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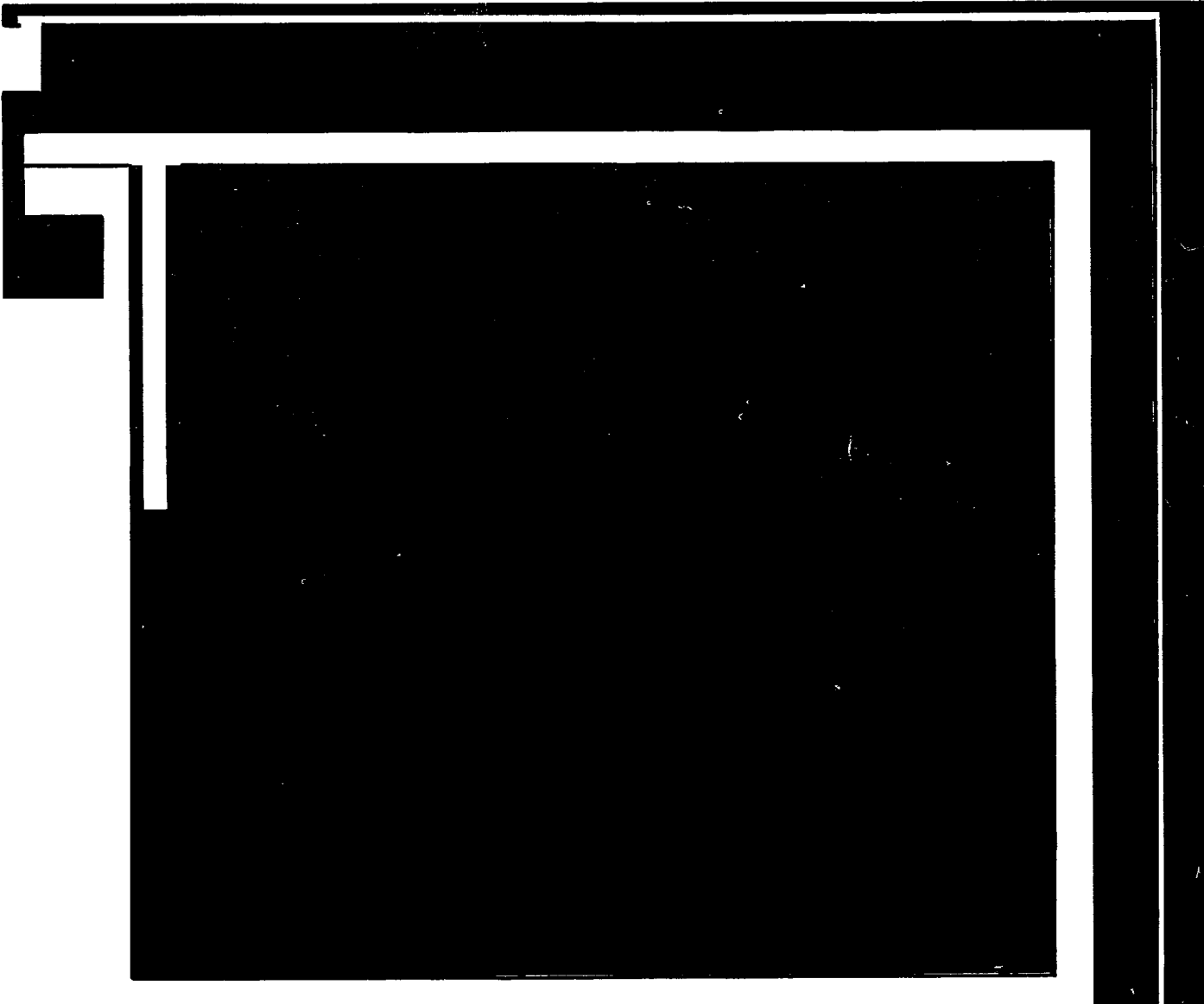
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Fall 1983

REVIEW



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Ask the Experts: Getting Through the Information Maze



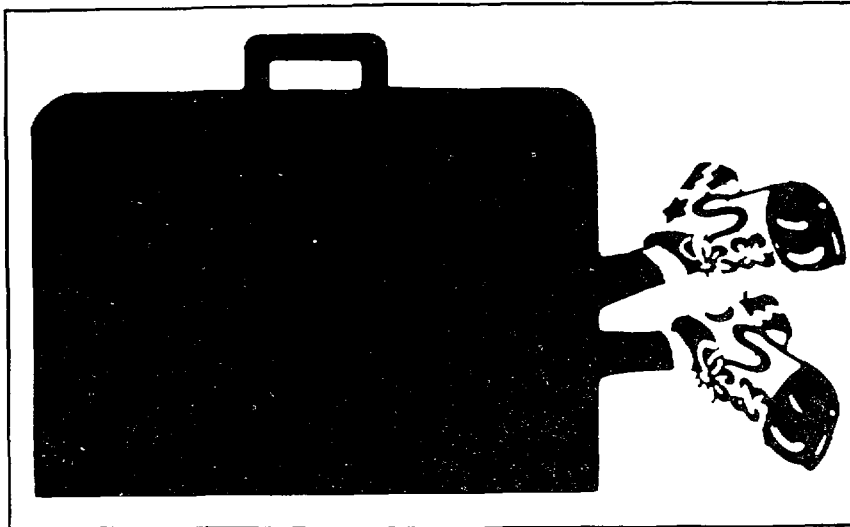


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From Our Briefcase



Accounting Update

GAO Revises Accounting Systems Approval Process

GAO, in an effort to streamline and improve the effectiveness of its approval process for executive agency accounting systems, will now only approve operating accounting systems. In the past, GAO separately approved agencies' accounting principles and standards and their systems' designs. The revised process, which was announced on April 18, 1983 (B-115398), will be in line with the objectives of the Federal Managers' Financial Integrity Act of 1982, which highlights the responsibility for each agency to install and maintain adequate accounting systems.

Upon request, GAO staff will continue to consult with executive agencies in developing and operating their systems, to the extent staff resources permit. In addition, GAO will continue to examine the overall effectiveness of accounting systems in operation in connection with GAO's overall audit responsibilities. The overall effectiveness of a system is to be based on the compliance of the system with GAO principles, standards, and related requirements, and the ability of the system to fulfill management's needs.

GAO Issues Accounting Statement

GAO issued an accounting statement on April 18, 1983 (B-115398) to aid Federal executive agencies in meeting certain requirements under the Federal Managers' Financial Integrity Act of 1982. The act requires that agencies report annually on whether their accounting systems conform to principles, standards, and related requirements prescribed by the Comptroller General. The statement organizes current GAO principles, standards, and related requirements by subjects, such as financial reporting and processes. It does not include a section on internal controls; this will be the subject of a separate GAO publication.

GAO Publishes Internal Control Standards

On June 1, 1983, GAO published the internal control standards to be followed by executive agencies in establishing and maintaining systems of internal control as required by the Federal Managers' Financial Integrity Act of 1982 (31 U.S.C. 3512(b)). Executive agencies are required to report to the Congress annually on the agencies' internal control systems' compliance with the

standards. The standards cover both the program management and the traditional financial management areas. The standards include five general standards, six specific standards, and an audit resolution. The general standards concern (1) reasonable assurance, (2) supportive attitude, (3) competent personnel, (4) control objectives, and (5) control techniques. The specific standards concern (1) documentation, (2) recording of transactions and events, (3) execution of transactions and events, (4) separation of duties, (5) supervision, and (6) access to and accountability for resources. The audit resolution standard concerns the prompt resolution of audit findings.

To obtain more information on the items in "Accounting Update" or to suggest topics for future columns, call Bruce Michelson, (202) 275-6222.

Networking

As someone who has successfully climbed the career ladder, Comptroller General Charles Bowsher recently offered some insider's tips on how to set the wheels in motion for career and personal advancement.

"Training programs are important," Mr. Bowsher told a gathering of GAO program managers, "but self-development and individual initiative play an even more important role in getting ahead. [You] must become more aware of opportunities for self-development, such as participating in professional organizations and working on task forces."

Networking, the job promotion strategy that the Comptroller General was referring to, is being hailed as the typical employee's best alternative to a professional employment agency when the time comes to seek or change a job.

In essence, networking means working as your own public relations and marketing representative in keeping relatives, friends, coworkers, and neighbors aware about how your particular skills might suit a potential job opening. Networking

works best, however, when these contacts are used for job information and when it is made clear that you are prepared to return the favor. It also works well simply for keeping apprised of developments within a field or making contacts who can help you do your current job more effectively.

No matter what your field, there are probably several professional associations which you might consider contacting to spread your network. One of the best resources for finding these groups is the *1983 Encyclopedia of Associations*, published by the Gale Research Company in Detroit. This encyclopedia indexes, for example, more than 75 national accounting associations, ranging from the 12,000-member Association of Government Accountants, headquartered in Arlington, Virginia, with 90 local chapters, to the 18,000-member American Society for Public Administration, headquartered in Washington, D.C., with over 100 chapters throughout the United States. In addition, the book indexes professional networks for auditors, evaluators, secretaries, writers, and editors, along with more than 100 associations each for managers and educators.

Sometimes networking can work as simply as introducing yourself to another person who shares an interest or concern, or by introducing two of your acquaintances to each other. To show the advantages of networking, a government employee in Washington, D.C., lost a \$15,000-per-year job due to a funding cut-back. After learning about several openings from friends who themselves maintained good networks, the employee landed another job paying \$18,000 per year.

Four techniques should be used in forming a network, which can be adapted to suit personal needs. First, tailor a network to suit your own job responsibilities and career goals. Second, don't ignore existing contacts, e.g., fellow employees. Third, when seeking to make a new contact, choose a method that feels most comfortable. Finally, when forming a network, be able and willing to give as well as receive.

Though networking is commonly associated with career development, it also promotes personal

growth outside the workplace. To use networking most effectively, be open to making contacts. The individual who finally decides to take advantage of networking will discover that most people are eager to share their contacts and feel flattered by the interest being shown in them.

The Job Interview

Probably one of the fastest ways to raise your blood pressure is to go for a job interview, an encounter where it feels as if one or more people are sitting in judgment of your overall worth as a human being. Getting that interview is in itself a feat—it is reported that for every 245 resumes sent out for a particular job, only one interview actually occurs.

How to overcome those interview jitters may spell the difference in getting called for the job or having your resume thrown on top of the rejected pile. GAO's Counseling and Career Development Branch (CCD) suggests that knowing what you will say and having an expectation of what will be asked can help reduce the stress level, leading to a successful interview. This pre-interview preparation may prove as important as an impressive resume or a reciting of professional honors, if not more so.

In this regard, almost all instructional manuals and books on the subject constantly emphasize that it is the interviewee's job to control the content of the interview. The person who knows how to gently lead the prospective employer to a discussion of his or her strengths has the best chance to land the job.

More specifically, a GAO employee going for an interview within GAO should learn as much as possible about that division: its mission, needs, accomplishments, and shortcomings. Through networking, the GAO employee can know beforehand whether this division would be an appropriate place to work. Another pre-interview tip is to make several copies of your resume, in case the interviewer loses a copy or more than one individual will be doing the interviewing.

During the interview itself, a positive and enthusiastic attitude will be as important as what you are saying;

often, it's more important. Sloppy appearance, letting the interviewer do all the talking, lack of interest or enthusiasm, and indecisive responses to questions all hurt your chances for getting the job.

One important subject is sometimes never mentioned during the interview: your salary and benefits. If nothing is said about it and your time seems up, you might consider several factors. If the opening is within the government, the job's general salary range can be checked beforehand in the posting for the position or by asking in the personnel office. If the interviewer says something about wanting to see you again, or indicates in some way that you are being considered, you may want to risk bringing up the subject. In some situations, however, discretion might work better than valor. The experience of a teacher serves as a case in point. This individual went for three interviews with a consulting firm where nothing was said about money. Finally, at the end of interview number three, she decided to broach the topic herself, asking for a salary of \$25,000 per year. Unfortunately, her salary demands must have antagonized her prospective employers for she was quickly dropped from consideration—they had been prepared to offer her \$50,000. If that's all she felt she was worth, these employers were reported to have said, then perhaps it was better to let her work someplace else.

Another crucial element in the interview process is a thank-you letter, written to the prospective employer following the interview. This letter, about two or three paragraphs long, reiterates your interest in the job and shows specifically how your skills match the job opening.

CCD offers advice and actual experience with interviewing through the use of roleplaying, where an employee can practice answering typical interview questions. Some of these questions are as follows:

- What are your career objectives (or plans)?
- Why did you choose this career field?
- Why should I hire you?

See Briefcase, p. 36

On Location

Comptroller General Establishes New Division

Effective May 15, 1983, Comptroller General Charles Bowsher created the National Security and International Affairs Division (NSIAD), to plan and execute all of GAO's work in these areas. It is organized to focus on the missions, programs, and management of the executive agencies responsible for the Government's activities in defense and international affairs. Its organization is sufficiently flexible to address broad crosscutting and single-agency issues and to do the functional work GAO now does.

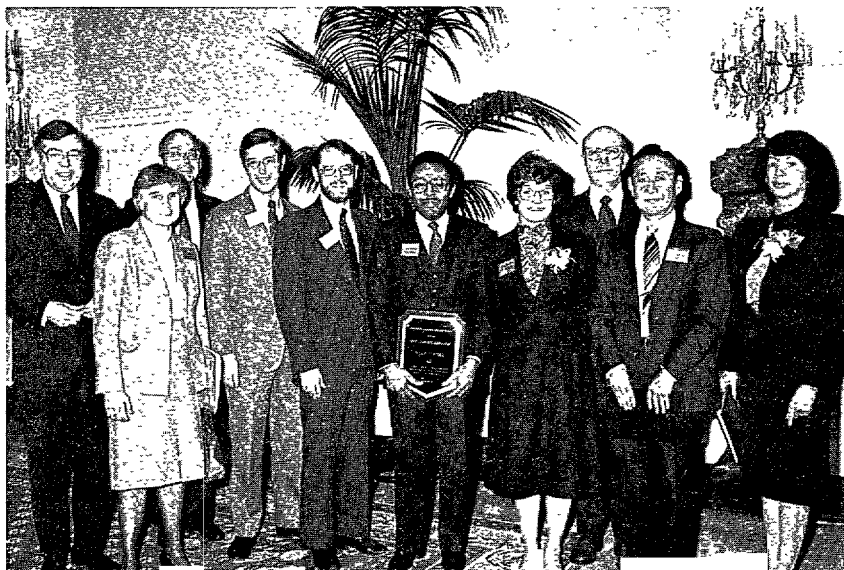
This division was formed by the merger of the International Division; the Mission Analysis and Systems Acquisition Division; the Procurement, Logistics and Readiness Division; and the military personnel issue area of the Federal Personnel and Compensation Division.

The staff changes which occurred as part of NSIAD's creation are listed in our "GAO Staff Changes" feature, page 40

JFMIP Conference on Financial Management Reform

At a recent Joint Financial Management Improvement Program conference, the keynote speakers pointed out that financial management reforms were needed now to help improve the overall management within the public sector. The conference, held in Washington, D.C., on March 30, 1983, was the program's twelfth annual affair, with over 850 people attending to learn more about "Financial Management Reform." One of the keynote speakers, J.P. Bolduc, Chief Operating Officer of the President's Private Sector Survey on Cost Control, pointed out that changes are going to happen whether people want them to or not. People can become involved to bring about the change, or they can end up the victims of change. He gave some background information on the survey group (also known as the Grace Commission). He summarized some of his personal views based on the preliminary findings of the commission, which are discussed below.

Major participants in JFMIP's Financial Management Conference were (l to r) Charles Bowsher, U.S. Comptroller General; Joyce Blalock, Inspector General, District of Columbia; Roger Feldman, Comptroller, Department of State; Michael Serlin, Assistant Commissioner for Government-wide Accounting, Department of Treasury; Gerald Murphy, Deputy Fiscal Assistant Secretary, Department of Treasury; Roland Burris, Comptroller, State of Illinois (holding Donald L. Scantlebury Memorial Award); Carole Dineen, Fiscal Assistant Secretary, Department of Treasury; Ronald Lynch, Principal, Arthur Andersen & Co.; Susumu Uyeda, Executive Director, JFMIP; and Virginia Robinson, Associate Director, Accounting and Financial Management Division, GAO.



Elaborating on these major points, he stated the following:

- Strategy at the top level of Government is required to make the changes needed for an integrated and holistic approach.

- There should be some semblance of structure, so that financial managers are no longer considered step-children within each organization. A chief financial officer at each Cabinet-level department is needed, who will report to someone comparable to a controller in a private-sector company.

- Financial management systems in the Federal Government should be developed so that budgeting, accounting, financial reporting, and auditing are integrated.

- Highly qualified people are needed to make these reforms. There should be continuity of top-level leadership in the financial management area within each organization, so that systems are not developed exclusively for one person. The people who are placed in these positions should have the expertise and financial management background to perform their duties competently.

Mr. Bolduc also gave 10 critical success factors to be a successful financial manager. They include

- flexibility,
- risk,
- communications,
- organizational orientation,
- timeliness,
- technological awareness,
- holistic approach,
- utilization of best proven practices,
- power to control information, and
- justification of your existence.

The afternoon keynote speaker was Joseph L. Wright, Deputy Director of the Office of Management and Budget. He challenged financial managers to join him in improving the total management of the Federal Government through this administration's Reform '88 project. Mr. Wright also pointed out that there are too many similar, yet incompatible, administrative accounting and payroll systems that are operating on antiquated computer equipment. Improvements must be made to update and consolidate some of these systems, 532 of which are currently reported to the General Accounting Office. Under Reform '88, initiatives in the following areas will take place.

Budget. Automate the budget

submissions from 18 agencies so that on-line analysis is practical.

Financial/Accounting Systems. Develop compatible, GAO-approved systems that meet management needs. Standards and guidelines for this type of system will be developed jointly for OMB and GAO.

Management Information Systems. Develop a standardized model for common financial reporting among all departments and use these systems for timely information needed by the White House.

Administrative Payment Centers. Improve productivity of payment centers by consolidating and using more centralized administrative payment centers, such as USDA's National Finance Center.

Debt Management. Implement the Debt Collection Act of 1982, which allows agencies to use collection tools previously denied by law; automate agencies' debt portfolio data bases; and automate agencies' servicing and collection functions.

Cash Management. Use better cash management practices, such as wire transfer and lockbox systems for collections, bill payments to vendors and contractors on the date due, not before and not after; and monitor more closely the disbursements made to grantees.

Payroll/Personnel Systems. Develop standard payroll/personnel modules for use by any civilian agency.

Telecommunications Link. Develop an electronic mail system between the White House and the major departments.

One of the highlights of the conference was the presentation of the 1982 Donald L. Scantlebury Memorial Awards for distinguished leadership in public financial management. The Comptroller General of the United States, Charles Bowsher, and the Executive Director of the JFMIP, Susumu Uyeda, made the official presentation to Harold L. Sturgart, Auditor General, Department of the Army; and Roland W. Burris, Comptroller, State of Illinois.

Four workshops on various aspects of financial management reforms were also held. The workshop on "Reform in Finance and Accounting" included presentations on the central agencies' efforts to improve financial management. The panel

discussed Treasury's initiatives to improve accounting, reporting and cash management, GAO's efforts to ensure compliance with the Federal Managers' Financial Integrity Act and new approaches in the accounting systems approval process, and OMB's emphasis on finance and accounting and Reform '88 initiatives. For an agency perspective, the Army's initiatives to implement a new accounting system and reporting requirements under Reform '88 were presented.

One workshop dealt with "Reform in Budgetary Process" and included presentations on (a) the Congressional Budget Act of 1974, what the act was intended to do when it was passed, and how it is actually working in today's environment of deficit spending, (b) budgeting for capital investments and the pros and cons of a capital budget, (c) what problems an agency has in the budget process, meeting sometimes conflicting requirements of the Office of Management and Budget and the congressional budget committees, and (d) suggestions on areas that should be looked at to improve the overall Federal budget process.

The workshop on "Reform in Auditing" focused on issues concerning promoting audit reform, such as the enhancement of consistency in standards and developing strategies to do the job better. The panel discussed the role of the Inspectors General in the prevention of fraud, waste, and abuse; efforts to improve the single audit concept for State and local governments and for universities and other nonprofit organizations; and the President's Council on Integrity and Efficiency initiatives to offer more and improved computer audit training.

Another workshop addressed "Reforms Due to Technological Advances" and included presentations on (a) purchasing microcomputers and important characteristics that should be considered, (b) an electronic work station study by the General Accounting Office which concluded that the work station concept could save about 24 percent of the time to perform an audit and write a report, and (c) a JFMIP study on using bar-code technology for automated data input of property records.

Seattle Regional Office's Annual Holiday Project

As the holiday season approaches, the Seattle Regional Office staff would like to share with you a project that started off as an idea to better use the funds spent exchanging Christmas cards among staff members. The idea was to help needy families in the community enjoy a Christmas they might ordinarily not have by providing food, clothing, and gifts.

The project, now in its twelfth year, received contributions last year totaling \$905. Nearly all the 85 staff in the Seattle office participated. Although the project has become a traditional event, no individual has ever been put on the spot by being asked, "Do you want to contribute?" The entire project, including contributions, purchasing, and delivery, is and will continue to be voluntary.

Each November, usually after Thanksgiving, three to four families are selected by local social welfare agencies for our sponsorship. The agencies help the region select families with children, usually single-parent, that are in need of assistance. The families have ranged in size from three to six, with children from infants to teenagers. The Seattle office initially contacts each family by phone. The conversation centers around the premise of providing a "Christmas dinner with all the trimmings" for the family. Staff ask the mother what her family would like to have for its Christmas meal if she were buying it herself, regardless of cost. They also attempt to find out what clothing items the children need and their sizes. The conversations are often delicate because of the need to maintain respect for the dignity of the people.

The Seattle staff always deliver clothing and toys for the children, enough food for the "Christmas dinner," and staples and canned foods to last for some days afterwards. They also provide some special gift for the mother—warm coat, scarf, bathrobe, etc. It's nice to know that when the staff enjoys their own Christmas celebrations, they've helped make a happy holiday for

others as well.

Each of the families helped over the years has been deserving, some more dramatically than others. For example, a number of years ago, the usual Christmas package went to a family consisting of a single parent with five children. Unknown to the Seattle staff at the time, the mother had a terminal illness. In fact, that Christmas was the last that she spent with her family. The GAO staff found out that she died shortly after Christmas. In a letter from her family, her children said it will be a Christmas that they will always remember.

Another year, the Christmas package was for a family that was desperately hungry. While the staff were bringing the food and gifts into the house, one of the young children stood nearby, eyeing the food instead of the presents (which normally get the attention of most children). The mother said, as she wept, that she prayed that morning that the staff people would actually come because the family was out of food and the children were hungry. It certainly explained the reason why the child was looking so intently at the food we had delivered.

This past year brought families into the picture that had never been placed in such a financial situation before. Each of the families helped was out of work and found themselves unaccustomed to needing such assistance. One family was on the verge of losing its home

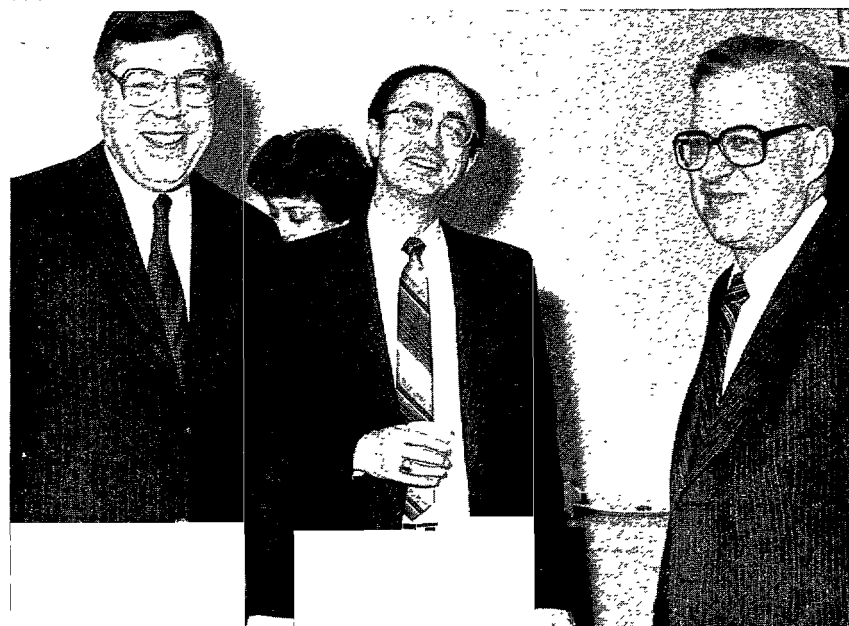
because it could no longer meet the payments. The mother's thank-you letter said the family did not have enough funds to live, much less consider Christmas. Her hope was that the children could have *something*, and that something was what the Seattle staff were able to provide. She addressed her letter to the "friends at the General Accounting Office." She said "friends you must be, because only friends can give as you have."

There are other stories like these, but to hear the stories and see the people isn't why Seattle does this project. It's really just to help "friends" in the community. If you would like to start a project such as the Seattle region's or would like some additional information, call the project coordinator, Steve Jue, at (206) 442-5356 (FTS 399-5356). Steve has been heading up the project for the past 9 years.

Office of Quality Assurance / Office of Policy Open House

The Office of Quality Assurance (OQA) and the Office of Policy (OP) held open house on April 14 to inaugurate their new offices on GAO's sixth floor. Some 200 guests, including division directors, staffs, and the Comptroller General, helped themselves to a variety of refreshments supplied by the OQA and OP staffs.

Comptroller General Bowsler (l), OQA Director Ira Goldstein(c), and Assistant Comptroller General for Planning and Reporting Henry Eschwege(r), chat during the open house.





Jim Howard (l), then director of the Office of Policy, and Claudia Cooper, Office of Policy staff member, escort Mr. Bowsheer to the open house.

Training Underway for "Office of the Future"

GAO administrative and professional staffers have been "going back to school" by the hundreds the past year to prepare themselves for the electronically oriented "office of the future." Sophisticated word processing equipment is the key component in this computerized work environment, and everyone—evaluators, writer-editors, secretaries, and office managers—will need a measure of "computer literacy" to function effectively in it.

Instructor Linda Morgan answers a student's question during one phase of the Micom word processing training course.



That's where the Micom word processing training course enters the picture, or should we say, comes on the video screen. The three-part course, a little more than 1 year old, is designed to familiarize GAO administrative staff with the operation of the Micom word processors that have been placed throughout the agency. Philips Information Systems, Inc., which manufactures the Micoms, supplies marketing support representatives to teach the course, under the direction of GAO. The agency decided on the administrative course content and intensity,

and Philips designed the curriculum around those parameters, according to Charlean Jackson, employee development specialist with GAO's Office of Organization and Human Development.

As of April 1983, 1,355 people have been trained in Micom operation. Slightly more than half of those (690) have been trained in word processing functions. At headquarters, 593 have received word processing instruction; in the regional offices, 137. To help the staff learn to operate the Micoms, each division has designated "facilitators" to answer the many questions that crop up. Thus far, 56 facilitators have been trained, with 43 of those having gone through the advanced phase of the course. So far, 242 word processing operators have received advanced instruction.

The course is sequentially arranged in order of increasing complexity, says Ms. Jackson. In Phase I, staffers learn the basics, just enough to understand how to get information into and out of the machine. Phases II and III are shorter but present more challenging functions of the Micom to students: column formats, foot-noting, and variable line spacing are some examples. Phase III, a 1-day course, has an optional format to allow students to concentrate on their weaker Micom skills.

Intergovernmental Audit Forum Activities

For the first time since the Intergovernmental Audit Forums were established in 1972, the chairmen of the 10 regional forums met as a group with the executive committee of the National Intergovernmental Audit Forum. The purposes of the meeting, held at GAO headquarters in April 1983, were to discuss what each chairman considered the priority issues deserving attention by the National and Regional Forums over the next 2 years, and the future role of the forums. A committee was established to formulate recommendations. Committee members include John Lordan of the Office of Management and Budget; Joseph Sickon, Inspector General, General

See Location, p. 36

What They're Saying About Us

This selective list of articles about GAO is compiled by Guy Wilson, Technical Library.

The press, in its newspapers and journals, gives the public image of the General Accounting Office: its internal management; its positions on matters of concern in government, management, and evaluation; its power over business and other government entities; and the value of its reports. The purpose of the following list of articles is to present a cross-section of reaction to GAO as an organization; it does not include any of the many articles announcing or summarizing new agency reports, since they are well covered by *Clippings*, a service of GAO's Office of Public Information. The following items, which were published between March 1982 and March 1983, are excerpted from a lengthy bibliography of books, reports, and articles on the same topic, to be issued soon. Copies of these articles are available through the Technical Library.

Bigelow, R. "Federal Agency Contingency Plans: A Failure." *Computer*

Security Journal, 1 (Winter 1982), pp. 13-14.

Bowsher, C. "The GAO and the Accounting Profession." *Journal of Accountancy*, 155, No. 2 (Feb. 1983), pp. 66ff.

✓ Bowsher, C. "Management Issues and the GAO." *Bureaucraft*, 11 (Spring 1982), pp. 30-33.

✓ Broadus, W. "Governmental Audit Standards: A New Perspective." *Journal of Accountancy*, 153, No. 5 (May 1982), pp. 80-90.

✓ Etzioni, A. "The Fight Against Fraud and Abuse: Analyzing Constituent Support." *Journal of Policy Analysis and Management*, 2, No. 1 (Fall 1982), pp. 26-38.

"GAO Cites Black Who Aids Laid Off Federal Employees." *Jet*, 62 (5 July 1982), p. 29.

✓ Hinds, M. "New, Improved Fraud Hot Line." *New York Times*, 132 (5 Oct. 1982), p. A20.

Ingle, H. "Contemporary Issues in Federal Evaluation Policy: New Linkages Between Personnel and Program Assessment Processes."

Public Personnel Management, 11 (Winter 1982), pp. 322-331.

✓ Lanznar, H. "The General Accounting Office's Access to Government Contractors' Records." *University of Chicago Law Review*, 49, No. 4 (Fall 1982), pp. 1050-1075.

✓ Radburn, W. "Fraud Awareness in the Government Environment." *Cost and Management*, 56 (March-April 1982), pp. 2-6.

✓ Shnitzer, P. "Evolving Contractors' Remedies—the GAO." *Federal Bar News and Journal*, 29, No. 12 (Dec. 1982), pp. 466-468.

✓ Staats, E. "The Scalpel, Not the Meat Axe." *Society*, 20 (Nov.-Dec. 1982), pp. 22-25.

Editor's note: The Technical Library staff maintains a file of articles and book chapters about GAO similar to those listed above. Agency staff who have similar material in their own files are encouraged to contribute copies to this central archival collection. "What They're Saying About Us" will be an occasional feature in the *Review*.

Manager's Corner

This feature is coordinated by Stephen Sawmelle, Office of Organization and Human Development.

This issue of "Manager's Corner" focuses on the interpersonal managerial competency. A phrase that aptly describes this competency is *positive personal interaction*. The ability to relate positively to others is of incalculable value in an environment like that of GAO, where so much of our work is accomplished by groups of people working together. Several examples where application of the interpersonal competency is highly important are interacting with congressional committee staffs; achieving a more collaborative relationship with executive agencies; issue area planning sessions among headquarters and regional units; coming to agreement on the messages of our products during "story conferences;" the role of mentoring, both at the senior executive level, and, less formally, at all other levels; and giving employees feedback on results of the annual assessment process.

For this edition of "Manager's Corner," four members of the Senior Executive Service reviewed books related to the interpersonal theme. Three of the reviews are printed here; the fourth, by Ronald Lauve (*Getting To Yes: Negotiating Agreement without Giving In*), is under the "Bookmark" feature, p. 31

**Of Human Interaction:
The Johari Model. By Joseph Luft.
Reviewed by Martin J. Fitzgerald.**

The author applies the "Johari Window" to a wide variety of human relationship and interpersonal communications problems. The window is a model that pictorializes—in the form of a square divided into four quadrants—the aspects of awareness of the total person in relation to other persons. It is fitting that the author refers to this instrument as an "awareness model." Each quadrant relates to the quality and degree of awareness—on the part of both self and others—of one's actions, feelings, and motives. Quadrant 1 is

that area of awareness which is *open* to self and others, quadrant 2 is that to which the self is *blind* but which is observed by others, quadrant 3 is that which is known to self but kept *hidden* from others, and quadrant 4 is that which is *unknown* to both self and others. A principal assertion in this book is that the Johari model has universal applicability to human behavior and interaction, including executives in leadership positions.

The author discusses the key attributes of each quadrant and argues that none is static. He asserts that the most effective human communication results from enlarging the first quadrant (the *open* area), which is the determinant of the degree of skill, awareness, and pleasure involved in human interaction. Furthermore, all four quadrants of each participant in an interaction are involved in and affected by each act of communication between them.

Two chapters which have particular relevance to the GAO setting are the ones on "group interaction" and "interaction and influence." The latter focuses on leadership. In the former, the author applies Johari's Window to interaction between groups of individuals, as well as to interaction of individuals within groups. He makes some instructive observations on the topic of intergroup relations. (One can read headquarters/field interaction, congressional relations, or executive agency dealings for "intergroup relations.") For example, groups interacting with other groups are more apt to respond to each other according to group properties than to qualities of individual members. Also, relations between groups depend on the ways they develop "to change the states of awareness within and between them."

Much of what this book is about can be captured in a quotation from the final chapter:

Your talent and your potential have a better chance of being developed if you as a person have access to your own feelings, your imagination, and your fantasy. If you can be open and free with but one other person

there is greater likelihood that you can be in touch with self.

**Gifts Differing. By Isabel Briggs Myers, with Peter B. Myers.
Reviewed by David Littleton.**

You may or may not be familiar with the Myers-Briggs Type Indicator (MBTI). If you are, I would like to encourage you to continue using it as a management tool. If you're not, I would like to encourage you to learn about this excellent way of understanding and appreciating the differences in individuals and organizations. In addition to its managerial applications, a basic understanding of MBTI can help evaluators in interviewing and gathering data from others.

In my experience, the MBTI is the best personality-type instrument available for managers. Simple enough for beginning managers and staff to use immediately, it also possesses sufficient complexity to meet the needs of more advanced managers. In addition to *Gifts Differing*, another book that can help provide a solid base for understanding the MBTI is *Please Understand Me* by David Keirsey and Marilyn Bates. I will highlight a few fundamentals from these two texts and then refer to the use of MBTI by managers and supervisors in GAO's Washington Regional Office.

While everyone is unique, all people share a lot in common, and some are more alike than others. Building upon Carl Jung's investigations into personality type, MBTI focuses on understanding human similarities and differences and appreciating their usefulness in various situations.

To determine a person's type, Isabel Briggs Myers developed a questionnaire designed to identify people's differences in their styles of gathering information, making decisions, and orienting themselves in the world. The questionnaire consists of 126 questions that give people choices in selecting their preferences. Once the individual preferences are known, the MBTI types them into one of 16 categories.

Although unimportant in themselves, the questions do uncover basic preferences that have far-reaching effects. Neither right nor wrong, these preferences indicate different kinds of people who have different interests and excel in different fields. Thus, each type has its own set of strengths and abilities. Yet these very differences often make it hard for us to understand each other, especially since people with preferences opposite to our own tend to be opposite to us in many ways.

Respectfully recognizing human preferences, both books emphasize that we cannot substantially change people's characteristic differences. Nor should we, for the differences are good, not bad. And they are easy to see, if one looks. These fundamental human differences become manifest in our different wants, purposes, values, and impulses. Human beings naturally think, perceive, understand, and relate differently.

In the face of these natural and beneficial human differences, we do ourselves and others a disservice in assuming that they are flaws. Different characteristics enrich us. Only through misunderstanding and rejection do we diminish our ability to work with each other.

Opposite types can complement each other in any team undertaking. When two people approach a problem from opposite sides, each sees things not visible to the other. Unfortunately, they may not see each

other's point of view, thereby failing to appreciate each other's differences and strengths. Hence, good teamwork calls for recognizing and drawing upon valuable differences among members of the team. *These differences enable people to enjoy different tasks. What would only bore or confuse one type and thus be badly botched can truly interest and reward another type and be expertly handled.* We know this from seeing a person fail in the wrong job but truly excel in the right one.

Although cooperation between opposite types is crucial, disagreements are only natural. Because opposite kinds of perception make people see quite different aspects of a situation, they may disagree on what should be done, or how, or even whether anything really needs to be done at all. Using MBTI can help us recognize and avoid these disagreements by building on the team members' strengths to accomplish various tasks.

Each type has characteristic strengths and preferences. Opposite types have the most difficulty communicating with each other, yet, ironically, they can stand to gain the most from trying to understand and use each other's strengths. Your opposite also describes what you do least well. Figure 1 contains a very brief characterization of each of the 16 types. Condensing the type descriptions into one table involves some oversimplification and distor-

tion, so use it cautiously. Note that the types are arranged by opposites across from each other.

Remembering 16 different personality types is difficult, but the MBTI identifies each type by a combination of 4 letters. By learning only the 4 letters and their various combinations, one quickly becomes familiar with the 16 types. And once you become familiar with this system, it's relatively easy.

Just as different types of personalities tend to like different tasks, they also prefer different types of jobs and organizations. For example, it's not by accident that approximately one-half of the evaluator staff in the Washington Regional Office falls into only one of the 16 categories—ISTJ. Of course, you will find staff members represented in each category, but this category predominates. And when one considers that not all these personality types are evenly distributed within the general population, this fact becomes particularly significant. No wonder, then, that many schools and universities use the MBTI as a career counseling tool.

The MBTI has acquired its own established association of users. As news of its utility becomes widespread, management and industry are realizing its practical benefits. The MBTI becomes critically useful to managers when one recognizes that different personality types have different ways of communicating,

BRIEF DESCRIPTIONS OF THE SIXTEEN TYPES

<p>ENTJ Intuitive, innovative ORGANIZER, aggressive, analytic, systematic; more tuned to new ideas and possibilities than to people's feelings.</p>	<p>ESTP REALISTIC ADAPTER in the world of material things; good natured, tolerant, easy going, oriented to practical, first-hand experience; highly observant of details of things.</p>	<p>ISFP Observant, loyal HELPER, reflective, realistic, emphatic; patient with details, gentle and retiring; shuns disagreements; enjoys the present moment.</p>	<p>INFJ People-oriented INNOVATOR of ideas; serious, quietly forceful and persevering; concerned with the common good, with helping others develop.</p>
<p>ESTJ Fact-minded, practical ORGANIZER; aggressive, analytic, systematic; more interested in getting the job done than in people's feelings.</p>	<p>ESFP REALISTIC ADAPTER in human relationships; friendly and easy with people, highly observant of their feelings and needs; oriented to practical, first-hand experience.</p>	<p>INFP Imaginative, independent HELPER, reflective, inquisitive, emphatic, loyal to ideals, more interested in possibilities than practicalities</p>	<p>INTJ Logical, critical, decisive INNOVATOR of ideas; serious, intent, highly independent, concerned with organization, determined and often stubborn.</p>
<p>INTP Inquisitive ANALYZER, reflective, independent, curious; more interested in organizing ideas than situations or people</p>	<p>ISTJ Analytical MANAGER OF FACTS AND DETAILS, dependable, decisive, painstaking and systematic; concerned with systems and organization; stable and conservative.</p>	<p>ESFJ Practical HARMONIZER and worker-with-people, sociable, orderly, opinioned; conscientious, realistic and well-tuned to the here and now</p>	<p>ENFP Warmly enthusiastic PLANNER OF CHANGE; imaginative, individualistic, pursues inspiration with impulsive energy; seeks to understand and inspire others.</p>
<p>ISTP Practical ANALYZER; values exactness; more interested in organizing data than situations or people; reflective, a cool and curious observer of life.</p>	<p>ISFJ Sympathetic MANAGER OF FACTS AND DETAILS; concerned with people's welfare, dependable, painstaking and systematic; stable and conservative.</p>	<p>ENFJ Imaginative HARMONIZER and worker-with-people, sociable, expressive, orderly, opinioned, conscientious, curious about new ideas and possibilities</p>	<p>ENTP Inventive, analytical PLANNER OF CHANGE; enthusiastic and independent; pursues inspiration with impulsive energy; seeks to understand and inspire others.</p>

learning, and understanding, as well as distinctive preferences for doing different types of tasks. As one strives to improve interpersonal skills, knowing one's own MBTI preferences as well as those of others can prove to be extremely valuable.

The Human Side of Enterprise.
 By Douglas McGregor.
 Reviewed by William E. Gahr.

"Are successful managers born or made?" Asked by Alfred Sloan, this question encouraged the author to research management behavior in business organizations. He discovered that unsuccessful managers often failed to clearly conceive management tasks and to create a climate conducive to individual growth and a genuine unity of purpose.

The realities of complex organizational life indicate that many jobs cannot be accomplished by individuals. A group is more often needed. Managers who understand interpersonal interaction and group dynamics can create conditions for individual growth in group situations. *Effective groups* have an informal working atmosphere; everyone participates; the task is well understood; the members listen to each other; there is disagreement but no dominating hostility; decisions are reached by consensus; criticism is frequent and frank; there are few hidden agendas; the chairman does not dominate; and the group often stops to reassess how well it is doing. *Ineffective groups* have a boring atmosphere; few people discuss; the task is unclear with no acceptance of a common objective; ideas are ignored or overridden; disagreements are suppressed; action is taken before the real issues are examined; leadership remains with the chairman; criticism is embarrassing; feelings

are hidden; the group avoids discussion of its own makeup and agenda.

Although there is no clear formula to determine whether a manager is born or made, the author insists that understanding human nature, motivation, and capacity—and developing effective groups—is the winning path. However, the "win" results from mutually collaborative, cooperative, and interdependent individuals working to a common end. It is not brought about by authoritative, aggressive individuals.

Since GAO's primary resources are human, the author would say, "The world is your oyster, just make use of what you have." Since GAO does practically everything in groups—Comptroller General/Assistant Comptrollers General, divisions, individual jobs—the author's insight into effective and ineffective groups is particularly pertinent. At the end of the book, the author closes with his belief that if we can learn how to realize the potential of human resource collaboration, the next few decades of human enterprise could be comparable to the technology leaps of the past half century.

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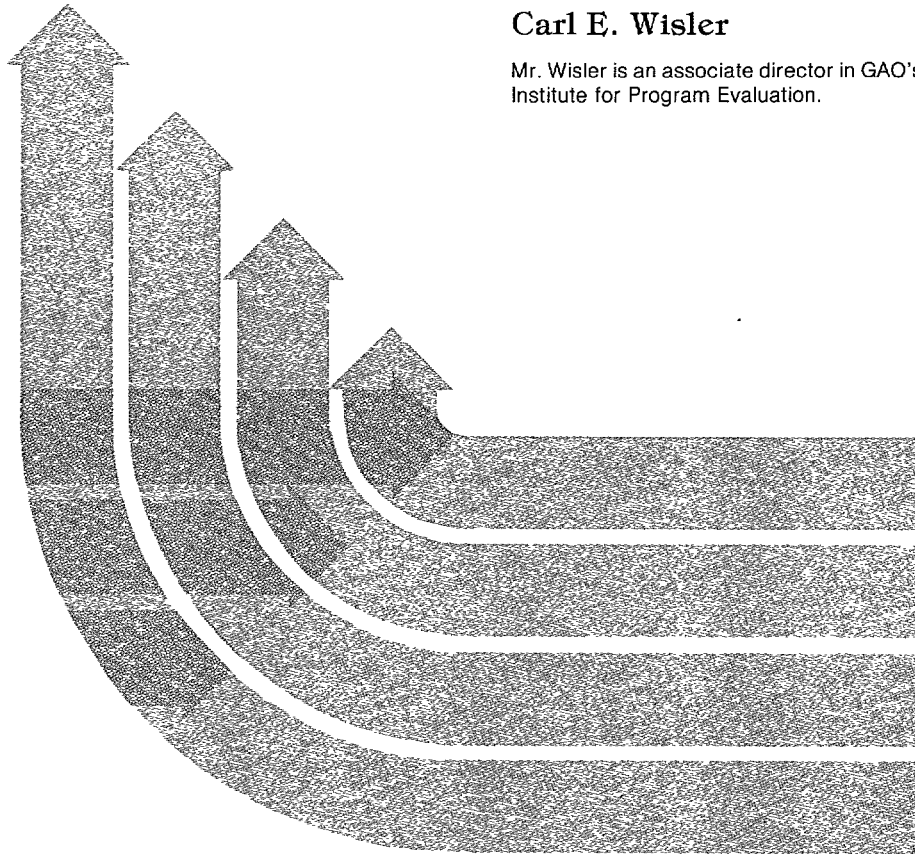
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Topics in Evaluation

Carl E. Wisler

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This issue's topic is the interrupted time series design.

Medical science has produced effective vaccines for many infectious diseases. Of course, the mere availability of a vaccine does not ensure that the disease will be conquered. From epidemiological theory, we know that a disease will be eradicated only when a large proportion of the susceptible population is vaccinated. From experience, we also know that reaching a sufficient number of people with the vaccine requires concerted action which is sometimes encouraged and aided by a government program. But how effective are such programs? A recent effort to assess a measles vaccine program can be used to illustrate the interrupted time series design, an approach to evaluation which can be applied to many kinds of programs.

Correction: In "Topics in Evaluation," Winter 1983, page 12, column 1, paragraph 3, line 4 should read, "NPGA (the before measurement) and high in."

The Measles Eradication Program

Measles (rubeola or red measles) is a highly contagious virus infection to which children, especially between the ages of 4 to 6, are susceptible. Although not a major threat in this country, the disease can be serious and is particularly so in underdeveloped parts of the world where measles is sometimes the principal killing disease of childhood.

In March 1963, a live, attenuated measles vaccine was licensed for use in the United States and soon became available to physicians. About 3½ years later, in October

1966, a Federal measles eradication program was initiated under the Community Health Services Extension Amendments. Grants to State and local health departments for measles immunization were an important element of the program.

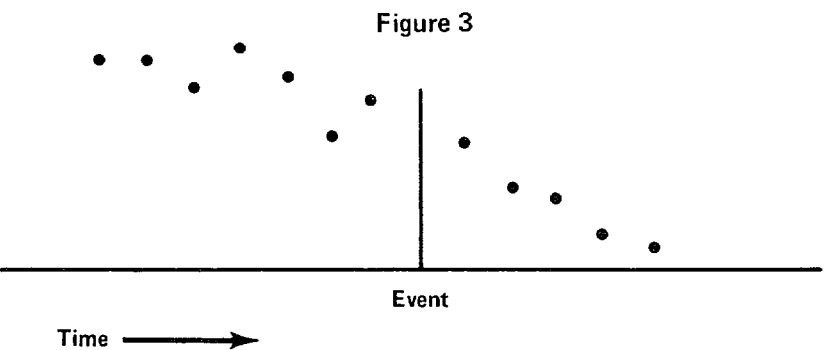
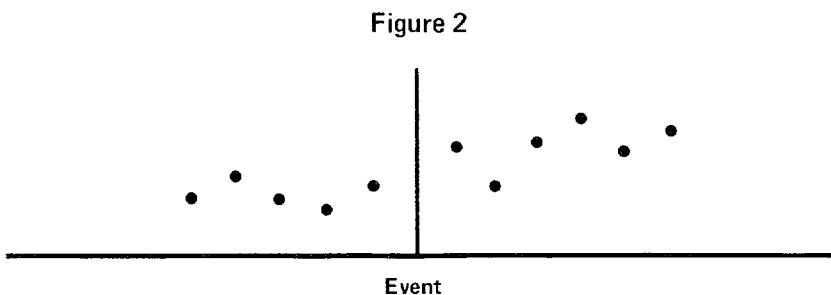
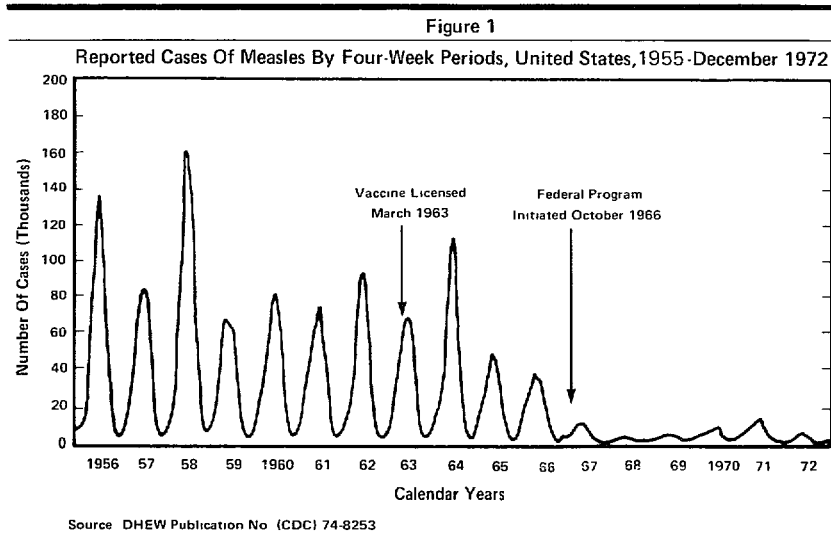
Measles cases are cyclical. Once each year the number of cases rises to a peak and then declines. There is substantial year-to-year variation, however, due to a number of epidemiological factors. Data compiled and published by the Centers for Disease Control show the pattern for the years 1955 to 1972. (See figure 1.) The data also show that the number of cases has been rather moderate since the last big peak in 1964. The question is: Can the decline in measles cases be attributed, at least in part, to the Federal eradication program? An important alternative explanation is that immunization efforts by private physicians, in conjunction with local and State authorities, may have had a substantial impact on the disease before and during the time the Federal program was operating.

To address the effectiveness of the Federal program, the evaluator has a 18-year data base, called a time series, and the knowledge that two important events took place: first, marketing of the measles vaccine in 1963 and second, initiation of the Federal measles eradication program in 1966. Either or both events might have had an effect upon the number of measles cases. This information sets the stage for an evaluation of the Federal program.

The Interrupted Time Series Design

Evaluations aimed at determining program effectiveness must be built around designs which can help reveal cause-and-effect relationships. (See "Topics in Evaluation," GAO Review, Winter 1983.) One of those designs is the interrupted time series (ITS) which was used by Albritton (1978) to evaluate the measles eradication program.

To use the ITS design, we must have observations over time. The basic idea of the design is that if an event, such as the onset of a Federal program, occurs which has a causal effect on the variable in question,

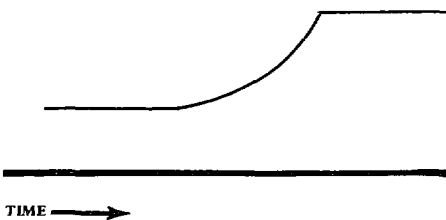
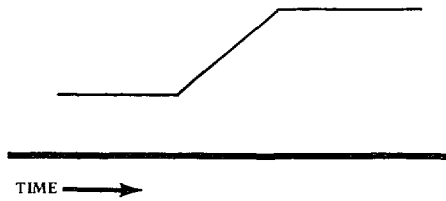
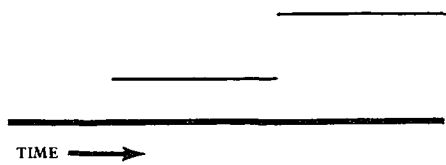


the pattern of observations before the event should be different from that after the event. One possible change in the pattern would be a change in the level of the series. Here, after an event, an increase in the average level of the series is discernible despite substantial fluctuation among observations. (See figure 2.) The "background" variation

is caused by factors not related to the event we are interested in.

Another possible change in the pattern would be an alteration in the trend of the series. For example, the event might lead to a change in the slope of a down trending series without an abrupt change in the level. (See figure 3.) Many other changes in patterns may occur.

Figure 4



Sometimes the changes associated with an event can be seen by visual inspection of the time series, but often statistical techniques are needed to detect effects masked by other fluctuations in the data. The other fluctuations, as illustrated by the annual but irregular cycling of measles cases, give rise to the major problems in analyzing time series

data. Without those confusing variations in the data, the effect of an event might take one of the simplified forms illustrated by figure 4. Interrupted time series analysis may be thought of as a search for idealized forms, like those above, embedded in much more complicated patterns. In fact, one of the strengths of the ITS design is that we can make some judgment about the variation in effect of a program or policy over time. We may be able to tell, for example, whether the program has an abrupt effect followed by a fadeout or if the effect is moderate at first with a steady climb to a plateau. Other designs, such as the non-equivalent comparison group, provide no clues about the time-shape of a program effect.

The up-and-down fluctuations of most time series illustrate why a simple before-and-after evaluation design is usually inadequate for drawing inferences about cause and effect. The differences between a single observation made before the start of a program and another made afterwards could very well be misleading because of the background variation. For example, attempting to determine the effect of a measles immunization program from only two points on the upside of a cycle would clearly give erroneous results. Multiple data points are needed to help separate the effects of the program from other factors causing variation in the time series.

Although the eye and brain may fail to perceive a program effect in the pattern observations, the statistical techniques of time series analysis may be able to separate the effect of an intervention from other fluctuations. The statistical manipulations used for pattern recognition also obligingly provide a quantitative estimate of the size of the effect.

In his analysis of the measles time series, Albritton looked for evidence of effects from marketing of the vaccine and from the subsequent eradication program. After analyzing the time series, he concluded from statistical evidence that both events caused a drop in measles cases: 2.1 million cases per year due to the marketing of the vaccine and 1.9 million cases per year due to the Federal program.

Applying Time Series Analysis

The opportunities for applications of the interrupted time series design are diverse. Recent examples include evaluations of air pollution control laws, bilingual education, the Community Development Block Grant Program, the organizational effectiveness of the Federal Prison System, and the National School Lunch Program. IPE is presently considering the use of ITS to determine the effect of changes in the Aid to Families with Dependent Children program upon the number of beneficiaries and on program costs.

In the traditional use of ITS, the evaluator knows about the onset of an intervention. For example, we know when an air pollution control law was passed, and the question is: What effect did it have? The investigation proceeds by gathering data and plotting out time series for measurements on various atmospheric pollutants. Usually statistical analyses are then necessary to draw defensible conclusions about the effect of the intervention.

A different approach is illustrated by the work of Straw, et al. (1982). Using time series of participation rates from many different school lunch programs, they looked for effects—interruptions in the series—and then used other evaluation techniques, including a sample survey, to probe potential causes. In other words, they reversed the traditional approach.

One possible drawback of ITS is the need for a string of observations. It seems likely that most potential GAO applications of ITS would be in situations where the time series is already available, thus avoiding the time and expense of primary data collection. Some of the main considerations in deciding to use ITS would then be about the quality of the data, construct validity (see "Trends in Evaluation," *GAO Review*, Spring 1982), and whether there are a sufficient number of observations before and after the event in question to appropriately use statistical procedures.

See Topics, p. 37



Comptroller General
Charles A. Bowsher

Perspectives on the Federal Budget

former cabinet members, three of whom served under Democratic presidents and three under Republican administrations, formed a bipartisan coalition to draw the President's and the Congress' attention to the fiscal crisis. The document they issued outlining the crisis and its implications drew over 500 supporting signatures from eminent Americans in commerce, finance, law, and education. I am struck by the diversity of political and economic views represented by these 500 Americans, and I share their concerns.

Like them, I believe that the \$127 billion deficit in fiscal year 1982 and the expected deficit of over \$200 billion this fiscal year, though to some extent unavoidable because of the recession, are too large. And what is more troublesome is that even with an economic recovery, in which full employment is reached in 1988, the deficit is projected to be \$300 billion.

This predicament does not bode well for continued economic growth, for a sustained recovery from our current recession, and for the health of some of our industries, such as automobiles and steel.

In past decades, our country has benefited in a number of ways from economic growth. It has afforded us a rising standard of living that has enabled us to live longer and healthier lives and enjoy more of the material things in life. High rates of economic growth are made possible by high rates of investment in plant, equipment, research and development, and public infrastructure. These investments occur when the savings of the economy are available for private-sector uses. Savings are not available for private investment when they are absorbed by the Government to finance its deficits.

This diversion of the savings from productive investment in new plant and equipment has been increasing at an alarming rate. During the 1950's, the Federal budget absorbed

less than 1 percent of personal savings. During the 1960's, the total claim on personal savings was only 6 percent. During the 1970's, it climbed to 36 percent, and for the first 3 years of the 1980's, the absorption was a staggering 71 percent. The forecasts for the period 1983-88 show that only in the final year, 1988, will personal savings exceed the deficit. This absorption rate is a certain prescription for economic stagnation during this decade.

The prospect of large deficits during the 1980's poses a current obstacle to our emerging from the worst recession in 50 years. Because lenders must anticipate large Federal claims on the Nation's pool of savings for years to come, today's long- and medium-term interest rates, despite some recent decline, remain abnormally high relative to current inflation rates. Today's high real interest rates pose the principal threat to a sustained economic recovery.

Finally, our high real interest rates serve as a magnet attracting foreign funds to our shores. These flows, in turn, lead to an abnormally strong dollar on foreign exchange markets. A strong dollar works to the disadvantage of our export industries and those which compete with our imports.

Because our fiscal problem is at the national level, it is the Federal Government which must devise a solution. This does not mean that big government is totally to blame for our problems. Those attacking the evils of large government tend to forget that large government has also been beneficial for the country.

Leadership at the Federal level was responsible for lifting us out of the Great Depression through creating programs like the Reconstruction Finance Corporation; for mobilizing the Nation to achieve victory in World War II; for formulating and carrying out the Marshall Plan for rebuilding Europe, called by Winston

The following article was adapted from the Cardinal O'Hara Memorial Lecture given by Comptroller General Bowsher before the College of Business Administration, Department of Accountancy, the University of Notre Dame, IN, on March 24, 1983

Within the scope of this article, I will offer my perspectives on our current budget situation in the Federal Government and what I think ought to be done to correct it. Then I will shift gears and describe the improvements I think are needed in the Government's financial management systems.

Budget Problems Were Long in the Making

Our budget deficits did not exactly creep up on us unnoticed. They have been developing for over 20 years. Recently, however, the actual and prospective budget deficits have become so large that many in the public press speak of an endless river of red ink. In fact, public concern is now so high that, last January, six

Churchill "the most unsordid act in human history"; for providing massive educational opportunities through the establishment of land grant colleges and a host of educational subsidies ranging from the GI bill to student loans; for providing us with a first-rate highway system; for inspecting the meat we eat, the medicines we take, the water we drink, and the air we breathe; for stopping floods, bringing electricity to rural areas, and irrigating our deserts; and for striving to ensure equal rights for all.

Where Did We Go Wrong?

If large government had many past successes, how then did we work ourselves into the present fiscal crisis?

As I noted, our fiscal problems are not of recent origin but have been developing in varying degrees for the past 20 years. It occurs to me that, over this period, several events contributed to producing our current state of affairs.

The Great American Inflation

Almost 20 years ago, we decided to fight the war in Vietnam without putting the U.S. economy on a war-time footing. We attempted to fund the war, maintain the social programs embodied in the Great Society, and, at the same time, not reduce the standard of living of our citizens. This effort at war and social justice was financed in ways which set in motion the great American inflation—an inflation which, fueled by the oil crises of 1974 and 1978, has bedeviled our economy for a decade and a half and strengthened the effects on the budget deficit of the indexation of entitlement programs and our inability to raise tax revenues.

A Change in Budget Priorities

An examination of the changes in the Government's spending and taxing priorities sheds additional light on what has happened. Since the end of World War II, and especially since the 1960's, the growth of social insurance and entitlement programs

has increased sharply. In 1960, we spent 28 percent of our budget on income security, social services, retirement benefits, and the like. By 1972, this spending had grown to 45 percent, and in 1982, to about 50 percent. This is almost a doubling in only 2 decades.

The increases in expenditures for these programs can be attributed to the way in which they are indexed to offset the effects of inflation, to changes in eligibility criteria, and to changes in the number of participants in each program. GAO has found that, between 1970 and 1977, indexing accounted for about half of the spending growth. Of somewhat less importance was the open-ended nature of these entitlement programs. While the Congress sets the standards of eligibility for the programs, it cannot directly control the rate of participation in them. As a result, total spending can vary dramatically without any congressional action, even in the absence of inflation and indexing. It is the rapid run-up in these costs which has given rise to the widespread concern that the budget may be out of control.

When the Congress first indexed these entitlement programs, there was a belief that maintaining real benefit levels for retirees and others was both noble and affordable and should be removed from the political process. At the same time, the U.S. economy was experiencing low rates of inflation. Our economic performance during the last 5 years has not been so good. The growth in our national productivity has declined markedly, inflation has frequently been in the double-digit range, and our economy has stagnated. In per-capita terms, our real income has actually declined. Yet this decline has not been shared, to an equal extent, between those who receive entitlements and those who do not.

In addition to entitlements, interest costs on the national debt have also soared. In 1970, net interest payments were a little less than 7 percent of total Federal expenditures. They increased to a little less than 9 percent by 1980 and, in 1982, they consumed over 11 percent of Federal expenditures. This growth in interest payments is the product of a number of factors, including the recent large deficits, debt financing

policies of the Treasury, and inflation, which drove interest rates to 100-year highs.

One of the political themes of the 1960's was fiscal federalism, or revenue sharing. This translated into a program in which the Government redistributed tax revenues among the various States and localities. In 1960, these grants were almost 8 percent of Federal outlays. By 1970, they reached 12 percent of total Federal expenditures, and by 1980 they had risen to about 15 percent.

In view of the fact that social programs, interest, and aid to State and local governments grew as a share of the Federal budget, something had to give. After peaking at 64 percent during the Korean conflict, defense expenditures declined to 48 percent in 1960, 36 percent in 1970, and 23 percent in 1982.

The overall result of these changes has been enormous growth in Federal outlays due largely to the increasing role the budget has come to play in redistributing income among the population.

Finally, we have seen major changes in the sources of Federal revenues and an inability of total revenues to rise as a proportion of the gross national product due to a combination of tax rate cuts and erosion of the tax base.

In 1950, personal income taxes and corporate profit taxes provided 70 percent of total Federal revenues, with each contributing about equal shares. Social insurance taxes, on the other hand, contributed about 12 percent of the total. Three decades later, nearly one-half of all Federal revenues were derived from the personal income tax, nearly one-third from social insurance taxes, and about 12 percent from taxes on corporate profits. The increase in the relative importance of social insurance taxes is due primarily to the fact that Social Security, the largest of these programs, is self-financing. Its revenues must grow by roughly the same amount as its expenditures have grown.

Despite these shifts in the relative importance of various revenue sources, for the past 12 years total Federal revenues have been a fairly constant proportion of the gross national product—ranging between

18½ and 21 percent. In 1983, they are projected to be at the low end of this range. Because tax revenues have not kept pace with the growth in Federal outlays, we have had a long string of deficits.

Chain of Events Led to Fiscal Crisis

Since the end of World War II, we have seen a change in our national priorities. For better or worse, we decided that primary responsibility for various social problems related to old age, health, and disability should be assumed at the Federal level. In dealing with these problems, we decided to establish real benefit levels by indexing. In doing so, we failed to anticipate the great American inflation, itself a legacy of the Vietnam War. This inflation led to a rapid run-up of expenditures to support the programs and for interest on a growing national debt to finance such programs. This, in turn, made it difficult to raise revenues to finance other programs.

Recently, a series of decisions to reduce tax rates and index the tax system, as well as increased real outlays for rearmament coupled with a reluctance to reduce spending for entitlement programs, has only served to exacerbate the fiscal crisis.

Where Do We Go from Here?

Despite the merits of the views motivating the changes in policy that have taken place recently and over the last several decades, their effect on the Government's fiscal health poses a real threat to our economy. And because of our interdependence with the economies of the rest of the world, the spectre of enormous deficits and a continuation of high real interest rates is even more alarming.

As Helmut Schmidt, former chancellor of West Germany, noted in a recent essay on the state of the world economy, "The world economy is in undeniably bad shape. But it is not incurable. Our problems are man-made, and they can be solved by man. But this means that governments must face up to their responsibilities. We cannot afford to believe in the invisible hand of the market

so much that, as the American columnist Joseph Kraft puts it, we 'prefer not to acknowledge the visible hand of explicit policy.' The 'self-healing powers of the market' cannot take care of all our problems." Mr. Schmidt went on to say, "The United States will have to take the lead in the required reduction in world interest rate levels, if only because of its importance in the world. It accounts for about 40 percent of the national product of all Organization for Economic Cooperation and Development countries, around two-thirds of all official exchange reserves are held in U.S. dollars, and about three quarters of Euro-market loans are denominated in U.S. dollars and reflect American interest rates."

We must give the highest priority to putting our fiscal house in order. Our options for responsible action include raising revenues and reducing expenditures, and, within the expenditures area, containing spending growth for both entitlement and defense programs.

Social Programs and Entitlements

I indicated that indexing social programs and entitlements and their open-ended nature were the main reasons for their soaring costs during the past decade and the widespread concern that the budget may be out of control.

Social Security, by far the largest of our social insurance programs, has been self-financed. Therefore, it could not directly contribute to deficits in more than a temporary way. Nevertheless, it has had an important indirect effect. If one accepts the premise that the Government tax claim on our national output should be limited if we are to achieve sustained economic growth, increases in taxes for Social Security may come at the expense of reductions in tax revenues from other sources, and this is what has happened. The ultimate result is that even in the case of Social Security, maintaining real benefits that are self-financed can indirectly contribute to deficits. For partially self-financed entitlement programs and those financed out of general tax revenues, the effect on the deficit of maintaining real benefit levels is more direct. I have to conclude that,

regardless of whether these programs are self-financed or not, the real question is, can we continue to afford maintaining the level of benefits promised in better times than we are currently experiencing?

Our current economic circumstances, unforeseen by the Congress when it indexed these programs; warrant some modification in the indexing formulas; a more systematic review of eligibility criteria; and relatedly, more stringent means tests. These will assure that the poor are adequately protected while modifying participation by certain program beneficiaries whose own source income levels are sufficient to maintain a decent living standard.

Defense

In his March 23, 1983, address, President Reagan outlined the buildup of both strategic and tactical forces by the Soviet Union; a buildup that has continued unabated for 2 decades. Like the President, I believe that the Soviet Union possesses a formidable arsenal of weapons which constitutes a threat to the security of the United States. I also believe that a strong U.S. defense posture is the best deterrent to a superpower confrontation. However, I believe that we can maintain a formidable and credible defense posture without engaging in the greatly accelerated defense buildup currently proposed.

This buildup must be slowed if we are to reduce the Federal deficit. Also, the very large increase in our procurement demands may place severe strains on the Nation's defense industrial base. Federal officials must carefully consider current and future industrial capacity with an eye toward saving taxpayer dollars when planning buys and setting procurement quantities and schedules. A realistic and stable acquisition program over a period of years will yield enormous benefits to our defense posture and help our budget situation.

At the same time, the Defense Department should recognize that the costs of maintaining and operating the complex equipment it is procuring and proposing to procure will place a strain on future defense budgets. We will soon find that ade-

quately supporting what we have recently purchased and continuing the high level of investment in all-new equipment will result in our doing neither well. We must recognize that maintaining the weapons of the future may require eliminating some weapons purchases today. We simply cannot afford to put into production virtually all weapons developed under the Carter-Ford-Nixon administrations. We must not buy the weapons that have technological problems or the weapons that have languished in development and are now obsolete. The savings from such actions would be primarily in future years. But, particularly in the defense procurement area, we must consider carefully the future costs of today's decisions.

In addition, the possibility of breakthroughs on the international and diplomatic fronts that could limit strategic and conventional forces should be fully explored.

Taxation

Finally, we need to reexamine the revenue side of the budget and stop the erosion of the tax base. There has been an increasing tendency for individuals and businesses to obtain subsidies through the Federal tax system by having a portion of their income exempted from taxation. Tax shelters, loopholes, and tax expenditures should be reexamined, as I believe Senator Dole and others are currently doing in the Congress. While these exemptions are justified on worthy social or economic grounds, there is increasing evidence that they fail in many cases to accomplish their stated objectives. In those cases, we merely forego a source of tax revenue to seek behavior that would occur without the subsidy. Such exemptions also have the potential to lead to serious misallocations of our scarce economic resources. They also add complexity to our tax code that leads to undermining what was once the best voluntary tax system in the world. It is essential that the public have confidence in the integrity, equity, and effectiveness of our tax system. Otherwise, billions of dollars will continue to be lost because of taxpayer noncompliance.

The steps I have outlined to curb

the growth in entitlement and defense programs and to raise tax revenues are reasonable and responsible in their own right. And they will go a long way toward eliminating both the massive deficits projected for the future and the spectre of continued high interest rates and stagnant economic growth both here and in the rest of the world.

Financial Management Process Improvements

Let me now shift from the problems associated with the imbalance of the Federal budget to the financial management processes which support the formulation and execution of the budget.

One of the key functions of financial management is allocating the resources over which the Government has command. This process involves, to a large extent, assessing trade-offs among competing political goals. But for the choices to be informed, it is essential that the information used by policymakers be as accurate and reliable as possible so that the costs of the choices are clear—especially the full, long-term cost of major proposed programs. For such choices to be well-informed, we need much-improved financial information.

Today's Federal decisionmakers are working with financial management systems that were designed for a bygone era. Many of these systems date back to World War II and the 1950's. These officials use planning, budgeting, and accounting systems that are not well integrated. The individual systems have become cumbersome as more and more requirements have been added to meet expanded needs for information. We must streamline and modernize these systems to meet the requirements of those decisionmakers who must address the tough and complex issues associated with the budget dilemmas I have described.

During the past 2 decades, both the executive branch and the Congress have taken steps to strengthen their budgeting process. In the early 1960's, Mr. McNamara established a planning, programming, and budgeting system for the Defense Department. The defense budgeting system has been adapted to each adminis-

tration's policy and management needs and, today, still represents the most comprehensive, integrated approach to supporting decision-making in the Federal Government. But this system is now 20 years old, and there are many areas in which it can be improved. In other Federal agencies, the systems are generally not as comprehensive and integrated.

In the 1970's, the Congress added a new budget process on top of the existing authorization and appropriations processes so it could better handle the overall Federal budget. To support and carry out the new budget functions, the Congress created new budget committees and the *Congressional Budget Office*. These new processes increased the demands on the systems at the same time that the issues being addressed were getting more complex and the budget itself was becoming more important to policymakers. So the Congress also has found that its processes need to be streamlined, and it is working on new approaches.

Accounting systems in the Federal Government have a different history. Prior to World War II, accounting was centralized in the General Accounting Office. During the buildup for World War II, the disbursement and accounting systems had to be decentralized quickly. After the war, at the recommendation of the Hoover Commission, legislation was passed that formalized the decentralization to the executive departments and agencies, with GAO providing guidance and retaining responsibility for their review and audit. Generally, separate systems were created for payroll, administration, and program operation. Some attempts have been made to consolidate and integrate systems at high levels, but even these have not been integrated with budgeting. So today, we find hundreds of accounting systems with narrow scopes and few linkages to other systems.

Auditing, evaluation, and oversight have also experienced major expansions because of policymakers' growing expectations about their capabilities. Decisionmakers want analysts doing review work to give them clear, specific recommenda-

See Federal Budget, p. 37



David F. Fiske

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"Believe one who has proved it. Believe an expert."—Virgil

Two thousand years have not dented the soundness of Virgil's counsel. If anything, the modern age of rapid change has made expert advice all the more necessary. At GAO, whether the use of new technology makes the evaluator's work easier or harder may depend on how well he or she uses the experts. Data entry, quality control, and computerized data analysis are complex subjects. As generalists, we rarely have the time or the knowledge to cope with this complexity. For this reason, specialists are important to us because their knowledge is often the only way we can get a job done and

Ask the Experts: Getting Through the Information Maze

minimize problems. Our experiences using the new Microm word processors and larger computers for data analysis convinced us of the worth of good advice.

Our review of performance appraisal systems in the Senior Executive Service (SES) employed a number of quantitative techniques for data analysis. These included content analysis and computer-based statistical analysis of our data. Although we were unfamiliar with these techniques at the outset, on the whole the work went smoothly because we sought the advice of experts. When we did run into problems, it was often because we didn't get enough advice.

A Little Learning Is a Dangerous Thing

One tool that was important to our analysis was SPSS, the "Statistical Package for the Social Sciences." SPSS is a large set of programs that allows for computerized, statistical analysis of almost any structured data. Practically any conceivable statistical test can be run with SPSS, and the results are not too difficult to understand.

When we started, we knew almost nothing about SPSS, so we "borrowed" the *SPSS Primer* from our Technical Assistance Group (TAG). The *Primer* is a simplified, condensed version of the *SPSS Manual*, which is comprised of several large and complicated volumes and updates.

We read the *Primer* three times. We discussed SPSS with other auditors who had some experience with it. We drew up sample report outlines to test our understanding of what the final product should look like. But we still didn't know enough to avoid all the problems. For example, because we had read the *Primer*, we knew that SPSS requires the creation of a "get" file—an elaborate set of

labels for each data item. Because we knew this, we were able to tell our analyst from GAO's Institute for Program Evaluation exactly what labels we wanted for our files. And we also discovered that we could change the labels, recompute categories, and reconfigure the data in any number of ways.

However, we later learned that certain changes to a "get" file can change the structure of the underlying data. New changes don't always build on the old, but sometimes require going back to the original data file and starting again. Had we consulted the experts beforehand, we could have avoided extra work by being more careful in designing the original labels and in ordering changes.

Plan, Plan, Plan

Planning in detail is crucial—even more crucial in computer-assisted analysis than in conventional evaluations. The experts know that a once-over-lightly approach to planning in computer applications is a recipe for disaster. In our review, we analyzed over 1,000 senior executive performance agreements. To enter the resulting data into the computer and to reduce it to manageable size required three separate computer programs. So we spent about half a day with TAG staff discussing how these programs would work. This discussion went well. We thought we had agreement, and TAG could begin writing the programs immediately.

TAG said no. They would not start writing the programs without first drafting a "systems flow chart." They said it would take about 2 weeks to draw up this chart, which would plan the interaction of the three programs down to the most minute level of detail.

We thought they were nuts. We were afraid of spending additional time on planning when we thought

we had agreement already. And we had all heard the horror stories of computer programs taking months to get running. We argued for our position, but TAG insisted that we would actually get a better product this way.

TAG turned out to be right. Although there were some delays, the programs processed all the data accurately, and each of the three programs meshed perfectly with the others.

When we saw the systems flow chart, all 40 pages of it, we saw why it was essential. The three programs had to process and keep organized almost 2,000 separate data items. One flaw in any of the programs could have “unzipped” the complex interrelationships between the three programs. We concluded that all the additional time spent in planning had been an excellent investment.

Test It Before You Run It

The experts told us that quality control—testing programs and testing data—had to be built in at each stage of the process. We had two experiences with quality testing, one good and one bad. Both experiences emphasized to us the necessity of testing everything thoroughly.

Our first experience involved testing keypunched data. TAG staff told us that, in addition to keypunch and checking by the keypunch contractor, our product would have to be run through a separate edit program to test for entry errors. Given our other precautions to ensure accuracy, we thought this was a waste of time, but we went along simply to keep the experts happy.

When the verification programs caught over 100 errors, we were glad we followed the advice to check and double-check data quality. After these edits, our SPSS programs ran smoothly, with no errors attributable to bad data. When we later tested the data for accuracy, we found a less than a .07 percent keystroke error rate.

Our second experience was with the Micom word processor. We used the Micom to analyze over 300 comments by senior executives. Using the “file locate” instruction, we were able to classify these com-

ments into major categories automatically. Since the process seemed fairly straightforward and worked every time we tried it on samples we typed into the machine, we skipped talking to the experts and plunged ahead.

Naturally, we had problems. They started when we tried to put the bulk of the comments on the Micom. We had the administrative staff type the comments with a special typeface that the Micom can “read” with the optical character reader (OCR). When we reviewed the OCR input, we found “return” marks at the end of and between each line. The result: the “file locate” instruction could only classify sentence fragments, not whole comments.

To get the Micom operating as we wanted it to, we had to go through the entire file and erase the excess “returns” one by one. This process took two evaluators almost a full day. Next time, we’ll test the entire process from first input to last output. And we’ll talk to someone—an expert—who’s done it already to find out what problems to expect and how best to avoid them.

You Can Make It Work

When we first started our project, we were hesitant to base too much of our work on computers or Micom analysis. The office folklore of computers is filled with spooky tales of data evaporating into electronic limbo, strange glitches ambushing the unwary at exactly the wrong moment, and programs taking forever to work, then delivering garbage

when they do. But we felt we needed the precision and reliability that computers can provide. And we felt we could overcome most of the problems if we got the right kind of help. Experience proved us right.

For example, the Electronic Work Station (EWS) staff in the Office of Information Systems and Services suggested that we could read a computer data base we had developed if it was transmitted to the Micom. By reading the data “raw” this way, we could find out if we were on the right track in our analysis and spot any early problems. Also, Micom would be able to systematically erase unneeded characters in the data base so it wouldn’t look like a jumble of digits.

However, we should have known more. The first three times we tried the “erase” routine, the machine locked up, and days were lost while we tried to figure out the problem on our own. Finally, we asked for help from EWS core staff. Together, we found the problem: the files were too big. Once we cut the files into smaller pieces, the system accepted the task easily.

Perhaps our best experience with advice was when we designed our Data Collection Instrument (DCI). The DCI was the form used to record the analysis of senior executive performance agreements. It was the basic document for our analytical work.

We contacted TAG staff for advice because they had experience in DCI design. They said we should design

See Experts, p. 38

Figure 1

Advice on Advice

- Good advice is logical. It has well-expressed reasons, not just opinion, behind it.
- Good advice is supported by example. An expert offering good advice can point to specific occasions when taking advice is crucial.
- Good advice is convergent. That is, the same advice from several experts on the same subject is probably good advice.
- Good advice advances the job. It is not enough to find problems, an expert should be able to suggest a solution.



Arley F. Franklin

Mr. Franklin, director of the Office of Organization and Human Development (OOHD), joined GAO in 1963. He has worked in the Los Angeles Regional Office, the International Division in Frankfurt, Germany, the Office of Staff Development, the Organization and Management Planning Staff, and General Services and Controller. He attended Southwest Missouri State University and California State University at Los Angeles, and received a master's degree in organization development from George Washington University in 1978. He is currently pursuing postgraduate work at Virginia Tech. Mr. Franklin has received the Comptroller General's Award (1979). He was named to Outstanding Young Men of America in 1973.



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Planning for Change: How To Ensure an Effective Transition to the Future

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The Office of Organization and Human Development provides a cohesive approach to the development, delivery, and evaluation of human resource management programs in GAO, thereby helping the agency more effectively carry out its responsibilities concerning its work force. In this context, OOHD supplies change management assistance on request. The following article describes how OOHD can help us anticipate, plan for, and successfully deal with change in the workplace.

Change: The Inevitable

There is no need to build a case that change is with us. Change has been with us throughout history, but it has taken a new twist in recent times. Contemporary change has taken on a tone of increasing intensity, complexity, and frequency. Most important, more people are affected more significantly by change.

Change is a constant and often unpleasant factor in our personal and work lives. In our personal lives—the way we live, the homes we build or buy, the vacations we plan, and the schools our children attend—change, usually unplanned, con-

fronts us. The process of making decisions on each of these arouses all the feelings any change brings—doubts, fears, anxieties, and threats.

The organizations we work in have the greatest difficulty changing in order to remain viable and dynamic. Adapting to new leadership, undergoing reorganizations, changing work processes, shifting roles, adapting to new technology, or simply relocating an employee's office space can produce complex problems. These problems and their change issues take time away from the accomplishment of organizational goals. In addition, most organizations are not well equipped to bring about optimal results when a change occurs.

The Change Process

Organizational change is simply movement from a current state to a future state. The future state represents the results of an effective change process in which all goes well and change objectives are achieved. Between the current and future states lies the critical state called transition. This is where we usually encounter our difficulties. The manner in which we plan and manage the transition state determines the health of our future state.

A specific description of the future state is also of paramount importance. How do you know if you're getting there if you're not clear about your destination? Change objectives, goals, and future states are like many-headed creatures. On first glance, an organizational change may appear to be merely structural or procedural when, in fact, it will require change in norms, behavior, and work relationships. It's very important to sort out the different facets of change because organizations

operate as open social systems. As systems, all aspects of the organization are interrelated, and change in one seemingly isolated part of the organization affects others. A simple change like relocating a staff member may disrupt work relationships, morale, and even productivity. A proposed change in one part of an organization must be carefully assessed in terms of its potential effect on the rest of the organization.

Change: The Uncomfortable

Why does change create such difficulties for us? Only people can make change work—systems, structures, and procedures are merely some of the ingredients in the process. Unless the people directly affected by change are working for the change in a positive direction, they are resisting or working against its successful implementation. Is this because people are naturally difficult?

We know that most people are not naturally difficult, but we do know that they

- prefer stability or equilibrium to disruption and uncertainty,
- are inquisitive and concerned and have a need to understand the purpose of change,
- view themselves as information resources and think they can make contributions to the change processes,
- like to be involved in planning because they usually support what they have helped to build, and
- have a vested interest in the status quo.

Involved and committed participants in the change process can help guarantee successful results. These are a few factors which, when overlooked, can contribute to resistance to change.

Human resources are the driving force behind successful change. As Richard Beckhard views it, the challenge of change facing managers is, "How can we optimally mobilize our human resources and energy to achieve the organization's mission and, at the same time, maintain a viable, growing organization of people whose personal needs for self-worth, growth and satisfaction are significantly met at work?"¹

Change: Let's Get a Handle On It

We need to plan in advance for change. We can't wait for change to force us to react—we all know from experience that the costs are too high. Anticipating and planning for it can help us control and guide its impact on our organizations and human resources. Planning and anticipating means more than tolerating change. It means understanding, managing, and encouraging this process so it will work for us and not against us.

Many organizations have recognized the need to bring in change specialists to work with management to plan change and improve organizational health. These managers have found that, without some form of assistance, the change process can be stressful and the loss in productivity costly.

Organizational consultants or change specialists are uninvested third parties in the process and are traditionally external to the organization. Use of experts outside the organization has been the standard way to meet the change challenge. Recent literature suggests that management should also consider using internal change specialists to help implement change. Internal consulting help has more potential than most organizations realize. This is not to say that drawbacks don't exist, only that most can be overcome. Both internal and external change specialists can help the manager meet the challenge successfully.

Some Advantages of Using Internal Change Specialists

There are certain advantages to the use of internal change specialists, including

- their knowledge of the organization, its history, culture, mission, dynamics, values, and operations;
- their understanding of where the power lies, who holds key positions, and what personalities are involved; and
- the degree of needed trust they bring to the relationship by being a known quantity.

External consultants may require extensive time and energy to gain the necessary organizational knowledge base. On the positive side, the external specialist should bring an objective perspective and specialized knowledge and skills to bear on the consulting relationship. "The internal consultant frequently faces the dilemma of achieving credibility while the external consultant is most likely to be coping with the dilemmas of gaining entry into the system."²

To capitalize on the advantages and avoid the disadvantages of using internal change specialists, OOHD builds consulting teams composed of an internal and an external consultant. Such a team gives the insider "expert" legitimacy for his or her efforts and an objective perspective. Likewise, this combination gives the outside expert a grounding in the organization.

Change Specialists: What Are We All About?

OOHD's approach to change management involves collaboration between the consulting team and the organization's managers throughout the change process.

Effective change management requires an assessment and description of the present state of the organization, a comprehensive definition of its goals, a plan for working through the transition state, and an evaluation of the process. Our approach to change management involves collaboration between the consulting team and the organization's managers throughout the process.

Change specialists can fulfill a number of roles within an organization. You can look to change specialists to serve as

- facilitators who can assess the organization and identify issues that highlight the need for change;

¹Richard Beckhard and Richard Harris, *Organizational Transition* (Reading, Mass. Addison-Wesley Publishing Co., 1977), p. 79.

²Ronald Lippitt and Gordon L. Lippitt, "The Consulting Process in Action," *Training and Development Journal*, 29, No. 5 (May-June 1975), p. 139.

- catalysts who can help the organization overcome inertia and start working on its problems, who can uncover issues, question the status quo, and energize a problem-solving process;
- process helpers who can help formulate a clear statement of the intentions and expectations of change;
- facilitators who can help formulate a change plan and develop implementation plans after change goals have been established and accepted; and
- mirrors that don't hedge on the truth, helping to ensure that blind spots don't remain hidden from managers too close to their organizations to accurately view the "full picture."

In addition to serving in many roles, OOH change specialists can also help ensure that the following criteria of effective change management will be met:

- "The organization does, in fact, move from the current state to the future state.
- The functioning of the organization in the future state meets expectations, i.e., it works as planned.
- The transition is accomplished without undue cost to the organization.
- The transition is accomplished without undue cost to the individual organizational members."³

OOHD change specialists, both internal and external, assist the organization in the change process by providing service in the areas of role clarification, conflict management, team-building, organizational analysis, and personal consulting. These services are provided in response to specific situational requirements. For example, changes in leadership are not merely personnel actions; they represent significant organizational change. To more appropriately address the process of change and transition, OOH has, over the past several months, embarked on the development of a leadership transition intervention. The services of internal and external specialists are used to take a "picture" of an organization's climate and culture and assist with the introduction of new leadership into those organizations. This intervention has allowed the organization to change leadership in a more effective manner by reducing

the period of "downtime" normally associated with change in leadership.

In providing these and additional services, we have identified some key factors that make the change process work. Success usually hinges on working with those in the organization supportive of change and improvement. It is difficult and often counterproductive to focus energy on those who are defensive and resistant. An attempt to force change on an unwilling organization or manager will be met with an equal and opposing force. It is absolutely necessary to wait until the target management system or individual is ready for assistance. Change specialists must also avoid being "seduced" by management to

- "fix" an errant manager,
- use "team building" as an exercise to coerce a manager, and
- collect data on organizations when there is no intention of acting on the data.

In addition, if an organization cannot internalize and manage its conflicts and issues and sees them in terms of "black and white," this is a signal that the organization may not have the capacity to bring about an effective change. Our most successful consultations are characterized by

- open and honest communications,
- willingness to be introspective and examine issues,
- desire for excellence,
- genuine interest in human resources, and
- interest in learning and skill improvement.

A change relationship can be an exciting and rewarding experience for both the change specialist and the organization members. It can also produce frustration and disappointment if the relationship is not properly managed.

Conclusion

Organizations and individuals do not change rapidly, and it is unrealistic to believe that effective change can happen overnight. Change specialists can help meet the challenge to manage change so that organizations and individuals benefit. Careful planning and implementation of change management strategies are sometimes slow and tedious, but, when the change is finally in place,

its beneficial effects usually show up quickly.

Managers and organization members can either anticipate and plan for change, or they can sit back until forced to react. If our organizations are going to be dynamic, viable, and responsive in the future, sitting back and reacting is not a plausible option. We need to be one step ahead of change. "Effective management allows us to plan for and influence the course of change."⁴ The change specialist can help organizations realize this and assist in making change what it should be—an effective transition to the future.

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³David A. Nadler, "Managing Organizational Change: An Integrative Perspective," *The Journal of Applied Behavioral Science*, 17, No. 2 (1981), p. 196

⁴Gordon L. Lippitt, "Coping with Change," *Management World*, 3, No. 8 (August 1974), p. 11

See *Change*, p. 38



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Legal Minimum Wages – Benefits, Costs, and Unanswered Questions

Ever since its enactment, the Federal minimum wage has provoked controversy with two equally vocal camps of supporters and opponents arguing their cases with more bombast than solid evidence. Economists, despite extensive theoretical and econometric research, have been unable to reach consensus on this subject.

The minimum wage, set by Federal law for most types of wage employment, and related issues such as a youth subminimum wage, are continuing subjects of debate before the Congress. Our earlier report, "Minimum Wage Policy Questions Persist" (GAO/PAD-83-7), discussed areas of agreement and uncertainty about the effects of the minimum wage. We hope that the congressional committees involved can use that report to make informed decisions about an issue that is inevitably political—decisions that will help some and hurt others.

Economic Effects of the Minimum Wage

When the minimum wage was first established in 1938 under the Fair Labor Standards Act (FLSA), it applied to, or covered, only 43 percent of all workers. Today, coverage exceeds 83 percent, with most workers covered actually earning more than a minimum wage.

Who are the minimum wage workers? Almost half are under 24 years old; nearly one-third of these are teenagers. Another 6 percent are over age 65. From another perspective, 70 percent of all minimum wage workers are spouses, children, or other relatives of the head of the household. In general, these workers are secondary earners in the household—often new entrants or re-

entrants into the labor force. Only about one in four minimum wage workers heads a household.

The Congress' original motivation to institute a minimum wage, and behind its continuing action to increase the level and amount of coverage, is "to maintain the minimum standard of living necessary for health, efficiency, and general well-being of workers."¹ Our earlier report focused on whether minimum wage laws have achieved this objective, and perhaps more importantly, asked how the minimum wage population will be affected by further increases in the minimum wage.

To understand the effect of these laws, the workings of the unskilled labor market must be known. This market has three participants: the employers or buyers of labor, the workers or sellers of labor, and the Government. How much low-skilled labor (in terms of either number of hours or number of employees) an employer will hire depends on many factors, including what type of production process is used, the state of the economy, the prices of other resources used in production, and the price, or wage rate, that an employer must pay for unskilled labor. Employers hiring low-skilled labor act like all consumers when buying virtually any good or service—the higher the price, the less the employer will buy. Even ignoring how the sellers, i.e., low-skilled workers, will react to a raise in their pay, a mandated rise in the legal minimum wage will lead employers to purchase less unskilled labor, or to hire fewer unskilled workers than they would have before the minimum wage was increased. This results in a situation where workers want to work, but cannot find jobs, causing a rise in unemployment.

¹29 U.S.C. 202(a).

To be sure, some of those who are laid off or have their hours reduced might find work in sectors of the economy not covered by a minimum wage, but even these opportunities become fewer as the coverage of the legal minimum wage expands to additional types of employment.²

Is A Minimum Wage Desirable?

Those who have examined this issue agree almost unanimously that increases in an effective minimum wage will lead to employment losses. The question then becomes: is it desirable when some people are helped and others hurt by the minimum wage? The answer depends on several factors:

- How much employment is lost?
- Who is most likely to lose a job?
- How do the increased social and personal costs attributable to rising minimum wages compare with the higher incomes received by some workers?

Unfortunately, the data and tools of analysis are not precise enough for researchers to produce answers which will fully satisfy both advocates and opponents of minimum wage laws.

There is some agreement that job losses caused by increases in the minimum wage are relatively small, although available studies do not present a precise estimate of how many jobs are lost. The Minimum Wage Study Commission surveyed the current research and reported a rough consensus that a 10 percent increase in the minimum wage would lead to a 0.5 to 2.5 percent decrease in teenage employment relative to the employment possible if the minimum wage remains unchanged.

Opponents of legal minimum wages contend, however, that any job loss is too high a cost. This contention is often supported by arguments of both economic efficiency and equity. If total employment is lower with a minimum wage than without, total output in the economy will be smaller than would otherwise be true. This means fewer available goods and services, damaging the economy as a whole. When this happens, the economy is not producing to its maximum ca-

capacity. The size of this effect, that is, the loss in economic efficiency, cannot be easily measured using available data and analytical techniques. The equity argument holds that for the system to be fair, those who benefit from the minimum wage should compensate the losers. Since no mechanism exists to achieve this result, the natural conclusion is that the minimum wage is inequitable. However, many economists concerned with these types of redistributional questions would say that the winners' gains were large enough so that compensation *could* occur (even though in reality it actually does not occur), the result being that the society is better off than before. Using this rationale, these economists would reject the equity argument.³ In the case of the minimum wage, if job and income losses are small compared to the increased wage income of those who keep their jobs, the gainers (those with increased income) could, conceivably, compensate the losers, and still be better off than before.

Analysts generally agree that when the minimum wage increases, teenage workers suffer the greatest job losses. In some ways, this mitigates the negative effects of the employment losses, because teenagers are unlikely to be their family's primary wage earners. However, counter-arguments are also offered on this issue. When teenagers cannot find work, they may find it harder later on to gain the necessary skills to escape low-wage, unskilled work. Moreover, part of the "pay" of new job entrants (teenagers) is the on-the-job training provided by an employer. But when faced with a new, higher minimum wage, the employer may reduce the amount of training. Thus, even employed teenagers might lose the opportunity to acquire necessary skills when employers are forced to pay a minimum wage.

Although there is limited empirical evidence showing the importance of this effect, the Reagan Administration has suggested a summer youth minimum wage to increase teen employment during the summer months. Such a subminimum would probably increase the number of jobs for teenagers; however, questions remain. What, for example, will happen to the wages of those teens already

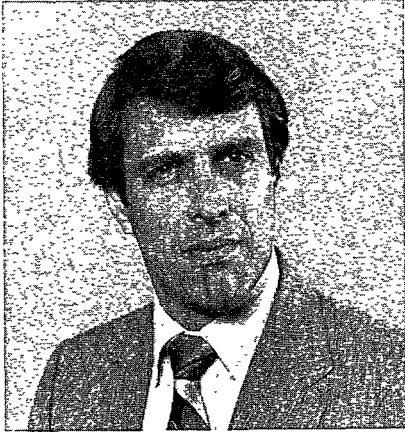
employed at the existing minimum? Indeed, the potential beneficiaries may themselves not like the idea. Even though more teenagers will get jobs, the trade-off is in lower wages, perhaps resulting in a teenager's feeling of being "discriminated" against."

Do minimum wages work? Are the living standards of the working poor improved? Once again, these are difficult political questions. One answer might come by examining whether an increase in the minimum wage changes the way personal income is distributed through the population. An increased share of income moving to the poorest part of the population would suggest that the law is achieving the objective desired by the Congress. However, no study has found consistent evidence showing that a minimum wage alters the share of income going to poor families, a result that is not really surprising if two facts are considered. First, not all the poor gain from the minimum wage; some also lose. Second, many minimum wage earners are not members of poor families. As a result, an increase in the minimum wage is distributed across nearly all levels of family income. Even if the higher minimum wage should lift absolute levels of income in poor families, their relative standing would not improve much. Whatever the merits of a legal minimum wage, it is a poor instrument to redistribute income toward the poor.

²For example, agricultural workers have only recently been covered by the minimum wage.

³For example, if one person gains \$2 and another person loses \$1, we cannot be sure that the two people taken together are better off. Since the winner *could* pay the loser \$1 and still be \$1 ahead however, many economists would feel that the two people are better off. This implies that the welfare losses and gains of individuals can be measured by the dollar changes in their incomes, either an increase or decrease. This is a heroic assumption that is used to simplify the analysis. It is not really possible to measure the effect on society's well-being when one person loses and another one gains

See Wage, p. 38



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Why Are Natural Gas Prices Rising?

Why, in the mildness of autumn, should you worry about natural gas prices?

- For those who live in the north, heating bills during the winter of 1982-83 were essentially unchanged from the previous year's levels only because the mildest winter in 29 years counterbalanced rising prices. And this winter is only a few months away.
- For those who live in Texas, California, and several other "sunbelt" States, natural gas is used to generate much of the electricity used for summer air conditioning.
- For all of us, natural gas prices have been—and promise to remain—a source of considerable concern to the Congress and the public.

This concern has led to a series of GAO reports on the reasons for natural gas price increases, State and local responses to such increases, analyses of the administration's natural gas pricing proposals, and related topics.¹ Among our current efforts is a series of "case studies" designed to analyze why prices increased in Boston, Detroit, Kansas City, Los Angeles, and Pittsburgh.

The Natural Gas Industry

Natural gas accounts for somewhat over 25 percent of the U.S. energy supply. Nationwide, industry accounted for about 36 percent of all gas used in 1982, more than any other sector. Residences accounted for about 29 percent; electric utilities, 20 percent; commercial establishments, 14 percent; and miscellaneous uses, 1 percent.

The natural gas industry is comprised of three segments—production, transmission, and distribution—

which are physically interconnected by a network of pipelines and mains throughout the Nation. Companies in the various segments may also be related through corporate affiliations. Producers include thousands of small, medium, and large firms which explore for, drill for, and produce gas. All domestic production is subject to Federal price regulation. Texas, Louisiana, Oklahoma, New Mexico, and Kansas—in descending order—account for about 88 percent of production. Gas imports from Canada, Mexico, and Algeria also contribute to the supply in selected areas.

Producers sell most of their gas to transmission, or pipeline, companies. They also sell some gas directly to distributors or end-users. Pipeline companies transport gas from the producing areas to consuming areas. There are 139 interstate pipeline companies which are regulated by the Federal Energy Regulatory Commission. Finally, there are almost 1,600 distribution companies throughout the Nation. They are usually local public utilities, serving a specific market area and under the jurisdiction of State or local regulatory bodies.

Although the recent price in-

¹Recently issued reports include the following "Natural Gas Price Increases: A Preliminary Analysis" (GAO/RCED-83-76, Dec. 9, 1982), "Information on Contracts Between Natural Gas Producers and Pipeline Companies" (GAO/RCED-83-5, Feb. 22, 1983), and "State and Local Responses to Natural Gas Price Increases" (GAO/RCED-83-142, Apr. 25, 1983). We would like to recognize the contributions of Victor Antelman, Simon Bonderow, James Dishmon, Lisa Shames, Doreen Stolzenberg, Phyllis Wiesenfelder, and Paul Wilson to these efforts.

creases have attracted widespread attention, natural gas prices have been rising for many years. Originally, natural gas was largely a by-product of petroleum extraction, and 3 decades ago, gas sold for less than 10 cents per 1,000 cubic feet (mcf)² at the wellhead. The comparable price in December 1982 was \$2.56 per mcf.

On a national basis, end-user prices vary widely, both from one type of customer to another and from one city to another. According to the Department of Energy's Energy Information Administration, the national average end-user price increased from 84 cents per mcf in 1974 to \$3.39 per mcf in 1981, representing a compounded growth of 22 percent per year. In 1981, residential users paid \$4.29 per mcf, the highest average price, while industrial users paid an average of \$3.14, and electric utility users paid an average of \$2.89. However, residential users experienced a lower annual rate of increase between 1974 and 1981 (about 17 percent) than did industrial users (24 percent) and electric utilities (28 percent).

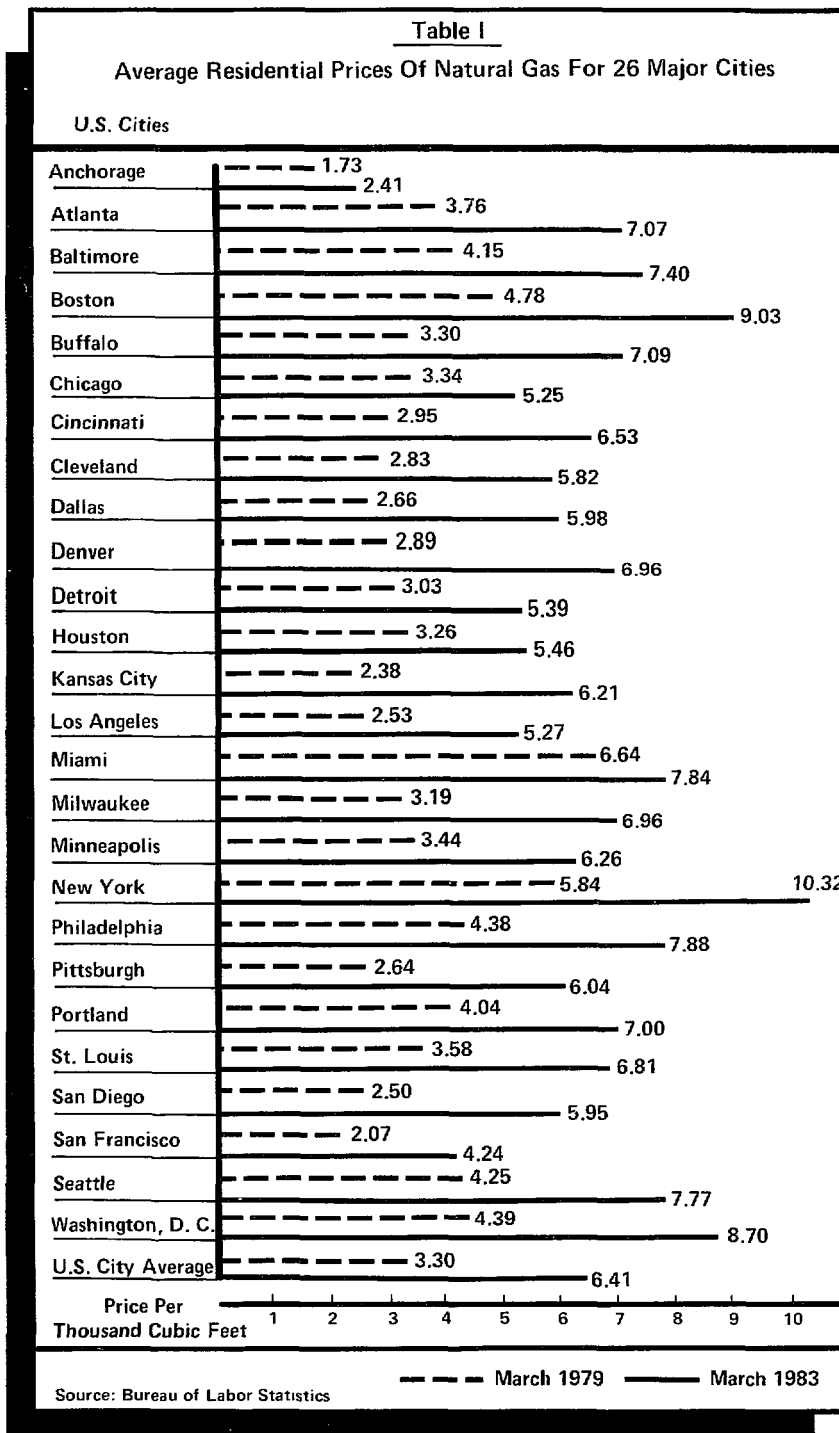
Data from the Bureau of Labor Statistics provide more detail on residential prices. These data show considerable variation from city to city. The average increased from \$3.30 per mcf in March 1979 to \$6.41 per mcf in March 1983. The lowest prices were recorded in Anchorage, San Francisco, and Chicago; the highest in New York, Boston, and Washington, D.C. (Table 1 lists rates for 26 major cities for March 1979 and March 1983.)

What Accounts for Price Increase?

Natural gas prices have definitely risen, but there is no certainty about why they have risen. One way to discover the cause is to analyze the flow of revenues from end-users back to the various segments of the natural gas industry. Another approach is to focus on the various factors which appear to be responsible for the increase.

Distribution of Gross Revenues

Prices paid by end-users flow back as gross revenues to distribu-



tors, pipelines, and producers. Although definitive information is not available on how much each segment retains, we hope to find that information in the course of our ongoing case studies. However, we can relate the results of two national analyses. One of these was performed by the American Gas Associ-

²Quantities of natural gas are often measured on the basis of volume. Frequently used measures include billion cubic feet (bcf) and thousand cubic feet (mcf). Alternatively, gas may be measured on the basis of heat content, in terms of British thermal units. A single cubic foot of natural gas typically contains about 1,021 British thermal units. Thus, an mcf is roughly equivalent to a million British thermal units (MmBtu).

ation (a trade group).³ The other was performed by staff of the Federal Energy Regulatory Commission.⁴ The two studies differ somewhat in their methods and results, but they suggest similar overall conclusions about the distribution of end-user prices. The studies show that the gross revenues received per unit of sales increased between 1971 and 1981 for all three segments. But the rates of increase differed so much that there were notable shifts in the distribution of the total revenues. Principal points of agreement in the two studies were as follows:

- The distributors' share of gas revenues was reduced by more than one-half and represented 15 to 21 percent of the total in 1981.
- The pipelines' share was reduced by a smaller proportion and represented 21 to 25 percent of the total in 1981.
- The share for producers (both domestic and imported) approximately doubled, reaching 53 to 64 percent of the total in 1981.

We note that these studies deal with gross revenues, and not net revenues or profits.

Analysis of Selected Factors

Recent price increases have been attributed to a wide range of causes. The December 1982 report, cited above, identified a number of factors which could contribute, in some measure, to price increases in various localities. It did not attempt to determine which factors are most important in any specific locality. We are trying to do so in the current case studies.

One cause for price increases is gas pricing itself. Pipeline purchases of natural gas from producers are governed by the Natural Gas Policy Act of 1978. The act essentially established eight major price categories for first purchasers of natural gas, and the prices paid by pipelines depend on both the quantity of domestic gas in each category and the price of gas in each category, as well as the quantity and price of imported gas.

Also, the regular increases in ceiling prices for the various categories can affect gas price. For example, the ceiling for new natural gas in-

creased from about \$2.14 per MmBtu in March 1979 to about \$3.34 per MmBtu in March 1983.

Incentive prices for high-cost gas, as provided by the act, is also a cause for price increases. According to the most recent, published Energy Information Administration data for major pipelines' projected purchases, high-cost gas accounted to about 6 percent of wellhead purchases nationally in mid-1982. Pipelines expected to pay an average of \$7.24 per MmBtu, considerably higher than the average price for all wellhead purchases of \$2.35 per MmBtu (both in January 1982 dollars).

A third cause is the depletion of old gas reserves. As existing gas reserves are depleted, they must be replaced by new gas to ensure a stable gas supply. This depletion rate is important because the old gas usually sells for considerably less than new gas.

A fourth cause relates to clauses in producer-pipeline contracts. Many contracts obligate the pipeline to pay for a set amount of gas even if the pipeline does not have a ready market. These so-called "take-or-pay" clauses can induce pipelines to pass up less expensive gas and

accept more expensive gas; this, in turn, causes average gas prices to increase.

These causes can combine to produce fairly dramatic changes in the price and quantity of wellhead purchases, as shown in table 2. Between mid-1981 and mid-1982, the total amount of pipeline purchases increased less than 2 percent. But the amount of old gas (gas from fields in production before enactment of the 1978 act) declined about 9 percent, the amount of "new gas" (gas which started to be produced after 1978) increased 14 percent, and the amount of high-cost gas increased 70 percent. Analysis of the changes in prices and quantities shows that the quantity shifts between categories were more important than price increases in explaining the higher overall average price.

Finally, we will briefly summarize how gas is priced to distributors and

³American Gas Association, *Gas Facts 1981*, p 124

⁴Memorandum dated Mar. 8, 1983, from staff to the Director, Office of Regulatory Analysis, Federal Energy Regulatory Commission, on the subject of "Pipeline Cost Increases."

Category of gas	Mid-1981		Mid-1982	
	Volume (in billion cubic feet)	Price Per mcf (note a)	Volume (in billion cubic feet)	Price Per mcf (note a)
Old gas	6,348	\$1.25	5,803	\$1.28
New gas	3,348	2.96	3,826	3.10
High-cost gas	390	6.12	664	7.24
Other	85	2.60	60	2.87
Total (note b)	10,170	\$2.01	10,352	\$2.35

a / Prices are given in January 1982 dollars
b / Details may not add to total due to rounding. Totals represent weighted averages

Source: Energy Information Administration

end-users. Prices paid by distributors depend on the prices paid by the pipeline suppliers, plus pipeline operating expenses, recovery of investments, and rates of return. Prices paid by end-users depend on the prices paid by their distributors, the distributors' expenses, and the way these costs are allocated to residential, industrial, and other classes of users. Reduced consumption by end-users can result in underutilization of pipeline and distribution company facilities. When this happens, the fixed expenses of these companies are spread over a smaller volume of natural gas sales, resulting in a higher price per unit.

Why Do Prices Vary from City to City?

The average natural gas prices shown in table 1 demonstrate that prices increased substantially between March 1979 and March 1983 for all of the 26 cities listed. However, the averages also suggest another conclusion: prices vary widely from city to city. The lowest prices were registered in Anchorage, San Francisco, and Chicago; the high prices in New York, Boston, and Washington, D.C.

The natural gas sold in San Francisco is essentially the same physical commodity as the gas sold in Boston. Yet San Francisco's householders paid an average of \$4.24 per thousand cubic feet in March 1983, while Boston's paid an average of \$9.03 for the same quantity. Prices for other commodities, such as gasoline or apples, also differ from city to city, but the range of natural gas prices is unusually large.

One reason for intercity differences is that consumers who are farther from the producing areas pay more for transporting the gas than consumers who are closer. It stands to reason that, if all pipelines paid the same amount for their gas supplies, end-user price differences would reflect the cost of moving gas—often hundreds of miles. Thus, it is not surprising that the highest

prices are found on the East Coast, including Boston (\$9.03) and New York (\$10.32).

A second reason for intercity differences is that all pipelines do *not* pay the same amount for gas. For example, cities in Texas, the largest gas-producing State, pay rates which may seem surprisingly high; gas costs more in Dallas (\$5.98) and Houston (\$5.46) than in Detroit (\$5.39) and Chicago (\$5.25).

Differences between pipelines in their gas purchase costs derive, first, from the effect of Federal price controls in the interstate market (in essence, where gas is produced in one State and consumed in another State) since 1954. Federal price controls have applied in the intrastate market (in essence, where gas is produced and consumed in the same State) only since 1978. Therefore, substantial quantities of "old" and relatively inexpensive gas are under contract to interstate pipelines, but not much "old" gas is available to intrastate pipelines.

Differences in pipeline gas purchase costs also reflect large differences between interstate pipelines in their supplies of "old" gas, "new" gas, and high-cost gas. According to a recent analysis, some pipelines paid, on average, up to twice as much as other pipelines for gas purchased from producers. Such differences can translate into big differences in end-user costs. For example, the primary pipeline serving Chicago (\$5.25) had a much lower average cost than the primary pipeline serving Washington, D.C. (\$8.70).

A final reason for intercity differences is the effect of State regulatory policies on prices charged to residential, industrial, and other customers. The rates to various customer classes usually reflect the different costs of serving them. Because residential customers are more expensive to serve, their rates are usually higher. For example, the distribution company serving Chicago received an average of \$5.61 per thousand cubic feet in January 1983 from residential customers and \$4.48

from industrial customers whose service could be curtailed if supplies were short.

However, a State regulatory commission may shift a portion of the costs normally carried by the residential class to industrial and other classes. Because of commission action in California, distributors there collect less revenue per thousand cubic feet from residential customers than from others. For example, the distribution company serving San Francisco received an average of \$4.32 per thousand cubic feet in January 1983 from residential users and \$5.49 from industrial users.

Are High Costs a Trend?

Natural gas prices have been rising steadily for many years. Will such increases continue?

Future gas prices depend largely on two factors which are external to the gas industry. The first is national economic conditions, which affect gas consumption, especially in the industrial and electric utility sectors. A weak economy means lower sales and exerts downward pressure on prices. The second is world oil prices, which affect the competitiveness of gas with residual fuel oil, again largely in the industrial and electric utility sectors. Lower oil prices mean more competition and exert downward pressure.

In the recent past, an anemic economy and lower oil prices have sharply reduced gas consumption and led the gas industry to undertake numerous actions to stabilize, or even reduce, prices. These forces may well work to keep prices relatively constant during the coming winter.

In the long run, however, there is less certainty. A stronger national economy can be expected to increase consumption and permit some price increases. Higher world oil prices can be expected to reduce price competition with gas and also permit some price increases.



A Week's Worth



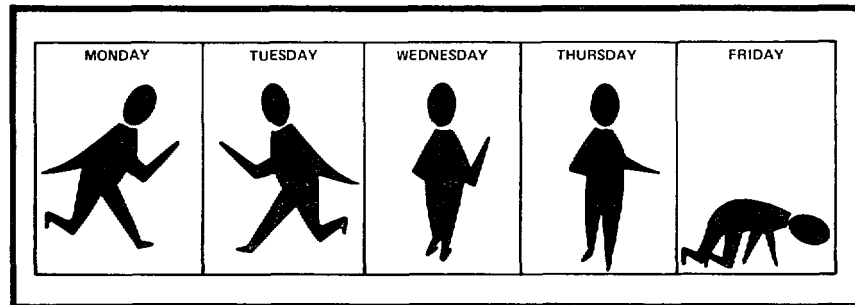
Howard N. Johnson

Mr. Johnson, the branch manager of the Counseling and Career Development Branch, OOHD, came to GAO in August 1981 from the Howard University Counseling Service in Washington, D.C. He is a licensed psychologist (D.C.) who worked at Howard and maintained a private practice in Washington before coming to the agency. He earned a B.S. in biology from Roosevelt University in Chicago, a master's degree in biology education and counseling from Southern Illinois University, and a Ph.D. in counseling psychology from the University of Iowa.

Monday

I start the day the same way I do every morning—with a cup of coffee. Unlike many people, I seldom have what rock-and-roll singer Fats Domino called a "Blue Monday." My guess is that I'm either too old to appreciate weekends the way he did or that I'm thoroughly enjoying my job. It's probably a combination of both.

Thinking about my own career reminds me of the Career Management System project the Counseling and Career Development (CCD) staff is working on. Employees now seem much more concerned about making wise career decisions than they were before. I guess you could blame the slumping U.S. economic picture for turning what was a lackluster topic 5 years ago into a major concern for the 1980's. Project staffers have been wrestling with the question of how to mesh the individual concerns



of employees with those of supervisors and make a well-integrated, mutually meaningful model for both. I was pleased with their progress but recognized that there was still more to be done.

I'm scheduled for a lot of meetings today. The first, one of OOHD's twice-weekly "program review" meetings, has an agenda calling for discussions on two projects involving the Training and Management Development branches. My next meeting dealt with new procedures and forms to be used when reporting the status of new projects. The last is a briefing given by CCD staff members Milt Cambridge and Liz Carr on a proposed health advocacy program for the agency. This meeting took up the remainder of the morning.

After lunch, I met with Steve Medlin, branch manager from Organization Analysis and Planning and Sam Holley, a member of his staff, to go over the latest developments of the Upward Mobility Program. The meeting ran slightly over its allotted time, however, and I had to rush back to my office for an appointment with a counseling client. I'd had several previous sessions with this person regarding some involved, personal issues. This time, she talked about the outcome of a suggestion resulting from last week's meeting.

I used the rest of the day to catch up on some required reading and review the health advocacy program materials left by Milt and Liz.

Soon, I was driving home through the typically congested rush hour traffic between downtown Washington and Colesville Road in Silver Spring. Then, I turned up tree-shaded Sligo Creek Parkway, leaving the

traffic snarls behind. This is the most relaxing part of my trip home. It reminds me how much I love the outdoors. It also brought to mind the amount of gardening I was able to accomplish this past weekend, despite intermittent rain.

Tuesday

For some reason, Tuesday mornings tend to be free of meetings and appointments, a phenomenon that usually gives me a welcome chance to do some report writing, correspondence, and planning. Today was no exception. I need to work on the objectives for fiscal year 1984 program plans, which are due Friday, and I need to write several memos. This morning, I had a lot of "drop-in" questions from the CCD staff. Bob Ackley, for example, wanted to go over the procedures used to register workshop participants. And Janet Wilson, who coordinates the intern program and work schedules, gave me an update on the announcement for next year's intern program. We also talked over the tentative vacation and travel schedule for the summer.

The OOHD administrative staff meeting usually held Tuesday during lunch was canceled, so I grabbed a hamburger and french fries from the cafeteria and returned to the office. This afternoon, I had appointments with two clients. One of the clients wanted to discuss career planning. He was a very bright, better-than-average performer who felt pressed to decide whether or not to try his hand at working in the private sector for a couple of years. He had an offer which, outside of its potential, was

not particularly attractive. We talked about the risk factors on either side of this decision and the odds came up even, in our estimation. He still has several weeks to decide what to do. We ended this exploratory session and agreed to make a followup appointment for next week.

Later in the afternoon, I had a meeting with Lynn Ernst, an OOH staff member I've been working with on a project. The meeting produced some good results. We discussed the status of our project and agreed that substantial progress had been made. The monitoring process we are using on the project seems to be working out fine, and only a few mid-course corrections will be necessary.

I ended the day by reviewing the afternoon mail and placing some phone calls. My wife, Sylvia, called to remind me of the annual Montgomery County (Md.) Consumers COOP Award dinner we will be attending tonight.

I left the office in the midst of a heavy downpour that slowed the rush hour traffic to a crawl. By the time I arrived at the church where the dinner was being held, Sylvia, my 13-year-old son, Stephen, and 12-year-old daughter, JoAnn, were all seated. Although the meal itself was very ordinary, the fact that JoAnn entertained the dinner guests with two piano selections made the occasion very special for a pair of proud parents.

Wednesday

Wednesday normally begins with the second of the twice-weekly OOH "program review" meetings. We met for the customary hour and accomplished much. Finding that my 10:00 a.m. meeting was canceled, I looked over the mail and placed phone calls. Afterward, I met with Dr. Flora Bryant, a consultant, to discuss arrangements for a stress workshop to be given at the Philadelphia Regional Office. She had suggested modifications in the materials to highlight their relevance to the goals of participants. The idea of meeting with individuals before the workshop is something we haven't tried yet, but it sounds interesting. We speculated on what reactions we could anticipate and how such meetings could be arranged without major work disruptions.

After lunch, several other staff members and I previewed a videotape lecture on "wellness" given by Dr. David Morrison. The CCD staff psychologists were asked to serve as facilitators for groups interested in viewing the tape. In this meeting, we wanted to work out a strategy that would provide the viewers with the maximum educational benefit.

After the videotape showing, I spent the rest of the day pulling together information for the monthly report. The new procedures took longer to complete than I expected. It shouldn't take as long next month.

Every Wednesday evening, I go from work directly to the Comprehensive Evaluation Service, a local mental health agency where I serve on the board of directors and volunteer one evening of work per week. After meeting with one client, I finally headed for home at 7:30.

Thursday

I spent the first hour this morning preparing for a planning meeting with the Career Management team. The first draft of the proposal has been approved, and now specific assignments need to be clarified. As expected, the meeting lasted 2 hours. Although the team works well together, the problem of coordinating the various facets of the project required a long discussion. The meeting ended with several key issues resolved.

Before going to lunch, I had an extended phone conversation with Bob Meahls, the training coordinator in the Philadelphia Regional Office, to make final arrangements for the stress management workshop and work out details for a conference call involving the Boston and New York Regional Offices.

During our regular weekly staff meeting today, Dr. Earl Sutherland, of the Montgomery County (Md.) Family Counseling Service, shared with us his latest research findings on the neurophysiological dimensions of hypnosis. His presentation was very technical, although he was quite informal and relaxed. All of us found his information fascinating.

After the staff meeting, a client dropped by to talk about the escalating seriousness of her problem. I agree—matters are not improving. The personal variables suggest the

need for community referral, an avenue she had refused to pursue in the past. I repeated my recommendations for outside assistance and discussed alternatives with her. We agreed that any improvement would be minimal and temporary without long-term intervention. After the session, I had time to return phone calls and catch up on some reading.

That evening, I took JoAnn to her piano lesson in Bethesda, Md. I think she is going to be very good at it some day. Having been a piano student myself, I know what she has to go through.

Friday

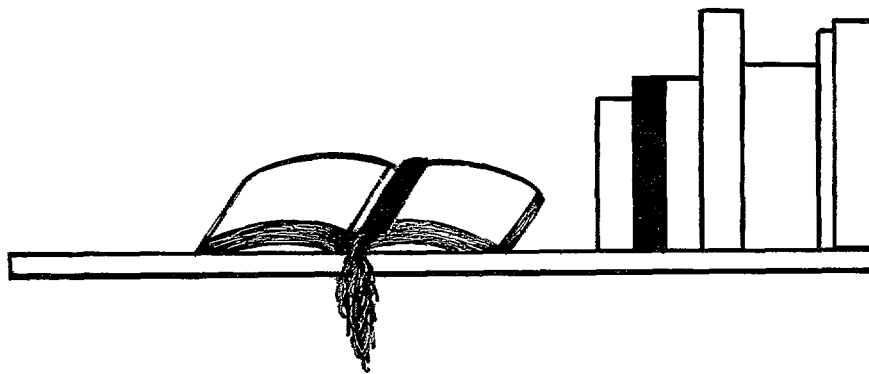
Today I attended the Personnel Systems Development Project briefing on the new procedures for annual assessment. Attendance is mandatory at these briefings, as it will be for all GAO employees. Our staff attended the briefing as a group. After the meeting, I went to the Technical Library in GAO to research materials needed for a career project. Since this was one of the first days in several that it hadn't rained, I decided to go outside of the building for lunch. The weather was beautiful and I found myself looking forward to the weekend.

During the afternoon, I met with Joe Gabbert from GAO's Management Center to hear his ideas on a proposed human resource management project. Next, I met with Thom Jones, a CCD staffer, to go over some technical issues related to the Regional Retirement workshop scheduled for the third week in May. The progress being made on this project is reassuring.

I used what was left of the day to clear up several small administrative tasks that accumulated during the week: memos, letters, phone calls, and personal filing.

Although I had no special entertainment plans for the weekend, there was still plenty of work around the house to keep me occupied. Those worn-out steps leading from the den to the patio needed replacing. And the yard, as usual, looked like it needed some close attention. Of course, both projects depended on cooperative weather. And, after months of soggy weekends, good weather was expected for Saturday and Sunday. Maybe I'll be able to complete my home projects after all.

Bookmark



The subject of this issue's "Bookmark," interpersonal managerial competency, is also the subject of "Manager's Corner" on page 8.

Getting to Yes: Negotiating Agreement Without Giving In

By Roger Fisher and
William Ury. Boston:
Houghton Mifflin Co.,
1981. 160 pp.

What is the best way for people to deal with their differences? The dilemma faced every day by families, neighbors, employees, bosses, businesses, and nations is how to get to yes without going to war. Negotiation is a fact of life. Everyone negotiates something every day. Negotiation is a back-and-forth communication designed to reach an agreement when two sides have some interests that are shared and others that conflict. People see two ways to negotiate—soft or hard. The soft approach involves avoiding personal conflict and making concessions readily; however, the end results of this method often are feelings of exploitation and bitterness. On the other hand, the hard approach is seen as a contest of wills in which the side that takes the more extreme positions and holds out the longest fares better. However, the end result of this approach is also often unsatisfactory—exhaustion of the negotiator and resources and a harmful relationship with the other side.

The authors offer a third way—*principled negotiation*. Developed at

the Harvard Negotiation project, this approach is both hard and soft. It involves deciding issues on their merits rather than what each side says it will and won't do. The principle is hard on the merits but soft on the people. It allows negotiators to get what they want and still be decent and fair while protecting them against others who would take advantage of such fairness. Unlike almost all other strategies for negotiation, if the other side learns this one, it does not become more difficult to use, it becomes easier. Principled negotiation has four basic points. I will cover the four points briefly, then discuss the first in some detail.

The first basic point is to *separate the people from the problem*. Negotiators are people first. People have emotions, values, different backgrounds and viewpoints, and they are unpredictable. Failing to deal sensitively with others can be disastrous for a negotiation. Negotiators have two interests—the substance of the negotiation and the relationship. The art of successful negotiation will serve both interests by reaching a successful compromise and preserving the relationship.

The second basic point is *focus on interests, not positions*. Solutions to problems lie in determining and reconciling interests which are combinations of needs, desires, concerns, and fears. Interests motivate people; they are the silent movers behind positions. Often behind conflicting positions lie shared and compatible interests. However, identifying interests can sometimes be difficult. A position is likely to be concrete and explicit; the interests underlying it may be unexpressed, intangible, and perhaps inconsistent. The authors provide insights

into what to look for in identifying hidden interests and how to make them visible so they can be considered by all parties in successfully negotiating agreements.

The third basic point is to *generate a variety of possibilities before deciding what to do*. Invent solutions advantageous to both sides; that is, expand the pie before dividing it. There are four major obstacles to this approach—premature judgment, searching for the single answer, assumption of a fixed pie, and thinking that "solving the problem is the problem."

The fourth and last basic point of principled negotiation is *insist that the result be based on some objective standard*. Typically, negotiations begin on the premise of what one is willing to accept—a set of demands. A better approach is to negotiate on a basis independent of anyone's will; that is, on the basis of some objective criteria. The underlying principle of this approach is to commit to reaching a solution based on principle, not pressure. Concentrate on the merits of the problem rather than the mettle of the parties. Further, "be open to reason but closed to threats." Be prepared in advance: develop some alternative standards beforehand and think through their application.

Returning to the first point—separate the people from the problem—it is hard to deal with a problem without people misunderstanding each other, getting angry or upset, and taking things personally. Certainly, we see this phenomenon often at GAO; I quickly add, however, that this is not unique to GAO. These problems arise in all relationships professional and personal. The human aspect of negotiation can be either helpful or disastrous. A work-

ing relationship involving trust, understanding, respect, and friendship built up over time can make negotiations smooth and efficient. Conversely, failing to deal with others sensitively as persons prone to human reactions can spell disaster. People get angry, depressed, fearful, and frustrated. Egos are easily threatened. Sometimes people confuse their perceptions with reality; for example, they may interpret what you say differently from what you intend and do not mean what you understand them to say. Misunderstandings lead to reactions that produce counterreactions, which, if unchecked, can result in a vicious circle. At this point, rational exploration of possible solutions becomes impossible and negotiation fails. The real point is lost, and the purpose becomes to score points, confirm negative impressions, and apportion blame at the expense of the substantive interests of both parties.

Beyond wanting to reach an agreement that satisfies one's substantive interests, a negotiator also has an interest in the relationship with the other side. Most negotiations take place in the context of an ongoing relationship; therefore, it is important to carry on each negotiation in a way that will help rather than hinder relations and future negotiations. In fact, *the ongoing relationship is far more important than the outcome of any particular negotiation.*

A major problem arises when the parties' relationship becomes entangled with their discussions of substance. On both the giving and receiving end, we tend to treat the people and the problem as one. Statements intended to identify a problem are likely to be seen as a personal attack. Anger over a situation can lead you to express anger toward a person whom you associate with that situation. Egos tend to become involved in substantive positions. Another danger is that people draw, from comments on substance, unfounded inferences which they then treat as facts about attitudes toward themselves. Unless we are careful, this process happens all too easily.

The key to success is to separate the relationship from the substance. Dealing with a problem and maintaining a good working relationship

need not be conflicting goals; however, the parties must be committed to treat each separately on its own merits.

In dealing with people problems, one should think in terms of three basic categories: perception, emotion, and communication. Various people problems fall into one of these three categories. However, it is important to remember that in negotiating, you must deal not only with their problems, *but also with your own.* Your perceptions might be one-sided, or you might not be listening closely enough or communicating properly. Your anger and frustration may keep you from reaching an agreement beneficial to you.

Following is a discussion of some important matters to keep in mind while negotiating agreements. They apply as equally to oneself as to the other side.

Perception

Understanding the other side's thinking is not only useful in solving the problem, it is crucial to a solution. Problems are defined by the differences between your thinking and that of the other side. People often disagree or quarrel over an object or an event. Therefore, they tend to assume that what they need to know more about is the object or the event, so they study this. Ultimately, however, conflict lies not in objective reality, but in peoples' heads. Ill-founded fears need to be dealt with; unrealistic hopes need to be dealt with. Looking for objective reality is useful, but facts might not solve the problem.

A few of the helpful steps described by the authors are mentioned below.

First, put yourself in their shoes. People tend to see what they want to see. They select and focus on facts that confirm their prior perceptions and disregard or misinterpret those counter to their positions. The ability to see the situation as the other side sees it, though difficult, is an important skill. You need to empathize with their point of view. A better understanding of their thinking might lead you to revise your own views.

Another helpful procedure is to discuss the perceptions of each

party. A frank and honest discussion of perceptions, without parceling out blame, might provide the understanding they need to take what you say seriously, and vice versa. Often in negotiations, concerns of the other side that do not stand in the way of an agreement are treated as unimportant. Don't make this mistake. A good investment in the negotiation is to say clearly and convincingly things you are willing to say and that the other side would like to hear.

Also, don't blame others for your problem. Even when justified, blame is usually counterproductive. The other side will become defensive, resist, cease to listen, or strike back.

A final important factor concerns "face-saving." This entails allowing people to reconcile the stand they take in a negotiation with their principles and their past words and deeds. Often in negotiation, people will continue to hold out not because the proposal is unacceptable, but rather because they want to avoid the feeling or appearance of backing down. Face-saving involves reconciling an agreement with principle and with the self-image of the negotiators.

Emotion

In a negotiation, feelings might be more important than talk. The parties might be more prone to fight than to work out a solution. People often approach negotiations realizing that stakes are high, and they feel threatened. Emotions on one side will generate emotions on the other. Emotions can quickly bring negotiations to an impasse or an end. The authors mention several things to remember.

For example, recognize and understand both their and your emotions. Recognize your nervousness and anger and look for theirs. It is easy to treat negotiators as mere mouthpieces without emotions. However, they have feelings, fears, hopes, and dreams. Also, their careers might be at stake. There might be issues on which they are particularly sensitive or proud. Work at asking yourself what is producing the emotions, and proceed on that basis.

Another suggestion is to allow the other side to let off steam. Let them release their feelings. When

people are freed from the burden of unexpressed emotions, they will become more likely to work on the problem. Instead of interrogating or walking out on the other party, control yourself, sit there, listen quietly, and allow them to pour out their grievances. In this way, you offer little support to the inflammatory substance, give the person the opportunity to speak out, and leave little to fester.

Communication

Negotiations depend on communications. Good communication is not easy, even between people who share common values and experiences. Whatever you say, the other side will almost always hear something different. The authors refer to three big problems in communication. First, negotiators might not be talking to one another; each side might have given up on the other and isn't attempting to communicate seriously. In this case, motives might be to trip up the other side or play to an audience or supporters of one's position. Second, even when talking directly and clearly to people, they might not be hearing you. At times, people are thinking about what they are going to say next or about the reaction of their supporters. If they are not hearing, there is no communication. The third problem is misunderstanding what has been said. Misinterpretations occur easily. What can be done about these three problems? The authors provide some helpful guidance.

For example, listen actively and acknowledge what is being said. Active listening will let the other party know that they are being heard and understood. Ask others to repeat to avoid ambiguity or uncertainty. It is crucial in the negotiation process to understand the other party's position. Understanding is not agreeing. You can understand perfectly and

disagree completely. However, unless you can convince the other side that you grasp how they view a situation, you might not be able to explain your viewpoint.

Another strategy is to speak about yourself, not about them. Often in negotiations, each side explains and condemns the motivations and intentions of the other. However, it's better to describe a problem in terms of its impact on you than in terms of what the other party did or why they did it. Obviously, if statements are made about them that they believe are untrue, they will ignore you or get angry and not focus on your concerns. However, *a statement about how you feel is difficult to challenge.*

The authors point out that, although the above techniques for dealing with problems of perception, emotion, and communication work well, the best approach is to not let people problems develop.

To avoid these problems, one should build a personal and organizational relationship with the other side that can cushion people from the knocks of negotiation. Knowing the other side personally helps. Dealing with someone you know is quite different from dealing with a stranger. The faster you can turn a stranger into someone you know, the easier the negotiation is likely to become. You will have less difficulty understanding where they are coming from, you will have a foundation of trust to build upon, and it will be easier to defuse tension. The time to develop this relationship is before a negotiation begins. Try to get to know the other party, find ways to meet them informally, and arrive early to chat before the negotiation is scheduled to start (and stay for a few minutes after it's over). Efforts should be made to structure the negotiation as a side-by-side (sometimes literally) activity in which people with differing interests and

perceptions and emotional involvement jointly face a common task—and search for a fair agreement advantageous to each.

★ ★ ★ ★

Overall, I think the authors of *Getting To Yes* have provided an excellent framework, with many specifics, for dealing interpersonally with people across a broad spectrum of circumstances. Their pointers can be applied to both personal and professional relationships. Although at times their guidance will be hard to apply because of circumstances surrounding a particular event, they offer invaluable insights for dealing with people in situations involving conflicting interests, unfounded fears, and genuine concerns as well.

In GAO, we have numerous opportunities for applying the principles and techniques described in the book. Certainly, things don't always go our way. Some give and take is necessary. Sometimes it's on a day-to-day basis with our subordinates, peers, or supervisors. At other times, it's with other divisions, regional staff, agency officials, congressional staff, and even congressmen and senators. Although our approach and techniques will vary depending upon the nature of the circumstances and the parties involved, some "basics," as spelled out in this book, will provide a sound basis for successfully negotiating solutions to problems when interests and concerns conflict.

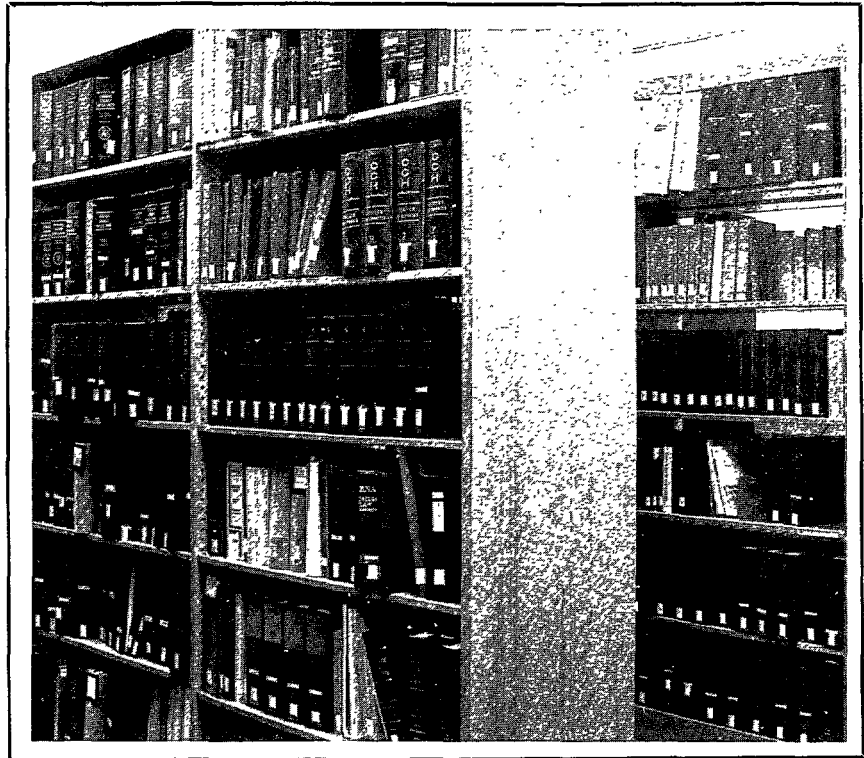
I believe *Getting To Yes* contains lessons for all of us. My self-challenge is to recognize circumstances where the insights provided by the authors can be applied successfully. I challenge you, too!

—Reviewed by Ronald F. Lauve,
Senior Associate Director,
General Government Division

Legislative Developments



Judith Hatter



Deep-Draft Navigation

S. 865, the Deep-Draft Navigation Act of 1983, introduced on March 21 by Senator Mark O. Hatfield of Oregon, requires the Comptroller General to carry out periodic audits of the deep-draft commercial harbor operations of States that have elected not to authorize the U.S. Customs Service to accept payment of the duty or tax levied under the bill.

Consulting Reform and Disclosure Act of 1983

In introducing H.R. 1882, the Consulting Reform and Disclosure Act of 1983, Congresswoman Geraldine A. Ferraro of New York stated: "I believe that the 22-year history of agency mismanagement of consulting services contained in 30 critical General Accounting Office reports

demonstrates why this legislation is necessary. * * *"

The bill has as its purpose to clarify the authority for appointment and compensation of experts and consultants, and to provide statutory guidelines concerning the award of contracts for the procurement of consulting services, management and professional services, and special studies and analyses.

Shipping Act of 1983

On March 1, the Senate amended and passed S. 47, the Shipping Act of 1983. Section 20 of the bill, as passed, requires that no later than 2 years after the effective date of

¹*Cong. Rec.*, Vol 129 (Mar 3, 1983), p. E824.

See Developments, p. 38



Diane E. Grant

Reflections



Editor's note The entire editorial staff would like to thank Ms. Grant for her contributions to the administration of the *Review*. She is now secretary to the Director of the Office of Policy, and we wish her well in her new assignment

Ten years ago, in the fall 1973 issue of the *GAO Review*, you will find a few of GAO's new staff members were

- Rosslyn S. Kleeman, from the Department of Health, Education, and Welfare, to the Federal Personnel and Compensation Division.
- Richard B. Springer, from private law practice to the Office of General Counsel.
- Julius S. Brown, from the U.S. Army, to the Logistics and Communications Division.
- Janet C. Dolen, from the office of Education, Department of Health, Education, and Welfare, to the General Government Division.
- Murray Grant, M.D., from Turo Infirmary to the Manpower and Welfare Division.
- John L. Vialet, from the Mitre Corporation, to the Resources and Eco-

conomic Development Division.

- Gene L. Dodaro, from Lycoming College, to the Washington Regional Office.
- Michael L. Eid, from the University of Kentucky to the Washington Regional Office.
- Richard L. Hembra, from West Liberty State College, to the Washington Regional Office.

Other important events during that period:

- Joseph W. Kegel, manager, Washington Regional Office, was designated an assistant regional manager in the Seattle office.
- Francis X. Fee, Assistant Comptroller General, Operations, was designated an assistant regional manager in the Philadelphia office.
- Samuel W. Bowlin, associate director, National Security and International Affairs Division, was designated a legislative advisor in the Office of Legislative Liaison.
- Arnold P. Jones, senior associate director, General Government Divi-

See Reflections, p. 36

Reflections, con't. from p. 35

sion, was designated an assistant director in that division.

- Brian L. Usilaner, associate director, Accounting and Financial Management Division, was designated an assistant director of the Financial and General Management Studies Division.
- Arthur R. Goldbeck, associate director, General Government Division, was designated an assistant director in that division.
- In June 1973, GAO first published the booklet *The General Accounting Office—Answers to Frequently Asked Questions*, which contained objectives of the Comptroller General and 71 questions with answers concerning GAO responsibilities, policies, and methods of operation.
- In February 1973, GAO established a special task force to create new

job classifications to bridge nonprofessional and professional positions in GAO. The task force for developing new job classifications identified the target population for the program as well as target professional positions and structured preprofessional positions leading to each target. The preprofessional program trained, counseled, and educated selected nonprofessional employees so they could advance to professional management analyst, attorney, and adjudicator positions. It also developed a process to identify employees eligible to enter the professional ranks directly. Persons to be selected were interviewed by four-person interview teams and a seven-member selection panel of GAO employees. Selection criteria were chosen to provide the broadest and most comprehensive base possible on which to assess a candidate's potential for career advancement. The

Civil Service Commission aided the task force in identifying the possible elements necessary for success in a management analyst position. A test specifically designed to measure the elements was developed during the following fiscal year. The process served as a model for identifying job elements required for other positions and for developing special tests for each career advancement training program leading to a different target position.

Other task force recommendations pertained to remedial and preparatory training, release time, and a systematic outplacement program, to be implemented in the future.

As of April 30, 1983, approximately 100 employees had entered the program and approximately 70 had converted to the professional evaluator series. During June 1983, the program was revised, and 10 additional positions were opened.

Briefcase, con't. from p. 2

- What do you consider your major strengths and weaknesses?

CCD also gives advice about the informational interview, a situation where an employer will give interviews in anticipation of potential openings. CCD can be reached on 275-5848.

Several reference books on how to develop skills for interviewing are: *What Color Is Your Parachute?* by Richard Nelson Bolles, *Go Hire Yourself An Employer* by Richard K. Irish, *Sweaty Palms* by H. Anthony Medley, and Dale Carnegie's *How To Win Friends and Influence People*.

**GAO Review
Articles Make
Another Appearance**

Articles contributed to the *GAO Review* often find their way into broader forums. *Public Budgeting and Finance*, 3rd ed., edited by Robert T. Golembiewski and Jack Rabin, is a collection of 24 essays which present in-depth, authoritative examinations of behavioral, theoretical, and technical perspectives on public budgeting and finance.

Five essays in this text were formerly published in the *GAO Review*:

- "Concepts of Accounting Applicable to the Public Sector," from a report by the American Accounting Association, p. 197. (*GAO Review*,

Fall 1977.)

- "Evaluating Benefits and Costs of Auto Safety Standards," by John Pennington and Heber Bouland, p. 245. (*GAO Review*, Fall 1976.)

- "Productivity Measurement: A Management Tool," by Brian L. Usilaner, p. 255. (*GAO Review*, Fall 1976.)

- "The Critical Path Method Applied to GAO Reviews," by John C. Karmendy and Thomas Monahan, p. 285. (*GAO Review*, Spring 1978.)

- "Looking Back at PPBS: Image vs. Substance," by Harry S. Havens, p. 301. (*GAO Review*, Winter 1977.)

Public Budgeting and Finance, published earlier this year, may be ordered for \$24.75 from Marcel Dekker, Inc., 270 Madison Ave., New York, NY 10016.

Location, con't. from p. 6

Services Administration; Anthony Piccirilli, Rhode Island Auditor General; David Shulman, Commissioner of Finance of New York's Westchester County; David Hanna, GAO; and Joseph Comtois, GAO. Mr. Comtois is also Executive Secretary of the National Forum.

The National Forum, chaired by

Wilbur Campbell, GAO, consists of 19 Federal audit executives from the Office of Management and Budget, GAO, and major grantmaking agencies, as well as State and local representatives. Each Regional Forum functions independently, dealing with issues of local concern.

The primary efforts of the forums have been implementing the single audit concept, providing guidance

for quality reviews of governmental audit organizations, encouraging the adoption of methods for assessing internal control and fraud vulnerability, and providing an understanding of the implications of block grants. All 11 forums plan to meet in the spring of 1984 to discuss these and other major issues affecting the governmental audit community.

Manager's, con't. from p.10

Roark, Albert E. "Interpersonal Conflict Management." *Personnel and Guidance Journal* (Mar. 1978), pp. 400-402.

Schein, Edgar. "SMR Forum: Improving Face-to-Face Relationships." *Sloan Management Review* (Winter 1981), pp. 43-52.

Sedwick, Robert C. *Interaction: Interpersonal Relationships in Organiza-*

tions. Englewood Cliffs, N.J.: Prentice-Hall, 1974.

Timm, Paul R. *Managerial Communication*. Englewood Cliffs, N.J.: Prentice-Hall, 1980.

Topics, con't. from p. 13

The statistical analyses associated with ITS are a bit forbidding. Fortunately, computer programs for time series analyses are included in widely available statistical packages such as SPSS (Statistical Package for the Social Sciences), SAS (Statistical Analysis System), and BMDP (Biomedical Programs). Another popular program, written by D.J. Pack, is also commercially available. The most common statistical approach to time series analysis, at least in the social sciences, is the Autoregressive Integrated Moving Average (ARIMA) model. There are, however, circumstances where other techniques are more appropriate.

Where To Look for More Information

Albritton, R.B. "Cost-Benefits of Measles Eradication: Effects of a Federal Intervention." *Policy Analysis*, 4, No. 1 (1978), pp. 1-21.

Cook, T.D. and D.T. Campbell. *Quasi-Experimentation: Design and Analysis Issues for Field Settings*. Rand-McNally, 1979.

Chapter 5 provides an introduction to ITS designs, and Chapter 6 describes the statistical analysis of time series using the ARIMA method.

Forehand, G.A., ed. *Applications of Time Series Analysis to Evaluation*. Number 16 in *New Directions for Program Evaluation*. Jossey-Bass, 1982.

A collection of applications from a variety of fields.

Gottman, J.M. *Time-Series Analysis: A Comprehensive Introduction for Social Scientists*. Cambridge University Press, 1981.

An intermediate-level text but broader in scope than the McCleary-Hay book.

McCleary, R. and R.A. Hay, Jr. *Applied Time Series Analysis: For the Social Sciences*. Sage, 1980.

An intermediate-level text using the ARIMA approach. Many examples.

Straw, R.B., N.M. Fitzgerald, T.D. Cook, and S.V. Thomas. "Using Routine Monitoring Data to Identify Effects and Their Causes," in Forehand, *Applications of Time Series Analysis to Evaluation*. Jossey-Bass, 1982.

A nontraditional application of ITS: detecting effects and then searching for possible causes.

Federal Budget, con't. from p. 17

tions for ways to save money, manage more effectively, and get better results from the Government's activities. They also want to be told very generally how each agency is being managed. But reviews have tended to be narrow in scope, dealing with only a single aspect of an agency's activities. Therefore, it is often not possible to give overall assessments or make broad proposals on entire programs.

Thus, current financial systems of the central agencies and the many individual departments have grown up in an ad hoc fashion. Each was put in place to meet some perceived need at the time. But this evolution has yielded a patchwork set of arrangements characterized by gaps, hurdles, and failure of the parts to mesh well with each other. This has degraded the efficiency and effectiveness of the whole system, which can be made to function only through

virtually superhuman efforts by the participants in the process.

We need to move to a broad concept of financial management in the Federal Government that encompasses the processes and functions associated with acquiring, managing, deploying, and accounting for the Federal Government's financial resources. We need systems that will assure us that, to the maximum practical extent, these financial resources—and the real resources they represent—are acquired and used lawfully, efficiently, and effectively to achieve purposes of commensurate value to society. We need to ensure that policy officials and the public get clear, concise information on the Federal Government's stewardship of financial resources. I believe we can do a better job of reporting on as well as managing the resources, and I will be working with the Congress and the executive branch to develop a strategy and plan to create the needed systems.

Putting Our Fiscal Affairs in Order

In 1975, then President Ford, when delivering his first State of the Union Address, said "the State of the Union is not good." He went on to say, "Millions of Americans are out of work. Recession and inflation are eroding the money of millions more. Prices are too high and sales are too slow. This year's Federal deficit will be about \$30 billion; next year's probably \$45 billion. The national debt will rise to over \$500 billion."

We must, in 1983, once again realize and acknowledge that the financial health of the Government, as well as the economy, is not good. Though inflation appears to be under control, we have paid a heavy price; right now over 10 percent of our labor force is out of work. Our Federal

See Federal Budget, p. 38

Federal Budget, con't.
from p. 37

budget appears out of control. Even in real terms, the \$300 billion deficits projected in a fully employed economy make the deficits that President Ford was worried about pale in significance.

I have briefly outlined the steps I believe should be taken to put our fiscal affairs in order. We must reduce the deficit through a combination of reductions in the growth in entitlement and defense programs and increase either tax rates, the

tax base, or both. The burdens imposed by these steps will involve sacrifices from all of us. In Government, we need a bipartisan recognition of the problem and a resolve to deal with it. We also need the development of a consensus of agreement among public officials and the full spectrum of private interests on an equitable allocation of sacrifice. Without action, we are faced with a continuation of unprecedented large deficits, high interest rates, a worsening trade balance, an enormous drain of savings from supporting private capital formation, a relatively

stagnant U.S. and world economy and, at best, no improvement in our standard of living.

The consequences of not coming to grips with our budget problems are so serious that I am certain we will find the ways to resolve them. Our Government has faced problems of similar magnitude in the past and has dealt with them. I see signs of a developing bipartisan recognition and resolve to deal with our problems. I believe that we, as we have so many times in the past, can make the most of the unfortunate turn of events this Nation faces.

Experts, con't. from p. 19

our DCI for keypunch entry by breaking it up into 80-character blocks and including special keypunch instruction codes in the form.

We pointed out that we planned to do data input on the Micom, which has very flexible input formats. We thought TAG's design was more restrictive than we needed. TAG staff replied that the 80-character block layout would make data transmission easier and more reliable, and the special keypunch instruction codes would make for easier and

less error-prone keypunch, if we weren't able to use the Micom.

We considered their reasons and agreed. Again, TAG was right. The 80-character block layout made it possible to use a local computer facility for certain programming, error-checking, and transmission. Because no Micom data-entry assistance was available when we needed it, we had to use the keypunch contractor at the last minute. The special instructions coded onto the form were invaluable in explaining our system to the contractor and in assuring the quality of the contractor's product.

**It's Your Job,
But You Need Help**

In the end, evaluators must exercise their own judgment. But that judgment will be much more sound if it's tempered with the advice of someone who's been there—the expert. If you're tempted to proceed without advice or against it, remember this:

"Advice is seldom welcome; and those who want it most always like it least."—Philip Dormer Stanhope, Earl of Chesterfield.

Change, con't. from p. 22

Action." *Training and Development Journal*, 29, No. 5 (May-June 1975).

_____. "The Benefits of Doing Your Own Consulting." *Business Week*, (May 1977).

Mirvis, Phillip H., and David N. Berg. *Failures in Organization Development and Change*. New York:

John Wiley and Sons, 1977.

Nadler, David A. "Managing Organizational Change: An Integrative Perspective." *The Journal of Applied Behavioral Science*, 17, No. 2 (1981).

Wage, con't. from p. 24

GAO Role In Minimum Wage Argument

In summary, increases in the minimum wage cause these effects: an increase in the wage rate (and income) of a majority of low-wage workers; reduced employment, es-

pecially among teenagers and those with the fewest job skills; and no measurable gain in the overall share of income going to the poor.

While Harry Truman wished for a one-armed economist who would not always say "on the other hand . . .," we think our role at GAO is to point out alternatives and, in the areas where evidence is weak, to identify the benefits and costs of decisions

and policies and to define the trade-offs as clearly as possible. Economists generally hold most strongly to this view when it comes to such decisions as the minimum wage, which involve changes in the distribution of income or wealth. In that regard, GAO's responsibility is to supply the Congress with the best possible information for it to make these difficult and far-reaching decisions.

Developments, con't. from p. 34

the act, the Comptroller General submit to the Congress a compre-

hensive study of, and make recommendations concerning, the regulation of international ocean shipping by common carriers.

See Developments, p. 39

New England Regional Power Planning

Senator Claiborne Pell of Rhode Island introduced S. 670, the New England Regional Power Planning and Distribution Act of 1983, which contains at section 601 a requirement that GAO “* * * conduct a study of the economic impact of Federal legislation

1. allowing States to enter voluntarily into multi-State agreements not subject to congressional approval for regional power planning and regional regulation and granting such States authority for the development of

(A) electricity demand and supply forecasts;

(B) reliability and reserve requirements;

(C) increased power pooling and interconnections; and

(D) electricity import and export agreements; and

2. increasing regional electric regulatory authority and reducing the current authority of the Federal Energy Regulatory Commission by

(A) shifting FERC jurisdiction over intrastate wholesale transactions to individual States or to regional regulatory bodies, at the option of the

State or States involved; and (B) shifting FERC jurisdiction over interstate wholesale transactions to regional regulatory bodies where they exist and desire such authority.”²

Federal Student Assistance Restrictions

Congressman Paul Simon of Illinois introduced H.R. 2145, to delay the effective date for the denial of Federal educational assistance to students who have failed to comply with registration requirements under the Military Selective Service Act

The bill requires the Comptroller General to conduct an on-going study of the impact of section 12(f) of the Military Selective Service Act on enforcement of the registration requirements under section 3 of such act and the efficiency and effectiveness of enforcing such requirements through programs of student assistance.

Witness Security System

Senator Max Baucus of Montana introduced legislation similar to that recommended by GAO in its report, “Changes Needed in the Witness Security Program.” The bill, S. 1178, would better provide for the rights of third parties seeking to en-

force court judgments directed against a witness relocated or protected by the Attorney General, while at the same time protecting the safety of such witnesses.

Office of Operational Testing

On April 28, Senator David Pryor of Arkansas reintroduced in the 98th Congress a bill to establish a Director of Operational Testing and Evaluation in the Defense Department. In discussing the legislation, the Senator refers to various GAO reports critical of weapons testing procedures.

Social Security Act Amendments of 1983

Among other things, the Social Security Act Amendments of 1983 (Public Law 98-21, April 20, 1982, 97 Stat. 65) provides for the appointment by the Director of the Office of Technology Assessment of a Prospective Payment Assessment Commission to review certain inpatient hospital discharges. The Commission is subject to periodic audit by the General Accounting Office.

²Cong Rec., Vol. 129 (Mar. 3, 1983), p S2109.

GAO Staff Changes

Senior Staff Changes



Philip A. Bernstein

Mr. Philip A. Bernstein, director, Human Resources Division, has been named deputy director for operations in that division.

Mr. Bernstein, a graduate of George Washington University (A.B. 1958), joined GAO in 1960 and carried out diverse and increasing responsibilities in the former Civil Division. At the time of GAO's 1972 reorganization, he was in charge of GAO's work at the former Atomic Energy Commission and served briefly in that capacity in the newly formed Resources and Economic Development Division. Later in 1972, he was named regional manager, Seattle. In 1976, he returned to headquarters as deputy director of Management Services and in 1978 moved to the Human Resources Division as deputy director. He served as director from 1982 to early 1983.



Frank C. Conahan

Mr. Conahan has been named director of the newly formed National Security and International Affairs Division (NSIAD). Formerly, he was the director of GAO's International Division.

Mr. Conahan joined GAO in 1955 and was assigned to the former Division of Audits. He served in the U.S. Navy from 1956 to 1958. Upon his return to GAO, he was assigned to the former Civil Division. He was designated an assistant director of that division in 1968, an associate director in 1972, a senior-level associate director in 1976, deputy director in 1980, and director in 1981. Between August 1974 and July 1976, he served as director of the European Branch in Frankfurt, Germany.

In 1955, Mr. Conahan received a B.S. degree in accounting from King's College, Wilkes Barre, Pa. In 1968, he attended the Executive Development Program at the University of Michigan Graduate School of Business Administration. For the academic year 1972-73, he was a member of the Senior Seminar in Foreign Policy at the Foreign Service Institute. In 1978, he completed an Advanced Study Program at the Brookings Institution and in 1980 he completed the Executive Program in National and International Security at Harvard University's John F. Kennedy School of Government.



Edward A. Densmore

Edward A. Densmore has been designated deputy director for Planning and Reporting in the Human Resources Division, effective May 15, 1983.

Mr. Densmore joined the General Accounting Office in 1958 and has had a wide variety of experience in the Civil Division, the Community and Economic Development Division, and the Human Resources Division, where most recently he was deputy director for operations and also served as associate director—Consumer and Worker Protection; Nondiscrimination and Equal Opportunity.

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

Mr. Densmore received the GAO Career Development Award in 1969, the Meritorious Service Award in 1973, the William A. Jump Memorial Award in 1973, and the Human Resources Division Director's Award in 1979.



Richard L. Fogel

Mr. Fogel has been named director, Human Resources Division. He formerly served as director, Office of Program Planning.

Mr. Fogel joined GAO in 1969. He has since been responsible for directing GAO's activities in the tax administration issue area, and for a short time, GAO's work in the financial institution regulatory area as well. During that period, he served as an associate director in GAO's General Government Division. Mr. Fogel has also worked in the Manpower and Welfare Division.

Mr. Fogel received a master's degree in public administration from the University of Pittsburgh (1968). He received his B.A. degree in Government from Cornell University (1966) and his master's degree in comparative politics from Sussex University, England (1967). He is a member of the American Society for Public Administration and has published several articles in professional journals and books on program evaluation.

Mr. Fogel received the GAO Meritorious Service Award in 1974, the GAO Distinguished Service Award in 1976, and GAO's Meritorious Executive Award in 1981. He was one of the 10 Federal employees to receive the National Civil Service League Career Service Award in 1979-80 for outstanding public service.



Clifford I. Gould

Clifford Gould, formerly director of the Federal Personnel and Compensation Division, has been designated Assistant to the Comptroller General for retirement matters.

Mr. Gould began his career with the General Accounting Office in 1954 as a GS-5 trainee and served in progressively more responsible positions in the Kansas City Regional Office until 1965. He served as assistant director of the Far East Branch from 1965 until 1971 and as assistant regional manager in charge of the St. Louis suboffice during 1971 and 1972. He was designated associate director in the Federal Personnel and Compensation Division in March 1972 and deputy director in 1976. During 1980, he served as Special Assistant to the Comptroller General responsible for directing the implementation of requirements of the GAO Personnel Legislation.

Mr. Gould served in the Air Force from 1946 to 1949 and again from 1951 to 1952. He received his B.S. in business administration from Kansas State University in 1953 and has graduate credits in economics.

Mr. Gould has completed many senior-level management courses and has received a variety of awards from GAO, including a Meritorious Service Award in 1958, an Outstanding Performance Award in 1967, a Career Development Award in 1969, and the Distinguished Service Award in 1977.



Werner Grosshans

Werner Grosshans has been designated director of NSIAD's planning staff. He formerly served as deputy director, Procurement, Logistics and Readiness Division.

Mr. Grosshans joined the GAO's San Francisco Regional Office in 1958. In July 1967, he was appointed an assistant regional manager. In 1969, he attended the 10-month residence course at the Industrial College of the Armed Forces. In July 1970, he transferred to the U.S. Postal Service as Assistant Regional Chief Inspector—Audit. In this position, he was the manager for internal audits for the Postal Service, Western Region, which comprised the 13 western states. In October 1972, he returned to the General Accounting Office as the assistant director, Materiel Management Group, Logistics and Communications Division. In July 1976, he was designated as senior associate director of the Materiel Management Group, and in 1980, he was appointed deputy director of the Procurement, Logistics and Readiness Division.

Mr. Grosshans received a B.A. in accounting from San Jose State College in 1958 and an M.S. in business administration from George Washington University in 1969.

Mr. Grosshans is a certified public accountant (California), a member of the California Institute for CPAs, and the Northern Virginia Chapter of the Association of Government Accountants.



Donald J. Horan

Mr. Horan, who served as the director of the Procurement, Logistics and Readiness Division, has been named director, Office of Policy.

Mr. Horan's career with GAO began in 1955 following his graduation from King's College in Pennsylvania with a B.S. degree in accounting.

He held positions of increasing responsibility in GAO's New York Regional Office before transferring to the audit policy staff of the Office of Policy and Special Studies in 1965. In 1968, he was designated assistant director for auditing policy, a position he occupied until 1972. He then transferred to the Procurement and Systems Acquisition Division in 1972 as an assistant director in its general procurement management group. Mr. Horan was the director of the Office of Policy from July 1974 to July 1978, when he was designated deputy director, Logistics and Communications Division.

He received the GAO Meritorious Service Award in 1968 and the Comptroller General's Award in 1978. In 1981, he received the rank of Meritorious Executive in the Senior Executive Service. He is a member of the Association of Government Accountants.



James L. Howard

James Howard, director of the Office of Policy, has been designated deputy director for planning and reporting, General Government Division.

Mr. Howard received a B.S. degree in business administration from Bloomsburg State College in Bloomsburg, Pa., and also attended George Washington University for specialized courses. In 1977, he attended the Executive Development Program at Dartmouth College.

Since joining GAO in 1964, Mr. Howard has had diverse assignments including responsibilities for audits at the Federal Aviation Administration, U.S. Forest Service, Federal Highway Administration, and the Nuclear Regulatory Commission. In 1980, he was named associate director, Nuclear Energy, DOE Management and Administration. He was named director, Office of Policy, in 1981.

Mr. Howard received Outstanding Performance Awards in 1975 and 1977, a Director's Award in 1978, a Certificate of Merit in 1979, and a distinguished Service Award in 1981.



David A. Littleton

Mr. Littleton, manager of GAO's Washington Regional Office since 1980, has been named deputy director for operations, NSIAD.

He joined the General Accounting Office in 1960 in the Dallas Regional Office. In 1967, he was named auditor-in-charge of the Albuquerque sublocation. He was assigned to the Senate Armed Services Committee in Washington from 1969 until 1971 when he joined the Procurement and Systems Acquisition Division. In 1976, Mr. Littleton joined the Washington Regional Office as assistant regional manager and served in that position until 1978 when he became assistant to the director of the Field Operations Division. In 1980, he was designated manager of the Washington Regional Office.

Mr. Littleton served 4 years in the Navy and graduated from St. Edwards University, Austin, Texas. He graduated from the Industrial College of the Armed Forces in 1971 and earned a master's degree in human resource management from George Washington University in 1972. In 1980, he attended the Program for Senior Executive Fellows at the Kennedy School of Government, Harvard University. He is a member of the Association of Government Accountants, the American Accounting Association, the Institute of Professional Managers, and the National Accountants Association. Mr. Littleton received the GAO Meritorious Service Award in 1979.



William D. Martin, Jr.

William D. Martin, Jr. has been named director, Office of Internal Review. He formerly served as chairman of the Claims Steering Group.

Mr. Martin joined GAO in 1959 and has had varied experience in the Civil Division and the International Division. He served as director of the Organization and Management Planning Staff from 1971 to 1973, deputy director for operations in the Manpower and Welfare Division until 1974, director of the Office of Staff Development until 1976, director of the Office of Personnel Development and Services until 1977, regional manager in Denver until 1979, deputy director, Field Operations Division, until 1981, director, Regional Relations and Staff Development—Defense and Materiel Management Studies until 1982, and chairman, Steering Committee for the Claims Settlement Function.

Mr. Martin served in the U.S. Army from 1953 to 1955. He graduated from Wake Forest College in 1959 where he majored in accounting. He received an M.S. degree in Financial Management from George Washington University in 1971. He attended the Advanced Management Program at Harvard Business School in 1974.

He is a CPA (Virginia) and a member of the American Institute of CPAs, the National Association of Accountants, and the Association of Government Accountants.



Peter J. McGough

Mr. McGough has been named director of GAO's Office of Program Planning. He comes to this position after serving as an associate director in the Human Resources Division.

Mr. McGough has been with the General Accounting Office since 1964. He was appointed by the Comptroller General as legislative advisor, Office of Congressional Relations, in July 1975. In this position, he was responsible for liaison with 10 congressional committees, including those dealing with Agriculture, Armed Services, Intelligence, Small Business, and Science and Technology.

Prior to joining the Office of Congressional Relations, Mr. McGough spent 4 years in GAO's Office of Policy, several years at various executive agency audit sites in Washington, and three years working out of GAO's New York Regional Office.

Mr. McGough received his B.S. degree in accounting from King's College in Wilkes Barre, Pa., and completed postgraduate work at George Washington University in Washington, D.C.



Walton H. Sheley, Jr.

On April 30, 1983, Walton H. Sheley, Jr., director of the Mission Analysis and Systems Acquisition Division, retired from GAO.

Mr. Sheley joined GAO's Dallas Regional office in 1954. He served as the regional manager in New Orleans and Dallas and headed the Far East Branch, Honolulu, before joining headquarters in 1978 as deputy director of the Procurement and Systems Acquisition Division. Prior to his GAO service, he worked for the Minor and Moore CPA firm and for Peat, Marwick & Mitchell Co. Mr. Sheley is a graduate of Memphis State University with a B.S. degree in accounting and is a certified public accountant (Tennessee).

Mr. Sheley received the GAO Career Development Award in 1968.



Daniel F. Stanton

Daniel F. Stanton was designated deputy director for operations in the General Government Division effective May 15, 1983. He has been with the General Government Division since 1972, serving as deputy director from October 1978 until his present appointment. Prior to October 1978 he was associate director with responsibilities for directing the audit and investigation work for law enforcement and criminal justice activities.

Mr. Stanton served in the U.S. Army from 1954 to 1956. He graduated from the University of South Carolina in 1959, receiving a B.S. with a major in accounting. He is a CPA (Virginia), a member of the American Institute of Certified Public Accountants, and is a certified internal auditor.

In 1971, Mr. Stanton attended the Harvard Program for Management Development. He received the GAO Meritorious Service Award in 1967, the Career Development Award in 1971, and the Distinguished Service Award in 1977. In 1980, he received a joint Director's Award from the Field Operations and General Government Divisions.



Bill W. Thurman

Mr. Thurman, formerly the Assistant to the Assistant Comptroller General for Operations, has been designated as deputy director for planning and reporting, NSIAD.

Mr. Thurman joined GAO in 1962 in the Dallas Regional Office. In 1972, he transferred to the General Government Division where he served as an assistant and associate director.

He is a graduate of Southern Methodist University and in 1972 completed a year of graduate study under the Mid-Career Executive Program at the University of Virginia. Mr. Thurman is a certified public accountant (Texas), a member of the Texas Society of Certified Public Accountants, the Association of Government Accountants, the American Society for Public Administration, and the National Assistance Management Association, where he served on the Board of Directors for 3 years. He is also a member of the Board of Visitors for the American University Program in Procurement, Acquisition and Grants Management. In 1975, he received GAO's Meritorious Service Award.



Alfonso J. Strazzullo

Alfonso J. Strazzullo, manager of GAO's Norfolk Regional Office, retired from the agency on April 30, 1983.

Mr. Strazzullo joined GAO in 1954 at the Philadelphia Regional Office. In his career, he served as manager for the New York Regional Office and for the Norfolk office twice.

Mr. Strazzullo is a graduate of La Salle College, where he earned a B.S. degree in accountancy. Before joining GAO, he worked for public accounting and industrial firms. During World War II, he served with the U.S. Navy.

Mr. Strazzullo received GAO's Meritorious Service Award in 1969.

Additional Staff Changes

Supervisory GAO Evaluator

San Francisco Regional Office

James A. Brucia

Attorney-Advisor

Office of General Counsel

John A. Carter
Herbert I. Dunn

Office Director

Office of Financial Management

James T. Luter

New Staff Members

The following staff members reported for work during the approximate period January 24, 1983, through May 1, 1983.

Division / Office	Name	From
Office of the Comptroller General	Cox, Margaret M.	Dept. of the Navy
Accounting and Financial Management Division	Boyer, Bruce N. Cook, Gectris D. Hepburn, James M. Narins, Simin D.	M.B. Hariton & Co. Dept. of Labor Earl Small, Auctioneer National Society for Internships and Experimental Education
Federal Personnel and Compensation Division	Bretzfield, Anita M.	National Institute of Education
General Services and Controller	Redmond, Bernadette C.	Dept. of Labor
Human Resources Division	Williams, Blanche C.	Dept. of the Army
Institute for Program Evaluation	Mulhauser, Frede	National Institute of Education
Program Analysis Division	Bascetta, Cynthia A. Wilson, Angelleno	Dept. of Labor Telesec Temporaries
Personnel	Blue, Delona L. Jeffers, Maria A.	Defense Mapping Agency Agile Printing Co.
Regional Offices		
Chicago	Morales, Hermalinda Simpson, Tarrano	Chicago Transit Authority ITT Research Institute
Cincinnati	Donohue, Darla	Dayton Power and Light Co.
Dallas	Albers, Anna	North Texas State University
Denver	Alcocer, Paul D. Fernandez, Peter Gamache, S. J. Hanson, Marvin E. Payan, Rudolfo G. Reilly, Michael Rice, Collins D., Jr. Ronayne, Sandra Shorey, Dawn E. Stevens, Evert A. Stewart, Robert	University of Colorado Dept. of the Interior State of Colorado Metropolitan State College Legal Services Corp. Fitzsimons Army Medical Center Dept. of Agriculture University of Colorado University of New Mexico Rodriguez, Roach & Assoc., P.C. Dept. of Agriculture
Los Angeles	Boudreau, Roger Raheb, Walter L.	Long Beach State University Congressional Budget Office

New Staff Members-cont.

Norfolk	Baines, Jane K. Meiklejohn, Deborah Shimek, Michele	Olsten Temporary Services Old Dominion University Old Dominion University
San Francisco	Brucia, James A.	Dept. of Energy
Seattle	Arns, Renee I.	Fotomat Corp.
Washington	Berry, Peter J. Cary, Timothy M. Dawson, Linda L. Eiserman, Richard Knorr, Deborah Langford, Debra Lyons, Richard P. Mountjoy, Gary N.	International City Management Association Virginia Action Dept. of Commerce George Mason University U.S. House of Representatives Texas State Senate George Washington University University of Virginia

Retirements

The following staff members retired from GAO during the approximate period February-April 1983.

Division/Office	Name	Title
Accounting and Financial Management Division	Bisset, George, Jr.	Evaluator
Federal Personnel and Compensation Division	Wilson, Betty M.	Writer-editor
Office of General Counsel	Cribben, Lillian	Secretary
General Services and Controller	Youmans, Rebecca	Property Management Assistant

Regional Offices

Philadelphia	Pinto, Anthony M.	Assistant Regional Manager
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Deceased

New York	Curran, Thomas	Evaluator
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Attritions

The following staff members left the agency during the approximate period February-April 1983.

Division/Office	Name	To
Accounting and Financial Management Division	Bobier, Larry Cook, Kimberly Curry, James Davis, Delphine Martin, John C. Penland, Patricia	Pension Benefit Guaranty Corp. Dept. of the Army HUD Private industry Dept. of Energy Private industry

Attritions-cont.

Office of the General Counsel	Roberts, James H.	IRS
Human Resources Division	Carter, David F. Shealey, Carol A.	Heritage Foundation School
International Division	Leitner, Peter M. Hughes, Barbara M.	GSA Private industry
Program Analysis Division	Pasquini, R. Carmel	NASA
Personnel	Saltz, Rebecca	Dept. of the Navy
Resources, Community and Economic Development Division	Oveson, Sanny	State Dept.

Regional Offices

Atlanta	Farmer, Mary Sue Jay, Vincent	Atlanta Public Library School
Chicago	Elliott, Jay C. Hillstrom, Raymond W. Liebhaber, Ralph F. Moore, Teri A. Yannello, Mark	Dept. of Transportation Dept. of Transportation Wright-Patterson AFB Dept. of Justice Dept. of Transportation
Denver	Madsen, Kenneth E.	Dept. of the Interior
Los Angeles	Lamont, Diane	Private industry
Norfolk	Owens, Patricia	Dept. of the Navy
San Francisco	Figueroa, Roberto McKenzie, Alan Vargo, Mary White, Marrian	IRS NORCAL Center on Deafness, Inc. Federal Reserve Bank Dept. of Energy
Seattle	Dembling, Douglas E.	Veterans Administration
Washington	Bouril, Beverly Cable, Lucille Enneking, Bonnie Reynolds, Stuart Spottswood, Wanda	Graduate school Not specified Graduate school Dept. of the Navy Not specified

Professional Activities

Office of the Comptroller General

Charles A. Bowsher, Comptroller General, addressed the following groups:

School of Business and Industry, Florida Agricultural and Technical University, Tallahassee, Feb. 1.

Joint meeting of the Los Angeles chapters, Association of Government Accountants (AGA) and the National Contract Management Association (NCMA), Los Angeles, Feb. 17.

College of Business Administration, Department of Accountancy, University of Notre Dame, South Bend, IN, Mar. 24.

Chicago chapter, AGA, Mar. 25.

Boston chapter, AGA, Apr. 7.

Capitol Hill Society of CPAs, Washington, Apr. 21.

Harry S. Havens, Assistant Comptroller General, addressed the Joint Financial Management Improvement Program's 12th Annual Financial Management Conference Workshop. He spoke on "Budgeting for Public Capital Investment," Washington, Mar. 30.

Milton J. Socolar, Special Assistant to the Comptroller General, addressed a joint meeting of the Hawaiian chapters of the American Society of Military Comptrollers, the Association of Government Accountants, the Institute of Internal Auditors, and the Hawaii Society of Certified Public Accountants, on "Initiatives to Improve Financial Management and Accountability in Government," Honolulu, Apr. 22.

Office of the General Counsel

Harry R. Van Cleve, acting general counsel, was a panelist in a session entitled, "The Climate for A/E Work in '83," at the 11th Annual Federal Program Conference sponsored by the Committee on Federal Procurement of the Architectural/Engineering

Services, Washington, Mar. 16.

Seymour Efros, associate general counsel, spoke before the D.C. Bar Association on "Bid Protests," Apr. 13.

Ronald Berger, assistant general counsel, spoke before the Air Force Institute of Technology Contract Law Class on "Negotiated Procurement Rules," GAO, Apr. 14.

Ronald Wartow, deputy assistant general counsel:

Addressed the Forest Service National Contracting Officer's Workshop on bid protests, Salt Lake City, UT, Mar. 21.

Spoke before a National Institutes of Health symposium on source selection in research and development contracting, Frederick, MD, Apr. 25.

E. Jeremy Hutton, senior attorney, delivered a speech, "Legal Restrictions on Funding of Contracts," to the Air Force Institute of Technology contract law class, Washington, Apr. 15.

J. Dean Mosher, senior attorney, participated in the FBA Equal Employment Opportunity Conference by discussing current developments in EEO law and policy, Orlando, FL, Apr. 8.

James H. Roberts, III, attorney-adviser, presented seminars on "GAO Bid Protests and Advertised Procurement Pitfalls" during the 1983 National Guard Judge Advocate Conference, Little Rock, AR, the week of Apr. 4.

Accounting and Financial Management Division

Walter L. Anderson, senior associate director:

Led a panel discussion on "Improving Agency Accounting and Financial Systems" at the 9th Annual Federal Data Processing Expo in Washington, Apr. 14.

Led the workshop on "Reforms

Due to Technological Advances" at the Joint Financial Management Conference on "Financial Management Reform" in Washington, Mar. 30.

Ken Pollock, deputy associate director, addressed a session of the Joint Financial Management Conference on the use of electronic work stations in GAO, Washington, Mar. 30.

Ronald J. Points, associate director:

Spoke before the Southeastern Intergovernmental Audit Forum on the "Federal Managers' Financial Integrity Act and OMB Circular A-123," Jacksonville, FL, Feb. 24.

Spoke before the New York/New Jersey Intergovernmental Audit Forum on "GAO Internal Control Standards," Cherry Hill, NJ, Apr. 15.

Spoke before the American Society for Public Administrators' Conference on "Issues in Regard to the Federal Managers' Financial Integrity Act," New York, Apr. 18.

Spoke before the Missouri Society of CPAs' 16th Annual Governmental Accounting Seminar on "Status of the Governmental Accounting Standards Board," Jefferson City, Apr. 21.

Spoke before the Michigan Association of CPAs' Governmental Accounting and Auditing Conference on "Internal Controls in a Governmental Environment," Lansing, Apr. 25.

Spoke before the American Accounting Association, Western Regional meeting, on "Problems of Establishing Accounting Standards in the Public Sector," San Francisco, Apr. 29.

Virginia B. Robinson, associate director:

Participated in a panel discussion on "Careers in Accounting" sponsored by the American University, Washington, Apr. 28.

Participated in a workshop on

"Reform in Finance and Accounting" at the Annual Conference of the Joint Financial Management Improvement Program, Washington, Mar. 30.

Spoke on "Accounting Systems Approval, the GAO Approach" before the Central Pennsylvania Chapter, Association of Government Accountants, Harrisburg, Apr. 19.

Brian L. Usilaner, associate director, spoke at the Second National Public Sector Productivity Conference on "GAO's Approach to Management Reviews," New York, Mar. 25.

Joseph J. Donlon, senior group director:

Spoke on "Fast Pay Procedures" at the Office of Personnel Management Training Center, Washington, Feb. 15.

Spoke on "The Revised GAO Accounting System Approval Process" at a meeting of the Association of Government Accountants, St. Louis, Apr. 13.

W.A. Broadus, Jr., group director, conducted briefings, workshops, etc., on governmental audit standards and governmental auditing for the Municipal Finance Officer's Association Committee, Washington, Feb. 1; accounting accreditation visit to the University of Oklahoma, Norman, Feb. 13-15; University of the District of Columbia accounting staff, Washington, Feb. 16; National Assistance Management Association, Arlington, VA, Mar. 7; Association of Government Accountants, Harrisburg, PA, Mar. 15; Association of Government Accountants, Cleveland, Mar. 21; University of Virginia, Charlottesville, Apr. 12; Kentucky Society of CPAs, Louisville, Apr. 29; American Accounting Association, New York, Apr. 30.

Theodore F. Gonter, group director, spoke on conducting "A Management Control Review of a Computer Entity" at the 1983 Conference on EDP Performance Management, Scottsdale, AZ, Mar. 2.

Bruce Michelson, group director, spoke on "Internal Controls in the Federal Government" as part of an Association of Government Accountants seminar on the Federal Managers' Financial Integrity Act, Atlanta, Apr. 17.

Robert A. Pewanick, group director, is serving as Chairman of a major Association of Government Accountants task force to identify and catalogue significant financial management studies that have been conducted with respect to Federal Government financial operations during the past 35 years and to evaluate the results of these studies.

John Reifsnnyder, group director, is serving as Project Leader for the task force.

George P. Sotos, group director, spoke on "The Personal Computer: At Home in the Office, and in Education" at the Annual Dinner and Joint Chapter meeting of the Chesapeake Division of the Association for Systems Management at the University of Maryland, College Park, Mar. 30.

Paul S. Benoit, computer specialist, was reelected Secretary and Membership Chairman, Patuxent Chapter, Association for Systems Management, 1983-84.

Ronald Kozura, computer specialist, was presented with a Certificate of Appreciation for serving as the Chesapeake Division Council Chairman for 1982-83. He received this award while attending the International Association for Systems Management Conference in Boston, Apr. 26.

Dennis Shaw, computer specialist, made a presentation at the Federal Data Processing Expo on "Federal Procurement: Update and Overview," Washington, Apr. 12.

J. Chris Farley, management analyst, along with **Marcia Drayton**, branch chief, and **George Beasley**, technical assistant, spoke on the "Debt Collection and Waiver Process" at the Joint Military Conference in Cleveland, Apr. 18-20.

Thomas D. Sholedice, management consultant, presented a seminar on the "Review and Evaluation of Internal Control in Accordance with the Federal Managers' Financial Integrity Act of 1982" to the AGA, Denver Chapter, Apr. 21.

Gordon J. Filler, systems accountant, was appointed Chairman of the Small Business Education Commit-

tee, Washington Chapter, AGA.

Peter Lemonias, project manager, discussed the use of productivity improvement to deal with budget cutbacks in Federal agencies at a panel at the American Society for Public Administration's national conference, New York, Apr. 17.

Human Resources Division

Mort Henig, senior associate director, spoke on "The Impact of Auditors' Findings on Government Policy" at a joint meeting of the Detroit Chapter of the Association of Government Accountants and the Detroit Chapter of the American Society for Public Administration, in Detroit, Mar. 22.

Frank Curtis, associate director, discussed "Improving the Federal Employees' Public Image," at an executive forum at the Federal Executive Institute, in Charlottesville, VA, Apr. 8.

Charles Gareis, evaluator, and **Harry Coffman**, group director, discussed GAO's report, "The Congress Should Consider Repeal of the Service Contract Act" (GAO/HRD-83-4, January 31, 1983), at a luncheon meeting of the Electronic Industries Association's Service Contracts Committee, in Washington, Mar. 10.

Michael Donohue and **Donald Franklin**, evaluators, and **Christie Bentzen**, WRO, presented coaching sessions on preparing for the Certified Information Systems Auditor exam for the Central Maryland chapter of the EDP Auditors Association, in Baltimore, Mar. 23 and Jan. 26.

International Division

Samuel Bowlin, associate director, and **Eugene Wohlhorn**, group director, discussed GAO reviews concerning U.S. participation in international organizations, during a U.S. Chamber of Commerce Workshop on "Third-World Development, UN Economic Agencies and U.S. Business," Washington, Feb. 3.

Institute for Program Evaluation

Wallace M. Cohen, group director: Chaired a panel on "Analytical Is-

sues in Block Grants" at the 1983 Annual Conference of the American Society for Public Administration in New York City, Apr. 19.

He and **Jeremiah Donoghue**, New York Regional Office, met with members of the National Council of State Legislators, Executive Committee on Program Evaluation meeting in Albany, New York, October 14 and 15, 1982. The group had representatives from a number of States as well as one from the Canadian Auditor General's Office. In addition to discussing how each group conducted its reviews and the products prepared, the group discussed the utilization of the reviews with New York State Senate Finance and House Rules Staff Directors, Special Commission Staff, and the Governor's Office Staff.

Ray Rist, group director, has been appointed to the International Editorial Advisory Board of *Human Resources Abstracts*. The *Abstracts* is a quarterly journal that publishes more than a thousand abstracts a year in such areas as labor market and manpower policy, economic conditions, industrial and labor relations, and education.

Lois-Ellen Datta, group director:

Discussed "The Implications of Recent Knowledge Syntheses of Bilingual Education" at the American Educational Research Association. She also participated in a panel discussion of demands analysis versus needs analysis in program planning.

Had published "A Tale of Two Studies" in *Educational Evaluation*, Vol. 8, 1983.

Terry Hedrick, evaluator, coauthored a chapter in *Solutions to Ethical and Legal Problems in Social Research* (Robert F. Boruch and Joe S. Cecil, eds., Academic Press Quantitative Studies in Social Relations, 1983) entitled "The Statutory Protection of Confidential Research Data: Synthesis and Evaluation."

Linda Morra, evaluator, delivered a paper entitled "State Capability to Assess Block Grant Programs" at the American Society of Public Administrators at the 1983 Annual Conference in New York, Apr. 19.

Joint Financial Management Improvement Program

Susumu Uyeda, executive director:

Gave a presentation on JFMIP and new issues in Government financial management to the Boston Chapter of the Association of Government Accountants, Boston, Feb. 22.

Gave a presentation on JFMIP, Reform '88 and the Financial Integrity Act to the Army Audit Agency Regional Staff and the Association of Government Accountants' Officers of the Texas/Oklahoma Region, San Antonio, TX, Mar. 4.

Gave a presentation on new issues in Government financial management to the Cleveland Chapter of the Association of Government Accountants, Cleveland, Apr. 18.

Gave presentations on JFMIP, Financial Integrity Act, Reform '88, cash management, and new issues in Government financial management to the Detroit and Lansing Chapters of the Association of Government Accountants, Apr. 19.

Gave a talk on JFMIP and new issues in Government financial management to the officers of the Mid-Western Region of the Association of Government Accountants, Kansas City, MO, Apr. 23.

Gave a presentation on JFMIP and new issues in Government financial management to the Topeka Association of Government Accountants Chapter, Topeka, KS, Apr. 25.

Gave a presentation on JFMIP's role in the Government and current projects at the DOD Financial Commanders' Information Exchange Conference in Topeka, KS, Apr. 26-27.

Kenneth M. Winne, senior project director, taught a series of 1-day seminars on Internal Controls, sponsored by the National Office of the Association of Government Accountants in Cleveland, Mar. 23; San Francisco, Apr. 15; Baltimore, Apr. 20; and St. Louis, Apr. 28.

Mission Analysis and Systems Acquisition Division

Donald E. Day, senior associate director:

Spoke on "The Role of the GAO in Major Acquisitions" at the Defense Systems Management College, Fort Belvoir, VA, Mar. 16.

Discussed DOD's acquisition and management of major weapons systems at American University, Washington, Mar. 24.

John J. D'Esopo, group director, spoke on "The Organization and Mission of GAO As It Applies to Navy Acquisitions" at the Navy Systems Acquisition Management School, Washington, Dec. 10.

Lester C. Farrington, Jr., group director, spoke on "GAO's View of Test and Evaluation" before students attending the Defense Systems Management College, Hanscom Air Force Base, Bedford, MA, Nov. 18, and at the Defense Systems Management College, Fort Belvoir, VA, Jan. 27.

John L. Anderson, evaluator, was elected Secretary of the Northern Virginia chapter of the National Association of Accountants for the year 1983-84.

George W. Halleron, evaluator, participated in a panel discussion on "What Groundwork Needs to be Laid for an Approach to Provide Vigorous Competition?" at the American Defense Preparedness Association's Military Computer Conference, Arlington, VA, Jan. 28.

Office of Organization and Human Development

Tom Franklin, director, and **Sande Lehrer**, management development specialist, gave a presentation on "How the U.S. General Accounting Office Develops Managers" at the American Management Association's Annual Human Resource Conference, Dallas, Apr. 15.

Curtis Groves, evaluation specialist, coauthored an article on U.S. Department of Education Policies and

ESEA Title I Evaluator Utility: Change in Attitudes, Change in Platitudes, which was published in the spring issue of *Educational Evaluation and Policy Analysis*.

Sam Holley, personnel psychologist:

Participated in preparing and presenting a paper entitled "Concepts of Career and Career Development" before the Consultative Committee on Administrative Questions at the United Nations, New York, Apr. 8.

Addressed the International Civil Service Commission on "Evaluating Management and Organizational Performance," Geneva, Switzerland, Feb. 10.

Office of Quality Assurance

Heather Wiltberger, social science analyst, spoke on qualitative data collection techniques at a graduate seminar in evaluation methodology at George Washington University, Washington, Mar. 28.

Michael Speer, evaluator, along with **Carol Codori**, Office of Foreign Visitors, conducted a problem-solving workshop for senior citizens at the Logan Community School, Washington, Apr. 16.

Procurement, Logistics and Readiness Division

Ron King, supervisory evaluator:

Spoke on Federal agency attitudes toward using computer-aided building design and GAO's role in encouraging greater use of this technology on Federal building projects, during Catholic University's short course, "Computers in Architecture: Who Needs Them?", Washington, Mar. 7, 9, and 11.

Chaired a technical session on "Computer Aids for Engineering Analysis and Design," served as discussion leader for the Federal agency special interest group session on "Expansion of Computer/ Graphics Use Among Contract Architects and Engineers," and spoke on "Developing and Responding to

RFPs for Computer-Aided Graphics Services," at the Second Annual International Congress on Computer/ Graphics in the Building Process '83, Washington, Apr. 6-8.

Participated in roundtable discussions on research needs and priorities during the workshop on "Sophisticated Models for Building Energy Analysis and Performance Prediction," sponsored by the Department of Energy, the House Committee on Science and Technology, and various private-sector organizations, at the Xerox International Center for Training and Management, Leesburg, VA, Apr. 20-21.

Participated in a roundtable discussion, "Where Do We Go From Here?", at the Construction Industries Coordinating Group meeting during the Annual Meeting of the American National Metric Council, Crystal City, VA, Apr. 25.

Julia Denman, senior evaluator:

Participated in a Logistics Panel on "Defense Logistics Trends and Perspectives: Progress and Problems," at the Air Command and Staff College, Maxwell AFB, AL, Jan. 14.

Gave a presentation entitled "Optimizing Limited Defense Dollars: A Challenge for Logisticians" at the Long Island Chapter of the Society of Logistics Engineers, Feb. 22.

Discussed "A GAO Perspective of Life Cycle Management" before the Life Cycle Cost Management Seminar at the Defense Systems Management College, Mar. 3.

Program Analysis Division

Kenneth W. Hunter, senior associate director:

Represented the Federal sector in a panel discussion on "America's Infrastructure: Four Views of Government Responsibility," cosponsored by the Congressional Research Service and the Council of State Governments, Washington, Feb. 15.

Chaired a workshop on economic and demographic issues affecting the budget at the spring symposium

of the American Association for Budget and Program Analysis, Apr. 15.

James L. Kirkman, management analyst, chaired a workshop on defense management issues at the spring symposium of the American Association for Budget and Program Analysis, Apr. 15.

Emilie Heller, supervisory evaluator, chaired a workshop on management reforms in social programs at the spring symposium of the American Association for Budget and Program Analysis, Apr. 15.

Margaret H. Dyess, supervisory evaluator, discussed GAO's role under the Consolidated Federal Funds Act of 1982, at the Joint Federal and State Federal Assistance Award Conference, in Albuquerque, NM, Mar. 21.

Roberta Hale, evaluator, discussed GAO's review of the Stevenson-Wydler Technology Innovation Act provision establishing a mechanism for transferring federally owned and/or originated products, processes, and services from Federal laboratories to State and local governments and the private sector, at a conference on Federal knowledge transfer programs sponsored by the Department of Health and Human Services, Feb. 17-18.

Lawrence Cluff, economist, discussed GAO's report, "Minimum Wage Policy Questions Persist" in live interviews broadcast over WBBF radio, Rochester, NY, and WCAU radio, Philadelphia.

Harold Brumm, economist, is the author of "Property Rights and the Cost Growth of Weapon Systems," published in the first quarter issue of the *Defense Management Journal*.

Resources, Community and Economic Development Division

Hugh Wessinger, senior associate director, spoke on "Financing Sewage Treatment Needs—The Challenge Ahead," before the Winter Technical Conference of the Associate of Metropolitan Sewerage Agencies, San Antonio, TX, Feb. 17.

Tom Reese, group director, partic-

ipated in a panel discussion on the potential joint civil and military use of military airfields, at the Aviation Business '83 Conference, Los Angeles, Mar. 2.

Vic Rezendes, group director, discussed GAO's report, "Better Regulation of Pesticides Exports and Pesticides Residues in Imported Foods Is Essential" (CED-79-43, June 22, 1979) with Tetsuo Tsubowawa of the Japan Broadcasting Corporation. The taped interview was included as part of a program on pesticides aired in April.

Rita Grieco, evaluator, discussed the role of the General Accounting Office at a Career Day Workshop at the Maxwell School of Citizenship and Public Affairs, Syracuse University, Mar. 7.

Kevin Boland, senior associate director, discussed "GAO and Energy" at the International Energy Conference sponsored by the International Research Center for Energy and Economic Development, Denver, Mar. 23.

Dave Jones, issue area planning director, discussed Federal and State regulation of the pesticide chlordane on "Good Morning, America," Apr. 5.

Jim Wells, group director, and **John Murphy**, evaluator, participated in a "wood study" advisory panel meeting, sponsored by the Office of Technology Assessment, Washington, Mar. 31.

John Sprague, associate director, and **Charles Cotton**, evaluator, discussed GAO's views on strategic and critical minerals, at a workshop on U.S. strategic minerals policy, sponsored by the International Economic Studies Institute, Washington, Mar. 31.

Ed Kratzer, group director, discussed the role of the interagency Professional Audit Review Team, which was established by law to review Federal energy information activities, at a conference of the National Academy of Sciences' Committee on Natural Gas Statistics, Apr. 22. He was accompanied by **Carl McClure** and **Lew Adams**, evaluators.

Kevin Boland, senior associate director, and **Don Forcier**, senior group

director, discussed "Energy Policies and Programs: Views from GAO," at the Western Executive Seminar Center, Denver, Apr. 25.

Jerry Killian, group director, discussed GAO's role in nutrition issues, before the National Nutrition Consortium's nutrition policy seminar, Washington, Apr. 26.

Mel Mench, evaluator, discussed GAO's report, "Need for Greater Efforts to Recover Costs of Food Stamps Obtained Through Errors or Fraud" (GAO/RCED-83-40, Feb. 4, 1983), before the National Welfare Fraud Association, Dallas, Apr. 26.

Richard Frankel, evaluator, was on a panel of experts invited to review the work of a graduate seminar course on acid rain at the Lyndon B. Johnson School of Public Affairs, University of Texas, Austin, Apr. 28-29.

Robert Robertson, evaluator, discussed GAO's report, "DOT Needs Better Assurance that Transit Systems Are Maintaining Buses" (GAO/RCED-83-67, Mar. 25, 1983), with WAMU radio, Washington.

Regional Offices

Atlanta

Marvin Colbs, regional manager, spoke on "Carrying Out Oversight Functions—How GAO Interfaces with DOD" to the Professional Military Comptroller School at Maxwell AFB, AL, Feb. 10.

Pat Patterson, assistant regional manager, was guest speaker at the April meeting of the Santa Fe subchapter of the New Mexico Chapter of AGA in Santa Fe. He spoke on "Use of Microcomputers in Financial Applications."

Muriel Castillo, evaluator, spoke to English students on the contributions of Afro-American writers and the communication skills involved in producing GAO reports during Okaloosa-Walton Junior College's Professional Awareness Day, Niceville, FL, Feb. 16.

Frankie Fulton, evaluator, participated in a special training session for members of the Atlanta Chapter of the Institute of Internal Auditors by presenting a segment on interpersonal skills and interviewing.

Al Davis, evaluator, spoke on GAO reviews of special programs for disadvantaged students at the 11th Annual Conference of the Southeastern Association of Educational Opportunity Program Personnel, Atlanta, Feb. 3. He also participated in the National Alliance of Business College Youth Motivation Task Force at Clark College, Atlanta, Feb. 16-18.

Elaine Asher, technical information specialist, spoke on "On-Line Systems in a Libraryless Information Center" during the Federal interagency Field Librarians Workshop, Washington, Dec. 1.

Chicago

Roger E. Kolar, evaluator, spoke on "GAO and Performance Auditing" before three auditing classes at the University of Illinois, Champaign, Apr. 14.

Stewart O. Seman, evaluator, spoke on "Small Computer Software Utilization in Operational and Compliance Auditing—Data Base Management" before the Intergovernmental Accounting and Financial Reporting Conference, AGA, Madison, WI, Apr. 29.

Cincinnati

Mike Murphy, evaluator, participated in a Sentencing Institute for Federal judges from the 4th and 11th Circuits, Raleigh, NC, Apr. 17-20.

Arthur Foreman, operations systems analyst:

Spoke on "Computers, Crime, Controls, and Audit" to a Moral Problems class at Xavier University, Cincinnati, Apr. 21.

Served on the 1982 *EDP Auditors Journal* awards committee for the EDP Auditors Foundation.

Served as instructor for two sessions of the EDP Auditors' Certified Information Systems Auditor examination coaching course in March.

Was elected Director of the Greater Cincinnati Chapter of the EDP Auditors Association for 1983-84.

Norman Hofmann, evaluator, was elected Treasurer of the Greater Cincinnati Chapter of the EDP Auditors

Association for 1983-84.

Denver

Robert W. Shideler, senior evaluator, and **Emmanuel S. Olona**, evaluator, discussed GAO's history and organization with the University of New Mexico's Robert O. Anderson Accounting Association, in Albuquerque, Apr. 7.

Douglas H. West, senior evaluator, discussed GAO's work on block grants at a conference for 12 State education departments of the Mountain and Plains Region, in Denver, Apr. 28.

Detroit

Walter C. Herrmann, Jr., regional manager, spoke before the Dayton, Ohio, Chapter of the Association of Government Accountants, Feb. 24.

Robert J. Piscopink, evaluator, discussed the GAO study on the implementation of the single audit before the National Intergovernmental Audit Forum Meeting, Washington, Feb. 1.

William F. Laurie, evaluator, was keynote speaker on "Profiles of Older People" at the 68th Texas Legislation meeting, Houston, Feb. 24.

Theresa M. Walter, evaluator, presented a paper entitled "Dynamic Demographic: Profile of an Aging Population," to the Ohio Academy of Science, Apr. 23.

Cynthia L. Giacona, evaluator, received her final passing scores for the CPA examination, Feb. 2.

Mary E. Lyons, lead clerk typist, spoke on "The Administrative Personnel in the Federal Government," before the 12th grade career planning class of Annapolis High School, Dearborn Heights, MI, Feb. 15.

Kansas City

Richard E. Burrell, evaluator, spoke on GAO and future employment opportunities in GAO and in the Government in general at the Minority Business Day Conference sponsored by Blacks in Business (BIB) at Southern Illinois University, Carbondale, IL, Apr. 22.

Los Angeles

Vic Ell, assistant regional manager:

Spoke on "Auditing with GAO" before the Public Organization and Management Theory Graduate Class at the University of Southern California and the Auditing class at California State University, Los Angeles, Mar. 11, Apr. 12, and Apr. 19.

Had an article entitled "GAO Looks at Health Care" published in the *Government Accounting Journal*.

Ed Nash, evaluator, presented a 1-day training course on "Questionnaire Design" for the California Association of Auditors for Management, Apr. 4.

Pat Gormley and Darryl Dutton, evaluators, taught an advanced auditing class covering operational, internal, and control-related auditing to spring semester graduate students at California State University, Long Beach.

Karl Deibel, evaluator, received a Distinguished Public Service—Outstanding Professional Employee Award recognizing professional competence and dedication to public service from the Federal Executive Board, Los Angeles.

Fred Gallegos, evaluator:

During the winter quarter, taught a management information systems class to graduate students at California State Polytechnic University, Pomona, CA.

During the spring semester, taught a security and privacy of information systems class to graduate students at California State Polytechnic University, Pomona, CA.

Spoke on "The Use of Microtechnology in Operational Auditing" before the Student Accounting Society at the California State Polytechnic University, Pomona, CA, Feb. 15.

Spoke on "Information Systems Careers in EDP Auditing" before the Management Information Systems Student Association at California State Polytechnic University, Pomona, CA, Mar. 10.

Received notice of status as a "Certified Data Educator (CDE)" from the Certification Council of the Society of Data Educators, Apr. 4.

Fred Gallegos, Dave Ireland, Tom Kinch, Barbara House, Sandra Coussu, and Walter Raheb, evaluators, and **Dan Ortiz**, technical information specialist, briefed Mr. Zimmerling of the Auditor General's Office, State of California, on Management Science Operations and the Use of New Technology in Operational Auditing, Mar. 31 and Apr. 1.

Marco Gomez and Matteo Torres, evaluators, spoke on "Career Opportunities at GAO" before Hispanic Business Student Associations at Loyola Marymount University; California State University—Long Beach, Northridge, Fullerton, and Los Angeles; and the University of California, Santa Barbara.

Norfolk

Joseph Holland, evaluator, discussed how GAO operates, its career paths, job requirements, and his own career experiences, as part of the Youth Motivation Task Force program presented by the National Alliance of Business at Hampton Institute, Hampton, VA, the week of Mar. 21.

Dan Omahen, evaluator, was interviewed by WTKR-TV concerning GAO's report, "Improved Federal Efforts Needed To Change Juvenile Detention Problems" (GGD-83-23), Norfolk, VA, Apr. 4.

Philadelphia

Richard Chojnicki was recently selected to serve on the Executive Committee of the Pittsburgh Chapter of the Association of Government Accountants.

San Francisco

Charlie Vincent, supervisory evaluator, discussed GAO's internal control standards at the national convention of the Association of Military Comptrollers, San Francisco, Feb. 23.

Thomas Monahan, senior evaluator, spoke on career opportunities

with GAO to members of Beta Alpha Psi, the national accounting fraternity, at California State University, Hayward, Apr. 27.

Larry Calhoun, senior evaluator, discussed GAO's audit efforts in the areas of performance appraisal and merit pay at a symposium for Federal executives on Merit Pay and Performance Management, San Francisco, Apr. 4, and Los Angeles, Apr. 11.

Walter Cyganowski, evaluator, spoke on planning for ADP procurement at the International Conference on Computer Capacity Management, New Orleans, Apr. 20. A paper he delivered on the subject was published in the conference proceedings.

Joe Martorelli, evaluator:

Was reelected president of the Golden Gate Federal Credit Union, in February.

Joined the faculty of San Francisco Community College as an instructor in computer studies, in May.

Seattle

Stephen J. Jue, technical assistance group manager, and **Roger D. Hayman**, senior evaluator:

Discussed GAO job opportunities at the first annual Career Emporium sponsored by Beta Alpha Psi, Seattle University, Feb. 22.

Participated in the annual Government Night program sponsored by Beta Alpha Psi, University of Washington, Seattle, Apr. 19.

Randall B. Williamson, senior evaluator, spoke on "GAO's Functions in Reviewing Federal Programs" at Seattle-area meetings of the Ballard Kiwanis Club, Apr. 7, and Issaquah Kiwanis Club, Apr. 15.

Kim F. Kenney, evaluator, was notified that he has passed all parts of

the CPA exam, in February.

Washington

Linda Koontz and **Diana Schultz**, evaluators, discussed the General Accounting Office before a Georgetown University U.S. Government class, Washington, Feb. 8.

Ed Zadjura, supervisory evaluator, discussed the functions and activities of the General Accounting Office before accounting, business, and public administration classes at Bowie State College, Bowie, MD, Feb. 9.

Gary Cockerham, evaluator, spoke on the activities of the General Accounting Office before a Howard University accounting class, Washington, Feb. 22.

LaJeannia Lacey, evaluator, discussed the General Accounting Office before a graduate-level public administration class at Howard University, Washington, Feb. 22.

George Delgado, evaluator, spoke on the activities of the General Accounting Office before Howard University's Society for the Advancement of Managers, Feb. 22.

Leslee Bollea and **Rich Yeh**, evaluators, participated in a cooperative education open house, informing University of Maryland students about the General Accounting Office, College Park, Feb. 23.

Ann Borseth and **Paul Zacharias**, evaluators, spoke to students at Strayer College as part of GAO's recruiting efforts, Washington, Jan. 26 and Feb. 10.

Linda Harmon, supervisory evaluator, **Kathleen Stanley**, and **Richard Yeh**, evaluators, participated in the University of Maryland's minority job fair, College Park, Feb. 2.

Fritz Askew, evaluator, spoke on the General Accounting Office be-

fore a combined meeting of Morgan State University's Accounting Club and Society for the Advancement of Managers, Feb. 24.

Gary Cockerham and **Claudia Fletcher**, evaluators, discussed the responsibilities and activities of the General Accounting Office before the Accounting Club of George Mason University, Fairfax, VA, Feb. 24.

Leslee Bollea, evaluator, spoke to MPA students on the functions and activities of the General Accounting Office at Ohio State University, Mar. 2.

Linda Koontz, evaluator, discussed career opportunities in GAO with students at the Inter-American University, San Juan, Puerto Rico, Mar. 14-15.

Leon Langford, evaluator, discussed career opportunities in GAO with students at the University of Puerto Rico, San Juan, Mar. 15-17.

Edith Pyles, senior evaluator, discussed the transition from college to the work force and career opportunities in GAO at a Youth Motivation Task Force program sponsored by the National Alliance of Business, Hampton Institute, Hampton, VA, Mar. 22-24.

Linda Harmon, supervisory evaluator:

Spoke on "Co-op Employment in the Federal Government—Future Employment Needs" and "Importance of Involvement with Professional Associations" before the Cooperative Education Association of Maryland, Mar. 24.

Represented WRO at the University of Maryland's Career Day activities, Apr. 12.

Jan Goldstein and **Ed Zadjura**, evaluators, participated in Career Day activities, discussing the General Accounting Office with George Washington University students, Washington, Apr. 8.

Annual Awards for Articles Published in The GAO Review

Cash awards are presented each year for the best articles written by GAO staff members and published originally in *The GAO Review*. The awards are presented during the GAO Awards Program held annually in October in Washington.

One award of \$500 is available to contributing staff 35 years of age or younger at the date of publication, and another is available to staff over 35 years of age at that date. Staff through grade GS-15 at the time they submit the article are eligible for these awards.

The awards are based on recommendations of a panel of judges designated by the Editor. The judges will evaluate articles from the standpoint of their overall excellence, with particular concern for

- originality of concept and ideas,
- degree of interest to readers,
- quality of written expression,
- evidence of individual effort expended, and
- relevance to "GAO's mission."

Statement of Editorial Policy

This publication is prepared primarily for use by the staff of the General Accounting Office (GAO) and outside readers interested in GAO's work. Except where otherwise indicated, the articles and other submissions generally express the views of the authors and not an official position of the General Accounting Office.

The GAO Review's mission is threefold. First, it highlights GAO's work from the perspectives of subject area and methodology. (The *Review* usually publishes articles on subjects generated from GAO audit work which are inherently interesting or controversial. It also may select articles related to innovative audit techniques.) Second and equally important, the *Review* provides GAO staff with a creative outlet for professional enhancement. Third, it acts as historian for significant audit trends, GAO events, and staff activities.

Potential authors and interested readers should refer to GAO Order 1551.1 for details on *Review* policies, procedures, and formats.

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