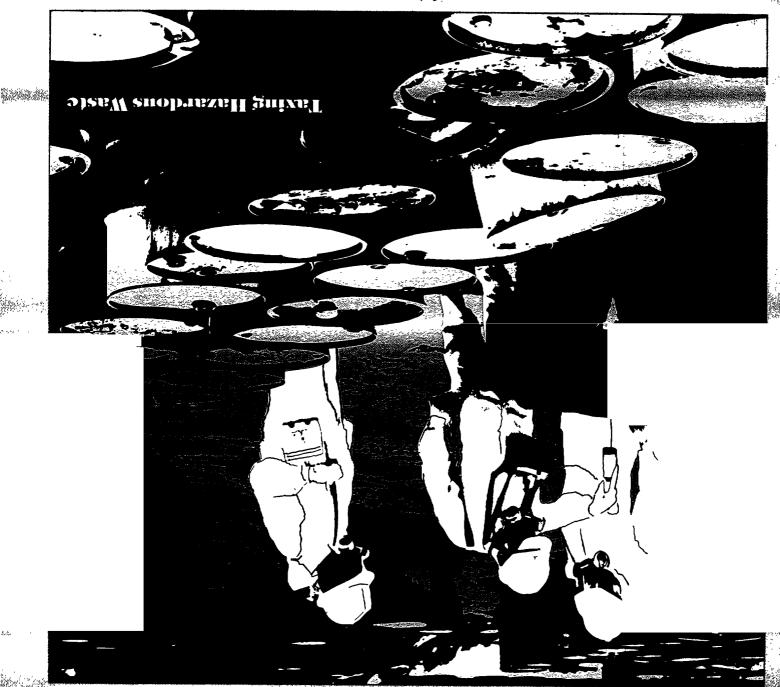
(02120- thru-031515)

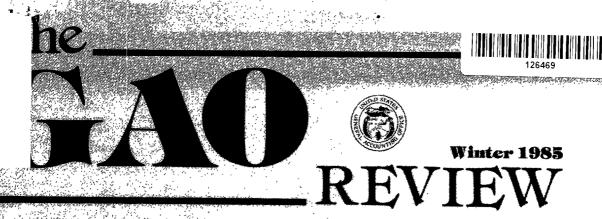


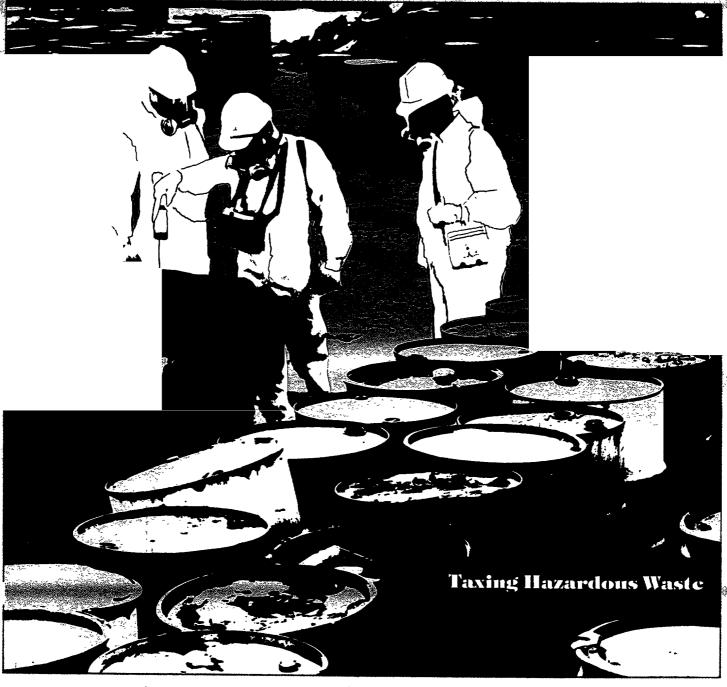
KENIE

Winter 1985









(031507- HWU-031515)

. . . . ¥. A . L.

1 From Our Briefcase

Legislative Perspectives on Program Evaluation Help on Writing Speeches VDT Explosion Bar-Code Update Reducing Jet Lag: Tips for Auditors on Travel

4 On Location

Fifth Biennial Intergovernmental Audit Forum Conference Association of Government Accountants Meets in Washington, D.C. World Future Society Holds 1984 Conference Child Care Advocates Visit GAO GAO's 1984 International Auditor Fellowship Program AV and Personnel Make Recruiting Videocassette

9 Manager's Corner

Creativity

10 Topics in Evaluation 031507

The Evaluation Synthesis Carl E. Wisler

Taxing Hazardous Waste: Economics, Design, and Implementation 031500

Linda Fletcher

16 A Consolidated Financial Statement for the Federal Government? - 031509 Policy, Problems and Potential

David F. Fiske and Valerie Lau

18 Commercializing Landsat 031510 and the Weather Satellites

James F. Donaghy, Daniel J. Semick, and Frank V. Subalusky

Measuring the Government's Borrowing Costs: 031511 A Case for Adjustable (Variable) Interest Rates

Thomas Storm and Patrick Doerning

Contents

Deceased Attritions

51

Professional Activities

26	A First Look at GAO's 031512 Resident Instructor Program Gary Lawson, Patricia Moore, Thomas O'Connor, David Rowan, and Lin Weeks
30	OGC: Serving GAO, the Congress, and the Public Marilynn Eaton, et al \\0315\\3
35	Beauty and the Beast: A Lesson in Interpersonal Dynamics Marvin E. Hanson and Sigrid L. McGinty
38	A Week's Worth Pearl Brewer
39	Bookmark "Computer Wimp: 166 Things I Wish I Had Known Before I Bought My First Computer." Glenn Spiegel, reviewer
40	Legislative Developments 031515
45	GAO Staff Changes Senior Staff Changes SES Reassignments Additional Staff Changes New Staff Members Retirements

From Our Briefcase

Legislative Perspectives on Program Evaluation

GAO staff and *Review* readers in state audit offices will find a number of professional themes in common in a "mini-symposium" published in the May/June issue of *Public Administration Review*. In three short articles, senior managers in legislative research or program auditing at the state level explore the growing field of legislative program evaluation. They consider it from complementary perspectives: as a legislative service and as a profession.

Definitions

Judith Brown, performance audit manager with the Illinois Office of the Auditor General, says that legislative program evaluation measures both program effectiveness and operational proficiency. It can identify program weaknesses and also determine if there is a justification for a program to continue. This mixture of roles has come about since the 1970's, when state legislatures first established professional staff to evaluate the effectiveness of public programs.

The broad scope of the field leads Brown to suggest that definitional boundaries are needed. She lists four characteristics that describe program evaluation as a legislative service: independence, objective support, programmatic scope, and legislative perspective. The last characteristic implies that conclusions can be used by decisionmakers who effect legislative policy. However, a balance between raising issues and identifying a particular legislative response must be struck.

Balance

Allen Green addresses this balance and its implications for nonpartisan

evaluator staff. As research director of Oregon's Legislative Research Office, he deals with policy research on issues facing the Oregon legislature, as well as with sunset reviews of occupational licensing (and several other) state agencies. His concerns about legislative program evaluation include staff recommendations and advocacy of findings, determination of a successful evaluation, and the trend toward more fiscally oriented evaluations.

Green says an important issue is in determining the proper role of evaluation staff in either advocating a legislative position or in staying involved after completing its work at an agency. To what extent should staff "lobby" for a position? Or, for example, what if a report finds an agency is not following proper procedures? In Green's experience, the legislature has not asked staff to follow up on such findings. But he questions whether time and resources should be available to evaluators for agency monitoring tasks.

Standards

How standards affect the future direction of legislative program evaluation is discussed by Mark Funkhouser, legislative program evaluation chief for the Division of State Audit, Tennessee Office of the Comptroller of the Treasury. In contrast to Brown, who supports studying the merits of self-regulation, Funkhouser points out the disadvantages of national standards. He thinks the incentive to survive as a profession drives the improvement of systems for internal controls and quality assurance more than outside standards would.

Of even greater relevance, legislators expect evaluations to meet the basic standard of "reliable, credible, objective information and judgments about executive agencies delivered to them when they need it." This view is echoed by Green, who says that a legislative evaluation's primary purpose is to "provide information to legislators in their consideration of an agency." Legislators may use an evaluation to reach a conclusion that is different from that of the staff's. Nonetheless, a successful evaluation is one that provided the information needed to do so.

The Public Administration Review may be ordered from the American

Society for Public Administration, 1120 G Street, N.W., Washington, D.C. 20005.

Help on Writing Speeches

A speechwriter, assigned to write Franklin D. Roosevelt's address to the Congress asking for a declaration of war against Japan, began by typing, "December 7, 1941: A day that will live in world history."

When Roosevelt received the draft, he scratched out "world history" and penciled in a single word...infamy. That one word transformed Roosevelt's address into a memorable speech, one that would live in world history. The reason most people remember "infamy" is because it carries an emotional appeal, the word stirs our passions. Good speeches use such rhetorical devices, bad speeches use such dead sounding words as world history.

With government and big business combating a negative image in the last decade, the need keeps growing for public information specialists, especially those with a knack for writing speeches, who can mold a favorable public opinion about the organization. Also, government and private industry employees are more likely to be asked to write speeches for the boss.

The Corporate Communications Report has disclosed that the demand for corporate speechwriters has increased about 30 percent a year in the past 5 years. The Report says that the average salary for a corporate speechwriter rose from \$20,000 in 1970 to \$40,000 in 1980, with many positions paying \$60,000 and \$70,000. The primary reason, the Report says, for these escalating salaries is that the supply of good speechwriters has not increased to meet the demand, especially in government.

One good way to write a speech is to remember that we are all speech-makers. A communications specialist for Cities Service Company in Tulsa, Carolyn Lomax-Cooke, remembered that her mother was the first speech-maker that she really noticed. "My mother's first speech was the one about my face. She would say, 'Look at that expression on your face. Do you want your face to freeze into that expression? Go look in the mirror, you're

From Our Briefease

about to step on your lip." Lomax-Cooke said she remembered her mother's speeches because they were delivered with such frequency and conviction.

A good speechwriter, specialists in the field say, remembers the two critical elements of a good speech; the audience and the speaker. A speech cannot be written in a vacuum; it must be written for a particular audience to be delivered by an individual speaker. This means that a speechwriter should learn the background of the speaker: educational background, experience in business or social situations, whether the speaker comes from a large or small family, a small town, farm, or big city, and whether the speaker has any personal anecdotes that could be incorporated into the speech. All these details help the audience identify with the speaker, making the speaker sound believable and human, rather than like a robot parroting somebody else's lines

Also crucial to good speechwriting is limiting the message, especially when the speaker is an expert in the subject of the speech. Often, the speaker wants to say so much and cares so passionately about the topic that everything and the "kitchen sink" is thrown at the audience. If that happens, the speech is a failure; nobody is going to remember anything. Mike ten Kate, a former educational vice-president of GAO's toastmasters (speechmaking) club called "The Generally Able Orators," points out that a speech should not be cluttered with main points and subpoints. "I never plan a speech to cover more than one topic and never more than three or four major points to develop that topic," ten Kate savs.

Speechwriters must also remember that they should be writing for the ear. not the eye—that's what separates the writer from the speech writer. John R. Bonee, in an address on "The Care and Feeding of the Executive Speaker," published in Vital Speeches of the Day, pointed out that speechwriters are not the same as journalists or editors who might want to delete throw-away words like "now" and "so" and "by the way": in journalism, these words are considered redundancies or tautologies; in speechmaking, we call that amplification. Bonee, corporate communications manager at Illinois Bell, suggested that the main point a speaker is trying to make should be said in two or three different ways.

"The Generally Able Orators" of GAO are a good source of ideas for how to make effective speeches. For information, contact Stevie (Cleo)

Young at 275-6239 or Carl Moore at 275-6137.

VDT Explosion

In the nationally syndicated cartoon strip called "Shoe," a crusty newspaper editor rebukes his disgruntled reporter by saying, "I've had it with your constant complaining about the computer...We couldn't run this newspaper without it." To which the reporter returns to his desk, stares at his computer, and sighs, "Yeah, I suppose every business needs an inanimate scapegoat."

The computer that "Shoe." the reporter, was complaining about is known as a video display terminal (VDT), a unit that is rapidly replacing the typewriter and other office equipment at GAO and in companies across the country. VDTs, also called CRTs because a cathode ray tube is the main component for the typical display unit, are probably most associated with automatic bank tellers and video games. Today, some 8.3 million VDTs are in use, and the number will grow to 30 million by 1986, as estimated by the International Data Corporation, a market research company in Massachusetts.

VDTs are having a particularly significant effect on women, who make up 80 to 95 percent of typists, secretaries, bank tellers, and keypunchers. By 1990, more than three-quarters of all office jobs will involve VDTs, and some experts are predicting that they will become as common as telephones.

VDTs have become a common sight in the workplace because they offer huge productivity improvements in office work, which has expanded explosively in the last several decades, but, until now, has not been accompanied by a similar expansion in high technology.

With the new VDT technology have come some negatives: questions have been raised whether VDTs are making work a lot more tedious and lonely. The New York Times quoted a bank clerk in Cleveland as saying she works from 1 p.m. to "finish," meaning that the job can end anywhere from 8 p.m. to midnight. Her job is to enter data from checks into an electronic coding machine so the transactions can be handled by a computer, "We sit all day and process these checks," she says. The clerk is expected to handle 1,600 checks an hour. VDTs are also considered a threat to other jobs traditionally held by women, such as file clerks, secretaries, claims processors, and some management workers.

The most serious questions about

VDTs concern whether they represent a health hazard; in particular, whether they cause eyestrain, cataracts, pregnancy problems, birth defects, and such musculoskeletal symptoms as shoulder, back, and neck pain. Psychological stress is also associated with using the terminal, including monotony, boredom, and a workpace dictated by VDTs rather than by the operators.

In addition, an Army researcher named Barry Smith says that VDTs may, in fact, be worse for your hearing than a week of listening to "heavy metal" rock music. As reported by the D.C. Gazette, a Washington, D.C., newspaper, Smith claims that some VDT screens emit a soft, high-pitched tone that is intense enough to damage the eardrum. For most people, the symptoms start with a persistent ringing in the ears.

Concerns about VDTs have lingered even though the National Institute of Occupational Safety and Health (NIOSH) and other researchers have repeatedly said they see no harmful effects. Hundreds of radiation tests by NIOSH show that while VDTs do send out minute amounts of X-ray and microwave radio-frequency radiation. these emissions are extremely low: as little as one-thousandth of current federal standards for safe exposure. However, because of continuing anxiety about VDTs' effects, NIOSH is scheduled to conduct this fall the first major study to determine whether VDTs are, in fact, a health risk.

"In the face of great uncertainty, it is better to meet the problem head-on than to let the uncertainty fester," Dr. Philip J. Landrigan of NIOSH's Surveillance, Hazard Evaluations & Field Studies Division, which will conduct the study, told *Business Week* magazine. NIOSH will look at about 4,000 women workers—half who use VDTs, half who do not—over 3 years. NIOSH hopes to issue its findings by late 1987.

VDTs have been a controversial subject ever since the mid-1970's, when the product became dominant on the market. Questions about VDTs have produced a dramatic rise in the number of articles published about possible harmful effects, climbing from none in the early 1970's to about 50 articles per year now. The controversy has spread to Capitol Hill, where a House subcommittee was holding hearings on the subject through the summer of 1984. In addition, more than a dozen bills were introduced in 1983 in at least six states to regulate the manufacture or use of the keyboard and TV-like combinations that display computer information.

The best-known group calling for

federal regulatory control over the sale and production of VDTs is "9 To 5," the National Association of Working Women, which distributes a free information package about working with VDTs. This association, with head-quarters in Cleveland, can be reached at (216) 566-1699. Also, the American Optometric Association has compiled guidelines to help VDT operators avoid headaches, eyestrain, and fatigue while working at the terminal. These guidelines recommend that VDT operators take the following measures:

- Sit in a chair with adjustable height.
 The operator should be 14 to 20 inches from the screen, looking down to the center of the screen at an angle of 20 degrees
- Place reference material as close to the screen as possible. (Both should be the same distance from the eyes.) This way, the eyes will not have to refocus as much.
- Take frequent rest breaks. NIOSH recommends leaving the screen for 15 minutes every 2 hours. If the work is very demanding, NIOSH recommends breaking 15 minutes every hour.
- Have eyesight examined regularly. The doctor or optometrist should be told that you are a VDT user.

GAO employees with questions about VDTs can contact Lisa Cormier, chair of GAO's Secretarial/Clerical Council at 275-3909. The council maintains an information file on VDT issues in the GAO Technical Library.

Bar-Code Update

You see them on packaged items at the supermarket, those vertical dark lines called bar codes. In 1949, Mr. N.J. Woodland and his associates filed a patent application for them: actually, for a system of automatic identification. In 1985, bar-code systems will perform a variety of tasks in government agencies to help increase productivity while cutting costs.

A 1982 study was done by the Joint Financial Management Improvement Program (JFMIP) entitled "Bar Code Technology: A Means to Improve Operational Efficiency and Internal Control." JFMIP did the study to "take the 'mystery' out of the subject of electronic marking and related reading devices." The study disclosed the technology involved in optical scanning and machine-readable symbols. It also reviewed the work of 10 different federal agencies with bar-code systems in place at the time of the study.

To check on current applications, the *Review* contacted two of the agen-

cies—the U.S. Department of Agriculture (USDA) and the Department of Energy (DOE)—and also interviewed several GAO staff to learn more about what has happened since JFMIP published its report.

USDA has expanded its use of a barcode system to control a large inventory of property items. All items valued at over \$200 are tracked from the moment they are received. An item is assigned an identification number, a detailed description is entered into a master inventory file, and when the item is received by the requesting office, a bar-code label is attached. Portable bar-code readers are used to perform the physical inventory.

DOE continues to use a bar-code system for tracking scientific equipment among different facilities. In addition, bar codes are used to maintain library collections and as access symbols on badges for entry into laboratories and buildings.

GAO uses bar codes as an integral part of the collection control and automated circulation system in use in the Technical and Law Libraries. A bar code is applied to each item in the collection and serves as a unique identifier for a given item. Library material is "charged out" or "charged in" using a light wand to "read" the bar code into the automated circulation system. The use of bar codes also enables library staff to determine the status of any given item (e.g., on the shelf, charged out, in bindery, etc.)

For more information about bar-code applications, call Maureen Canick at GAO, (202) 275-5754, Scott Baily, USDA, (202) 382-9779, or John French, DOE, (202) 252-8255. For those who want to pursue the matter, there is even a trade journal devoted to barcode use: the *Bar Code News*. For more information about this journal, call (603) 924-7136. For a copy of the JFMIP report, call (202) 376-5415.

Reducing Jet Lag: Tips for Auditors on Travel

Even the healthiest auditor has probably experienced "jet lag"—the debilitating effects of taking an airplane trip across several time zones.

How much disorientation an air traveler feels depends on several factors. Most people suffer greater jet lag when flying against the earth's rotation, from west to east, rather than with it. Many people need less time to readjust to the regular hours of "home" than to get acclimated to the new hours of their destination. Departure and arrival time can also affect the

degree of disorientation and discomfort. Leaving in the middle of night (the infamous "red-eye specials") makes adjusting to a new time zone more difficult than leaving in the morning. Similarly, an early morning arrival, which forces a person to get through a new day without sufficient rest, increases stress.

While the necessity of using a GSA contract flight permits little choice over departure and arrival times, and the vagaries of airline delays cannot be foreseen, jet lag can be reduced by controlling certain physical conditions. If you are exhausted before leaving, or sleep badly the night before, the effects of jet lag will be more pronounced. The solution is to get plenty of rest before the trip and even nap during the flight. Wear loose-fitting clothing and shoes for maximum comfort and move about the plane from time to time to increase the blood's circulation.

Diet is also crucial. Eat lightly before, during, and shortly after the flight, Ignore the airline's abundance of free food at tightly scheduled intervals. Although eating helps to pass the time, it plays havoc with the digestive system. To restore the fluids lost by the dry cabin air, drink at least four glasses of non-alcoholic liquid (fruit juices are a good bet). Avoid carbonated beverages because their gasses start to expand in the cabin's lower airpressure. Drink alcohol in moderation because it aggravates the dehydration the body is already experiencing. If suffering from particularly dry sinuses, eyes, or throat, inhale the steam from coffee or tea.

Dr. Charles Ehret, a scientist at the Argonne National Laboratory, has developed a special diet to reduce jet lag. To help synchronize the body's internal clock with a new time zone, he recommends alternate days of feasting and fasting for 3 days before a flight. His book, Overcoming Jet Lag (published by Berkeley Books, co-authored by Lynne Waller Scanlon, and costing \$4.95) recommends two "feast" days for the traveler: 3 days before leaving and the day before leaving. Feast days should include high-protein breakfasts and lunches consisting of eggs, dairy products, fish, lean meat, or beans. For dinner, the traveler can indulge in carbohydrates: pasta, rice, potatoes, and even sweet desserts. "Fast" days should occur 2 days before leaving and on the day of the flight. Meals should consist of light salads and soups, fruit,

On Location

Fifth Biennial Intergovernmental Audit Forum Conference

In May 1984, the eleven Intergovernmental Audit Forums held their fifth biennial conference of audit executives in New York City. The conference attracted more than 250 federal, state. and local government and private sector audit officials. OMB's John Lordan and GAO's Fred Wolf, Chairman and Vice-Chairman, respectively, of the National Intergovernmental Audit Forum were conference moderators. GAO's Assistant Comptroller General for Operations, Frank Fee, represented the Comptroller General and moderated a panel discussion on problems and successes with peer reviews of audit organizations, quality control of audits, operational auditing at the local level, and training. Other panels addressed the single audit, fraud and abuse, the Federal Managers' Financial Integrity Act and audit resolution, and fund accounting and generally accepted accounting principles

New York's Mayor Ed Koch addressed the opening session, and five federal inspectors general, five state auditors general, and numerous other audit officials participated in the technical programs

The Forums' role of improving communication among all members of the audit community is expanding. Comptroller General Bowsher has decided to place greater emphasis on using the National and Regional Intergovernmental Audit Forums as a primary means to foster improved cooperation and coordination. He believes that the Forums provide a successful and experienced permanent foundation that can be effectively employed to react to policy and other studies performed by OMB and GAO, as well as state and local governments.

The Forums are now entering a most challenging period. New federalism and other intergovernmental legislative proposals will place greater emphasis on states and local governments' performing a larger role in the audit area.



Joseph Welsch, Inspector General, Department of Transportation (c), provides the federal perspective on single audit implementation, as Anthony Piccirilli, Auditor General, State of Rhode Island (l) and Robert Bramlett, City Auditor, Austin, Texas (r) await a turn to present their perspectives.

...



Panelists prepare to present information on projects conducted by their respective Regional Forums. Shown are (I-r) Robert Peterson, Auditor General, South Dakota; Rolan Malan, Auditor, King County, Seattle, Washington, and Chair, Local Representatives on the National Forum; Joseph Clark, Auditor General, New York City Board of Education; Ronald Crews, Internal Auditor, City of Shreveport, La.

Association of Government Accountants Meets in Washington, D.C.

Over 1,000 people—a record number in 11 years of Association of Government Accountants (AGA) events—registered for the 1984 Professional Development Conference held in Washington, D.C. in July. The conference theme was "Reform and Technology: a Renaissance in Government," and was embodied in certificate programs, workshops, keynote speeches, and a technology display.

Comptroller General Bowsher used his keynote speech to address aggressively some long-standing controversies. He laid to rest discussion that he wanted a central accounting system in government from which all agencies would work. This is impractical at the federal level, he suggested. Rather, he said, we should concentrate on the 20 or so largest departments and agencies and see that quality systems are installed in each. These could, in turn, serve as models and guides for smaller and newer agencies.

The Comptroller General also reviewed the controversy on the relative merits of the various bases of accounting: obligation, cash expenditures, or accrual. Today's information system technology renders this controversy meaningless, he said, since computers

can take the raw figures and produce at any given point whatever information managers need, embracing all accounting bases. Vital to this capability, of course, is the integrity of the numbers being input into the system.

For details on conference sessions, see the August/September 1984 issue of AGA's Government Financial Management *Topics*, available by calling (703) 684-6931.

World Future Society Holds 1984 Conference

Massachusetts Institute of Technology (MIT) Professor Jay Forrester, pediatrician Dr. Benjamin Spock, and feminist author Betty Friedan headed a varied group of speakers at the World Future Society's Fifth General Assembly, "WorldView '84: A Global Assessment of Problems and Opportunities," held last June in Washington, D.C. Mr. Kenneth Hunter, Senior Associate Director of the Accounting and Financial Management Division, chaired the assembly.

Approximately 3,000 people attended the 5-day conference, where experts used lectures and films to discuss workable approaches to complex global problems that exist today or could develop in the future. Economists, United Nations officers, technologists, and senators were among the more than 600 speakers making presenta-

tions on overpopulation, Third-World debt, computer security, the threat of nuclear war, and other world concerns.

"The theme of 'World View '84' was carefully chosen to emphasize that the world is in a critical period where important choices must be made concerning the human future," Hunter said. "Changes are taking place in values and institutional forms, behavior and relationships. Significant advances are occurring in communication, electronics, biotechnology, and space exploration. At the same time, mounting and explosive problems exist."

"The committee planning 'World-View '84' decided that the emphasis of our conference should be on identifying possible solutions to significant problems, rather than merely discussing the nature and extent of problems. During this time of soul searching, faltering economic systems, and international tensions, it is important to remember that there are many people and groups actively developing solutions."

Many of the lecture sessions were economics-oriented. At one session, entitled "Economic Conditions Ahead," Jay Forrester. Germeshausen Professor at MIT, discussed the implications of the Systems Dynamics Model. He is known as Mr. Systems Dynamics, having written several books about the concept, which demonstrates the internal interactions of the economy that produce business cycles, inflation, stagflation, and the economic "long wave."

Forrester noted that while the United States is "capable of the highest standard of living we've ever seen...we do have system imbalances which can pull the system down. It's happened before." More ominously, he noted that "the threat from internal economic difficulties is greater than any external military threat."

Forrester drew chuckles from the audience when he said "10 percent of the people actually produce goods in society, the other 90 percent are overhead—including most of us in this room." He contended "we could double output by adding 10 percent of this overhead to the 10 percent of the people who actually produce goods. There are capital plants out there to absorb them."

The 1985 conference, "World Economic Issues," will be held at the Washington, D.C., Hyatt Regency Hotel in August.

The World Future Society, located in Bethesda, Maryland, is a nonprofit, private educational and scientific association of scientists, scholars, government officials, businessmen,

and others interested in upcoming social and technological developments. The Society attempts to serve as a neutral clearinghouse for future forecasts, recommendations, scenarios, and alternatives.

The organization was founded in Washington, D.C., in 1966 by a group of private citizens. It has more than 100 chapters and about 30,000 members. About 12 percent of its membership comes from foreign countries.

For more information on the World Future Society, contact Kenneth Hunter at (202) 275-4825.

Child Care Advocates Visit GAO

Susan DeConcini and her husband, Senator Dennis DeConcini, visited GAO in June to discuss child care benefits for working parents. The DeConcinis are strong supporters of agency and company child care and were active in helping to establish the local Senate Child Care Center, a facility which children of GAO staff are eligible to attend.

ĞAO's Women's Advisory Council (WAC) sponsored their visit, during which Senator DeConcini discussed his role in sponsoring the Senate resolution to form the center and Mrs DeConcini, a mental health professional, explained her work on the center's board of directors. She also shared some of the history and hard work behind the center and encouraged GAO staff to continue working toward a center at GAO.

In conjunction with the DeConcini's talk, Sandra Sasseen, General Government Division, and a WAC member, said that WAC plans to use the results of a questionnaire sent to GAO staff on their interest in a center to support its ongoing goal to secure an agency child care benefit. Ms. Sasseen provided an update on child care trends for *Review* readers.

In March 1984, the House Select Committee on Children, Youth and Families initiated a series of nationwide hearings to gather information needed to make recommendations to the Congress regarding child care. A major goal of these hearings is to determine the appropriate role of federal and state governments, employers, and communities in providing child care, particularly in a time of high deficits.

The Committee released a report from the Congressional Budget Office that reveals a critical need for child care services in the coming year. According to CBO, by 1990, over half of

all mothers with children under age 6 will be working, as will be almost three-quarters of all mothers of children ages 7 to 17. One in four children under the age of 10 will be living in a single-parent household, with that parent working or looking for work. By 1990 there will be 23 million children under the age of 6, and 25 percent will be in single-parent families. The report also projects a decline by 5 million in the number of children aged 10 to 18, which means there will be fewer older siblings to help care for younger ones.

The Committee is quick to point out that child care is not merely a concern for single parents since, in many instances, it now takes two incomes to support a mortgage and meet the needs of the majority of two-parent families. This need will increase during the next two decades as the children of the "baby boom" generation have their families and continue to work.

For more information on WAC's child care benefits questionnaire or on the topic of agency/company child care advocacy, call Sasseen at (202) 254-3587. The summer 1983 Review included an article on this topic, as well.

GAO's 1984 International Auditor Fellowship Program

Participants in this year's International Auditor Fellowship Program-GAO's sixth—experienced many facets of audit work during their July-October stay. The 31/2-month program is offered to support the professional growth of auditing organizations in developing countries. The 14 fellows, as participants are called, attended numerous classes, briefings, and tours and spent time with GAO audit site and regional office staff GAO and external professional organizations also held receptions for the fellows. In addition, some 60 GAO staff members volunteered as sponsors to acquaint fellows with American culture as they adjusted to GAO and to Washington, D.C.

Program Features

Each year the program is adapted to incorporate specific suggestions from former fellows, instructors, sponsors, and audit site hosts. In 1984, two workshops to enhance cross-cultural awareness were added to the preprogram planning. Conducted by Dr. Nan Sussman, director of the Institute for International Service at the College of Staten Island, New York, the workshops allowed program resource people to explore cultural differences

which influence social interaction and learning styles. GAO staff had a chance to discuss cultural differences and thereby were better prepared for positive interactions with the fellows during the program.

Again this year, instructors worked toward linking most sessions to a common core course—the case study on an operational audit at the fictitious Eastern Agricultural Center, Instructors on such topics as procurement, fraud detection, and statistics used exercises and discussions to relate their material to the case. Fellows then had a better base to assimilate numerous audit topics and to relate separate sessions to a common conceptual thread. During the program, fellows were encouraged to take optional "knowledge assessments"-quizzes during and after major sessions. Through focused skills practice, fellows then planned how to share GAO techniques with audit staff in their own offices.

The 1984 program included a new curriculum feature—seminars on auditing development projects with officials of the Agency for International Development (AID) and the World Bank.

Jim Bonnell, Everett Orr, and other staff of the Inspector General's office at AID, discussed recommendations auditors can make to help development-related projects meet objectives. They also identified systemic problems of projects world-wide and described participant training components of projects in some of the fellows' home countries. Maurice Mould, financial adviser at the World Bank, described the functions and projects of that organization. In addition, Vic Zangla, group director of GAO's AID audit site within the National Security and International Affairs Division, and his staff, shared perspectives on operational audit techniques for development projects.

Canadian Fellows Visit

This was the second year that members of the Canadian Fellowship Program visited GAO. The Canadian fellows—10 auditors from developing countries—joined the GAO group for an October 1-5 seminar on public works auditing. June Gibbs Brown, Inspector General, National Aeronautics and Space Administration, set the theme for the week by discussing the

^{1&}quot;Demographic and Social Trends Implications for Federal Support of Dependent-Care Services for Children and the Elderly," Congressional Budget Office, Staff Analysis, June 15, 1983

Inspector General Act and the role inspectors general have in auditing federal programs.

The Canadian program is sponsored by the Canadian Comprehensive Auditing Foundation, and participants spend 1 year working on an audit in the Office of the Auditor General. The group includes senior officials studying techniques of value-for-money and comprehensive auditing-the former analogous to GAO's economy and efficiency work and the latter geared to agencywide management assessments. The two groups also attended a 2-day conference on September 27 and 28 on the international debt crisis sponsored by the International Consortium on Government Financial Management.

Special Events

Each year a highlight of the fellowship program is a welcoming reception sponsored by GAO's chapter of Blacks in Government (BIG). BIG provided hearty refreshments and warm greetings, to which Comptroller General Bowsher added his own. He also said that he appreciated all the efforts GAO staff members showed toward the fellows.

Fellows enjoyed picnics, concerts, and shopping during their stay; individual sponsors took fellows on family outings too. The 1984 program concluded with a well-attended cultural "open house" that has become a favorite farewell activity in recent years. Fellows displayed ethnic crafts and clothing and discussed social customs and audit approaches in their home countries. Many GAO staff and the fellows agreed that the 1984 program had met a diverse set of personal and professional goals.



Fazal-ur-Rehman of Pakistan chats with Jagdish Narang, AFMD, (r) one of his GAO sponsors.



Early arrivals who helped prepare the buffet table include (I-r) Toni Jenkins, OLS; Jackie Reid, AFMD; Geraldine Howard, OLS; Bonita Dokunor and Linda Henry, both of Personnel; and Rosa Chevalier, NSIAD.



Wyley Neal, first Vice President of the GAO Chapter of BIG (right, center) introduces Comptroller General Bowsher to the 1984 International Auditor Fellows and guests, sponsors, and staff at the BIG-sponsored welcoming reception.



OPS Director Julius Brown gets acquainted with Mavis Hoong Leng Choo of Singapore. Savvas Protopapas of Cyprus stands behind Mr. Brown.



Aletha Brown, NSIAD and President of GAO/BIG, greets Abraham Okpaise Ojo of Niceria.



Greg Ahart, Assistant Comptroller General for Human Resources (I), congratulates a surprised Bob Ford, who received a special award in recognition for his volunteer work in fellows' operational auditing course.



The 1984 International Auditor Fellows seated, (I-r) Abdel Kerim Aly Mohamed, Egypt; Carol Codori, Fellowship Director, GAO; Clara Elsa Villalba de Sandoval, Colombia; Hakızimana Ezechias, Rwanda, Abraham Okpaise Ojo, Nigeria; Mavis Hoong Leng Choo, Singapore, Standing, (I-r) Ibrahim M. Al-Musharaf, Sauidi Arabia, Surin Echaroe, Thailand; Llewellyn Sandy, Trinidad & Tobago; Franklyn V.T Davies, Sierra Leone; Savvas K. Protopapas, Cyprus, M B S Colley, Gambia; Ron King, Public Works Seminar Coordinator, GAO; Hugh G McNab, Jamaica; Javier Rubatto Salazar, Peru, Milton Socolar, Special Assistant to the Comptroller General.

AV and Personnel Make Recruiting Video-Cassette

Staff from the Audio Visual (AV) section of the Office of Organization and Human Development were quite literally "on location" during the summer months of 1984 while filming a GAO recruitment tool. Their project—a 10 minute videocassette—was designed in cooperation with Personnel staff. It complements the recruiting brochure (described in the summer 1984 Review) and will be used to enhance GAO recruiters' discussions at college career days and job fairs throughout the country in 1985.

According to Jim McGiness, AV officer, and Keith Bonney, project staff member, the cassette portrays aspects of work and career possibilities at GAO. A professional narrator is cast as

See Location, pg. 41

Manager's Corner

This feature was coordinated by Kerry St. Clair and Rusty Glazer, Office of Organization and Human Development

This issue of "Manager's Corner" focuses on creativity, a topic that has become more and more important as organizations look for ways to cope with rapid change. Students of creative thinking agree that there are methods which can be employed to help people think creatively. Our understanding of how these methods work is related to our expanding knowledge of how the brain works.

Two members of the Senior Executive Service, Ray Rist, Deputy Director of PEMD, and David Littleton, Deputy Director of NSIAD, have reviewed articles for this issue. The bibliography at the end of "Manager's Corner" lists numerous other books and articles on the subject.

"The Mind as a Management Tool," Public Management. By Roger Von Oech. Reviewed by Ray C. Rist, PEMD.

"Managers are getting paid to generate, manage, and apply ideas, whether you are managing people, a project, developing future strategies, or motivating people." So states Roger Von Oech as the basic justification for why managers need to be attentive to nurturing in themselves and in others what he terms "creative thinking." By being creative, he believes organizations enhance their capacity to find innovative uses for their resources, increase their productivity, and generate enthusiasm among staff. In short, creative thinking is central to organization survival, growth, and enrichment.

An underlying theme of this paper is why, according to the author, there is so little creative thinking within the organizations of American society. (How he came to this conclusion is not addressed, and thus the basic premise has to be taken on faith instead of fact.) Two basic explanations are offered for this presumed dearth of creativity: 99 percent of the time routine thinking is sufficient to the task at hand and second, creative thinking is an outlook that predisposes persons to think about conventional situations and events in nonconventional ways-a situation not widely rewarded within bureaucratic structures.

A second theme focuses not on the organization, but on the individual: to wit, what hinders personal efforts to achieve greater creativity. Von Oech posits there are seven "mental blocks" that stand in the way: believing everything is fine; always following the rules; believing that to err is wrong; deciding that playing is frivolous; declaring "that's not my area"; stressing the virtue in always being practical; and deciding that one personally is not creative. It is his belief that these blocks, individually or in unison, thwart the initiative to become more creative—thus leaving the individual scurrying for the shelter of conventional approaches and definitions.

To break out of this personal cul-desac, Von Oech argues that individuals have to overcome the tendency to remain within the conventional routine. In so doing, they can strive towards achieving the opposite of each of the seven blocks noted above, e.g., deciding things are not fine and that alternative solutions/approaches are needed; recognizing that there is often more than one right answer and that perhaps the second, third, or fourth correct answer is the more creative; and that to err is often the companion of innovation, For Von Oech, creativity is not a luxury-it is the essential ingredient to personal and organizational well-being.

"The Creative Brain." By Ned Herrmann. Reviewed by David Littleton, NSIAD.

This article discusses how our understanding of creativity relates to new knowledge about how the brain functions. Research has clearly established differences in the functions of our minds' left and right hemispheres.

For the majority of people, the *left brain* specializes in performing logical, analytic, mathematical and language tasks, particularly activities involving linear and sequential processing. Whereas, the *right brain* is better at "intuitive" flashes, music, art, and spatial concepts. In other words, the left brain sees the trees and the right brain sees the forest.

For most of us, one of the two hemispheres is the dominant or preferred mode for conscious thinking. Left or

right brain preference determines our preferred leisure activities as well as our career fields. The author would say for the GAO job dimensions data gathering, documentation, data analysis, and written communications, we would use primarily our left brain.

When it comes to creativity, the article points out that a "whole-brain" approach works best and that conscious processes can be set-up to be sure this happens. The key is to use creative strategies to make sure the two hemispheres work together cooperatively and interactively, and a bias for one side or another does not shut-out "whole-brain" thinking and limit opportunities for being fully creative. The author says it is better to begin to be creative first on the left side and move to the right side. A structured, creative process recommended by the author that could be used in a GAO planning session would begin with two recommended left brain categories, called interest and preparation. We then shift to the right brain for idea incubation, illumination or the "Aha" stage, and finally back to the left brain for a critical analysis of the total creative process measured against the specifications for the problem.

I am looking forward to trying the author's recommended approach the next time I need to be fully creative.

Ed note The following list is from *Take the Road to Creativity and Get Off Your Dead End*, by David Campbell (Argus Communications, Dallas, 1977)

Blocks to Creativity in Organizations

- · Fear of failure
- Preoccupation with order and tradition
- Resource myopia
- Overcertainty: the specialist's disease
- · Reluctance to exert influence
- · Reluctance to play
- Excessive reward for success

Characteristics of Creative Managers

- Willing to absorb risks taken by subordinates
- Comfortable with half-developed ideas
- Willing to "stretch" company policy
- Able to make quick decisions
- Don't dwell on mistakes
- Enjoy their job

Good listeners

See Manager's, pg. 41

Topics In Evaluation



This issue's topic is the evaluation synthesis. For more details, see the PEMD methods paper entitled, "The Evaluation Synthesis" (April 1983).

Does participation in the federal government's nutrition program, called WIC (for women, infants, and children), lead to a smaller proportion of babies born with the low birthweights usually associated with poor health and mortality? Suppose you are an evaluator who has been asked to answer this question about the effects of the WIC program. You know from reading congressional testimony that there is substantial debate about the effects of WIC on birthweight. Some authorities claim that the evaluation evidence is unequivocally positive while others assert that the case is far from proven, because the quality of most of the WIC evaluations does not warrant reaching

conclusions.

You know further that there are at least 100 WIC evaluation reports which may have a bearing on the issue. Clearly, the experts in the field are reacting differently to the available evidence. How can you begin to make sense of all this information and how will it be possible to draw any conclusions? An approach called the evaluation synthesis may help.

The Evaluation Synthesis

In many areas of public policy, an interesting condition has developed, at least in part because of the proliferation of federally required evaluations in the last 10-15 years. Decisionmakers want to use evaluation information but, as a practical matter, they can't cope with the volume and diversity of infor-

mation which may be available on a topic. To add to the difficulty, information from different sources may be conflicting for reasons not readily apparent even to those closely acquainted with the topic. In such a situation, which is not uncommon, evaluators can perform a service if they have a fast, systematic way to sort through and boil down a mass of often conflicting evaluative information. The evaluation synthesis is a way to do that sorting and summarizing.

There are two basic but similar ideas behind an evaluation synthesis. The first is that in many situations, we can use existing information to answer evaluation questions without the effort and expense of collecting new data. The second is that in these situations, we should be able to obtain a better answer to a question if we look over all the available information rather than focusing upon one or a few studies. The synthesis is thus similar in purpose to a literature review, but it follows procedures which go beyond the typical review.

The third idea is that there are usually important methodological differences among the available studies, and that information about the methods can be used to good advantage in drawing conclusions. If the results are fairly consistent across studies that use diverse methodologies, that suggests robust conclusions. On the other hand, conflicting results may often be accounted for by differences in evaluation methodologies used in the various studies-implying that some studies will be more convincing than othersand understanding those differences can help reconcile the disparate results. (Of course, the picture is really more complicated because factors other than methodological differences—variation in program settings and participants, for example—can be the reason for inconsistent results. When such factors can be identified, that information, too, is a useful conseguence of a synthesis.)

Doing a Synthesis

To see how a synthesis might be done, we'll continue the WIC birthweight example, which is patterned after part of an actual synthesis carried out in the Program Evaluation and Methodology Division. Much more elaborate guidance on synthesis procedures may be found in the methods paper, *The Evaluation Synthesis* (GAO, 1983).

A synthesis is driven by a policy issue, so the first step is to formulate evaluation questions which, if answer-

able, will satisfy decisionmakers' information needs. The important point here is that if the synthesis provides credible answers, then decisionmakers will be directly helped, but if the synthesis reveals that evidence is weak or lacking, that knowledge itself may prompt action such as a legislative mandate for sound evaluation.

The next step is to make an extremely thorough search for evaluative information. Experience has shown that cutting off particular sources of evaluations may introduce biases in the conclusions, and of course, a haphazard search can introduce unknown errors into the synthesis process. In either case, potential critics of the synthesis would have grounds for challenging the conclusions. Computerassisted literature searches and a survey of experts to identify gaps in the bibliography often provide substantial protection against missing evaluation reports.

Once in possession of the evaluation reports, the next step is to decide which evaluations should be included in the synthesis. For the birthweight question, only 39 of the many studies available on WIC in general were germane. Now the question is: Should we use all of these? Here, there is some debate. Some say that all reports that are relevant to the evaluation question should be included, while others argue that the synthesis should be restricted to high-quality reports. (This debate and other details of how results can be aggregated are beyond the scope of this article. Interested readers should consult the references at the end of the column.) In the case of the WIC synthesis, the decision was made to eliminate low-quality reports and use only those of medium or high quality. Procedures were established for rating quality based upon such factors as the strength of the evaluation design, the reliability and validity of the measure used, the appropriateness of the statistical analysis, and several other indicators. Four raters then scored each evaluation on a 9-point quality scale, with the result that only 6 studies were judged to have medium-to-high credibility.

Now comes the task of drawing conclusions from the chosen reports. Using the percentage of infants with low birthweight as an indicator of program success, 5 of the 6 evaluations gave positive results for the program. That is, in five of the evaluations, the percentage of low birthweight (less than 2,500 grams) infants was less than would have been expected had the pregnant women not participated in the program. However, two of the

evaluations did not give statistically significant results, including the one which produced negative results. The preponderance of evidence favors a positive conclusion about the effect of WIC, but, because of the mixed results and the moderate quality of the methodologies used in the evaluation, that conclusion might be wrong.

One of the desirable features of such a synthesis as this one-which has quantitative data—is that it is sometimes possible to statistically aggregate the result across studies. This was done for WIC with the conclusion that the proportion of infants who are "at risk" at birth because of low birthweight was decreased by WIC by as much as 20 percent. Most would agree that a conclusion based upon aggregrate results not only gives a stronger statement about program effects than is possible with the individual evaluation results but also serves the useful purpose of further boiling down the information for ease of communication to decisionmakers. For the birthweight issue, information from 38 reports was thus compressed to one sentence.

Strengths and Limitations

Any method has its strengths and weaknesses. On the one side, the synthesis depends upon accumulated information. Not all questions can be answered well by using only available information—because they have never been addressed or because the information is not current, for exampleand there is sometimes no recourse but to collect new data. Another problem is poor reporting of previous work. The evaluation synthesis method reguires one to know not only the results of prior evaluations in considerable detail but also much about how the information was acquired so that variations in apparent quality of the results can be taken into account. Inadequacies and inconsistencies in reporting practices limit the use of available evaluations, though a variety of devices have been developed to circumvent some of the difficulties. At the least, poor reporting can distort the conclusions from a synthesis (Orwin, 1983). At the worst, reporting problems can rule out the synthesis approach altogether.

On the positive side, the evaluation synthesis can integrate a large amount



Linda Fletcher

Ms Fletcher, an evaluator in the Resources, Community and Economic Development Division, joined GAO in 1980 as a graduate co-op She holds a B A in English and government from Georgetown University and a master's degree in public administration from George Washington University She is currently attending the evening division of George Washington University's Law School Ms Fletcher has received two Special Commendation awards one in 1983 for a review of the Saint Lawrence Seaway toll increase and the other in 1984 for the review on waste-end taxes

The Comprehensive Environmental Response, Compensation and Liability Act (often referred to as "Superfund"), the program to clean up such hazardous waste sites as Love Canal and Times Beach, will run out of money by the early part of fiscal year 1986. The "end" of Superfund could have serious implications for the cleanup of dumpsites containing corrosive solvents, toxic chemicals, and other potentially dangerous wastes. The Environmental Protection Agency (EPA) has estimated that there may be as many as 22,000 such hazardous waste sites in the United States and that 2,200 of these pose such an extreme danger to human health that they will be placed on the National Priority List of sites requiring clean up.

A GAO report entitled "EPA's Preliminary Estimates of Future Hazardous Waste Cleanup Costs Are Uncertain" (RCED-84-152) stated that it may cost \$5.3 — 26 billion to clean up these sites. Presently, the Superfund program has a total 5-year budget of only \$1.6 billion, which will expire in 1985. About 86 percent of this money will be obtained through taxes on the oil and chemical industry, while the remaining 14 percent is appropriated by the Congress from the general fund.

Taxing Hazardous Waste: Economics, Design, and Implementation

Most manufacturing processes produce hazardous wastes. Almost 92 percent of the 71 billion gallons of hazardous waste produced each year is generated by manufacturers who usually dispose of the waste through some form of land disposal. Once in the land, these hazardous chemical wastes do not break down into simpler components. Instead, they migrate through the soil, finding their way into rivers, streams, and human drinking water supplies.

Superfund legislation was passed in December 1980 to, among other things, provide a program and funding mechanism for the cleanup of dangerous abandoned hazardous waste dump sites. In designing the law, the Congress considered different funding alternatives. One approach was to fund the program by taxing the generators or the disposers of hazardous waste. (This is usually referred to as a wasteend tax.) Another approach was to tax the chemical "feedstocks" before they are sent through the manufacturing process and become wastes. Each alternative presented unique benefits and problems. Ultimately, the Congress chose to tax crude petroleum, and organic and inorganic feedstock chemicals. A major issue with the waste-end tax is that the more successful it is in discouraging waste production, the less revenue is collected. The feedstock tax, however, provides a stable revenue source which will collect about 86 percent, or \$1.3 billion, of the projected budget for the program over 5 years.

Superfund's taxing authority is scheduled to expire on September 30, 1985.² Although the expiration date is almost a year away, the Congress is considering Superfund's reauthorization. Among the issues being discussed is the implementation of a waste-end tax. Such a tax would create an economic incentive to reduce the amounts of waste generated, would encourage more environmentally desirable disposal methods, and would

raise needed revenue to fund cleanups. To help evaluate the feasibility of implementing a waste-end tax at the federal level, Congressman James J. Florio, a major sponsor of past and present Superfund legislation, requested on September 27, 1983, that GAO analyze the states' experiences with waste-end taxes under their own "mini-Superfund" laws and determine the potential impact of implementing the tax at the federal level.³

Taxing the generation and disposal of hazardous wastes seems to be a logical approach to preventing the production of these wastes at the source and encouraging their safe disposal. The concern about such a tax is that, if not carefully designed and implemented, it may also provide an incentive for using such undesirable waste management practices as sewer disposal and "midnight" dumping in vacant fields. The serious damage that can result from such practices requires that all aspects of the tax's design and implementation be made consistent with EPA's goals of protecting human health and the environment.

The Economics of Taxing Waste Generation and Disposal

The economic choices made by a manufacturer may largely depend on which activity is being taxed—waste generation or waste disposal. If waste generation is taxed, the manufacturer must determine whether the tax re-

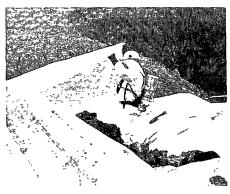
^{1&}quot;National Survey of Hazardous Waste Generators and Treatment, Storage and Disposal Facilities Regulated Under RCRA in 1981," prepared for the Environmental Protection Agency's Office of Solid Waste by Westat, Inc., April 1984, pp. 2, 5, 6

²26 U S C 4611(d)

^{3&}quot;State Experiences With Taxes on Generators or Disposers of Hazardous Waste," GAO/RCED-84-146, May 4, 1984

presents a sufficient increase in costs to justify changing the manufacturing processes. If the tax is less than the cost of the process changes, the manufacturer may choose to cut other production costs or pass the cost on to the consumer. The ability to pass on this cost will depend on the relative price increase, the competitiveness of the manufacturer's specific market, and the availability of substitute products

The ability to absorb or pass on the costs of the tax may also depend on the size of the manufacturer, Although most hazardous waste is produced by a relatively small number of large, generating manufacturers, and their total financial burden may be large under the tax, their ability to absorb, pass it on, or invest the capital to make the necessary process changes is greater than for smaller generators. Thus, even a modest tax on waste generation may seriously affect smaller manufacturers who lack the capital and size to pass it on or change their manufacturing processes.



Hazardous wastes are sampled and tested prior to cleanup at the Chem-Dyne site in Ohio.

For example, one hazardous waste generator in New York noted that under the current state waste-end tax, the company paid about \$100,000 in taxes for 1 year. If a federal waste-end tax were imposed at \$75 a ton, that company could pay as much as \$880,000 in a typical year. The company manager considered such a tax to be excessive.

Large manufacturers, like their smaller counterparts, have another incentive for reducing their level of waste generation. The Superfund law provides that all generators and disposers of hazardous waste will be held strictly liable for the costs of cleanup resulting from past disposal practices. Recent court decisions have added to the force of this provision by requiring that economically solvent, responsible parties pay the costs of cleanup when it can be shown that the generator's waste was disposed of at the site.



Workmen carry out hazardous waste cleanup efforts at a site in Maryland.

These manufacturers have also been held jointly and severally liable in waste disposal cases. That is, one manufacturer in a group may be held liable for the full cost of the government's cleanup if recovery is not possible from the other responsible parties. The manufacturer who pays is then faced with the problem of recovering excess payments from the other companies. Consequently, many manufacturers who produce and dispose of hazardous wastes are looking for permanent solutions for their apparently unlimited liability.

A tax on the disposal of hazardous waste may result in manufacturers considering many of the same choices available under a generation tax. The disposal tax, however, is aimed at encouraging shifts in waste management practices. Such a tax, for example, might be placed on land disposal, while exempting incineration. If the tax is high enough to make up the difference between the costs of land disposal and incineration, a change in behavior may result. The difference, however, between the costs of land disposal and incineration is very large. The cost of incinerating highly toxic liquid wastes ranges from \$395 to \$791 per ton, while the cost of bulk land disposal is as low as \$33 to \$83 per ton.4 Thus, a tax which is sufficiently large to induce a change in disposal alternatives may also induce practices such as illegal disposal or underreporting. Designing the tax therefore must include a consideration and balancing of economic choices as they are perceived by the taxpayers.

Designing a Waste-End Tax

In designing a waste-end tax, the Congress can combine a variety of factors to produce the most desirable general effect. These factors include the variables which determine what will be taxed, the tax rate, and the bill payer. Arranged in any combination, these variables can produce significantly different results, which may be environmentally desirable or undesirable. Likewise, the implementation of the tax will rely largely on the design of the rate structure. Descriptions of some of these variables and the problems they present to implementation will help illustrate the point.



Metal drums at a hazardous waste site in Pennsylvania.

^{4&}quot;Review of Activities of Major Firms in the Commercial Hazardous Waste Management Industry 1982 Update," prepared for EPA's Office of Policy Analysis by Booz Allen & Hamilton, Inc., Aug. 15, 1983, p. 16



Hazardous wastes are sampled and tested prior to cleanup at the Chem-Dyne site in Ohio.

Virtually any activity which relates to hazardous waste can be taxed. Waste generation, transportation, storage, treatment, and disposal are all taxable activities in this regard. However, because commercial disposal facilities are the most easily identified (given current information systems), such a tax is usually regarded as the most readily implemented. A tax on hazardous waste generation would be more difficult to implement to the extent that there are many more generators from which the tax must be collected. Before Superfund legislation was passed in 1980, the estimated number of generators was 260,000. Although most of the waste generated is produced by a few hundred large manufacturers, many smaller generators would also be subject to the tax, thereby making implementation difficult.

Transportation of wastes may also be taxed, but such transporters, as with the smaller generators, are difficult to identify for compliance purposes. Although not particularly difficult to implement, taxes on waste treatment and short-term storage (which is used until safe, permanent disposal can be obtained) are generally considered unwise from a policy perspective. A tax on such activities could inadvertently discourage desirable dis-



Hazardous wastes undergo tests in laboratories as part of the studies needed to plan cleanup.

posal methods.

Once it is decided which activity is to be taxed, the question is whether all operations are to be taxed the same. For example, if disposal is to be taxed. will such an operation as landfilling be taxed at a higher rate than underground injection or surface impoundments? Likewise, for each of these types of disposal, tax rates can vary depending on the safeguards used to protect the environment. For example, a surface impoundment with a double lining may be taxed at a lower rate than one with only a single lining. (Synthetic or clay liners are used to prevent hazardous waste from migrating through the soil and out of the dumpsite area.)

Tax rates that vary based on the safety mechanisms used are clearly more equitable in the eyes of individual taxpayers, but are difficult to design and administer. To be effective, the tax charged on the single-liner facility would need to be high enough to offset the price advantage that facility has over the double-lined facility. Likewise, the amount of business obtained by the better-equipped facility would need to be sufficient to offset the costs of retrofitting the operation with the safety devices. Without substantial economic incentive, there is little reason for existing facilities to install safety devices other than those required under EPA's current hazardous waste facility regulations.

Administrative problems occur with rates that vary based on the degree of hazard of the waste. As a policy matter, it is desirable to tax very hazardous wastes at a higher rate than less toxic, but nonetheless environmentally harmful, chemicals. The difficulty, however, is in designing the tax and establishing an administrative structure to classify the wastes into the appropriate categories according to their potential effects on human health and the environment. The system must also be flexible enough to deal with the many combinations of chemicals which may compose the taxable waste. EPA is working to develop a scheme of categorizing hazardous wastes by the degree of danger they pose to human health and the environment. A proposal being considered by the Congress will base the tax rates on this "degree of hazard" mechanism.

Implementing a Waste-End Tax

Once the Congress has made the policy choices involved in deciding the tax rates and who and what will be taxed, it is the job of EPA and the Inter-

nal Revenue Service (IRS) to implement the tax. In the May 1984 report on wasteend taxes, GAO found that the federal government will need to develop an information-gathering mechanism to

- help EPA and IRS to determine the amount of revenue to be collected,
- aid IRS in ensuring that generators and disposers comply with the tax, and
 provide EPA with the information it needs to determine whether the shifts in waste management practices are, in fact, desirable.

Perhaps the most perplexing problem in implementing a waste-end tax is the inherent contradiction of collecting revenue from a tax designed to discourage the production and disposal of waste. The more successful the tax is in achieving its underlying policy goal, the less revenue will be collected. The problem is that any program designed to operate efficiently must be able to plan its activities based on the anticipated level of income. Consequently, the waste-end tax provides an unreliable basis for the funding of a crucial program such as Superfund. Most proposals for adopting the tax now make it a supplement to a proven, reliable revenue source, the feedstock tax.

Even when the tax serves as a supplement, the need to anticipate revenue remains crucially important to planning effectively for the full spectrum of program activities. The establishment of an information-gathering mechanism for this purpose will help, though not entirely overcome, the difficulty in estimating the changes in behavior the tax may produce, as well as other existing disincentives, such as Superfund's legal liability.

Data on the amount of waste generated and on disposal methods will be helpful not only in the aggregate for estimating revenue but also at the individual taxpayer's level because it will provide the federal government with data for ensuring compliance with the tax. By requiring generators and disposers to provide volume amounts for wastes, this data can be crosschecked with the amount of tax paid. Although the potential exists for taxpayers to cheat, the likelihood for their "success" is diminished by the use of IRS audits and competing companies who may inform on the tax evader. An effectively administered compliance program may also provide the additional benefit of discouraging illegal disposal methods and underreporting of wastes.

Finally, the information which is gathered will provide the basis for determining changes in waste management practices. Such data will help EPA and the Congress to determine whether the shifts which are occurring are actually desirable, or whether rate changes are needed to encourage different behavior. By monitoring these shifts in waste generation and disposal, EPA will also be in a better position to evaluate the need for greater regulatory enforcement actions.

Conclusion

As the full magnitude of the problem of hazardous waste generation and disposal becomes clearer, the need to develop new tools to control it increases. Taxing the generation and disposal of the waste may provide an effective but imprecise instrument for stimulating desirable changes. The key to effectively utilizing the tax mechanism appears to be in careful design and implementation. Through the use of data gathering and analysis, in time, the Congress and EPA can work to change the tax structure to achieve the goals of preventing contamination and preserving human health and the environment.



Superfund money is used to clean up chemical spills such as this one, where a fire sent clouds of dark smoke into the air.

David F. Fiske

Mr Fiske is an evaluator in the San Francisco Regional Office. He came to GAO in 1980, working first in the Chicago Regional Office. He has been a Peace Corps volunteer in Africa, a company commander in the U.S. Army, and an Office of Economic Opportunity field representative. Before coming to GAO, Mr. Fiske worked at the Environmental Protection Agency and the Department of Health and Human Services. He has a B.A. degree in liberal arts from Wesleyan University in Connecticut and a J.D. degree from the John Marshall Law School in Chicago.



Valerie Lau

Ms Lau, an evaluator in the San Francisco Regional Office, has been with GAO since May 1980. She had worked for the Defense Contract Audit Agency from 1977 to 1980. She is a graduate of the University of California (Berkeley), where she obtained a BA in business administration, with an emphasis on accounting and applied economics. She also has taken graduate courses in public administration from California State University (Hayward). Ms. Lau is a certified public accoun-

A Consolidated Financial Statement for the Federal Government? – Policy, Problems, and Potential

tant in California, is a member of the Institute of Internal Auditors, and is president-elect of a local chapter of the Association of Government Accountants. She received a special commendation award from the San Francisco Regional Office in 1983 and certificates of appreciation from the former Field Operations Division in 1981 and 1982.

What is a Consolidated Financial Statement (CFS)? Should the federal government have one? What benefits or problems could come from establishing a CFS for the government?

These and other questions formed the background for a discussion in May 1984 between San Francisco Regional Office evaluators David Fiske and Valerie Lau, and two outside experts—Carl Orne, accounting professor at California State University, Hayward, and Barbara Smith, associate professor of accounting at the University of San Francisco This article reflects some of the questions and answers dealt with in that discussion

Mr Orne is a certified public accountant (CPA) and a member of the National Council on Governmental Accounting (NCGA) Ms Smith is a CPA and is writing her doctoral dissertation on an evaluation of the Department of the Treasury's prototype consolidated financial statement

The views expressed in this article are the authors' and do not necessarily reflect the views of any institution with which they may be affiliated

Fiske: What is meant by a Consolidated Financial Statement?

Orne: The concept of consolidated financial statements comes from the private sector. The presumption is that a Consolidated Financial Statement of a parent company (such as Standard Oil) and its subsidiaries (such as Chevron, Standard's retail distributing arm) provides more meaningful information to users of the financial statements (such as stockholders, lending institutions, etc.) than would the individual statements alone.

The consolidated statement reflects transactions between the consolidated entity and outside parties. Consequently, any transactions between the related companies are excluded from

the final consolidated statements. For example, "profits" on sales by Standard Oil's refineries to Chevron are excluded from Standard's consolidated statement.

Lau: The U.S. government also has subsidiaries, only they are departments or agencies, such as the Department of Defense or the Defense Logistics Agency. What happens when you apply the idea of a Consolidated Financial Statement (CFS) to this environment?

Smith: The general concept is the same, whether you apply it to the private or public sector. Naturally, some of the specifics would be different. However, the purpose of consolidation would remain the same, to show transactions between the government as a whole and outside parties, such as contractors, bond-holders, and taxpayers.

Lau: In the government, we use a system of governmental fund accounting. Each department or agency has many funds—for example, the "Operations and Maintenance fund"—which are accounted for separately. Is this separate accounting at odds with the concept of consolidating governmental financial activities?

Orne: No, both concepts are concerned with accountability, but at different levels of reporting detail. Historically, governmental accounting has focused on accountability for funds—money set aside for specific objectives. The major purpose of this type of accounting is to assure the political authorities that the money is used only for those objectives. Consequently, each fund is distinct.

By adding the concept of consolidating the financial activities of the various funds, the financial picture of the whole entity emerges.

Lau: How does the CFS fit in with the increased public interest in governmental financial activities, such as the past fiscal crisis of New York City and

the growing federal debt?

Orne: In the past, governmental financial reporting has been primarily for the use of managers within the government. A CFS would expand financial reporting so that taxpayers, banks, and other outside users of the financial statements could see the overall condition of the government's fiscal health. For example, the Treasury's current prototype CFS¹ discloses the magnitude of the government's public debt, pension liabilities, and estimated losses on guaranteed loan programs.

Smith: Outsiders have real problems understanding current federal financial reporting. The accounting profession presumes that the information in financial statements should be comprehensible to those who "have a reasonable understanding of business and economic activities and are willing to study the information with reasonable diligence." It's my opinion that understanding federal financial reporting requires more than reasonable expertise and diligence. There's too much detail, and you can't see the forest for the trees.

Fiske: We all agree that federal financial reporting does not present a clear, unified picture of government operations. We all agree that the tax-payer is entitled to more information about management of his money. Can we get more specific? What advantages would we get from a single CFS?

Smith: Today, we concentrate so much on the upcoming budget that we forget to look at history. An historical overview is crucial to private industry in order to evaluate its past performance and justify its future investment. It should be important to the government's managers and shareholders—the voters.

Orne: I believe that the central benefit of the CFS would go far beyond the reporting issues. Establishing such a CFS would require a uniform government-wide accounting system. Right now, it seems that the government has many systems, some of which even compete.

Fiske: Yes. I remember in 1976 reading a "Note" to what an Arthur Andersen publication²called "Illustrative Consolidated Financial Statements." It said: "For some agencies, numbers purporting to reflect the same items were available from more than one source and differed as to amount." I remember chuckling to myself. That statement is "accountantese" for "What on earth is going on here?"

Smith: It's also wasteful to support so many different accounting systems.

Lau: I agree there are too many incompatible accounting systems in the federal government, but there are many other necessary information systems besides the accounting system, such as budgeting, management information, and productivity measurement. These other systems often contain accounting information.

The problem is that these systems do not tie in together. For example, dollar amounts reported in program output reports should be reconciliable to the official accounting reports. This seems obvious, but it doesn't always happen now.

Orne: The National Council on Governmental Accounting (NCGA) standards call for consistency between budgeting, accounting, and reporting systems.

Smith: Private industry conceives of accounting as a subsystem of one overall information system. This is a better approach, because it provides automatically for this consistency.

Orne: Another issue is auditability. No system is worthwhile if the data upon which it is based is not verifiable. We must have confidence in the information generated by the accounting system—from the source documents and accounting records that feed it, to the computer software that manipulates the data and produces reports. To have this confidence, we must be able to audit.

Lau: What would it take to make a CFS work in the government?

Orne: There are three basic mandates for developing a CFS. First, the CFS should be comprehensive—that means the financial statement, as well as all supporting data, must include all significant transactions and entities. Second, all the entities in the consolidation must have common financial accounting systems. Last, the financial transactions should be recorded using a common set of accounting principles which are consistently applied and interpreted by each reporting entity.

Fiske: The Department of the Treasury already issues a CFS. Let's discuss that for a moment.

Smith: For the past 8 years, the Treasury has issued a prototype³ CFS for the federal government. However, this prototype has been limited. Commitment to the prototype has varied with administrations; and the report is based only on information available from currently prepared management reports.

Lau: If that's the case, can we rely on the financial information in the CFS prototype?

Smith: Right now, we can only assume the numbers presented are correct, unless there are obvious dis-

crepancies or omissions.

Lau: Do you still consider the CFS prototype meaningful?

Smith: Yes. It's not perfect, but it's a place to start. The prototype CFS is presently the only accessible source of information about the government's overall financial condition. Also, it leads us to important questions about our governmental accounting and financial reporting system and policies. For example, are all agencies reporting financial transactions in a uniform, consistent manner? Are they essentially operating under the same set of accounting assumptions and systems?

Fiske: We seem to agree that a CFS based on uniform, auditable records, is desirable. But what problems will we face when trying to implement this idea? The annals of government are littered with the bones of good ideas gone dead. For example, GAO recently issued a report called Selected Government-Wide Management Improvement Efforts-1970 to 1980.4 which described the current status of 12 management improvement efforts during that decade. Frankly, the record seemed pretty dismal. Few of the 12 efforts were successful, some were flops, and none had the scope and ambition of this CFS idea.

On the other hand, the report did discuss four "observations" which suggested how a management improvement effort could succeed. They were: (1) a sustained effort, (2) an accepted, coherent doctrine, (3) attention to career-level staff implementation, and (4) a basis in law. Let's look at each of these observations to see whether this CFS concept looks like a winner.

First, the report said that only a sustained effort has a chance of success. Can the CFS effort be sustained?

Orne: Yes. For example, the Comptroller General has taken the CFS as a personal goal. He has about 12 years left in his term, and his interest seems long-standing. The CFS effort started

¹Consolidated Financial Statements of the United States Government, Fiscal Year 1982/ Prototype Compiled by the Bureau of Government Financial Operations, Department of the Treasury

²Arthur Andersen and Co. Sound Financial Reporting in the Public Sector A Prerequisite to Fiscal Responsibility, September 10, 1975

³Consolidated Financial Statements of the United States Government

⁴GGD 83-69, August 8, 1983 (See also the *GAO Review*, Spring 1984, pp. 18-20, 39.)

Commercializing Landsat and the Weather Satellites



James F. Donaghy

Mr Donaghy is a senior evaluator with the Resources, Community and Economic Development Division. He joined GAO in 1968 and worked in the General Government Division. He has a BA degree in economics from Manhattan College, a J.D from Catholic University, and is a CPA in Maryland. He is a member of the American Institute of Certified Public Accountants.



Daniel J. Semick

Mr Semick is an evaluator in the Resources, Community and Economic Development Division. He joined GAO in 1974 and has worked for the Los Angeles Regional Office. He received a BA in political science from Westminster College and an MPA from American University. He is a member of the Academy of Political Science, the American Society for Public Administration, and the Evaluation Research Society.



Frank V. Subalusky

Mr Subalusky is a group director in the Resources. Community and Economic Development Division. He joined GAO in 1958 and is currently in charge of the office's work at the National Oceanic and Atmospheric Administration. He has a B S degree in accounting from Pennsylvania. State. University. A CPA in Virginia, Mr. Subalusky is a member of the American Institute of Certified Public Accountants and a national director of the National Association of Accountants.

On March 1, 1984, a Delta rocket rose from the Vandenburg Air Force Western Test Range in California. Several hundred spectators applauded and cheered as the rocket poured a white vapor trail skyward. Among the spectators was a team from GAO who, for more than a year, followed events surrounding the launch.

The rocket carried the last government-owned civilian land remote sensing satellite, called Landsat. The satellite senses the differences in visible, ultraviolet, and infrared light waves reflected by the earth's surface and sends the data back to earth. This data, when processed into photographic images and computer tapes, is used for crop estimates, mineral exploration, mapmaking, and many other purposes.

In March 1983, the President an-

nounced his decision to transfer the civil operational land remote sensing satellite and the weather satellites to the private sector. The federal government had spent about \$1 billion building and launching the satellites and developing a ground system. The administration believed the private sector could develop a market for Landsat better than the National Oceanic and Atmospheric Administration (NOAA). In fiscal year 1983, the federal government sold about \$7 million worth of data from its distribution center, while operating costs were more than \$22 million.1 If a private operator could enhance the market, it would offset costs and help the nation retain its international lead in a technology France and other nations were about to enter through commercial firms.

Because Landsat had not been economically self-sustaining since its inception as a research instrument in 1972, the proposal was made to commercialize the weather satellites, which would provide a subsidy to attract private entrepreneurs. The weather satellites appeared to be a more lucrative commercial venture because of an assured market, specifically the federal government. The National Weather Service, the primary user, has depended on the satellite data for more than 20 years to detect and issue warnings about hurricanes, tornadoes, and other severe storms; to

¹Ten foreign ground stations are operated under agreements with the United States requiring them to pay a \$600,000 annual fee and a fee for each Landsat product distributed

gather environmental data; to provide daily weather forecasts; and for research. Other users included, for example, the Department of Defense, the Department of Agriculture, the news media, airlines, farmers, and foreign nations.

The strongest objections to the sale were focused on the weather satellites. Some satellite experts said the federal government was the main user, and the private satellite operators would charge exorbitant amounts for hurricane warnings and warnings of other life-threatening storms. Foreign nations objected to the possibility of paying for satellite weather data. For more than 100 years, weather data had been exchanged freely among all nations. U.S. satellite data was used all over the world, particularly by Canada and many Western European allies, plus developing nations that had few sources of weather data.

In return for U.S. weather satellite data, the United States received ground and aerial observations from other nations around the world. This information, vital to U.S. military and commercial interests worldwide, was exchanged through the United Nations World Meteorological Organization's telecommunications system. Some nations said if the United States or its satellite operator charged them for weather satellite data, they would be forced to charge the United States and the rest of the world for their weather observations. Several weather experts suggested that a collapse of the free exchange of weather data would hurt the United States more than any other nation, since it used the most data.

Within a few months of the announced sale, the Department of State had approved a position ensuring free weather satellite data to all nations. In effect, the U.S. government would buy the data from a private operator and provide it freely to federal users, the public, and other nations.

GAO's Role – A Non-Traditional Approach

Almost a year before the President's announcement to commercialize Landsat, GAO, at congressional request, began examining issues related to the weather satellites and Landsat. Since that time, GAO's response to six congressional requests has run the gamut of traditional services: briefing committee staffs, testifying, issuing three reports, providing questions for hearings, and commenting on legislation.²

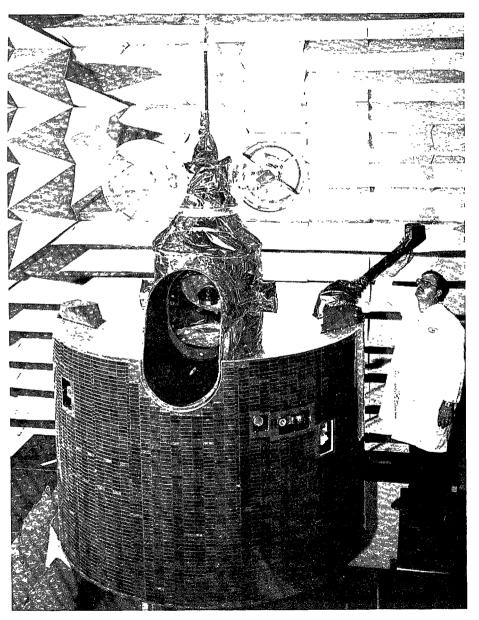
However, to achieve these goals, some less traditional approaches were

used. They included GAO's participation in an ad hoc legislative group, GAO's leadership in a seminar at an international conference, and rapid but extensive visits to three continents to learn about international uses and concerns surrounding the satellites.

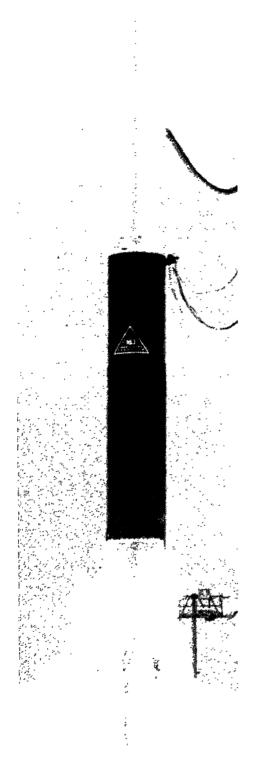
Early in GAO's examination of Landsat, the Subcommittee on Space Science and Applications, House Committee on Science and Technology, formed an ad hoc group to formulate issues and obtain information on the administration's evolving satellite sale. The Landsat Liaison Group was composed of congressional staffs, the Office of Technology Assessment (OTA), the Congressional Research Service (CRS), the National Academy of Sciences, and GAO Administration officials briefed the group on several oc-

casions. The forum also allowed GAO to raise additional issues with the Congress and to comment on legislation as it was being developed. The meetings also provided GAO an additional opportunity to meet with CRS and OTA staff. GAO and its sister agencies kept in touch every few weeks to share views and to keep each other informed. For example, when GAO and OTA were called to testify before the House Government Operations Committee, staffs of both offices met to compare their statements prior to the hearing.

²In May 1984, several congressional committees requested GAO to review the problems related to the technical failure of several weather satellites. This review is ongoing



An engineer inspects a geostationary weather satellite.



This Delta rocket being launched is similiar to the one used to carry the Landsat satellites into space. (Courtesy of the National Aeronautics and Space Administration)

More Tools Used

Another tool for gathering information for policy and technical issues was GAO's establishment of a seminar at an international satellite conference. GAO solicited opinions on the sale from a broad range of satellite experts at the 17th International Symposium on Remote Sensing of the Environment, Ann Arbor, Michigan, 1983. About 60 symposium participants joined the discussions to voice their initial reactions to the sale of Landsat. The symposium also provided GAO an opportunity to meet informally with foreign Landsat satellite conferences, which gave us personal contacts and information on the sale of the satellites and some technical background on how the satellites operate. During two of the conferences, we observed the successful launch of a weather satellite from Cape Canaveral, Florida, and the Landsat launch, mentioned earlier, from Vandenburg Air Force Base.

To obtain in-depth comments on foreign uses of Landsat and the weather satellites and opinions on the sale, three GAO staff members each covered different nations on three continents to discuss the sale with the leaders of foreign space agencies and weather services. In 2 weeks, we held discussions in 11 nations: Argentina, Barbados, Brazil, France, Germany, India, Italy, Japan, Peru, Thailand, and the United Kingdom. We also met with representatives of the World Meteorological Organization, Geneva, Switzerland.

The discussions placed GAO staff in an unusual role as goodwill ambassadors. Many of the officials were pleased that the U.S. government had sent representatives who sought their opinions and briefed them on the latest status of the sale. At the end of the trips, GAO was uniquely qualified with foreign opinions on the sale. In September 1983, a few weeks after the trips, GAO staff testified on this subject before the House Government Operations Committee.

What Other Countries Said

GAO testimony indicated several foreign policy benefits to Landsat. Among the 10 foreign Landsat-receiving ground stations existing in 1983, 9 had only been in existence since 1979, so they believed they were recovering the investment they had made largely in computer hardware, software, and trained personnel. When they built ground stations, they expected the United States would keep Landsat

satellites operating at least through the 1990's. In some developing nations, Landsat was at the forefront of their space programs, and it was a means of learning more about the countries' natural resources. In addition, the U.S. policy of providing the data equally to any nation seeking it created goodwill and diminished suspicions that a superpower, using technology, could exploit the resources of these countries. Landsat was also a visible sign of U.S. leadership in research and development.

For foreign users, commercialization of the satellite left them with ambivalence about the continuity and equal distribution of data. Other users' concerns were also discussed in our briefings and reports to the Congress. Non-federal and federal users of Landsat were concerned that commercialization could increase costs. Although the federal government planned to buy weather satellite data and distribute it freely to users, some were unconvinced that price increases or diminished service would never occur in future years.

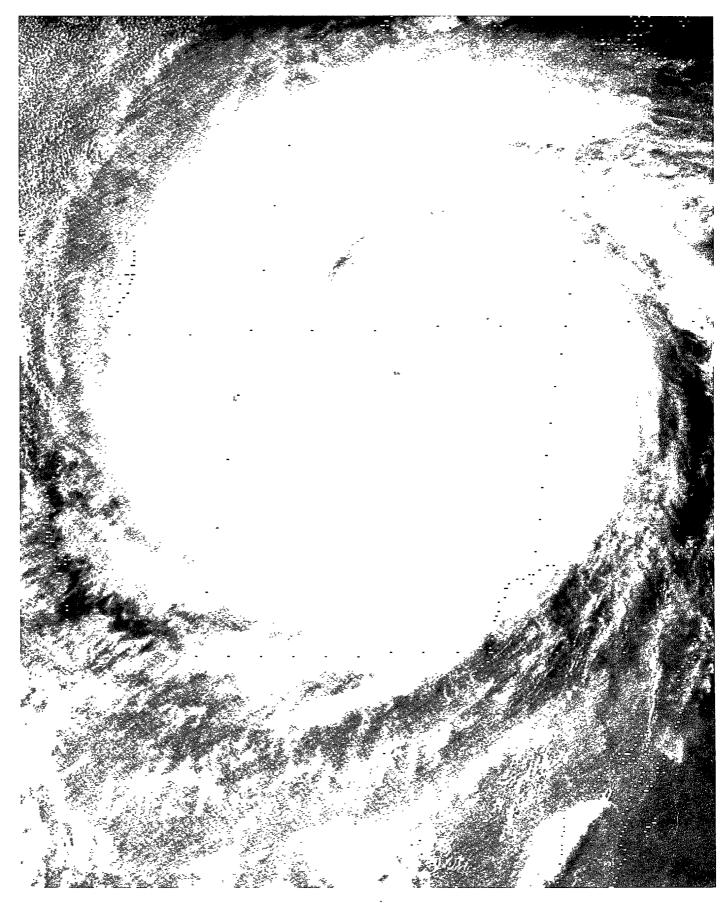
Moving Ahead

Based in part on our briefings, the Congress enacted legislation prohibiting the immediate sale of the weather satellites. GAO issued a report to the Subcommittee on Space Science and Applications, House Committee on Science and Technology, on the costs and uses of the satellites; a report to the Subcommittee on Legislation and National Security, House Committee on Government Operations, and three Senators on the effects on users of commercializing the satellites; and a classified report on the national security aspects of the sale.3 GAO commented on drafts of legislation on remote sensing satellite commercialization. The legislation, which passed in June 1984, set guidelines for commercialization, including the following areas:

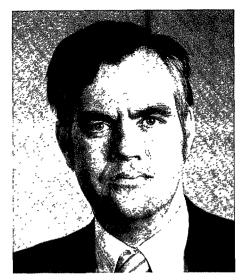
- the federal government's financial package for a commercial operator.
- continuity of data for foreign ground stations,

See Satellites, pg. 42

^{3&}quot;Costs and Uses of Remote Sensing Satellites" (GAO/RCED-83-111, Mar 4, 1983), "Effects On Users of Commercializing Landsat and the Weather Satellites" (GAO/RCED-84-93, Feb 24, 1984), "National Security Implications of Commercializing Landsat and Weather Satellites" (GAO/C-RCED-84-1, Feb 1, 1984)



A weather satellite image of Hurricane Allen over the Gulf of Mexico in August 1980. (Photo courtesy of the National Oceanographic and Atmospheric Administration)



Patrick Doerning

Mr. Doerning is an operations research analyst in the Design, Methodology, Technical Assistance Group (DMTAG) in RCED. He has a M S in economics and a B S, in economics and accounting. His GAO assignments have included policy analyses of various aspects of federal finance and credit policies as they relate to housing and agriculture. Mr. Doerning joined GAO in 1969 as an auditor in the Chicago Regional Office. He moved to GAO headquarters in 1972 and has worked in the technical assistance groups of several divisions since then.



Thomas Storm

Mr Storm is a senior evaluator with the Resources, Community, and Economic Development Division (RCED) Since joining GAO in 1965, he has worked in RCED and its predecessor divisions, including the old Civil Division He has a B S degree in business education from Bloomsburg State College in Pennsylvania.

Measuring the Government's Borrowing Costs: A Case for Adjustable (Variable) Interest Rates

The government's borrowing cost has many uses. For example, it is used to set loan interest rates on federal loans, establish user fees, make investment decisions, and account for program cost. Consequently, we are often confronted with how to measure this cost in our evaluations of federal programs and activities.

Policymakers within and outside GAO have long advocated that the government's borrowing cost be based on the prevailing market rate on Treasury securities, with maturities comparable to the time period in question. This article presents a case for using adjustable or variable interest rates to measure this cost and shows the potential effect of such a change. In doing so, the article looks at how the government borrows money and the rationale for how this borrowing cost is now measured.

How Does the Treasury Borrow?

As of September 30, 1983, Treasury's public debt borrowings totaled about \$1.4 trillion. These funds were borrowed over the years to finance shortfalls between budget receipts and expenditures, or budget deficits.

The public debt consists primarily of marketable interest-bearing obligations—bills, notes, and bonds. Bills are issued for debts that mature in up to 1 year, notes for debts that mature in over 1 year but under 10 years, and bonds for debts that mature in over 10 years. These marketable, interest-bearing obligations accounted for about 74 percent of the public debt. In addition, in the past 10 years, about 83 percent of the increase in the public debt was raised through the sale of marketable, interest-bearing obligations.

Generally, the Treasury borrows for

relatively short periods. For example, of the \$646 billion the Treasury issued in bills, notes, and bonds in fiscal year 1981, about 78 percent was issued in bills with a maturity period of 1 year or less. Although the Treasury borrows some funds for as long as 30 years, the average maturity of the public debt is now approximately 4 years. This means that one-half of the public debt will have to be retired or refinanced in the next 4 years. In fact, as figure 1 shows, in the past 17 years, the average maturity of the public debt has generally been less than 5 years.

Besides borrowing for relatively short terms, the Treasury usually has to refinance its debts as they come due. For example, of the \$646 billion in new debt issued in fiscal year 1981, \$567 billion, or 88 percent, was needed to refinance maturing debts. Debts can be retired only when a budget surplus exists. However, in the past 25 years, budget deficits occurred in all but 2 of those years. Deficits not only impair retiring the public debt, they add to it—the public debt has increased every year since 1959. Moreover, considering the short-term nature of Treasury borrowings—average maturity of 5 years or less in the past 17 years, the public debt has been subject to frequent and repeated refinancings.

How Are Government Borrowing Costs Currently Measured?

The generally accepted and preferred way to measure the government's borrowing cost is to base this cost on the prevailing market rates (yields) being

¹The remaining 26 percent comes primarily from surpluses in government accounts, mostly trust funds, which are required by law to invest their surpluses in Treasury securities

Figure 1

Average Maturity of Public Debt (Privately Held)

Average Maturity				Average Maturity	
Fiscal Year	Years	Months	Fiscal Year	Years	Months
1967	5	1	1975	2	8
1968	4	5	1976	2	7
1969	4	2	1977	2	11
1970	3	8	1978	3	3
1971	3	6	1979	3	7
1972	3	3	1980	3	9
1973	3	1	1981	4	0
1974	2	11	1982	3	11
			1983	4	1

bid on Treasury's marketable, interestbearing obligations that have remaining maturity periods comparable to the time period in question. For example, the government's borrowing cost for 15 years is based on the yields being bid on Treasury's marketable securities having about 15 years left to maturity. In essence, the use of prevailing market rates produces a fixed-interest rate that reflects the opportunity (anticipated) borrowing cost of money for a given time period.

The use of prevailing market rates can be traced back to the early 1960's. In 1963, President Kennedy's Committee on Federal Credit Programs stated that the subsidy element of a program should be determined by comparing the interest rate paid to the sum of (1) the prevailing market yield on government securities of comparable maturities, (2) an allowance for administrative costs, and (3) an allowance for expected losses. The Committee believed that these three factors together would provide a reasonable measure of the government's cost on direct federal loans.

In recommending the use of prevailing market rates, the Committee recognized that the Treasury did not enter the market to borrow a specific amount for a specific period to make a loan of an equal amount for the same period. However, it stated that the government was compelled to have a comparably greater amount of debt outstanding for the same period as the loan. Therefore, the Committee believed that the most

appropriate measure of the ultimate alternative cost involved was the current market cost of borrowing based on maturities comparable to the period of the loans.

Since then, succeeding administrations have supported the use of prevailing market rates as the most effective and equitable way to estimate current government (Treasury) borrowing costs. In 1965, the prevailing market rate approach was included in Office of Management and Budget Circular No. A-70 as the preferred basis for setting interest rates in federal credit programs. The prevailing market rate approach has been endorsed by the Congress and included in numerous statutes. GAO advocated its use in determining the costs of federal power programs and water resource projects. GAO uses this approach in cost comparisons to determine discount rates to compute present value, and GAO's accounting manual recommends that agencies use this approach when inputing interest as a program cost.

The Case for an Adjustable (Variable) Interest Rate

In recent years, fewer and fewer investors have been willing to buy long-term, fixed interest rate securities. According to GAO's report entitled "New Mortgages for Financing Homes Need Uniform and Comprehensive Safe-

guards" (CED-81-53, July 2, 1981), fixed-interest rate loans operated well in a relatively stable interest rate and low inflationary environment. However, according to the report, in periods of increasing inflation rates and highly volatile interest rates, such as those experienced in recent years, many lending institutions found it difficult to match asset and liability maturities. As a result, many lenders found themselves holding large inventories of older, low-interest, fixed-rate mortgages that produced low revenues in contrast to the interest rates that lenders had to pay to retain and/or attract funds. Adjustable or variable rate mortgages help to rectify this problem by allowing lenders to increase or decrease interest rates over the life of the mortgage.

An adjustable or variable rate mortgage is a series of short-term loans which provide for a new interest rate for each successive loan based on changes in some form of interest rate index. Currently, more than 50 percent of all new home mortgages provide for an adjustable interest rate and their use is likely to increase. However, adjustable interest rates are not limited just to home mortgages. For example, the Treasury is now paying an adjustable interest rate to promote the sale of U.S. savings bonds.

Adjustable interest rate mortgages are not new. Since 1969, Federal Land Banks, which are a part of the Farm Credit System, have used adjustable interest rates to recover borrowing

costs from their borrowers, who also happen to be the owners of these Banks. Like the Treasury, Federal Land Banks raise funds by selling bonds and notes to the public and whenever new debt is issued or old debt matures, the Banks' cost of money changes. Adjustable interest rates allow these changes in cost to be passed on to the owners-borrowers.

Like the Federal Land Banks, the Government could use adjustable interest rates to recover its cost of borrowing money. Several different rate bases are available to recover/measure Treasury's borrowing cost in connection with an adjustable or variable interest rate scheme. However, in this article, for purposes of calculating cost differences, we choose to use the average annual interest rate (charge) payable on Treasury's outstanding, marketable, interest-bearing obligations.

Although it does not use it in calcalating borrowing costs, Treasury does compute the average annual interest rate at least monthly. It does so by dividing the aggregate interest charge for all marketable obligations

by the total principal outstanding. For securities sold at a premium or discount, the annual interest charge for each such security is based on the actual effective yield to be paid. The averages derived from this charge (figure 2) consider the entire maturity structure of the marketable public debt and reflect the actual annual interest charge that would be paid if this debt remained outstanding during the ensuing year. In contrast to this rate, the prevailing market rate approach is limited to securities with a specific maturity period, thus ignoring other debt incurred by the Treasury, and results in a rate that reflects the opportunity cost of money rather than the government's actual borrowing costs.

By adjusting interest rates periodically, based on changes in these averages, we could account for any changes in cost that occur from the issuance of new debt or the maturing of old debt. This allows us to recognize the short-term nature of the public debt and the impact the frequent refinancing of this debt has on Treasury's actual borrowing cost over time, an important factor that is overlooked by the

prevailing market rate approach. Of course, the shorter the time interval between adjustments, then the greater the precision that can be achieved in measuring the impact of these changes on cost. For illustrative purposes and/or actually applying an adjustable interest rate scheme, we presumed that rates would be adjusted at least annually.

Besides the use of average annual interest rates, rates could be pegged to and adjusted periodically based on the prevailing market rate (vield) on Treasury securities adjusted to a constant maturity of 1 year. Rates also could be pegged to and adjusted based on the average effective interest rate paid on newly issued Treasury securities during a given time interval such as the preceding quarter or year. Both would represent an improvement over the current prevailing market rate approach since both recognize the short-term nature of Treasury borrowing and the effects the frequent refinancing of this debt has on Treasury's borrowing cost, especially in periods of volatile interest rates.

Figure 2

Annual Interest Rate Payable on Treasury's Marketable Interest-Bearing Obligations at Close of the Fiscal Year

Fiscal Year	Annual Interest Rate	Fiscal year	Annual Interest Year
1970	6.0	1977	6.5
1971	5.2	1978	7.4
1972	5.1	1979	8.6
1973	6.1	1980	9.6
1974	7.0	1981	12.4
1975	6.5	1982	12.1
1976	6.6	1983	10.9

Prevailing Market Rates Versus Adjustable Interest Rates: What's the Difference?

Figure 3 shows what the prevailing market rate was for a 10-year loan at the end of fiscal year 1972. It compares

this rate with the average annual interest rates that were applicable over the 10-year life of this loan. The area below the solid line represents the profit the government realized during the first year of this loan relative to the average annual interest rate on the government's debts. Although the government profited from this loan during the first year, it began losing money

during the second year (fiscal year 1973) when the average annual interest rate on the government's borrowings climbed above the prevailing market rate applicable to this loan.

In this example, losses will far exceed any profits. For example, assuming this was a \$1 million loan, interest payments based on the prevail-

ing market rate will total \$620,000² (\$1.3 million in 1983 dollars) over the life of the loan. In contrast, the government's cost to finance this loan based on average annual interest rates will total \$785,000 (\$1.5 million in 1983 dollars). Thus, the government will lose \$138,000 (\$200,000 in 1983 dollars) on this loan.

Figure 4 shows several other examples. In case A (1970 loan), the government should realize a profit. Over the long run, profits could possibly offset losses, but such a presumption is questionable considering the overall increasing trend in interest rates that the government has incurred over the years. However, even if this

Figure 3

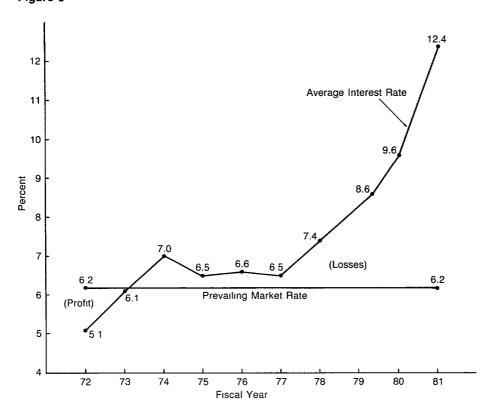
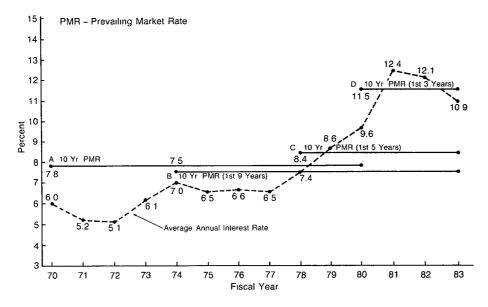


Figure 4



presumption was right, an issue of equity exists; that is, is it fair to charge some borrowers prevailing market rates that are higher than the government's actual borrowing cost to produce profits to absorb the losses resulting on loans made at prevailing market rates that are less than the government's borrowing cost? Such a practice results in cross-subsidization.

The total amount of money the government loans based on the prevailing market rate approach is not easily determined. There are numerous federal credit programs. In addition, a number of federal agencies are authorized to borrow from the Treasury or its Federal Financing Bank to finance their activities. Further, for one reason or another, not all of these borrowers are required to pay rates based on the prevailing market rate approach. Despite this, the following example serves to illustrate the significance of this problem.

At the Farmers Home Administration (FmHA), the use of prevailing market rates resulted in a \$2 billion understatement in the agency's interest cost for fiscal year 1981 compared to the interest cost that would have been reported using adjustable interest rates. At the end of fiscal year 1981, FmHA owed the Treasury or its Federal Financing Bank \$55.9 billion. These funds had been borrowed to finance FmHA's credit programs, and for the most part, they were borrowed for periods of 5 to 25 years, with interest payable based on prevailing market rates. For fiscal year 1981, FmHA reportedly paid \$4.9 billion in interest, which equates to an effective interest rate of about 8.8 percent (\$4.9 billion divided by \$55.9 billion). In contrast, the average annual interest rate on Treasury's marketable securities was 12.4 percent, or 3.6 percent more than the effective interest rate FmHA paid based on prevailing market rates. Based on this difference in rates, FmHA's fiscal year 1981 interest costs were understated by as much as \$2 billion (\$55.9 billion \times 3.6 percent).

Epilog

The prevailing market rate approach evolved in a relatively stable economic

²Assumes that principal is paid in a lump sum at maturity, which is how the public debt is financed as well as some agency borrowings from the Treasury.

A First Look at GAO's Resident Instructor Program



Authors are (I-r) Lawson, Rowan, O'Connor, Moore, and Weeks.

Gary Lawson, David Rowan, Thomas O'Connor, Patricia Moore, Lin Weeks

GAO's first four resident instructors bring a wide variety of experience and academic backgrounds to the classrooms and course design teams. As evaluators, they have been involved in audits of a broad range of issuesdefense, banking, international, ADP, energy, regulation, welfare, education, transportation, agriculture, housing, and employment Together, they have over 60 years of evaluator experience in GAO headquarters, four regional offices, two overseas branches, and on detail to the Congress Their academic backgrounds, include accounting, public administration, law, and economics. Three were Intermittent Instructors for OOHD prior to becoming resident instructors Lin Weeks is the OOHD coordinator for the resident instructor program; she has been with OOHD since 1980

An important part of GAO's overall effort to maintain and enhance the technical and managerial skills of GAO staff members is a comprehensive training program. To assist in developing and delivering nearly 80 courses, GAO established a Resident Instructor program in 1984. Resident instructors—evaluators who are assigned to the Office of Organization and Human Development for 11 to 23 months—primarily teach GAO training courses and assist in developing and modifying the training itself.

GAO's Resident Instructor program is modeled on similar successful programs in the public and private sectors. By integrating the practitioner's experiences, knowledge, and skills into the training "fabric," both the organization and the individual benefit: the organization's training becomes more practical, credible, and realistic, while the resident instructors gain new perspectives and methods which can be used in their roles as evaluators.

Eventually, GAO expects to have 7 to 10 resident instructors active in the program. In this initial year, four resident instructors were selected to pilot the program. In this article, the "pilot" resident instructors and the program's coordinator answer questions about the new program.

How Do Resident Instructors and Intermittent Instructors Work Together?

Intermittent instructors are GAO evaluators and other staff members who, along with their regular duties, teach GAO training programs on a part-time basis. Intermittent instructors have been and will continue to be a valuable resource in GAO's overall

training programs. Their role provides an opportunity for evaluators who cannot be full-time resident instructors due to other career demands.

Intermittent instructors may be more appropriate than resident instructors when particular courses are not offered frequently, when the courses are highly specialized, and in teaching courses that need to be adapted to unique division or office needs. On the other hand, the frequently offered courses can be more efficiently and effectively delivered by a resident corps of instructors who are available fulltime. However, these two types of instructors collaborate a great deal in designing and delivering courses. They work together in "team" teaching, curricula group meetings, annual instructor conferences, and in various planning sessions. Both types of instructors are encouraged to provide suggestions for changes or new examples for training manuals.

What Did You Expect From the Resident Instructor Program?

The first resident instructors had two major expectations about the program. We could make a significant contribution to human resource development in GAO, and we could increase our own technical expertise and managerial competencies.

Although it is too early to assess the long-term results, we think our expectations are being met. Through the variety of instructional assignments, from orientation to advanced managerial courses, we have many classroom opportunities to contribute to developing human resources by relating the course to the evaluator's role. We also contribute through course design or modification and by participating in new managerial and technical training.

How Were Resident Instructors Prepared?

Our preparation as resident instructors had three phases:

- We got acquainted with GAO's overall approach to human resources development.
- We identified how the Resident Instructor program fits into this approach.
- We established individual plans to prepare us for specific instructing and course development activities.

Our first official duty as resident instructors was to meet with the Comptroller General on the goals for this new program. Next, we met with the Assistant Comptrollers General for



Dave Rowan leads discussion in an Entry-Level Training course.



Tom O'Connor, resident instructor, and Janet Coffin, education specialist, review a computer program for an upcoming course.

Operations and Human Resources, and the director of OOHD. In these sessions, we saw how GAO's top management is committed to human resource development.

To understand how the Resident Instructor program fits into the overall approach, we met with the director and branch managers of OOHD. This helped us understand OOHD's activities and established important communication links. We discussed specifically how the resident instructors and OOHD branch managers could support each other's efforts.

Drawing upon this background, our past experiences, and particular skills and interests, we prepared Individual Development Plans (IDPs) to identify our individual development goals and objectives, our planned training and course development assignments, and our training needs. As resident instructors, we have received excellent training and support to make the transition from evaluator to instructor. Our training has addressed not only the specific course material we instruct, but also course design, instructional approaches and techniques, and other human resource development skills.

Are There Similarities Between Resident Instructors and Evaluators?

Some of the same basic skills are required in both the resident instructor and evaluator roles. Oral communication, leadership, interpersonal skills, and planning are important regardless of classification. Just as agency officials often challenge positions taken by GAO evaluators, sometimes class participants likewise challenge instructors. In both roles, you must "think on your feet." However, both are professionally demanding and afford many opportunities for professional growth and satisfaction.

While some of the same skills are required as a resident instructor and an evaluator, the skills may need to be practiced to a greater or lesser degree or in a different context. For example, on most days, resident instructors use more communication skills than do evaluators. While planning is a part of both roles, the factors for consideration and the parties involved in planning the design and delivery of a course differ greatly from factors and parties that influence the development of an audit plan. Finally, resident instructors may generally have fewer opportunities to practice their report writing skills.



Gary Lawson makes a presentation to one of the curriculum advisory groups.



Patricia Moore sets up videotape equipment to use in the classroom.

Aside from the skills involved, other differences exist:

- An evaluator's focus is typically on a division, office, issue area, etc., whereas a resident instructor's focus must be organization-wide.
- Evaluators are accustomed to waiting for long periods before seeing final products issued, whereas instructors see faster results in a week-long course.
- Instructors usually know class schedules and assignments several months in advance, whereas evaluators deal with a less rigid schedule.
- The instructor's role is proactive in that we are advocating ideas and positions, as opposed to the reviewing role of the evaluator.
- Instructors can gain an agencywide perspective on GAO's work and staff through discussions with class participants. This perspective cannot usually be seen as readily from an evaluator's role.
- Course development activities require continuing contact with GAO's Office of Policy, thereby providing ongoing reinforcement of policy positions that, as evaluators, we are sometimes too busy to study.

What Challenges Have You Faced?

One of our biggest challenges is to avoid "overload!" Both instructing and course development are demanding and interesting, and quite a few avenues of involvement are open. We keep our calendars with us, plan ahead, and try to be very clear about defining our involvements.

A second kind of challenge is to be less skeptical than we were in the evaluator role—where we often were looking for problems. Resident instructors are, in a sense, proponents of new ideas. While we still raise issues that we believe should be considered by OOHD, we need to be mindful that a great amount of effort, research, and organization support already exist for the courses we instruct and help design.

A third challenge is developing strong "platform" skills and a sense of psychology about adult learning. The skills an instructor needs for class discussions and for answering class questions are different from skills an evaluator uses. To sharpen our instructor's skills, we can and do solicit OOHD's advice. We sometimes videotape and critique our classroom performance.

A fourth challenge is simply the adjustment to a different "subculture" of GAO. OOHD staff generally come from

different academic backgrounds than do evaluators. As a group, they tend to be more extroverted (according to the Myers-Briggs Personality Type Indicator). They are perhaps less argumentative than many evaluators and have learned to interact extensively with a wide variety of individuals throughout GAO. While this adjustment to a different subculture is a challenge, it is also refreshing and enjoyable.

Which Skills Will You Enhance?

Oral communication, interpersonal skills, and leadership should be particularly enhanced by our experiences as resident instructors. Also, through answering participants' questions in a classroom and integrating our response with course material, we should increase our ability to conceptualize. In addition, in instructing technical courses—although not actually practicing technical skills—we are continually reviewing and deepening our appreciation of technical skills needed by evaluators.

Maintaining all the skills necessary to make the transition back to being an evaluator will require some thought and planning. Three of us have continued with occasional evaluator-type responsibilities, and these have kept us fluent in the evaluator's role.

Beyond these involvements, our responsibility is to stay abreast of developments that affect us as evaluators when we complete our OOHD assignment. Keeping current requires us to obtain and read office announcements, scan reports that are issued, and stay in informal communication with evaluators. Given the crosscutting role that we play, these things are not difficult to do.

We would like to note that OOHD's top management is committed to helping us make the transition out of the Resident Instructor program.

What Is the Most Outstanding Feature of the Resident Instructor Program?

Many features of the Resident Instructor program are particularly satisfying:

- We deal with a wide range of individuals at all organizational levels.
- We have a great variety of instructing roles, course development work, and activities.
- We get immediate feedback on our performance as instructors through

evaluation forms.

• We have fairly definitive schedules for instructing assignments so that we know what we will be doing for the next several months.

Although these features stand out, it is hard to list all the good features of the program. For instance, 11 to 23 months as an instructor may "reenergize" us to be more effective evaluators when we return.

Do You Advise on OOHD Operations?

On the basis of our experience as resident instructors in the pilot year, we have suggested possible modifications needed in the Resident Instructor program. We have also suggested to OOHD some possible ways to better integrate the training program into GAO's overall operations.

OOHD management has been very open to listening to our suggestions and has already acted on them.

Regarding the Resident Instructor program, we suggested it could be improved by

- better linking the performance appraisal system for resident instructors with the system used for evaluators,
- looking for innovative ways to make the program a more viable option for regional office staff,
- improving the system for identifying and selecting resident instructors, and
- publicizing the program throughout GAO.

OOHD has acted on the first two suggestions. The others were being considered as we went to press in fall 1984. We have assisted in searching for better ways to integrate the training program into GAO's overall operations. A fall 1984 conference, which brought together OOHD, the deputy director for operations, and assistant regional managers for operations to discuss just this topic, was a good beginning. We have also suggested where the GS-13/14 project manager curriculum can be better integrated with the GS-15 curriculum as it is developed. Of course, we endorse the Resident Instructor program as an excellent way to better integrate the training program into overall operations.

Our additional role of in-house OOHD advisors is very rewarding due to OOHD's open and interested attitude toward our suggestions.

See Resident, pg. 43



Marilynn Eaton

Contributors to this article are Barry Bedrick, Robert Centola, Douglas Faulkner, Michael Golden, Jeremy Hutton, Christine Kopocis, and Ronald Schneider, with compilation by Marilynn Eaton, the GAO Review liaison

Ed Note We note with sincere regret that Ron Schneider passed away on September 1, 1984

Introduction

This article—an overview of the Office of General Counsel (OGC)-was originally to have been entitled "The View from the Seventh Floor," reflecting the lofty perspective from which approximately 140 attorneys and 75 legal assistants, technicians, and other support staff members of OGC perform a multitude of tasks. However, a planned move to the first floor, to permit renovation of heating and cooling systems, probably will occur before publication. The change will alter the perspective, but not the caseload that OGC handles or the way that OGC relates to GAO's operating divi-

How OGC Is Structured

For legal decisionmaking, OGC is divided into four sections: General Government Matters, Special Studies and Analysis, Procurement Law, and Personnel Law Matters. Each section is headed by an associate general counsel, and although there is some overlap, each generally practices a separate and distinct type of law. In addition, a small litigation group represents GAO management in personnel actions. Providing support to all four

OGC: Serving GAO, the Congress, and the Public.

sections is the Legal Information and Reference Service.

In the summer of 1984, OGC also included almost 20 second-year law students, recruited by teams of attorneys and chosen on the basis of academic standing, participation on law reviews and similar journals, and demonstrated interest in public service. Such interns, who spend 10 to 12 weeks in OGC, comprise the applicant pool for full-time attorney positions.

The jurisdiction exercised by the various sections of OGC derives either from the Comptroller General's statutory authority to settle claims and accounts or from other responsibilities given to the Comptroller General by the Congress. Most recent is the specific statutory authority to decide bid protests under an act that became effective on January 15, 1985.

In performing their duties, OGC attorneys assume three different roles:

- Attorneys to the Comptroller General, drafting decisions for his signature;
- In-house counsel to GAO evalua-
- Legal consultants to the Congress, executive agencies, and, to some extent, the general public.

The decision-drafting role is played by attorneys in General Government Matters, who deal with the availability of appropriated funds; by Procurement Law attorneys, who perform a quasijudicial function in deciding bid protests; and by Personnel Law attorneys. whose decisions concern pay and allowances of government employees, both civilian and military.

The in-house counsel role is primarily that of Special Studies, where attorneys are divided into four working groups corresponding to GAO's major operating divisions. These attorneys participate in all phases of audit work, from issue area planning through report review. The in-house counsel role is shared by General Government and. to a lesser degree, by the two remaining sections of OGC.

As consultants, OGC attorneys may prepare testimony for, or participate in, congressional hearings; work with con-

gressional committees to implement GAO recommendations; draft proposed legislation; provide written comments on bills or amendments during their formative stages; and prepare manuals covering their areas of expertise that are used government wide.

While requests for legal services take various forms, in most cases the decision-drafting work of OGC begins in Index and Files, a sub-section of the Legal Information and Reference Service that receives all correspondence addressed to the Comptroller General. Of the nearly 40,000 incoming items a year, Index and Files forwards 14,000 of them to GAO's operating divisions and offices; the other 26,000 items are retained and processed in OGC.

Appropriations Questions? See GGM

Such questions as "Are federal appropriations available for a particular purpose?" or "Can an agency use its appropriations in a particular manner?" are directed to approximately two dozen attorneys in General Government Matters. These questions come from members of the Congress or congressional committees, the heads of executive agencies, and government certifying officers. In addition, General Government attorneys have special responsibility for cases involving accountable officers (cashiers, disbursing officers, and certifying officers), because in appropriate circumstances the Comptroller General can relieve these individuals of personal liability for the loss or improper payment of federal funds entrusted to their care

In a recent case, General Government attorneys reviewed in depth the funding methods used by the Department of Defense in conducting various activities in Honduras and found several improprieties. Another decision by this section examined and criticized an intense lobbying effort by the executive branch to obtain enactment of legislation to create a Consumer Protection Agency. Besides being legally questionable, the lobbying was



General Counsel Harry R. Van Cleve makes a point at the Comptroller General's annual reception for OGC summer interns. Clockwise, facing the camera, are intern Maureen Murphy, Associate General Counsel Rollee Efros, intern Thomas Sisti, Mr. Van Cleve, and Comptroller General Charles Bowsher.

not very effective: the legislation was defeated in the House of Representatives. An earlier decision halted the use of Secret Service agents for former Vice President Agnew 6 months after he resigned. While such decisions often involve comparatively small amounts of money, the precedents they set may affect future billions.

The legal content of an audit report that General Government Matters has helped prepare may have as much impact as a decision. For example, in a report on the Powder River Basin Coal Lease Sale, the Comptroller General criticized the Department of Interior's method for determining fair market value, used in connection with the sale of coal leases. This led to the appointment of the Coal Leasing Commission, and the General Government attorney who worked on the report subsequently served as General Counsel to that commission.

General Government's 2-3/4 inch manual, *Principles of Federal Appropriations Law*, summarizes relevant statutes and Comptroller General and court decisions. Published in 1982 and now being updated, the manual is considered a leading treatise on this esoteric area of the law and is among the Government Printing Office's best sellers.

Bid Protests: A Forum for Disappointed Bidders

Legal writing also is the bread and butter of more than 50 Procurement Law attorneys, whose primary responsibility is the drafting of decisions on protests filed by disappointed bidders for government contracts. A Bid Protest Control Unit provides initial notice of protests to procuring agencies and tracks all protest correspondence.

Since the 1920's, GAO has been the principal forum for resolution of bid protests, although bidders today may also protest directly to procuring agencies or go to court without exhausting their remedies at GAO. While protesters frequently are represented by leading law firms, under GAO procedures, it is possible for an individual or small business, for the price of a 20 cent stamp, to file a protest and trigger what is essentially an adversary process. In this process, GAO requests a fully documented report from the head of the procuring agency; the protester and other interested parties can comment on that report; and an administrative conference, chaired by a procurement law attorney, is often held, with technical and legal experts presenting their views.

The bid protest process is designed to ensure compliance with federal pro-

curement statutes and regulations. These are based on the principle of obtaining the widest possible competition, so that the government acquires needed goods and services at reasonable prices. Thus, the bid protest process is one means—apart from audit—of monitoring federal acquisitions.

In their role as independent arbiters, Procurement Law attorneys will decide, for example, whether specifications unduly restrict competition or whether a bid or proposal has been improperly rejected, particularly when it allegedly would meet the government's needs, as stated in a solicitation, at a lower price than the one selected. The application of Buy American and other domestic preference statutes and the implementation of socio-economic policies favoring small, disadvantaged, and women-owned businesses are areas of special concern. A clear trend is the willingness and ability of Procurement Law attorneys-sometimes with assistance from an audit division-to scrutinize technically complex procurements involving, for example, automatic data processing equipment or major military weapons systems.

Procurement Law's expertise is widely recognized, as illustrated by requests for advisory opinions from the U.S. District and Claims Courts and for

reports on procurement-related litigation from the Department of Justice.

A Procurement Law attorney regularly serves as counsel for all of GAO's own procurements, while another recently assisted with drafting the Competition in Contracting Act (P.L. 98-369), which was passed by the 98th Congress.

As noted above, this legislation for the first time gives statutory recognition to the bid protest process. In general, it requires that award or performance be suspended until a protest decision is reached; imposes strict time limits for the rendering of decisions; and permits the Comptroller General to award attorneys' fees to prevailing parties.

In fiscal year 1983, the Procurement Law section handled 2,253 protests; this is about two-fifths of OGC's caseload. Of the 1,241 protests that were resolved by formal decision, 14.5 percent were sustained; in other words, Procurement Law attorneys found merit to the protester's allegations and recommended action either to correct the particular problem or to prevent a recurrence. The number of bid protest cases filed is expected to double under the new act.

Preparing to meet this increased caseload, the section recently has been reorganized from two large working groups into eight small ones; has hired and trained new attorneys as well as some who have been temporarily detailed to Procurement Law from other sections of OGC; and has published new procedures that reflect the deadlines established by the new act.

Pay and Allowances: Personnel Law

The third OGC decision-writing section, Personnel Law Matters, is divided into two subsections, each headed by an assistant general counsel. During fiscal year 1983, the approximately 30 attorneys in this section completed a total of 1,067 cases.

The simplest way to describe the work of the section is to say that it deals with federal civilian employees and members of the uniformed services and their money. Virtually any question concerning pay, leave, travel, relocation allowances, and, for service members, retired pay, can be presented by congressional sources, heads of executive agencies, unions representing federal employees, certifying or disbursing officers, and individual claimants.

In most cases, the Personnel Law attorney must decide whether or not a specific individual, or that person's heirs or beneficiaries, will receive a



Thomas Armstrong, Attorney-Advisor in the Special Studies section of OGC, discusses an energy-related project with Leslie Aronovitz, an AFMD evaluator currently detailed to RCED.

specific payment. Because this is usually so important to the individual involved, claims are pursued with unrivaled tenacity. The most legendary claimant is the person who was fired from a federal agency in the early 1940's. He filed every administrative or judicial appeal possible, but lost them all. It was rumored that the staff of his Congressman's office had instructions not to let him in the door. By some unknown means, he discovered the location of the offices of the Personnel Law attorneys at GAO and, as late as the early 1970's, would stroll down that hallway until he found an attorney at work, then invite himself in to discuss his case.

On the civil side, Personnel Law attorneys deal with issues ranging from the ridiculous to the sublime. They have been asked if an employee may be paid mileage for riding a bicycle on a temporary duty assignment, if a transferred employee may be reimbursed for the cost of stamps used to change the addresses on magazine subscriptions, and if an employee may be reimbursed for the cost of boarding a pet dog at a kennel while the employee was on a temporary duty assignment. In each of these cases, the Comptroller General denied reimbursement.

Some cases have political as well as financial implications. One such case occurred when Claridge's Hotel in London submitted a claim for lost revenue after President Carter canceled reservations for two floors of rooms less than a week before his arrival for the

Queen's Jubilee in 1977. Upon recommendation of Personnel Law attorneys, the United States paid the hotel's claim. During the Watergate era, Personnel Law was asked whether President Nixon would be entitled to the benefits provided for former presidents if he resigned. The Comptroller General found that the benefits would be denied only if he were actually impeached and convicted. Another famous Personnel Law case involved the guestion of whether the Iranian hostages were entitled to overtime pay. (They were not.) This section also assisted in the investigation of loans received by White House counselor Edwin Meese.

In Military Law, the increasing incidence of service members married to each other has raised complex questions about quarters allowances and the status of children. A long-standing problem is the sorting out of beneficiaries after a service member's death. It may not be a world record, but in a recent case, Personnel Law attorneys had to decide who was the correct beneficiary because a service member had been married eight times but divorced only four times.

The constitutional prohibition against receipt of any presents or emoluments from foreign governments without the consent of the Congress applies to retired service members. Attorneys in this section therefore may be called upon to determine whether, for example, the prohibition applies to a retired Air Force officer who wishes to work for a foreign airline. The legal question

32

is whether the officer's payment is actually from a foreign government. This may be the case if the government owns and controls the airline. Attorneys in this section also drafted the decision holding that a retired service member cannot have taxes to cover both his retired pay and other income withheld from his retired pay to frustrate the purposes of the Former Spouses' Protection Act.

In their in-house counsel/consultant role, Personnel Law attorneys currently are exploring the legal foundation for the equal employment doctrine of comparable worth, assisting in a review of travel policies of the foreign service agencies, researching alternatives for the supplementary pension system for new federal employees who are covered by Social Security, and drafting legislation that would permit the Comptroller General to waive erroneous repayment of travel and relocation expenses. The section's decisions have been compiled in two manuals covering civilian and military personnel law.

And in Management's Corner

Although their subject matter is related, the role of the seven attorneys in the Personnel Legal Services and Appeals Group, also known as the "Swat Team," is unique in that its members are the only OGC attorneys who actually litigate. The group was established in 1981 to serve as inhouse counsel to GAO's Personnel Office and Civil Rights Office; to act as agency counsel in administrative proceedings, either through settlement or by defense of GAO's actions in an evidentiary hearing before the personnel Appeals Board; and to assist the United States Attorney's Office and the Department of Justice in defending GAO in federal court.

Most of the group's time is spent handling individual cases. The following examples illustrate the varied functions of the attorneys in this group:

- providing legal advice to the Personnel Office on GAO's responsibility for counseling and rehabilitation of a "problem performer" who is an alcoholic;
- assisting the Civil Rights Office in drafting rules for investigation of discrimination complaints and developing handouts explaining the rights and responsibilities of all participants in an investigation:
- representing GAO when an employee or prospective employee alleges that agency hiring or promotion practices are discriminatory.

The Evaluator's Friend: Special Studies

Possibly the most familiar of OGC's in-house counselors—at least to the GAO evaluator—are the attorneys of Special Studies and Analysis. Established in 1973 for the express purpose of providing full-time legal support to the operating divisions, Special Studies now has approximately 30 attorneys who maintain continued contact with the divisions for which they are responsible.

The "scoping" of Special Studies' work on particular jobs-identifying and refining the legal issues, deciding on the nature and extent of legal assistance, and arriving at appropriate timeframes—is a joint effort usually accomplished informally through meetings between the attorneys and evaluators. In some cases, routine legal research or informal advice on a single question is sufficient. At the other end of the spectrum, Special Studies attorneys have served as members of audit teams working, for example, on two reviews of the Commodity Futures Trading Commission.

Special Studies attorneys frequently travel to the regional offices and other locations to deal with the field audit staff. Recently, for example, they accompanied National Security and International Affairs Division evaluators on interviews to obtain the views of lawyers who practice before the Armed Services Board of Contract Appeals.

Accompanying witnesses from GAO's Resources, Community and Economic Development Division, attorneys recently testified in support of their legal position that a statutory \$50,000 limitation applied to the Department of Agriculture's "payment-in-kind" program; this was a highly publicized and controversial issue. They also worked closely with the Human Resources Division staff and the House District Committee to draft language to implement GAO's proposal for legislation transferring St. Elizabeth's Hospital to the District of Columbia. In addition to these projects, the following examples illustrate the broad scope of the section's legal work:

- a comprehensive analysis of federal laws pertaining to U.S. military involvement in El Salvador;
- a discussion of legal problems and changes needed in the Justice Department's Witness Security Program, together with draft legislative amendments;
- an analysis of Environmental Protection Agency's regulatory discretion under the Toxic Substances Control Act, including whether EPA has authority to

negotiate voluntary agreements with the chemical industry;

- an evaluation of the Defense Department's implementation of a statute requiring warranties for weapons systems;
- an evaluation of the legal aspects of the Grace Commission's recommendations:
- an opinion on whether the Bonneville Power Administration could finance the defense of the Washington Public Power Supply System in connection with its bond default; and
- a review of the legal implications of a proposal to sell the government's weather and land satellite systems to the private sector.

As an adjunct to its audit-related functions, Special Studies serves as the focal point for handling access to records problems and coordinates GAO's work under the Impoundment Control Act of 1974. In addition, attorneys from this section drafted and shepherded several laws of special interest to GAO through the Congress, including the General Accounting Office Act of 1980, statutes granting GAO audit authority over the Internal Revenue Service and the bank regulatory agencies and, most recently, the Federal Managers' Financial Integrity Act.

Legal Information and Reference Service

The fifth branch of OGC is the Legal Information and Reference Service. Index and Files, as noted above, processes all incoming correspondence addressed to the Comptroller General. In addition, once completed, every OGC case is returned to this branch for dissemination to all interested parties. At this time a "B" file, which includes all pertinent information in chronological order, is assembled and made a permanent record.

OGC's records now total approximately 320,000-100,000 "A" files, dating from 1924 through 1938, and 220,000 "B" files. Of the latter, those files starting with B-145000 are kept on the seventh floor; all earlier ones are stored at the Federal Records Center in Suitland, Maryland, To provide better control of OGC correspondence and access to the records, an automated correspondence control system was installed in Index and Files in 1978. The system operates through a time-shared computer at the House of Representatives and an in-house minicomputer. Along with the manual card system that it replaced the system allows Index and Files to provide information on any case processed since

1921.

Index-Digest, the other half of Legal Information and Reference Service, functions as a central research facility. Paralegal specialists provide telephone service, available to the public as well as GAO staff, answering approximately 6,000 requests for information a year. The section's files contain digests, arranged alphabetically by subject matter, of all Comptroller General decisions. In addition, an editorial group maintains a citation file similar to the Shepard's system, familiar to most legal researchers, but devoted exclusively to Comptroller General decisions.

About 10 percent of these decisions are selected for annual publication in a bound volume, either because they overrule, modify, or distinguish previously published decisions or because they concern an issue of widespread interest to the government or the general public. Various other legal

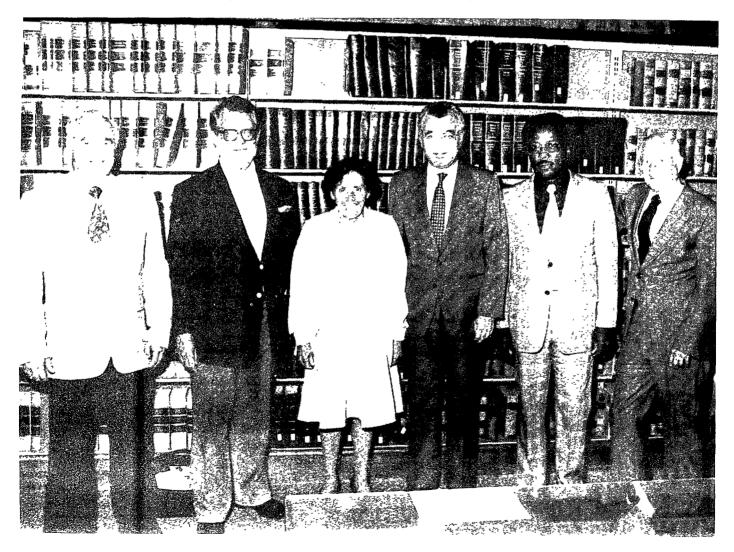
publications that support and augment this volume also are prepared by Index-Digest staff members. Since 1974, all Comptroller General Procurement decisions have been published (although not by GAO) in looseleaf form; in addition, Comptroller General decisions are now available via computerized research systems such as Juris and Lexis.

Legal Information and Reference Service recently was selected for a GAO pilot program employing Quality Circles. Originated in Japan, the Quality Circle is based on the theory that workers are best able to identify, analyze, and recommend possible solutions to work-related problems. The 16 staff members who are involved in the pilot program here will meet regularly over the next 2 years, using techniques such as brainstorming and cause-and-effect analysis, before presenting their findings to GAO manage-

ment.

OGC at Play

Finally, no description of OGC at work would be complete without at least briefly mentioning that OGC staff members also are involved in GAO's after-hour sports. The OGC team in GAO's basketball league has consistently been successful, winning the league championship once and coming close in other years. In addition to the highly competitive OGC softball team. a group of "Young Turks" plays regularly; the team uniform is an Hawaiian sport shirt. OGC runners are found regularly running during lunch and were well-represented on the GAO teams competing in the Xerox Marathon relay. Bowling, tennis, and GAO's annual golf tournament also have attracted OGC staff members.



Longest-time employees of the Office of General Counsel gather in the Law Library. F. Henry Barclay (far right), now Assistant to the General Counsel, began his OGC career on July 19, 1945. Other more "recent" employees include (I-r) Paul A. Kutyana, chief, Index and Files; Richard E. Shipman, attorney; Margaret L. Taylor, Index and Files; Norton H. Schwartz, Deputy Assistant General Counsel; and James R. Hill, Index and Files.

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.

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20410.

Documents published by the General Accounting Office can be ordered from GAO Document Distribution, (202) 275-6241.

Audit Forum Conference, New York, May 6-9.

Gave a talk on "Auditors and Investigators Working Together" for Small Business Administration audit and investigation staff, San Francisco, May 29.

Served as a panelist on "Contracting for Single Audits" at the AICPA National Conference on Auditing Federal Assistance Programs, Washington, June 4-5.

Presented a seminar on "The Essence of Evidence" at a meeting cosponsored by the Western Intergovernmental Audit Forum and the Inland Empire Chapter of the Association of Government Accountants, Norton Air Force Base, CA, June 13.

Was reappointed to the Committee on Governmental Accounting and Auditing of the California Society of Certified Public Accountants, July 26.

Robert L. MacLafferty, evaluator, taught a course on labor-contract negotiations for local, state, and federal managers, Concord, CA, May 16-18.

Perry Datwyler, evaluator, gave a presentation on the Federal Managers' Financial Integrity Act at a meeting sponsored by the Naval Electronic Systems Engineering Center, Vallejo, CA, June 25.

Seattle

Keith C. Martensen, senior evaluator, was elected to a 2-year term as council member, Evergreen Chapter, American Society for Public Administration, May.

Rodney R. Conti, senior evaluator, presented a paper on the occurrence and potential for economic development of poly-metallic sulfide deposits to scientists at the Marine Biological Association, Plymouth, England, May 16. He also held discussions on the same topic with scientists and researchers at the Institute of Oceanographic Sciences, Wormley, Godalming, England and the University of Bath, Bath, England, May 17-21.

Donald A. Praast, senior evaluator, delivered the principal luncheon address on the subject of "Fraud" at the 11th annual professional development symposium of the Portland, Oregon, chapter, Association of Government Accountants, June 1. Praast is currently serving as the Association's Regional Vice-President for the Northwest.

Charles D. Mosher, audit manager, served as arrangements chairman for the American Water Resources Association Symposium on Forecasting, Seattle, June 10-13. He also served as moderator of the technical session on Forecasting Water Demand.

Stephen J. Jue, technical assistance group manager:

Was elected to his sixth consecutive term on the Board of Directors, Puget Sound Chapter, EDP Auditors Association, Seattle, June 12. Jue, who is a founder and was first president of the chapter, will also serve as director of membership.

Along with **R. Jerry Aiken**, technical assistance group evaluator, was awarded a plaque for best chapter newsletter at the International EDP Auditors Association annual meeting, Washington, June 19. Aiken was also elected by the Puget Sound Chapter to serve as director of publications for the coming year, June 12.

Marvin E. Hanson

Marvin E Hanson joined the Denver Regional Office in March 1983 after 14 years with Community Health Planning and Health Systems Agencies in Arizona, Nebraska, and Colorado He holds a bachelor's degree in Latin from Saint Meinrad College in Indiana and two master's degrees (Medical Care Administration and Social Work Administration) from the University of Michigan From 1962 to 1964, Marvin served in the Peace Corps as one of the pioneer volunteers Recently, he passed the Certified Public Accounting Examination and is currently awaiting certification by the State of Colorado.



Sigrid L. McGinty

Sigrid L McGinty, an evaluator in the Denver Regional Office, joined GAO in 1980 She received a bachelor's degree in Human Services from Lake Superior State College in Michigan and has held several positions in counseling and social work Ms McGinty is currently the Denver Regional Office's Federal Women's Program Manager and serves on Denver's Career Level Council Executive Committee

Beauty and the Beast: A Lesson in Interpersonal Dynamics

Over the past several years, GAO and other organizations around the world have struggled with a new and uncomfortable situation: how to effectively incorporate different types of people into all organizational levels. Not only are increasing numbers of women and minorities entering the workforce, they are also being promoted to supervisory and executive positions Among the most frightening and anxiety-producing situations, for both the supervisor and the employee, is the advent of a man working for a woman. This article relates two people's experience with that situation, and their successful journey from anxiety to comfort.

A GS-11 Evaluator Becomes a Supervisor for the First Time

Sigrid McGinty: When I began working at GAO, several people mentioned to me the importance of analytical skills, written communication, and the willingness to travel. But no one mentioned the ability to get along well with people. After 3½ years, 10 assignments, 8 different supervisors, and goodness knows how many agency contacts, I have come to realize that a successful assignment depends, to a large extent, on having good interpersonal skills.

Before coming to GAO, I pursued a degree in the human relations field where I worked at a crisis intervention center, a hospital alcohol treatment center, an all-male prison, and a college where I helped teach a course on group dynamics. After college, I became a VISTA volunteer and counseled women at an employment agency, a shelter for battered women, and a family-planning clinic. I always knew that these experiences would prove beneficial, no matter what type of career I pursued.

I had been with GAO for 3 years, and a GS-11 for 4 months, when one day, an assistant regional manager asked me into his office. He was fairly new in our region, and I had never had contact with him before, other than the occasional "hello" in the halls and coffee room. When I went in, he asked if I would be interested in being the site senior of an assignment and the supervisor of a brand new employee. I was very surprised. Normally, GS-11s do not supervise, and rarely do they have the opportunity to supervise and run an assignment simultaneously. During the next several months, I would be planning my own wedding (which was to take place 1,200 miles away) and buying a new home. But I also knew that I would be foolish to turn down this opportunity. I gratefully accepted.

A Middle-Aged Man, Coming from a Top Management Position, Becomes a GS-9 GAO Evaluator

Marvin Hanson: There is nothing like a good, old-fashioned recession to take care of one's complacency on the job: particularly when the end result is the loss of that job. After 14 years as a manager with a non-profit community health planning agency, I awoke one morning to find that the agency had suddenly disappeared because of defunding. It was time to look for new horizons and new opportunities. After carefully weighing the options of either toughing out the recession until something came along that related to my past jobs, or trying something new, I chose the latter course and entered the field of accounting.

Some 20 years after being out of school, I was back in the world of academia. I cannot remember the last time I had worked so hard or had such a stimulating experience. No longer was I the guy in charge with a big office, an oversized desk, and a personal secretary; rather, there I was competing for grades with 30 or 40 other students of all ages and backgrounds.

It quickly became apparent that today's younger students are sharper

than the students of 20 years ago. If we more mature types were to maintain parity, in terms of absorbing the voluminous materials given to us as we competed for grades, it became essential that we join forces in helping each other through the process. It was a classic case of "together we achieve, alone we flounder." This school experience would prove good "bootcamp" training for my upcoming work experience with GAO.

One day, as I was walking between classes, a young coed asked me what I was going to do when I grew up. At age 42, I knew that the question struck right to the essence of my dilemma. Even though I had much life experience and all kinds of credentials (2 master's degrees and 14 years of management experience), I was definitely starting over.

I talked to many people about opportunities in the field of accounting and financial management, including "Big Eight" CPA firms, state and local accounting firms, non-profit agencies, business and industrial organizations, and government. This process involved many comments of "You're too qualified for the position (i.e., too old). Was I discouraged? Hell yes, but fate has a strange way of working things out for the best.

What I really wanted was to get into a field where I could use my life experiences as well as my new-found accounting skills. In November 1982, GAO recruiters were scheduled to come on campus. After reading the evaluator job description and talking to people who were familiar with GAO, I knew that it had to be my job. It was only a minor point that over 300 people were applying for the 10 available positions. No one was going to beat me out.

On recruitment day, I got up at 5 a.m. I wanted to be the first in line to sign up for a GAO interview. I shaved my beard and dusted off the pin-striped suit. On the day of the interview, I announced to my fellow students in Advanced Accounting that the GAO job was mine; they could have the job with the Big Eight firms.

It has been said that surviving the recruiting process is often harder than the job itself. GAO definitely lives up to that adage. After completing the infamous SF-171, writing my autobiography, and describing in great detail how GAO would have a difficult time existing without me, I waited and waited to hear from GAO. Finally, word came that I would get my interview with the GAO management. There was no way to prepare for this interview, except for one question I knew would be

forthcoming: "How would you be able to get along with a supervisor who is considerably younger than you?" I was ready for that one: "I don't have the energy or the inclination to get hung up on the age factor. I just want to be able to do a good job and to avail myself of opportunities to move upward within the organization." It must have been a good response, because a week later they offered me the job. But just the same, they were going to do a little testing. Words about being flexible and adaptable are one thing; how they hold up in real life situations could be another.

The Job Begins

Sigrid: About a week after I began my new assignment as a site senior and before my new "fledgling" came to work at our office, a very concerned training coordinator came to my desk. He had just received some information about the person I was to supervise. He explained that my future subordinate was an older man-old enough to be my father-and that he had vast amounts of education and job experience, including two master's degrees and top management experience with a health agency. I wasn't sure if I should have been happy, relieved, or scared. The training coordinator was concerned because this was to be my first supervisory experience with GAO and because the "new hire" was much older and more experienced than I. We decided to hold a meeting that included the assistant regional manager who gave me the assignment and my own supervisor, the regional assignment manager. The assistant regional manager assured us that the new "fledgling" was completely harmless and that we would get along fine. Toward the end of our meeting, a secretary came into the room and announced that one of the new hires was in the office and that he wanted to speak to a manager. It just so happened that the new hire was none other than my "fledgling." We ended our meeting, all agreeing that I would supervise the older gentleman. On the way out of the room, I couldn't resist taking a peek at my future subordinate. He was quite tall and nearly twice my age, but he had a big smile on his face, and yes, he did look harmless. Marvin: The job is mine! I start Monday. And the Saturday before, I am invited to the annual GAO Denver Regional Office Chili Cook-Off. I am going to meet the regional manager, the assistant regional managers, my new supervisor, and all kinds of other important people. What do I do? What do

I say? What do I wear?

I had gotten this far in the process by being prepared. Surely, my friends from the Internal Revenue Service and the Health and Human Services could offer advice on the right strategy. They said: "Be conservative, talk little, be moderate in the consumption of the spirits, and smile until it hurts."

I religiously followed this advice: for the first hour. For starters, I met the regional manager and his spouse on the elevator. A major debate ensued about whether or not the six people in the elevator liked my turquoise bolla tie. It lost on a vote of five to one. (The regional manager's wife liked it.)

As we got off the elevator, I engaged a congenial-looking fellow in conversation:

"Hi, I am Marvin Hanson. I will be starting with GAO on Monday. I am looking forward to my new career with your organization."

"Why are you telling me, buddy, I don't work for GAO."

Then one of the GAO regulars came by and asked: "Who are you trying to impress with all that smiling?" I still wasn't discouraged. I'd come this far, and it was no time to hold back now.

By about midway through the party, a number of the GAO staff had realized that I was the "old guy" who was to be assigned to Sigrid, the new GS-11 and site senior. This was too good an opportunity to let pass. I met for the first time the person who, for the next several months, would control my destiny with GAO. Lacking any guidance on the proper response to this situation, I kissed her hand.

It seemed that the Denver Regional Office management was trying something new: first, by hiring someone who was considerably older than the average new hire, and secondly, letting someone young and relatively inexperienced take on a "heavy duty" supervisory experience. What a gutsy organization, I thought. Who says government employment is locked in with the status quo? What was obvious to me was that, ready or not, the die was cast; my new career venture was about to begin.

Delegating Duties

Sigrid: Shortly before Marvin started working on the assignment, my supervisor and I got together to discuss his expectations of me as a site senior and supervisor. He began by commenting that he believed the office had been unfair to me by giving me such a big responsibility so early in my career. He added that if I did a good job of running the assignment and supervising a new

employee, then I would be performing above my grade level and would probably receive an exceptional rating. On the other hand, if I did not do well, the responsibility was obviously premature.

During this same period, several people in the office expressed concern over my new responsibilities. So many of us have a difficult time imagining a young woman supervising an older and more experienced man. I know that people had some doubts, and I would be lying if I said that I had none. But I knew I was being challenged, and I was not about to let myself or anyone else down.

After 4 days of filling out Marvin: forms, reading manuals, and learning the intricate art of filling out travel vouchers, I officially met my boss and started our "Review of Real Time Water Data Measurement Systems." The objective of the review was to determine whether or not duplication existed among federal agencies in terms of their use of expensive computer technology for water measurement. But I knew little about computers, less about water, and by this time, everyone had me convinced that the new supervisor would shoot off my kneecaps if I filled out my Time and Attendance Report incorrectly. Rather than waste a lot of anxiety on the unknowns, I wanted to get started on the project and deal with these unknowns.

During this first week, the evaluatorin-charge was in town and was meeting with the regional management representative and the site senior to lay out the groundwork for the review. As fate would have it, I got in on the tail end of the discussion. By this point, apparently, the strategies had all been discussed, and the two senior staff were telling GAO war stories: "I can remember when I didn't get home from the audit trail for 6 months at a time..."

What I needed to know was what was I supposed to do, where I was supposed to go, how I was supposed to measure water, what did my boss want of me. No answers that day; maybe the next.

The next day, when my supervisor and I met, we were cautious—very cautious—no one was going to make the first false move. Fill out a T&A. Get some office supplies. Read a preliminary writeup on the project. Fill out a travel request form. Do everything but communicate with each other.

The next day didn't appear to be much better. There was the formal presentation of the GS-9 performance standards, read straight out of the book. My biggest challenge had

become the effort not to collapse from boredom in front of my supervisor. Of course, the question began to surface: Is this all there is to life with GAO? There had to be more.

As I look back, it was a natural reaction for both of us to be cautious during those first few days. Both of us had our concerns and self-doubts. These were, in part, being fed by the "nay savers" and skeptics who did not believe someone older could adapt to the rigors and demands of GAO, and who did not believe someone young could supervise someone older. Running through my mind, too, were doubts about whether or not I could swallow my ego and be supervised by someone half my age and with only a fraction of my life experiences. Maybe indeed. I am too set in my ways to change, to respond to these new demands. And what if I have lost my enthusiasm for the challenges of the new job?

I only had to look at my new supervisor and realize that she was experiencing some of the same self-doubts. We both knew that if we continued with that mind-set, we were doomed to a self-fulfilling prophecy of failure.

Setting Mutual Goals

Sigrid: Neither one of us can pinpoint who initiated the discussion. All we can remember is that something needed to be said. We both had avoided the inevitable, and things were not going the way they were supposed to. It was definitely time to set aside the formalities and to define the essence of our working relationship.

The basis of our conversation centered around the fact that Marvin could not succeed without me succeeding and vice versa. And neither one of us was about to give the skeptics any satisfaction in terms of our inability to deliver the goods. Suddenly, we were no longer talking at the supervisor/ supervisee level but rather as two human beings with a definite personal objective or goal in this project. Making it more interesting, we needed each other.

Mutually accepting our goals for this project set everything in motion. We had a pact. We were in this together, we were a team, and there was no doubt that we were going to succeed. Little details like Marvin's getting ready to sit for the CPA exam and my preparations for an upcoming marriage and new home were not about to impede us.

Although we both learned much from this experience, and enjoyed it, we also went through some very dif-

ficult and frustrating times. The major element that pulled us through was our ability to communicate with each other. We knew from the start that our roles would be challenging, so when we set expectations for each other, we included the need for constant communication and feedback. I was to provide Marvin with feedback on his performance as a staff member and new employee, and he was to provide me with feedback as a supervisor. We began by scheduling specific times during the week when these feedback sessions would take place. This did not always come easily. Both of us had to learn the art of give and take.

Although I had rarely received opportunities to provide my past supervisors with feedback, I felt that Marvin's feedback on my supervisory techniques would benefit my own professional growth. I believe this feedback gave Marvin a chance to air some of his concerns and frustrations about the assignment and his role in GAO. I learned how very important specific feedback is to a new staff member: something many of us forget once we become supervisors.

During our assignment, Marvin and I had lots of good times. I'm not quite sure who laughed the most—Marvin and I, or the people who observed us.

First, it was the people in our office—our peers and our supervisors. Because they knew Marvin and I and our personalities, they were amused to watch this big, older man following around this petite, young woman with the man saying "yes boss."

Going on the road for the audit work was another enjoyable experience. Marvin and I had to travel to McCook, Nebraska, to gather information at the Bureau of Reclamation on water data collection. McCook is a small town located in southwestern Nebraska, and its residents are mostly farmers and cowboys. When we got off the two-prop airplane, the only rental car company in town picked us up and brought us to its office, which was a combination of an automobile dealer and a rental company. The only car available was a brand new Chrysler New Yorker, which was rented to us at a compact rate. This car was definitely more than we needed-it had a man's voice that told us: "All systems are go," "a door is ajar," "your lights are on," and "don't forget your keys." But the finale came when we pulled into the local truck stop one morning for breakfast, all decked out in our "power suits;" we



Pearl E. Brewer

Ms Brewer is secretary to the Deputy Director of the Program Evaluation and Methodology Division (PEMD) She joined GAO in April 1967 and worked in several positions in the Office of General Counsel (OGC) before joining the Institute for Program Evaluation (now, PEMD) in 1980 Ms Brewer is PEMD's representative to GAO's Civil Rights Advisory Council She has attended the University of Maryland, College Park, and is involved in a training program for computer programmers at Prince George's Community College in Largo, Maryland, She has received a Superior Performance Award from the Comptroller General in 1972 and an Incentive Award from OGC in 1971

Monday

Today, I return to work after a marvelous, 2-week long vacation. Getting back into a regular routine won't be easy. I get up at 6 a.m. and I'm out of the house by 7. It's my turn to chauffeur the car pool. Both passengers are ready, traffic is light, and everyone is cheerfully interested in my 10 days of touring down South. I visited my family in Monroe, North Carolina; the Dr. Martin Luther King Jr. Memorial and Stone Mountain in Georgia; and friends in

A Week's Worth

Tennessee.

At my desk, there is plenty of work to catch up on, I'm secretary to Ray Rist, the Deputy Director of the Program Evaluation and Methodology Division (PEMD). Before I start digging out, I have to check his calendar to see what appointments and meetings he has scheduled and which ones I still have to set up. Getting several top managers together in one place can turn into a juggling act. Now I learn that Mr. Rist wants to meet with all the PEMD associate directors this morning. So I call each one and suggest possible meeting times. After accommodating one who had a conflicting meeting and finding out another will be on leave, I end up scheduling it all for Thursday.

After I get caught up, the main work of the day is to make sure that the weekly status report gets to Mrs. Eleanor Chelimsky, the Director of PEMD, by the end of the day. It's my job to talk to each of the job managers and find out what's new on all the active jobs in the division. To update the report, I have to go to our computer terminal room and run a special program that gives the current data on active jobs in PEMD. While I'm working there, I see there's an EMAIL (electronic mail) message, too, so I print it while I'm at the terminal.

Back at my desk, there's more digging out to do; things have a way of piling up in a very short time. But eventually, I clear a space to put the status report together, get it xeroxed, and hand copies to the director and job managers. It's been a long first day back.

Tuesday

The phones certainly are busy this morning. Our most recent report is a hot item in the news. It's about the loss of benefits to families who have been cut from the Aid to Families with Dependent Children program, and the states and the agencies and the press keep calling us for information about it. The story was reported in the Washington Post and the New York Times; I feel like a public information officer myself today.

Then, there is a call from Brenda Anderson telling me that the Civil Rights Advisory Council (CRAC) will meet on Thursday. I'm PEMD's representative, working on a committee that's looking at how the revised Upward Mobility Program differs from the earlier version. The committee just finished drafting a memo of our findings for the Assistant Comptroller General, and now we're hard at work on the council's annual report.

The council invited Dean Mosher, Group Director, Personnel Legal Services and Appeals Group, GAO's Office of General Counsel and Patricia McLoughlin and Ryan Yuille, representatives from the Civil Rights Office, to our last meeting. Mr. Mosher told us the primary purpose of the group, summarized the current cases, and answered questions from the council. Mrs. McLoughlin and Mr. Yuille provided council members with some literature and outlined the procedures used in filing discrimination complaints.

Time to put my thoughts on all that aside, though, Mr. Rist wants to meet with the Interdivisional Design Team Group on the fourth Thursday in September. This means notifying all the participants at headquarters by telephone or note and sending an EMAIL message to those in the regional offices. After I've gotten this under control, and cleared away some more of the paper blitz that fell during my vacation, it's time to hit the road. The car pool won't like it if I'm not on the dot at 4:30, so I put everything away and close shop. The day went more quickly than I thought it would.

Wednesday

Well, no doubt about it; my vacation is over and my desk back to normal. My list of things to do today includes making the final arrangements for Mr. Rist's meeting tomorrow, distributing the list of action items from yesterday's managers' meeting and, of course, the usual stack of typing.

I've gotten very interested in using the computer, though. So have a lot of the support staff.

See Week's pg. 43

Bookmark

"Computer Wimp: 166 Things I Wish I Had Known Before I Bought My First Computer"

By John Bear Ten Speed Press, 1983.

Personal computers promise to speed up many of the tedious parts of our work, and they are all the more attractive now that GAO is officially encouraging employees to use theirs at work. If you are thinking about buying a computer or have just bought one. you should read John Bear's book. Computer Wimp: 166 Things I Wish I Had Known Before I Bought My First Computer. The cover describes it well: "An otherwise intelligent, sensible human being, who was turned into an unhappy, frustrated wimp by his first 10 years with small computers ... has written a book to help spare others his fate." This very readable book will save you from many problems, make you feel better about those you don't avoid, and give you an evening or two of interesting and entertaining reading, even if you never buy a computer. Perhaps most importantly, it lets you know that you are not alone in being a wimp and that it is all right to feel frustrated by computers.

Computer wimpishness is widespread. Many of us have felt, at some point, that we would have to learn to cope with computers, but we just didn't understand enough about them to make intelligent decisions. And we have all been made to feel helpless by a computer. Incorrect bills, paychecks, and leave slips aside, how many of us have lost a lot of hard work by forgetting to update a word-processed page? And who hasn't tried to read books that claim to make computers simple, only to find the books equally baffling?

Fortunately, Bear realizes that he and his readers are all computer wimps. He writes to be helpful, not to display the knowledge he has acquired, and his book is not mainly about computers, but about people. In it, you will find little information about what specific computers do, but a lot about what people can do to avoid or solve problems. He has followed Peter McWilliams' lead in producing a funny, jargon-free book with entertaining drawings, but he is more helpful than

McWilliams. While McWilliams shoots from the hip with brand-name recommendations about computers, software, or whatever, Bear explains the reasoning behind choosing one computer over another, enabling you to think for yourself about the next new computer that reaches the market (about one a week in 1983).

Three main sections contain the meat of the book: Buying Computers, Using Computers, and Problems with Computers.

Buying Computers

Bear does not make brand-name recommendations. His buying advice focuses on people, not hardware. Thus, he gives general advice that will help you buy any brand: "Choose the software first, then pick a machine that will run it . . . Never buy anything you can't lift." (Some day, you will have to move it.) The second most important point in the book, "Never Be the First Kid on Your Block to Buy Anything New." (You may not have the most up-to-date technology-you won't anyway in 2 months-but you may have something that works.) He also offers advice on choosing dealers: "Get a second or third opinion on anything a dealer tells you, no matter how confident he or she sounds." For finding or negotiating bargains, and determining the true cost of computerizing, Bear says "In the long run, most people will spend 3 to 4 times as much money on software, repairs, lessons, and additional hardware as they did on the original computer."

His psychological insight shows in his advice about what he calls the "But Wait!" syndrome. (Not buying because something better and cheaper will be out next month.) He has no easy answer, but he describes not only how paralyzing this syndrome can be, but how he feels about having bought an early digital watch for \$350. (He doesn't feel bad, actually, since he could afford the price, and he had one while others were waiting.)

Using Computers

Here, Bear tells us "The One Single Most Important Thing of All," and he really means it. "There is a strong tendency to junk the old system as soon as a new computer works. Doing so is the worst mistake a new computer user can make. No matter how expensive, inconvenient or annoying it is, keep the old system running parallel to the computer for at least three months." This means that you can computerize your workpapers, but make a backup copy in pencil. The computer may not fail you, but if it does, it could be very embarrassing to go back to an agency and ask the same questions all over again.

He offers a lot of other advice as well, based not on what computers can do, but on what you might want to do. It is all right to use your \$5,000 computer to play games—most people do. You will probably never need to program the computer yourself. There are many computerizable tasks that can be done better on 3x5 cards or in a book (Christmas card lists and your daily appointment calendar) and some tasks that should not be done at all (cataloging your shoes).

Problems With Computers

Although the book deals with some hardware problems (e.g., the lack of compatibility of most systems), it is mainly concerned with human problems. How do you keep from losing valuable data? (Make backup copies of your disks and keep them somewhere else.) How do you cope with cryptic manuals? (Join a users' group, call software companies' information numbers, buy the same stuff your knowledgeable friends have.) What do you do when you think you need a repair? (Try the software on another machine, keep a detailed diary of the problem, and bring the whole system into the shop.)

My favorite suggestion deals with temporary problems: Something won't work. You read the manual, check the plugs, try it again. It still won't work. You curse, call friends, try it again and again, and, suddenly, it works. "At this point, there is an overwhelming temptation to stop what you were doing and try to find out what went wrong or how it was corrected ... This is almost always extremely time-consuming and totally unproductive." This simple advice has spared me a lot of worry. I have been given permission not to have to be in complete control. The relaxation alone is worth much more than the price of the book.

See Bookmark, pg. 44



Judith Hatter

Oversight of the General Accounting Office

On February 29, 1984, the Subcommittee on Energy, Nuclear Proliferation, and Government Processes of the Senate Governmental Affairs Committee held a hearing on "Oversight of the General Accounting Office." The Chairman, Senator Charles H. Percy of Illinois, had the following comments about the work of the office during his opening statement:

"* * * This is now the 18th year that I have focused my attention on bringing more business-like practices to the federal government, and I have had no better partner through this time than the Comptroller General of the United States and the General Accounting Office. GAO has been extremely helpful, professional, creative, and thorough I just don't know how the Congress of the United States and the Government of the United States would get along without this kind of support, backup, help, and expertise in so many areas. It is literally the watchdog for the Congress, extraordinarily helpful and highly respected by every President and every executive branch that I have worked with. It is also a great friend of the American taxpayer and an extremely cost-effective one at that.* * * "

Deficit Reduction Act of 1984

On July 17, the President signed the 717-page "Deficit Reduction Act of

Legislative Developments

1984" (Public Law 98-369). The law is divided into two divisions: Division A, "Tax Reform Act of 1984," and Division B, "Spending Reduction Act of 1984." Several provisions of the law relate to the functions and jurisdiction of GAO.

Guaranteed Student Loan Tax-Exempt Bonds

Not later than 9 months after the date of enactment, GAO and the Congressional Budget Office are to report to the Congress on the results of a study of (a) the appropriate role of tax-exempt bonds which are issued in connection with the guaranteed student loan program and the PLUS program established under the Higher Education Act of 1965 and (b) the appropriate arbitrage rules for such bonds.

Medicare and Medicaid Budget Reconciliation Amendments of 1984

The Medicare and Medicaid Budget Reconciliation Amendments of 1984 require the Comptroller General to conduct three studies.

The Comptroller General is to report to the Congress, not later than January 1, 1987, on (a) the appropriateness of the fee schedules under section 1833(h) of the Social Security Act and their impact on the volume and quality of clinical diagnostic laboratory services, (b) the potential impact of the adoption of a national fee schedule, and (c) the potential impact of applying a national fee schedule to clinical diagnostic laboratory tests provided by hospitals to their outpatients.

Not later than 18 months after the date of enactment, GAO is to report to the Congress on a study of the amounts billed for physician services and paid by carriers under section 1842(b)(7) of the Social Security Act to determine whether such payments have been made only where the physician satisfies the requirements of section 1842(b)(7)(A)(i) of such act.

The GAO is also to study and report to the Congress, not later than 12 months after the date of enactment, on (a) the ability of the Health Care Financing Administrator to manage competitive bidding for agreements and

contracts under section 1816 and 1842 of the Social Security Act, and on the relative costs and efficiency of such competitive agreements and contracts as compared to current reimbursement for such agreements and contracts; (b) the need (if any) for eliminating the provider nomination procedure under section 1816(a) of such act; (c) the disparities (if any) in costs and quality claims processing among the various entities performing claims processing pursuant to section 1816 and 1842 of such act; (d) whether the standards of the Secretary of Health and Human Services for evaluating costs and performance of intermediaries and carriers are adequate and properly applied; and (e) whether the Secretary's statutory authority is sufficient to deal with inefficient intermediaries and carriers either through the contract negotiation and budget review process or through the process of termination or nonrenewal of contracts.

Procurement Protest System

Chapter 35 of Title 31, United States Code, is amended by adding a new Subchapter V—Procurement Protest System, to provide the General Accounting Office with a statutory base for its bid protest function effective January 15, 1985. Under the requirements of the law, the Comptroller General must issue his opinion on a protest within 90 working days. Also, under circumstances delineated by the law, contract award may be withheld or performance under the contract may cease until the protest is decided.

Budget Estimate Review

The Congressional Budget Office is to conduct, in consultation with the GAO, a review of the budget estimates prepared by the Department of Defense and one civilian agency. The GAO component of this review is to look at all phases of budget preparation and program evaluation in the agencies selected, and examine historical patterns of funding to determine the effect of cost estimation biases.

See Development, pg. 44

Location, Cont.d from pg. 8

an evaluator who joined GAO 3 years ago after graduating from college. He leads viewers through scenes of two audits—one reviewing a metropolitan transportation system and another reviewing compliance with federal standards at a water treatment plant. The scenes were filmed at locations within the D.C.-Maryland-Virginia area.

The video cassette is designed to be fast-paced and visually attractive to potential college age recruits. It encourages recent graduates with such diverse majors as engineering, psychology, accounting, and computer science to consider a career at GAO. To preview the film, call the AV unit at (202) 275-3228.

Briefcase, Cont'd from pg. 3

and half-slices of unbuttered bread. Not until breakfast at the destination should normal meals be resumed.

For a copy of proper diet and other tips on air travel, write to Argonne National Laboratory, 9700 South Cass Avenue, Argonne, IL 60439.

Ed. note: "Accounting Update," a regular feature in "Briefcase" since the summer 1982 issue, will appear in the spring 1985 Review. It will be an annual update of perspectives on accounting events and pronouncements that have come to fruition during the prior fiscal year.

Manager's, Cont'd from pg. 9

Characteristics of Creative People

- · Mental agility
- Conceptual flexibility
- Originality
- A preference for complexity over simplicity
- · Stimulating Backgrounds
- Multiple skills
- · Capacity for hard work
- Independent judgment
- Resilience
- · Good communicators
- Interested more in concepts than in details
- · Intellectually curious
- · Playful, spontaneous
- They avoid early self-criticism of their ideas

Bibliography

Adams, J. L. Conceptual Blockbusting: A Guide To Better Ideas. New York: W. W. Norton & Co., 1979.

Campbell, D. P. Take the Road to Creativity and Get Off Your Dead End. Allen, Texas: Argus Communications.

Carson, J. W., and Rickards, T. Industrial New Product Development: A Manual for the 1980s. Westmead, Hants.: Gower Press, 1979.

Clark, Charles H. Idea Management: How To Motivate Creativity and Innovation. New York: Amacom. 1980.

David, G. A. Psychology of Problem Solving: Theory and Practice. New York: Basic Books, Inc., 1963.

De Bono, E. Lateral Thinking for Management. New York: McGraw-Hill, 1972.

Geschka, H. Perspectives on Using Various Creativity Techniques. In Gryskiewicz, S. S. (ed.) Creativity Week II Proceedings. Greensboro, NC: Center for Creative Leadership, 1980.

Gordon, W. J. J. Synectics. New York: Collier Books, 1961.

Gryskiewicz, S. S. Targeted Innovation. In S. S. Gryskiewicz (ed.) Creativity Week III Proceedings. Greensboro, NC: Center for Creative Leadership, 1981.

Houston, Jean. The Possible Human. Los Angeles: J. P. Tancher, Inc., 1982

Kepner, C. H., and B. B. Trego. *The Rational Manager*. New York: McGraw-Hill, 1965.

Lombardo, M. M. Looking at Leadership: Some Neglected Issues. Technical Report Number 6, Greensboro, NC: Center for Creative Leadership,

MacKinnon, D. W. In Search of Human Effectiveness: Identifying and Developing Creativity. Buffalo, NY: Creative Education Foundation, 1978.

Nyström, Harry. Creativity and Innovation. John Wiley & Sons, Chichester, England. 1979.

Osborn, Alex. Applied Imagination. 3rd ed. rev. New York: Charles Scribner's Sons, 1979.

Parnes, S. J., and H. F. Harding. A Source Book for Creative Thinking. New York: Charles Scribner's Sons, 1962.

Prince, G. *The Practice of Creativity.* New York: Harper & Row, 1970.

Stein, M. I. Stimulating Creativity: Vols. 1 and 2. New York: Academic Press, 1974 and 1975.

Taylor, I. A., and J. W. Getzels. (Eds.) Perspectives in Creativity. Chicago: Aldine Publishing Co., 1975.

VanGundy, Arthur. Techniques of Structured Problem Solving. New York:

Van Nostrand Reinhold, 1981.

Zaltman, G., Duncan, R., and J. Holbeck. *Innovations and Organizations*. New York: John Wiley & Sons, 1973.

Topics, Cont'd from pg. 11

of possibly conflicting information in a systematic and explainable way. Diverse results are converted to a digestible form and the synthesized conclusion about a program or policy are likely to carry more weight than one or a few individual evaluations. The synthesis creates a common knowledge base for people working in a policy area, makes disputed points prominent and, just as important, identifies gaps where further empirical information would be desirable. To serve the needs of decisionmakers, the evaluation synthesis is designed to be completed within 3 to 9 months so that it can fit Into legislative schedules.

For More Information

Glass, G.V., McGaw, B., and Smith, M.L. *Meta-Analysis in Social Research*. Sage, 1981.

Quantitative methods of synthesis as developed by Glass and his colleagues.

Hunter, J.E., Schmidt, F.L., and Jackson, G.B. Meta-Analysis: Cumulating Research Findings Across Studies. Sage, 1982.

An independent development of metaanalysis with some extension of the Glassian techniques.

Light, R.J. (Ed.) Evaluation Studies Review Annual. number 8, Sage, 1983.

A collection of articles on the methodology and application of the synthesis approach.

Orwin, R. The Influence of Reporting in Primary Studies on Meta-Analytic Outcomes: A Conceptual Framework. University Microfilms International, 1983.

An examination of how reporting problems can distort the conclusions from a synthesis.

U.S. General Accounting Office. The Evaluation Synthesis: IPE Methods Paper 1. 1983.

Outlines the methodology for the evaluation synthesis as applied in GAO.

U.S. General Accounting Office. WIC **Evaluations Provide Some Favorable** But No Conclusive Evidence On The Effects Expected For The Special Supplemental Program For Women, Infants, and Children. PEMD-84-4, 1984.

An evaluation synthesis for the WIC program.

Consolidated, Cont'd from pg. 17

with the Arthur Andersen publication⁵ you mentioned earlier, issued in 1975. Mr. Bowsher reportedly was involved with preparing that report. I think there's no question that the effort to establish an auditable, consolidated financial statement will continue at least through this Comptroller General's term, probably beyond.

Smith: Voters and politicians are another source of support for sustaining CFS effort. One of their primary concerns is the size of pension and social security liabilities, and anything that will successfully help these two groups get a handle on how big these liabilities are-how they relate to the whole—should get sustained support.

Fiske: Now, what about the second element for a successful management improvement effort-a coherent and generally accepted doctrine? The report on management improvement efforts notes that, without a standard or model of good management, it is difficult to gain agency acceptance of any advice or criticism.

Smith: Accounting standards are particularly important because of the need to assure that all financial statements contain comparable information. In the private sector, the Financial Accounting Standards Board (FASB) established accounting standards. When these standards are followed, financial statements are reasonably reliable and comparable.

Orne: There are already some established accounting standards for government accounting. The NCGA has been working for years doing just this for state and local governments. Its successor, the recently established Governmental Accounting Standards Board (GASB) is expected to continue the work

Smith: The Comptroller General has stated that he intends to follow as many of the GASB and FASB standards as possible, given the federal environment.

Fiske: How about the third element of a successful management improvement effort-attention to career-level staff implementation?

Orne: There is considerable interest in a CFS at the highest levels of GAO and Treasury. However, from talking to others in the governmental accounting field, there doesn't seem to be that much interest or information at the lower levels, especially outside GAO.

Fiske: I've met a lot of career-level employees who are at least as dissatisfied as the average taxpayer with the way the government is run. Providing lower-level employees with information can make them a significant source of support and ideas for making the CFS concept work.

Smith: Part of my dissertation research involved communication with current readers of the prototype CFS. Government-sector readers tended to be more skeptical about using a CFS approach to government financial reporting.

Fiske: Government employees are often skeptical of new initiatives, because they've seen so many new ideas come and go. However, if the initiative is implemented properly, and careerlevel staff are assigned to it on a sustained basis, I believe it can work.

What about the fourth element for success-a basis in law?

Lau: Isn't the Federal Managers' Financial Integrity Act (FIA) a start? If you're going to have auditable financial statements, the first step is to ensure that you have a documented system of internal control for which managers are held accountable. This is the goal of the FIA.

Orne: The FIA is a start, but I would guess that any move to enact additional laws should be slow. There are many pieces that must fall into place before a good law could be drafted covering such a complex subject.

Smith: My contacts at Treasury have indicated that their agency would prefer not to get locked into a statute before all the issues and implementation problems are resolved.

Orne: We may not need additional statutory authorization. After all, doesn't the Comptroller General already have statutory authority to prescribe agency accounting principles and standards?6

Fiske: Let's summarize. We agree that the CFS, backed by a uniform auditable accounting system, is a good idea, that it will be difficult to implement, but that it can be done.

And I'd like to close with a story, As I was working on this article, rny 10-yearold son asked me what I was doing. First, of course, I had to explain what a financial statement was. Then, I told him we were working on developing such a statement for the federal government.

He only had one question: "You mean, they don't do that already?"

⁵Sound Financial Reporting in the Public

Sector ⁶P.L 81-784, Budget and Accounting Procedures Act of 1950

Satellites, Cont'd from pg. 20

- non-discriminatory availability of
- continuing federal archiving, research, and development, and
- national security implications.

In the meantime, a source evaluation board, chartered by the Secretary of Commerce, had issued a request for proposals only for the land remote sensing system. In June 1984, the Secretary of Commerce announced that two of seven bidders had been selected for final negotiations on a land remote sensing satellite contract. GAO has received four congressional requests to review the contract proposals for compliance with the recently passed legislation. If the transfer is completed, perhaps some GAO staff will be on hand to witness the first launch of a commercial remote sensing satellite and the beginning of a new era of enterprise in space.

Measuring, Cont'd from pg. 25

environment, and in this environment, this approach no doubt provided a reasonably accurate measure of the government's borrowing cost. However, in periods of volatile interest rates, and after considering the actual short-term nature of Treasury's borrowings, this approach may need to be reconsidered. Clearly, some form of adjustable or variable interest rate approach could better account for, measure, and where appropriate, recover the government's borrowing cost. Consequently, the authors would like to invite further discussion of this issue and the appropriate form (rate basis) that should be used to best carry out an adjustable/variable interest rate scheme.

Resident, Cont'd from pg. 29

A Beneficial Program

The Resident Instructor program can benefit GAO and the individuals selected as resident instructors, and we are optimistic about the future of the program in GAO. We encourage GAO evaluators to explore this program as a possible avenue in their career paths. We would be happy to answer questions or discuss the program with others who may be interested. Since we are often in the classroom, the easiest way to contact us is through GAO's Training Branch, FTS 275-9252.

Dynamics, Cont'd from pg. 37

got more stares that morning than we had during the whole assignment.

Walking into an agency for the first time felt a little awkward. I think that most agency officials thought that Marvin was the boss and I was the fledgling. But after the initial introductions and a few snickers, they finally got the picture.

Both of us learned to have a good sense of humor about our situation. It helped us get through the awkward and frustrating moments. Now that we had finally became comfortable with each other, it was easy for us to laugh off other people's insecurities with our roles

Sifting Out Myths

Marvin: There exists a myth, even in GAO, that a supervisor has to be the assertive one, always giving the appearance of being in charge, never taking any "guff" from the underling, never showing any anxiety about the state of the project or the way things are going, and always being the martyr in assuming responsibility for any problems that might occur. At the same time, the supervisee is supposed to unquestioningly respond to the supervisor's beck and call, should be seen and not heard in policy deliberations, should never question the audit plan laid out from "on high," should be passive in demeanor, and should not "rock the boat."

Given the complexity of the project we were on and the limited time available to meet all the requirements, we could ill afford the time and energies to dwell on these peripheral issues. Sigrid let me assume a sizeable chunk of the responsibility in conducting the review. We made this decision on the basis of what had to be done (i.e., we were not going to meet the deadlines otherwise), my desire to have more responsibility (i.e., these life experiences of mine had to be worth something), and my demonstrated ability to assume responsibility (Sigrid was not about to "turn over the ship" without some assurance that I could do the job).

This decision took a lot of courage and self-confidence on Sigrid's part. In one instance during the project, a colleague asked who really was in charge of the project: there was no question—Sigrid was in charge. She did not abrogate her supervisory responsibilities even though she let me participate in many instances as an equal. We were constantly communicating with each other on what needed to be done, what the options were, and who was going to accept the responsibility for getting the task done.

A major role Sigrid played in helping me to do my job effectively was her willingness to act as a sounding board. She was adept at helping me to arrive at the best course of action. And she allowed me to articulate my frustrations and confusions so that I did not have to worry about these expressions coming back to haunt me at a later date (i.e., performance appraisal time). And I appreciated her willingness not to dwell on a lot of the perfunctory requirements of the job (i.e., "You will do this this way, and you wil not do that..."). I was not about to let her down.

One other myth went out the window with this project. The myth is: you cannot be friends with your supervisor. As noted above, we had very little in common before starting this project. But as a result of our review experience, we are now good friends.

Winning the Final Victory

Marvin: There are usually ample signs to indicate whether or not the evaluators have succeeded on a project. Shortly after we had completed our review, Sigrid was recommended for an award by the Denver Regional Office management. She was recognized, in part, for her successful supervisory experience with a "new employee." The important thing to me about that award was that it was "our" award. When Sigrid walked up to receive the award, I not only felt proud of Sigrid, I felt proud

of both of us. We had succeeded in our mutual goals. This was reflected by my leading the applause and saying, so everyone could hear, "That's my boss!"

Week's, Cont'd from pg. 38

It's appraisal time, and the deputy associate directors have asked me to put together a report on time charges from a special computer program. This will help them do their appraisals. The CAPS (Central Assignment and Payables System) system works well most of the time, but somehow it "lost" several staff members from the report. It'll take me some time to key in the names separately and then go back and make sure I have all the right data. The report will show all the time charged and the jobs worked on by each staff member. Even with its tie-ups and snarls, driving the car pool was never like this.

Thursday

As I came to work this morning, I was thinking about my homework for my class tonight at Prince George's Community College. I have to give an informative speech to my classmates in Speech Communications, and I've decided to talk about the work GAO does for the Congress. Since I attend classes two nights a week and have to give a series of such talks before the semester is over, I'll use this first one to build up to the topic of how the computer is helping GAO in its communications functions-and how it has opened a new door for me. I've just been chosen to be a trainee in computer programming within PEMD. I think it will be a challenge. Returning to college has broadened my outlook on my career, and I'm really looking forward to my education in the computer field.

At my desk, I review my notes for the Civil Rights Advisory Council meeting at 9 a.m. The support staff are concerned about the split in attention given to "support" and "professional" personnel. This isn't anything new in GAO, but they want me to voice their opinion. Mr. Gregory Ahart, Assistant Comptroller General, and Mr. Anthony Hill, program evaluation specialist for the Personnel Systems Development Project (PSDP), were invited to our meeting today to discuss the recent GS-12 study. The meeting turns out to be primarily about the next steps in PSDP's plan for the GS-12 appraisal

process. The other committee members and I snatch a few minutes to put our heads together over the annual report, and then we break for lunch.

Back at my desk, I have a little time to work on the annual report some more, but mostly it's typing to clear out and phones to answer. There's a little filing and some xeroxing to do, as well. The director's secretary, Janet Dolen, steps away for an afternoon meeting, and so I catch the phones for her. Eventually, the workday comes to an end, and it's off to school for me.

Friday

I should have realized that no first week back after vacation could be easy. This morning, my alarm didn't go off, and I woke up at the last possible minute. So, I skipped breakfast and ran for the door. Can't keep those car pool people waiting. While in the car, we heard on the radio that there was a disabled car on Route 395, but the only sign we saw of it was the bumper-to-bumper traffic all the way into Washington. Naturally, we were a few minutes late, and the phones were ringing their heads off when I got to my desk.

Seems like everything is one step behind itself today. Part of the problem with the phones is that a lot of calls have been misdirected. It takes a minute to look up a name or number the person wants, but I do it because it's the only courteous thing to do. A staff member's off to a survey site this weekend and needs a travel order signed at the last minute. Also, there's typing help needed on a project that some of the other secretaries have been struggling with all week. And, finally, Mr. Rist needs a report from the print shop over the weekend, so I make the time to request "batch-time" printing through the computer The job will be ready for pickup Monday morning.

The flurry of activity all day makes the week feel as if it's been longer and busier than it was. I'm really looking forward to the weekend though. That's partly because a friend has tickets to a concert by my favorite jazz artist at Constitution Hall and is also taking me to Baltimore to see the Orioles play on Saturday. Sunday will be a day to relax and visit relatives or friends. Fortunately, on Monday, I don't have to drive the car pool.

Bookmark, Cont'd from pg. 39

If your machine has a lasting problem, Bear has some dastardly suggestions for "consumer karate." When all else fails, and you are so frustrated that something has to be done for your mental health, he suggests the ultimate computer therapy: burn a disk. "Disks burn very nicely, with a multicolored flame." Bear himself has burned two disks, and figures they were an excellent investment, since they cost the same as only 4 minutes at a psychiatrist.

Bear thinks that computers are oversold and that most of us can get along very well without them. One of the best features of his book is the support he gives to those who don't want to computerize. He describes businesses run well without computers, businesses run badly with them, and a variety of computer disasters. As he puts it, "Draft dodgers in the computer revolution probably won't be punished." If you have already been inducted, though, he can make your basic training more tolerable.

Glenn Spiegel Writing Resources Branch Office of Publishing Services

Development, Cont'd from pg. 40

GAO Executive Positions

On June 8, the Senate passed and cleared for the President, H.R. 5517, to increase the number of experts and consultants who can be hired by GAO and increase the number of positions in the GAO Senior Executive Service. (Public Law 98-326, June 22, 1984, 98 Stat. 269)

AMVETS Audit

Public Law 98-291, signed by the President on May 21, 1984, relieves the General Accounting Office of duplicative audit requirements with respect to the Disabled American Veterans. GAO will continue to perform oversight by reviewing the financial statements and auditor's report of the AMVETS.

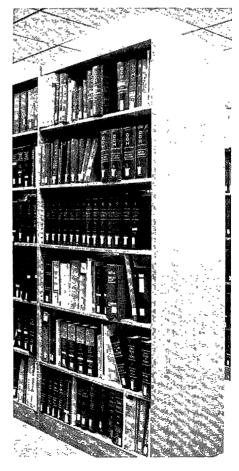
Women's Equity Act

On May 22, H.R. 4280, Women's Equity Act, passed the House of Representatives with a provision that not later than January 1, 1990, the GAO is to report the findings of a detailed study of the effect on women of participation, vesting, funding, integration, survivorship, and other relevant plans and federal pension rules.

Medicare and Medicaid Patient Program and Protection Act of 1984

On June 8, Senator John Heinz of Pennsylvania introduced S. 2744, to amend the Social Security Act to protect beneficiaries under health care programs of that act from unfit health care practitioners and to otherwise improve the antifraud provisions of that act.

During his remarks on the legislation, the Senator congratulated GAO and stated that the legislation incorporates full recent recommendations in the GAO report entitled, "Expanded Federal Authority Needed to Protect Medicare and Medicaid Patients from Practitioners Who Lose Their Licenses." (HRD—84-53)



GAO Staff Changes

Senior Staff Changes







Rein Abel

Dr. Rein Abel rejoined GAO on June 11, 1984, to serve in the Accounting and Financial Management Division as the associate director responsible for the Accounting and Auditing Policy Group. Dr. Abel is returning from his assignment with the International Atomic Energy Agency in Vienna, Austria. Prior to this work, he was a member of the professional staff of the Cost Accounting Standards Board (CASB). Dr. Abel joined the CASB from the Wharton School of the University of Pennsylvania where he served as an assistant professor of accounting. His prior work experience includes several vears with a national public accounting firm and industrial cost accounting experience in England.

Dr. Abel has a B.Sc. (Econ.) degree from the London University, a Diploma in Business Administration from the London School of Economics, and M.B.A. and Ph.D. degrees from Columbia University, where he was elected to Beta Gamma Sigma. He is a member of the American Accounting Association, American Institute of Certified Public Accountants, New York State Society of Certified Public Accountants, Pennsylvania Institute of Certified Public Accountants, and the Institute of Cost and Management Accountants (United Kingdom).

William S. Franklin

Mr. William S. Franklin joined GAO's Information Management and Technology Division on May 27, 1984. Mr. Franklin was formerly the associate director for technology in DOD's Foreign Military Sales (FMS) Financial Management Improvement Program Office. From 1979 to 1983, he was director of the Office of Systems Planning and Control at the Social Security Administration, During a 2-year assignment as acting deputy associate commissioner for systems, Mr. Franklin managed the development and implementation of an ADP operations consolidation plan which saved the government \$10 million.

Mr. Franklin first joined the Department of Defense in 1973, where, as technical advisor to the director for data automation, he was responsible for review and oversight of the military services' ADP budgeting, procurement, and development activities and was a mathematician in tactical warfare programs and telecommunications.

Mr. Franklin earned his B.S. degree in mathematics and computer science from Bowie State College in Maryland, and his M.S. in mathematics and economics from Lehigh University. He is working toward a doctorate in operations research and management science at George Washington University.

Thomas Giammo

Mr. Thomas Giammo joined GAO's Information Management and Technology Division on May 13, 1984, as the new associate director of the Natural Resources and Human Services group. He previously served for 5 years as technical director of the Federal Computer Performance Evaluation and Simulation Center (FEDSIM), a component of the Air Force.

Before joining FEDSIM in 1979, Mr. Giammo spent 5 years at the Social Security Administration, holding several ADP-related jobs, including director of the Division of Statistical Processing, deputy director of the Office of Data Development, and director of the Office of Systems Planning and Control. He also had a 6-month special assignment on President Carter's Reorganization Project to develop policy recommendations to improve government-wide ADP management.

Mr. Giammo's federal career started in 1970 at the Department of Health, Education and Welfare. In the private sector, he managed ADP systems development groups at TRW Systems and Gulton Industries. Mr. Giammo holds undergraduate and graduate degrees in mathematics from Rensselaer Polytechnic Institute and UCLA.



Morton E. Henig

Mr. Morton E. Henig, senior associate director of the Human Resources Division's Employment, Training and Education group, retired effective June 30, 1984. He had 33 years of accounting experience, most of it with GAO.

Mr. Henig was assigned to GAO's European Branch in London and Frankfurt between 1957 and 1961. Before becoming an associate director in the Human Resources Division in 1972 (it was then the Manpower and Welfare Division), he was in charge of the audit sites at the Bureau of Public Roads, the National Aeronautics and Space Administration, the Office of Economic Opportunity, and the Department of Labor.

Mr. Henig served with the U.S. Army in 1946 and 1947. He joined GAO in September 1951 after graduating from Rutgers University where he received a bachelor of science degree. He completed the Advanced Management Program, Harvard Graduate School of Business Administration, in the spring of 1970.

He received the GAO Meritorious Service Award in 1962 and again in 1967.



Rona Stillman

Dr. Rona Stillman became GAO's new chief scientist for computers and communications on June 17, 1984. Dr. Stillman comes to GAO from the Air Force, where she was the senior civilian official on all information technology matters.

Before joining GAO, Dr. Stillman was technical advisor to the Assistant Chief of Staff for Information Systems, and its predecessor organization, the Air Force Directorate of Computer Science. She chaired the Joint Policy Committee of the Federal Computer Performance Evaluation and Simulation Center and served on the blueribbon technical advisory panel which reviewed the Patent Office's automation plans, among other activities.

Prior to joining the Air Force, Dr. Stillman was at the Defense Communications Agency, where she was assistant to the chief scientist for ADP. Working at the National Bureau of Standards under National Science Foundation grants, Dr. Stillman conducted research on computer networking software. Her work on other projects included providing advice to GAO's Office of Federal Elections in the early 1970's. She began her federal career as an electronics engineer at the Rome Air Development Center.

Dr. Stillman earned her Ph.D. in computer science from Syracuse University, after earning master's and bachelor's degrees in mathematics and physics from Yeshiva University and Queens College.



Jack Wheeler

Mr. Jack Wheeler, who will advise the Director, Information Management and Technology Division, on fieldwork methodologies and training, joined the agency on June 3, 1984. He brings to GAO over 20 years of private-sector experience in ADP systems and management. In his 16 years at the accounting firm of Arthur Young & Co., Mr. Wheeler held positions in the computer auditing and management information systems fields. From 1976-1980, he was National Director of Arthur Young's computer auditing program and helped develop the firm's computer-related fieldwork performance guidelines and quality assurance program. In 1980, he began coordinating the information systems planning to meet Arthur Young's long-range operational and management information needs

From 1965-1968, Mr. Wheeler was a systems analyst and systems/programming manager with Pan American Airway's Aerospace Services Division, a base-support contractor to the Air Force at Cape Canaveral and downrange tracking stations. He was also a systems representative at IBM's Service Bureau Corporation.

Mr. Wheeler, who earned his degree in accounting at Boston University's College of Business Administration, is a Certified Information Systems Auditor. He served on the American Institute of Certified Public Accountants Task Force on Computer Fraud Review in 1979-1981.

Additional Staff Changes

Deputy Associate Director

General Government Division

Dodaro, Gene L. Gebicke, Mark E.

Harris, Daniel C. Lovelady, John M. Schultz, John R. Vialet, John L.

General Government Division (Cont.) Assistant Regional Manager

Kansas City Schmidt, Gerald F.

New Staff Members

The following new staff members joined the agency during the approximate period April 1, 1984, through June 30, 1984.

Division/Office	Name	From
Accounting and Financial Management Division	Block, Eleanor M. Hough, John R. Santarpia, John P. Stoltz, Roger R. Taylor, Jeffrey F.	Drexel Burnham Lambert, Inc. University of Maryland James Madison University Arthur Young & Company West Virginia University
General Government Division	Kuduk, Christine J. Reinsberg, William M.	Bureau of Labor Statistics George Mason University
Human Resources Division	Cantwell, James R. Crosby, Katherine L. Nilsen, Sigurd R. Terry, Lisa A. Valentine, Harold A.	Health Care Financing Admin. Co-op conversion Dept. of Agriculture Co-op conversion Arthur Young & Company
National Security and International Affairs Division	Avila, Wanda	University of Maryland
Personnel	Archbold, Kay Arroyo, Bonnie Wallace, Judith	Private industry Private industry Private industry
Resources, Community and Economic Development Division	Beckett-Hoffmann, Bonnie Carter, Frances Claycomb, Maria Ellerbe, Diann Fruitman, Michael Penn, Rosa Polinori, Lisa Rodriquez, Lillian	Self-employed Temporary Resources, Inc. National Business School Washington School for Secretaries Smithsonian Institution Department of the Army Radford University J.C. Penney
Regional Offices		
Denver	Carter, Jennifer A. Needham, Mary Ann Wadsworth, Dacia M.	Penn Valley Community College University of Colorado University of Colorado
Detroit	Peth, Sara	Private industry

Kansas City	Coffey, Carol Mincher, Jeffrey	St. Louis University Rockhurst College
Los Angeles	Brunelle, Roberta Kyte, Linda	Kentron International California State University
New York	Best, Delcenia	Federal Emergency Management Agency
	Bhattacharya, Anindya Eng, Betty	State University of New York Private industry
Norfolk	Ramus, Bonnie Shytle, Michael	School East Carolina University
	Thomas, Amanda	East Carolina University
Philadelphia	Barrett, Dorothy Hinkle, Donna	Co-op conversion Co-op conversion
	Jordan, Donna	Co-op conversion
	Reuter, Valerie	Co-op conversion
San Francisco	Benson, Shirley	Payco
	Green, Barry	Department of Labor
	Thomas, Patricia	Department of Energy
Seattle	Anschell, Susie	University of Washington
	Pfeiffer, Ben	Seattle City Light
	Purvine, Nancy	Penn State University
	Roberson, J. Vic	University of Washington
	Zitkovich, Mark	Mancini & Grossbeck
Washington	Bakatsias, Chrysoula	George Mason University
	Balkin, Jan	Government Information Services
	Bergman, William	University of Texas
	Bird, Mark	George Washington University
	Burda, Nicholas	American University
	Cabrera, Lionel	American University
	Casas, Sherry	Pan-American University University of Miami
	Castillo, Julian Deffer, Franklin W.	Department of the Army
	Gaddy, Margaret	Georgia State University
	Ho, Lee Hui	Kelly Services, Inc.
	Holden, April	American University
	Lerner, Leslie	University of Virginia
	MacBlane, William	Penn State University
	McGhee, Angelia	National Bank & Trust Co.
	Nagy, Suzanne	Oakwood Hospital
	Pierce, Anthony	Georgetown University Law Center
	Ritter, Roy	Indiana University
	Shaw, Mark	George Mason University
	Stukes, Phillip	Bowie State University
	Solis, Audrey	George Mason University
	Trujillo, Charles	New Mexico Highlands University
	Williams, Irvin	Pepperdine University

Retirements

Division / Office	Name	Title

National Security and Binetti, Dominick A. Supervisory Evaluator International Affairs Division McMahon, Susan H. Program Assistant Wohlhorn, Eugene Supervisory Evaluator

Regional Offices

New York Pisano, Samuel Supervisory Evaluator

Norfolk Cartwright, A. Julian Evaluator

Washington Perlman, Jack Evaluator

Deceased

Marion Becker, an evaluator who retired from the Detroit Regional Office in October 1982, passed away on April 16, 1984.

Attritions

Division / Office	Name
Accounting and Financial Management Division	Jones, Richard E.
Office of the General Counsel	Smith, Stephen G.
General Government Division	Lemonias, Peter J. Portela, Orlando Taylor, Jack H.
Human Resources Division	Dahlquist, Donald J. Dumont, Charles R. Kawecki, Carolyn A.
National Security and International Affairs Division	Baumann, Patricia S. Barrett, J. Nichols Davidson, David F. Grasso, Michele A. Hachten, Stephen W. Jones, Donald R. Myers, Zelda C. Pasciutti, Edward J. Vannoy, Lisbeth A.
Office of Organization and Human Development	Ackley, Robert Cambridge, Milton
Personnel	Haskins, Janice Turner, Deborah Walters, Verleen
Resources, Community and Economic Development Division	Bialas, Gerald Brooks, Patricia Freie, Diana Gibson, Dewey

Regional Offices

Denver Ortiz, Sharon S.

Los Angeles Agcaoili, Dehlia

Friedman, Don Kalgren, Julie Wandres, Linda Watson, Valerie

New York Lloyd, Gerda

Owens, Kathy Walker, Patricia

Norfolk Stephenson, Reginald

Philadelphia Harmon, Gregory

San Francisco Boccara, Eileen

Cyganowski, Walter Jones, Edyth Mochel, Dave Reimuller, Maria Strosnider, James

Seattle Stanley, Susan G.

Uberuaga, David V. Williams, Laura D.

Washington Bailey, Johanna Peck, Millard

Peck, Millard Sorgen, Robert Stumpf, David

Professional Activities

Office of the Comptroller General

Comptroller General Charles A. Bowsher addressed the following groups:

World Bank, Washington, June 7.

National Defense University, Ft. McNair, Washington, June 8.

Interagency Committee on ADP, Bolling Air Force Base, Washington, June 13.

Annual Meeting, National Association of Accountants, Seattle, June 25.

Francis X. Fee, Assistant Comptroller General—Operations, addressed the following groups:

Brookings Institution Conference for Business Executives on Understanding Federal Government Operations, on "The Functions of the General Accounting Office," Washington, June 18.

Sixty-five graduate students of Wayne State University, College of Education at the Washington Seminar Politics and Education on "The Internal Operation of the General Accounting Office," Washington, June 22.

Office of Foreign Visitor and International Audit Organization Liaison

Elaine L. Orr, director:

Led a panel entitled "The Evolution of Networks: Connections for Professional Development" at the 1984 conference of the American Society for Public Administration, Denver, Apr. 8-11.

Spoke before the Young Professionals Forum of the American Society for Public Administration on "Public Management Careers in the International Arena," Washington, June 26.

Donald Drach, International Program Specialist:

Presented a paper "Training Transfer: A Working Model" at the 1984 Conference of the National Society for Performance and Instruction, Atlanta, Apr. 22-27.

Participated as a member of the Training Committee at the 1984 conference of the American Society for Public Administration, Denver, Apr. 8-11.

Carol Codori, Fellowship Program Director:

Taught a 1-day session—with **Mike** Speer, OQA—on Assuring Quality Through Effective Communications during the Management Development Seminar, at the Executive Seminar Center, Oak Ridge, Tennessee, June 21.

Completed teaching a 10-week course in assertiveness for men and women at the USDA Graduate School, June 1984.

James P. Wesberry, Senior Advisor on International Audit Offices, was elected and took office as President of the Washington Chapter of the Institute of International Auditors.

Accounting and Financial Management Division

Virginia B. Robinson, associate director, spoke on the Impact of the Changes in Title 2, GAO Accounting Principles and Standards, on Operating Accountants in a Workshop on Operational Accounting at the Association of Government Accountants' Professional Development Conference, Washington, July 9.

John F. Simonette, associate director:

Participated in a panel discussion "Financial Integrity Act" at the JFMIP Thirteenth Annual Financial Management Conference, Washington, Apr. 16.

Spoke on "Financial Integrity Act" before the Cincinnati Chapter of Association of Government Accountants, Cincinnati, Apr. 9.

Participated in a panel discussion "Financial Integrity Act—One Year's Experience" co-sponsored by the St. Louis Federal Executive Board and the JFMIP, St. Louis, May 17.

Spoke on "The Federal Managers' Financial Integrity Act—Year One in

Review" before the Nashville Area Chapter of the Association of Government Accountants, Nashville, May 18.

Spoke on the "Financial Integrity Act" before the New York State Assembly, Albany, June 1.

Spoke on the "Financial Integrity Act" before the Mid-America Intergovernmental Audit Forum, Kansas City, June 8.

Kenneth W. Hunter, senior associate director:

Participated in a mini-plenary session of the future of public administration at the annual meeting of the American Society for Public Administration, Denver, Apr. 10.

Addressed the National Academy of Public Administration Program on Government Enterprises on "Accountability and Government Enterprises," Washington, Apr. 25.

Chaired the Spring Symposium of the American Association for Budget and Program Analysis as the President, Washington, Apr. 27.

Addressed the Association of Government Accountants at its Annual Financial Management Symposium on the Federal Budget Process, Denver, May 3.

Addressed Canadian officials on the budget and financial management reform initiatives in the U.S. federal government in Ottawa and Toronto, May 15 and 16.

Participated in a panel discussion on long-term trends and their implications for the public service at a workshop of the National Council of Associations for Policy Sciences, Washington, June 8.

Chaired the World Future Society's Fifth General Assembly, World View '84: A Global Assessment of Problems and Opportunities, Washington, June 11-15.

Kenneth W. Hunter, senior associate director, and Brad Hathaway, group director, conducted a workshop on the Department of Defense's Planning, Programming, and Budgeting System at the American Society of Military Comptrollers' Professional Development Stage IV in Kansas City, May 24. Mr. Hunter spoke on government-wide

ومروا الم

financial management issues while Mr. Hathaway reviewed the findings of the joint DOD/GAO working group on planning, programming, and budgeting systems.

Jeffrey C. Steinhoff, deputy associate director, spoke on GAO's "First Year Review of Federal Agency Implementation of the Federal Managers' Financial Integrity Act," before the Conference on Management Accountability and Controls sponsored by the George Washington University and the U.S. Professional Development Institute, Washington, Apr. 30.

W. A. Broadus, group director:

Participated as a panel member of a "Single Audit" workshop at the MFOA Annual Conference in San Antonio, Apr. 16.

Presented a session on "Governmental Auditing Standards," at the Institute of Internal Auditors' Workshop for Accounting Students and Faculty held at Georgetown University, Washington, Apr. 18.

Spoke to the graduate accounting class on "Governmental Auditing" at Georgetown University, Washington, Apr. 24.

Presented a workshop on "Governmental Auditing" at the Annual Symposium of the AGA Denver Chapter in Denver, May 4.

Moderated workshops on "Economy and Efficiency Audits" at the Joint Conference of Intergovernmental Audit Forums in New York, May 7-8.

Presented a workshop on "Governmental Auditing" at the Annual Industry and Government Committee's Conference of the Virginia Society of CPAs in Williamsburg, May 17.

Participated as a panel member on a "Single Audit" workshop at the AICPA's National Conference on Auditing Federal Assistance Programs, Washington, June 4.

Presented a session on "Governmental Auditing" at the International Conference of the Institute of Internal Auditors, Chicago, June 19.

Bruce K. Michelson, group director, spoke on "Accounting Standards Contained in the Revised Title 2 of the GAO Policies and Procedures Manual for Guidance of Federal Agencies," before a DOD accounting systems group, Washington, July 3.

Maurice J. Moortgat, group director, Celeste Darragh, and Lee Beaty, system accountants, discussed GAO's title 6 and 7 requirements, and GAO's CARE audit methodology, before Navy Comptrollers, Crystal City Training Center, Crystal City, VA, June 26.

Robert A. Pewanick, group director, has been elected 1984-85 Capital Region Vice President-Elect, Association of Government Accountants, and will serve as Chairman of the Region's Education Council.

Janis B. Combs, audit manager, was appointed Director, Northern Virginia Chapter, Association of Government Accountants 1983-84

JoEllen M. Kowalski, accountant, received the Northern Virginia Chapter of Association of Government Accountants' 1983/1984 Newsletter Award and an honorable mention for the chapter Newsletter Award from National Association of Government Accountants.

Charles R. McAndrew, Jr., accountant, was awarded the Outstanding Service award by the Washington Chapter, Association of Government Accountants (AGA) at its May meeting. In addition, Mr. McAndrew has been reappointed Chairman of Small Business Education Committee of the Washington Chapter, AGA.

Joint Financial Management Improvement Program

Susumu Uyeda, executive director:

Spoke on the "Joint Financial Management Improvement Program—A Progress Update" at the Department of Defense Information Exchange Program-Commanders' Conference, Cleveland, May 1.

Gave a presentation on "Financial Management Improvement Initiatives in the Federal Government" to the Association of Government Accountants Chapters, Denver, Norfolk, Huntsville, Pittsburgh, Tucson, and Phoenix, May 4, May 15, May 17, June 5, June 13, and June 14, respectively.

Doris Chew, assistant executive director, spoke on "Government-Wide Improvement Projects—How They Work," at the American Society of Military Comptrollers Professional Development Institute, Kansas City, May 25.

General Government Division

Rosslyn S. Kleeman, associate director:

Was appointed by the National American Society for Public Administration (ASPA) President, **Bradley Patterson**, to be Deputy Chair, 1985 National ASPA Program Committee, Apr. 9.

Participated on a panel on "Significant Developments Facing Federal Employees" at a conference of the Society of Federal Labor Relations Professionals and the Federal Labor Relations Authority, Apr. 26.

Spoke at a luncheon for the Department of Labor Personnel Directors' Meeting on "Federal Personnel Issues Before Congress," June 6.

Richard B. Groskin, planner-coordinator:

Was appointed Chairman of the Committee on External Relations of the American Society for Public Administration, Section on Criminal Justice Administration, Apr. 8.

Was appointed to a third term as an Executive Steering Committee Member of the National Forum on Criminal Justice.

Spoke on "The Criminal Justice System's Response to Terrorism" at the annual meeting of the Academy of Criminal Justice Sciences in Chicago, Mar. 29.

Chaired panel on "Developing Policy in Criminal Justice" at the annual meeting of the American Society for Public Administration in Denver, Apr. 10

Spoke on "The Need for Productivity and Performance Measures in Criminal Justice," at the annual meeting of the American Society of Criminology in Denver, Nov. 11.

Ken Bombara, evaluator, coauthored an article entitled "Entry in Commercial Banking 1962-1978" in the May 1984 issue of *The Journal of* Money, Credit, and Banking.

Brian L. Usilaner, associate director:

Addressed the North Carolina Governor's Conference on "Productivity—A Powerful Tool for Reducing Government Expenditures," Raleigh, North Carolina, May 18.

Addressed the Federal Productivity Interchange Symposium on "Barriers to Management Improvement in the Federal Environment," Washington, June 15.

Human Resources Division

Frank Curtis, associate director, spoke on "GAO—Serving the Congress and Working for the People," and discussed current audit trends as guest lecturer for the Effective Governmental Auditing Interagency Training Program, at the USDA Graduate School, Washington, June 6.

Gerry Goldberg, evaluator, presented a paper "application of an Optical Keyboard for Job-Site Access to Standard Computer Systems," at the second International Conference on Rehabilitation Engineering, Ottawa, June 19.

Bob Chan, evaluator, coauthored an article, "Evaluation of the Vertical Team Concept in an Evaluation Training Program," in the *Journal of Applied Behavioral Sciences*, 1984, Volume 20, Number 2.

National Security and International Affairs Division

Donald E. Day, senior associate director:

Spoke on the "Role of the GAO," before the Defense Systems Management College, in Fort Belvoir, VA, Apr. 11.

Participated in a panel discussion on "Challenges and Changes in Cost Analysis," at the DOD's Annual Cost Analysis Symposium, Arlington, VA, June 26.

Spoke on "GAO's Role in Systems Acquisition," before the Defense Systems Management College, in Fort Belvoir, VA, July 18.

Irv Boker and Jim Reid, evaluators, spoke on "Government Security Requirements—A Thousand Faces to Industry," at the 20th annual training seminar of the National Classification Management Society, Las Vegas, May 22-25.

Burt Hall, supervisory evaluator, discussed systems acquisition work force issues at the Naval Post-Graduate School, in Monterey, CA, May 11.

Bill McNaught, economist:

Presented a paper, "How Useful are Mainframe Models to Decision-makers?" at the Joint National Meeting of the Institute for Management Sciences and the Operations Research Society of America, San Francisco, May 14-16.

Participated in a panel discussion on "Reforming the Procurement Process," at the Women's Leadership Conference on the Economics of National Security, Washington, June 13.

Paul Math, associate director, participated in a panel discussion on "Update of Current Procurement Issues," at the National Security Industrial Association's Annual Spring Procurement Committee Program, June 4-5.

Earl Morrison, evaluator, discussed GAO's role in evaluating implementation of the Federal Managers' Financial Integrity Act, at the Department of State's Financial Management Officers' Conference, in Fredericksburg, VA, May 2-4.

Bill Newman, evaluator, discussed "Technology Transfer and Strategic Controls," before a class on "Strategic Implications of High Technology," at the Army War College, May 17.

Office of Organization and Human Development

H. Rosalind Cowie, manager, Training Branch, discussed GAO's approach to audit/evaluation training for the special interest group on Auditing, Accounting, and Underwriting at the American Society for Training and Development Convention, Dallas, May 22.

Steve Medlin, manager, Organization Analysis and Planning Branch, together with Catherine Fitzgerald, training evaluation specialist, presented a paper entitled "Design and Implementation of Management Information Systems for Human Resource Development Programs" at the American Society for Training and Development Convention, Dallas, May 25.

Catherine Fitzgerald, training evaluation specialist, and Janet Wilson, counseling psychologist, presented a paper entitled "Management Information Systems—A Powerful Strategy for Promoting and Documenting Employee

Counseling Services" at the American Society for Training and Development Convention, Dallas, May 25.

Personnel

Felix R. Brandon, II, director:

Participated in a panel on governmental relations at the annual meeting of the American Assembly of Collegiate Schools of Business, Phoenix, AZ, May 1-3.

Was appointed to the Governmental Relations Committee of the American Assembly of Collegiate Schools of Business for a 3-year term, May 21.

Jose Estella, special emphasis recruiter, chaired a panel on "The Federal Government's Recruiting Efforts—Present and Future" at the Middle Atlantic Placement Association's Conference, George Mason University, Fairfax, VA, June 4-6.

Office of Program Planning

Flora Milans, assistant to the director, served on the Board of Directors, National Capital Section, Society of Petroleum Engineers, from September 1983 until May 1984.

Resources, Community and Economic Development Division

Sharon Dyer, evaluator, was convenor of a panel on "Future Visions: New Career Paths for Public Administrators" and discussed "How To Avoid Career RIFs and What's in Your Future" before the American Society for Public Administration, Denver, Apr. 11.

Janet Lowden, evaluator:

Was interviewed by Steve Eckert of WSM-TV News, Nashville, on meat and poultry inspection programs, on June 29.

Skip Jenkins, evaluator, participated in the subsequent question-and-answer session.

Discussed "Monitoring and Enforcing Food Safety—An Overview of Past Studies," at a public meeting of the National Academy of Sciences' Committee on the Scientific Basis for Meat and Poultry Inspection Programs, Washington, Apr. 26.

£ ~ ~ ~ >

Osmund Fundingsland, Assistant to the Director for Science and Technology, presented a paper "Evaluation and Federally Sponsored Mission-Targeted Research and Development in the United States," at a Seminar on the Evaluation of Research and Development, sponsored by the French Ministry of Industry and Research, Paris, May 3-4.

Mitchell Rachlis, evaluator, won first prize in the 1984 national Ph.D. dissertation competition sponsored by the American Real Estate and Urban Economics Association for his dissertation, The Impact of Location on Risk in Urban Mortgage Markets—Theory and Evidence.

Bill Gainer, issue area planning director, discussed "A Federal Evaluator's Perspective on Citizen Monitoring of Government Programs," before a Congressional Neighborhood Issues Seminar, sponsored by the National Neighborhood Coalition and the Center for Community Change, Washington, May 21.

Bill McDowell, evaluator, discussed the production of electricity using nuclear energy, before the Rotary Club of Petersburg, VA, May 24

The May 1984 issue of the Journal of Regional Science contains a paper by Mehrzad Nadji on "A Note on Regional Investment Functions."

An article by **Alice Feldesman**, social science analyst, on "Extraversion, Social Cognition, and the Salience of Aversiveness in Social Encounters," has been accepted for publication in the *Journal of Personal and Social Psychology*.

Don Forcier, senior group director, spoke on "Ten Years After the Embargo: Are We Any Better Off Now?" before an International Leadership Seminar on "The Politics of Energy Policy," sponsored by the Foreign Student Services Council, Washington, June 8.

Regional Offices

Denver

In their respective roles as chairman and executive director, Robert W. Hanlon, regional manager, and James A. Reardon, senior evaluator, planned and conducted the semiannual meeting of the Mountain and Plains Intergovernmental Audit Forum, in Helena,

MT, Oct. 26-27.

Bill North, evaluator, has been appointed to serve on the 1983-1984 Continuing Professional Education Curriculum and Standards Committee of the Colorado Society of Certified Public Accountants.

At the Western Regional Program Evaluation Conference sponsored by the National Conference of State Legislatures, in Denver, Oct. 20:

James A. Reardon, senior evaluator, was a panel member in a workshop on "Developing Good Relations with the Auditee."

Monte B. Commons, TAG manager, discussed the structure of the Denver Regional Office's Technical Assistance Group and the group's current experiment with using data base management systems for audit purposes.

Ralph R. Hovda, EWS/Micro manager, discussed GAO's use of electronic work stations and microcomputers.

Los Angeles

Ron Bononi, supervisory evaluator, gave a speech at the Jet Propulsion Laboratory before the Joint Conference for Increased Use of Minority Business on "Trends in the Federal Government on the Small and Disadvantaged Business Subcontracting Program under Public Law 95-507," May 29.

George Grant, regional manager, was elected to the Executive Committee of the Western Intergovernmental Audit Forum.

Fred Gallegos, manager of management science group:

Spoke before the student assembly of San Bernardino High School on "Careers in Information Systems," May 1.

Spoke before the Intergovernmental Audit Forum Conference in New York on the subject of "Auditing Using Microtechnology," May 7-8.

Made a joint presentation with Hal Turner, California State Auditor General's Office, on the subject of "Auditing Using Microtechnology" before the Western Intergovernmental Audit Forum in Phoenix, AZ, May 18.

Presented a workshop before the In-

stitute of Internal Auditors—Los Angeles Chapter—on "Computer-Assisted Audit Techniques," May 23.

Spoke before the EDPAA International Conference in Atlanta, on "Auditing Using Microtechnology," June 19.

Taught an undergraduate course on Information Resource Management at California State Polytechnic University, Pomona, CA.

Norfolk

Several members of the Norfolk Regional Office recently received service awards from the Virginia Peninsula Chapter of the Association of Government Accountants:

Assistant Regional Manager Joe B. Stevens and evaluator Malvern Saavedra were presented Special Recognition Awards—Stevens for serving as Director-at-Large, and Saavedra for her work on the Research Committee.

Senior evaluator **Richard Payne** was given a Certificate of Award, and evaluator **Paul Latta**, Regional Management Assistant, received a Committee Action Award.

Senior evaluator **Don Ingram** received the chapter's Outstanding Member Award for the third time and was presented a Chapter Service Award in special ceremonies at the AGA's annual Professional Development Conference in Washington, July 11. In addition, Ingram will serve as a Member-at-Large of the AGA's National Executive Board.

A Certificate of Award was also presented to the members of the Regional Office administrative staff in recognition of their work for the chapter.

San Francisco

Jim Mansheim, assistant regional manager, was elected to a 3-year term on the Executive Committee of the Association of Government Accountants in July.

Bill Agnew, assistant regional manager, and Harry Medina, Hispanic Employment Program Manager, spoke before the Bay Area Hispanic Employment Managers Council, San Francisco, July 10.

Jack Birkholz, senior evaluator:

Served as a panelist for the Fifth Joint Biennial Intergovernmental

The GAO Review

Editor

Harry S. Havens

Assistant Editor

Carol A. Codori

Features Coordinator

Alberta E. Tropf

Publishing Services

Editing Staff

Linda J. Kemp Sharon Connolly Gerard Burke Eric Green

Graphics Staff

Sharon Ferguson Carmelo Ciancio Richard Rockburn

Printing Staff

Thomas Kneeland William K. White

Distribution Staff

Ann Morton

Liaison Staff

Accounting and Financial **Management Division**

Paul S. Benoit

General Government Division

Diana P. Schultze

General Services and Controller

Susan B. Burtner

Human Resources Division

Joseph Eglin

Information Management and

Technology Division

Daniel Long

National Security and International Affairs Division

Irene Robertson

Office of the Chief Economist

Nancy Hamilton

Office of the Comptroller

General

Alberta E. Tropf

Office of the General Counsel

Marilynn M. Eaton

Office of Internal Evaluation

Arley Whitsell

Office of Organization and

Human Development

Don O'Sullivan

Office of Policy

Elizabeth Poel

Office of Program Planning

Daniel L. Johnson

Office of Quality Assurance

Michael Speer

Personnel

Rose Decker

Program Evaluation and

Methodology Division

Wallace Cohen

Resources, Community and

Economic Development Division

European Branch

Far East Branch

Frank Etze

Tom Brogan

Ralph Running

Latin America Branch

Dan Spengler

Atlanta

William Ball

Boston

Paul Slater, Jr.

Chicago

Stewart Herman

Cincinnati

Elmer Taylor

Dallas

Frank Bizzell

Denver

Pamela K. Tumler

Detroit

Randall Conley

Kansas City

Arnett E. Burrow

Los Angeles

Robert Brown

New York

Eric Johnson

Norfolk

Melissa van Tine

Philadelphia

Louis Rodrigues

San Francisco

Gerhard Brostrom

Seattle

Alvin S. Finegold

Washington

Dennis O'Connor

U.S. GENERAL ACCOUNTING OFFICE WASHINGTON, D.C. 20548

OFFICIAL BUSINESS

POSTAGE AND FEES PAID U.S. GENERAL ACCOUNTING OFFICE



CONTROLLED CIRCULATION RATE