, N.Y.) Accounting Club. Their subject was "The Role of the GAO Today."

On March 17, *Ruth Levy*, supervisory auditor, and staff member *Nick Gabriel* addressed the Accounting Club at Hunter College of the City University of New York. They discussed GAO's mission, how it performs evaluations and the results achieved.

On March 1, *Ngairé Cuneo* and *Milfred Alfonso*, auditors, addressed the Economics Department of the College of New Rochelle. They spoke on the organization and the functions of GAO, as well as their experiences with the Office.

#### Philadelphia

*Richard G. Halter* and *Frederick E. Harzer*, audit managers, conducted a 2-day course in "Operational Auditing-Basic" for about 50 auditors and accountants representing various foreign, Federal, State and local governments as well as private sector firms and universities. The course was part of the Association of Government Accountants' 25th national symposium, held in Philadelphia in June.

#### San Francisco

*Harold J. D'Ambrogia*, assistant manager, has been elected vice president-elect of the Pacific Region of the Association of Government Accountants.

*Jeff H. Eichner*, audit manager, and *Robert W. Brown*, supervisory auditor, have been elected San Francisco chapter Chairman and Treasurer, respectively, for the 1978 National Symposium of the Association of Government Accountants.

*George R. Lincoln*, supervisory auditor, has been elected director of the Sacramento chapter of the Association of Government Accountants.

*Steven G. Reed* and *George H. Hartmann*, audit managers, have been elected vice president and director, respectively, of the Peninsula/Palo Alto chapter of the Association of Government Accountants. *James A. Grossman*, supervisory auditor, has also been elected director of the Peninsula/Palo Alto chapter.

#### Seattle

*Douglas E. Cameron*, supervisory auditor, was reappointed to the Government Accounting and Auditing Committee, Oregon State Society of CPAs, for program year 1976-77.

*Frank C. Pasquier*, supervisory auditor, addressed the Alpha Kappa Psi, Seattle University chapter, on May 25, as a part of the Seattle regional office's bicentennial speech program. His subject was "Roles and Functions of GAO."

*Lynda G. Wendt*, supervisory auditor, (a former instructor at Oregon State University) taught the course Fund Accounting to the seniors and graduate students at the University of Washington, spring quarter.

## Educational Attainments

Listed below are staff members who have advised the Office of Personnel Management since January 1, 1976, of their receipt of degrees from educational institutions.

### Washington

Name	Division/Office	Degree	School
George G. Daugherty	Administrative Services	MS	George Washington University
Joyce A. Holmes	Claims	MA	Federal City College
Mark E. Gebicke	Energy and Minerals	MS	George Washington University
John K. Harper	Federal Personnel and Compensation	Ph.D.	George Washington University
Gordon J. Filler	Financial and General Management Studies	MA	Central Michigan University
Roy R. Jones	Financial and General Management Studies	MBA	George Washington University
James F. Loschiavo	Financial and General Management Studies	MS	George Washington University
John S. Reifsnnyder	Financial and General Management Studies	MA	Central Michigan University
James L. Rothwell	Financial and General Management Studies	MA	Central Michigan University
Darby W. Smith	Financial and General Management Studies	MA	Central Michigan University
Kenneth M. Winne	Financial and General Management Studies	MA	Central Michigan University
Keith E. Bassett	General Government	MS	George Washington University
Glenn D. Klakring	General Government	MBA	George Washington University
James R. Reifsnnyder	Logistics and Communications	MS	George Washington University
L. Patrick Sampsell	Procurement and Systems Acquisition	MBA	George Washington University
John B. Gunner	Staff Development	MBA	George Washington University

### Regional Offices

Name	Regional Office	Degree	School
James T. Campbell	Atlanta	MGA	Georgia State University
Bobby L. Cooper	Atlanta	MGA	Georgia State University
Carl S. Mays	Atlanta	MBA	Georgia State University
Joseph S. Cohen	Boston	MBA	Northeastern University
Louis G. Economopoulos	Boston	ME	Salem State College
Donald B. Hunter	Boston	MBA	Babson College
Richard C. LaMore	Boston	MBA	Suffolk University
John E. McDonough	Boston	MBA	Boston
William M. Reis	Boston	MPA	Harvard

**Regional Offices**

Name	Regional Office	Degree	School
Glen L. Baughman	Denver	MA	University of Northern Colorado
Robert Y. Hill, Jr.	Detroit	MA	Central Michigan University
Robert R. Readler	Detroit	MBA	Eastern Michigan University
Lynn H. Brown	Kansas City	MA	Central Michigan University
James H. Diecker	Kansas City	MBA	Southern Illinois University
Carolyn Wheelhouse	Falls Church	BS	University of the State of New York



The following new professional staff members reported for work during the period May 16, 1976 through August 15, 1976.

**Energy Conservation**

Energy conservation holds the promise of moving the country further down the road toward energy independence per dollar spent than do most energy supply increasing options. In fact, conservation is truly one of our least costly energy supply options and must be a key element of national energy policy.

*Monte Canfield, Jr.*  
 Director, GAO Energy and Minerals Division  
 July 26, 1976

**Office of Staff Development**

- |                        |   |
|------------------------|---|
| Barbour, Mary B.       | University of Maryland                      |
| Bicknell, Thomas W.    | University of Scranton                      |
| Bickoff, Marc L.       | State University of New York                |
| Blose, Laurence E.     | Gannett College                             |
| Boehret, Carol L.      | Bloomsburg State College                    |
| Bogus, Alan C.         | Shippensburg State College                  |
| Bollea, Paul J.        | Southeastern Massachusetts University       |
| Borseth, Ann           | Department of Housing and Urban Development |
| Bowyer, John M.        | Old Dominion University                     |
| Brand, Thomas D.       | University of Maryland                      |
| Broderick, Thomas R.   | East Tennessee State University             |
| Brown, Shelia D.       | Morgan State University                     |
| Bukowy, Stephen J.     | William and Mary College                    |
| Carter, Curtis H.      | Old Dominion University                     |
| Cavanaugh, Robert P.   | State University of New York                |
| Chambers, Richard F.   | Georgia State University                    |
| Darragh, Edward P.     | Bentley College                             |
| Deck, Nancy G.         | Bucknell University                         |
| Dobson, Eugene A.      | St. Augustine's College                     |
| Felts, Ronald B.       | University of South Carolina                |
| Freeman, Anne S.       | Bowie State College                         |
| Gandhy, Natwar M.      | Louisiana State University                  |
| Gibson, Thomas A.      | St. Vincent College                         |
| Gilbert, Michael E.    | Eastern Kentucky University                 |
| Gleason, James D.      | University of Maryland                      |
| Goessling, Daniel F.   | Yale University                             |
| Gowen, Daniel J.       | Department of the Army                      |
| Green, Leon H.         | Drexel University                           |
| Grindstaff, William D. | Old Dominion University                     |
| Hallum, Donald S.      | University of Minnesota                     |
| Hansen, David N.       | University of Massachusetts                 |
| Hill, Sandra V.        | Department of Housing and Urban Development |

Hillman, Richard J.  
 Hintz, David L.  
 Hodges, Alan K.  
 Hodges, Charles D.  
 Houtz, James C.

Huber, Roberta M.  
 Hutch, Jan E.  
 Jennerich, Alan J.  
 Johnson, Rosa M.  
 Johnson, Walter L.  
 Kamensky, John M.  
 Kelly, Carolyn A.

Kelly, John V.  
 Kennedy, Donald L.  
 Kenny, Joseph A.  
 Kovach, Robert D.  
 Kumanga, Kevin M.  
 Leight, Robert R.  
 Marko, Janice L.  
 McDaniel, Sherman  
 McDonald, Roger T.  
 McDowell, James K.  
 Mallus, Christina  
 Menghi, James P.  
 Miller, Robert B.  
 Moore, Roderick T.  
 Morgan, Ruth F.  
 Nairn, Joseph M.  
 Orr, Everette B.  
 Ostendorf, William B.  
 Paige, Charles E.  
 Perez, Tommie  
 Ranieri, Nicholas M.  
 Roman, Michelle L.  
 Sachs, Thomas A.  
 Schlichth, James  
 Schwartz, Sheldon J.  
 Schweinsburg, Ruth A.  
 Shelly, Robert A.  
 Slaughter, Jerald N.  
 Smith, Leslie A.  
 Stana, Richard M.  
 Stanley, Charles S.  
 Tebeau, Gerald J.  
 Thomas, Gerald W.  
 Trahan, Charles D.  
 Walker, Michael L.  
 Watkins, Joseph J.  
 Weeks, Hugh M.  
 Weinstein, Roy L.  
 Williamson, Sharon R.

University of Scranton  
 University of Wisconsin  
 Virginia Polytechnic Institute  
 St. Vincent College  
 Department of Housing and  
 Urban Development  
 Department of the Treasury  
 University of Maryland  
 University of Utah  
 University of Puerto Rico  
 University of Texas  
 Angelo State University  
 Department of Health, Education,  
 and Welfare  
 University of Scranton  
 University of Baltimore  
 Catholic University  
 Ohio State University  
 University of Massachusetts  
 Duquesne University  
 University of Maryland  
 Bowie State College  
 University of Tennessee  
 University of Scranton  
 Georgetown University  
 University of Delaware  
 Virginia Polytechnic Institute  
 State University of New York  
 Cornell University  
 Strayer Business College  
 Department of the Treasury  
 St. Vincent College  
 LeMoyné-Owen College  
 Department of the Treasury  
 University of Scranton  
 Lehigh University  
 Department of Agriculture  
 Syracuse University  
 Temple University  
 Clarion State College  
 Bloomsburg State College  
 Veterans Administration  
 Department of Defense  
 Kent State University  
 Morgan State University  
 Oklahoma University  
 East Carolina University  
 Howard University  
 Department of the Navy  
 Tennessee State University  
 Department of the Army  
 University of Connecticut  
 Morgan State University

**Office of the  
 General Counsel**

Grammer, Elisa J.  
 Guritz, Donald A.  
 McCoy, Lynne C.  
 O'Toole, Jeffrey B.  
 Siegel, Kenneth E.  
 Stallings, John G.  
 Wotherspoon, William A.  
 Martin, Richard A.

**Office of Librarian**

Farley, Anne M.  
 Jordan, Janis E.

**Claims Division**

Agnostek, William A.  
 Hagerty, James A.

**Office of Controller**

Byle, Randall L.  
 Nadler, Stever.

**Financial and General  
 Management Studies  
 Division**

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## READERS' COMMENTS



### A Reader in Another Country Speaks

The editor of the *Review* is grateful for, and pleased to pass on, the following commentary from Dr. I. E. Nebenzahl, State Comptroller of Israel, written on July 4, 1976:

*Over the Bicentennial weekend I studied the Spring 1976 issue, just received here. It gives me much pleasure to tell you that I found this issue especially rich in contents and most rewarding reading. The report*

*by Mr. Th. F. Williamson on the important Impoundment Case, its technicalities and wider ramifications lucidly explained on ten concise pages, impressed me particularly.*

*On the personal side, I was pleased to find a short profile of Mr. Joseph P. Normile, who cooperated in the program of our U.N./INTOSAI Seminars, as other senior members of the GAO staff did after him.*

*With best wishes on this special day for your great country, . . .*

### Annual Awards for Articles Published in The GAO Review

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

One award of \$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.

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- Originality of concepts.
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- Evidence of individual research performed.
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3. Articles, technical memorandums, and other information may be submitted for publication by any professional staff member. Submission should be made through liaison staff members who are responsible for representing their offices in obtaining and screening contributions to this publication.
4. Articles submitted for publication should be typed (double-spaced) and generally not exceed 14 pages. The subject matter of articles appropriate for publication is not restricted but should be determined on the basis of presumed interest to GAO professional staff members. Articles may be submitted on subjects that are highly technical in nature or on subjects of a more general nature.

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