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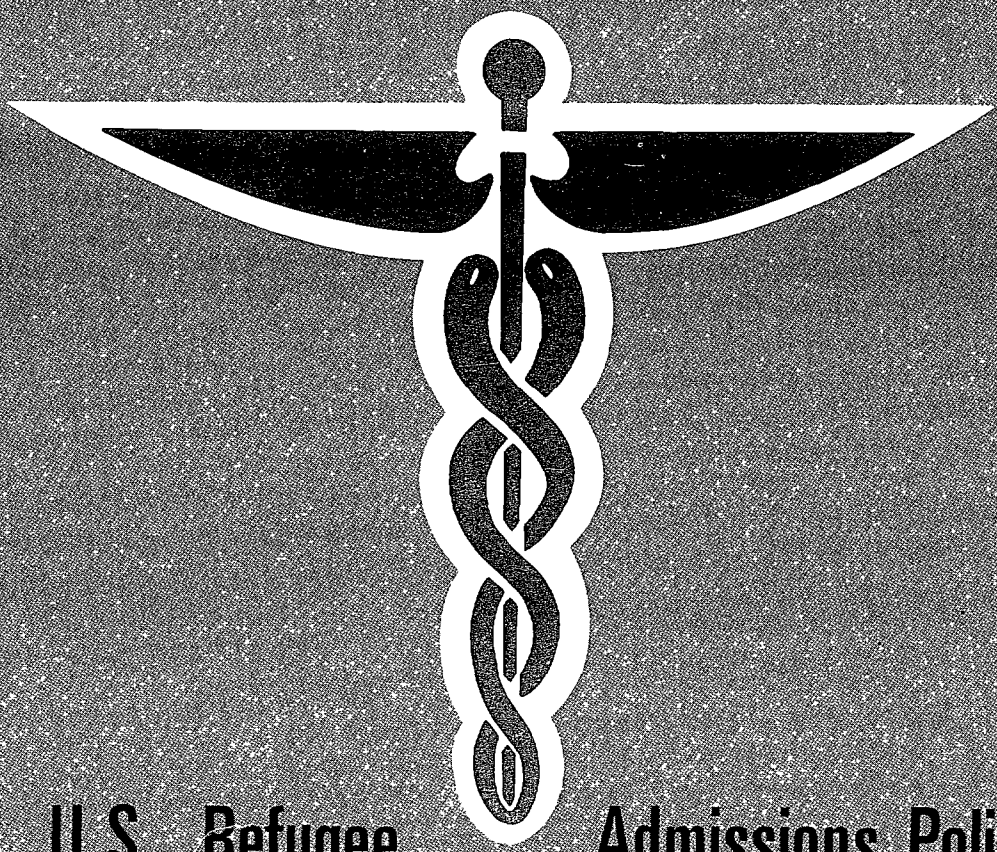
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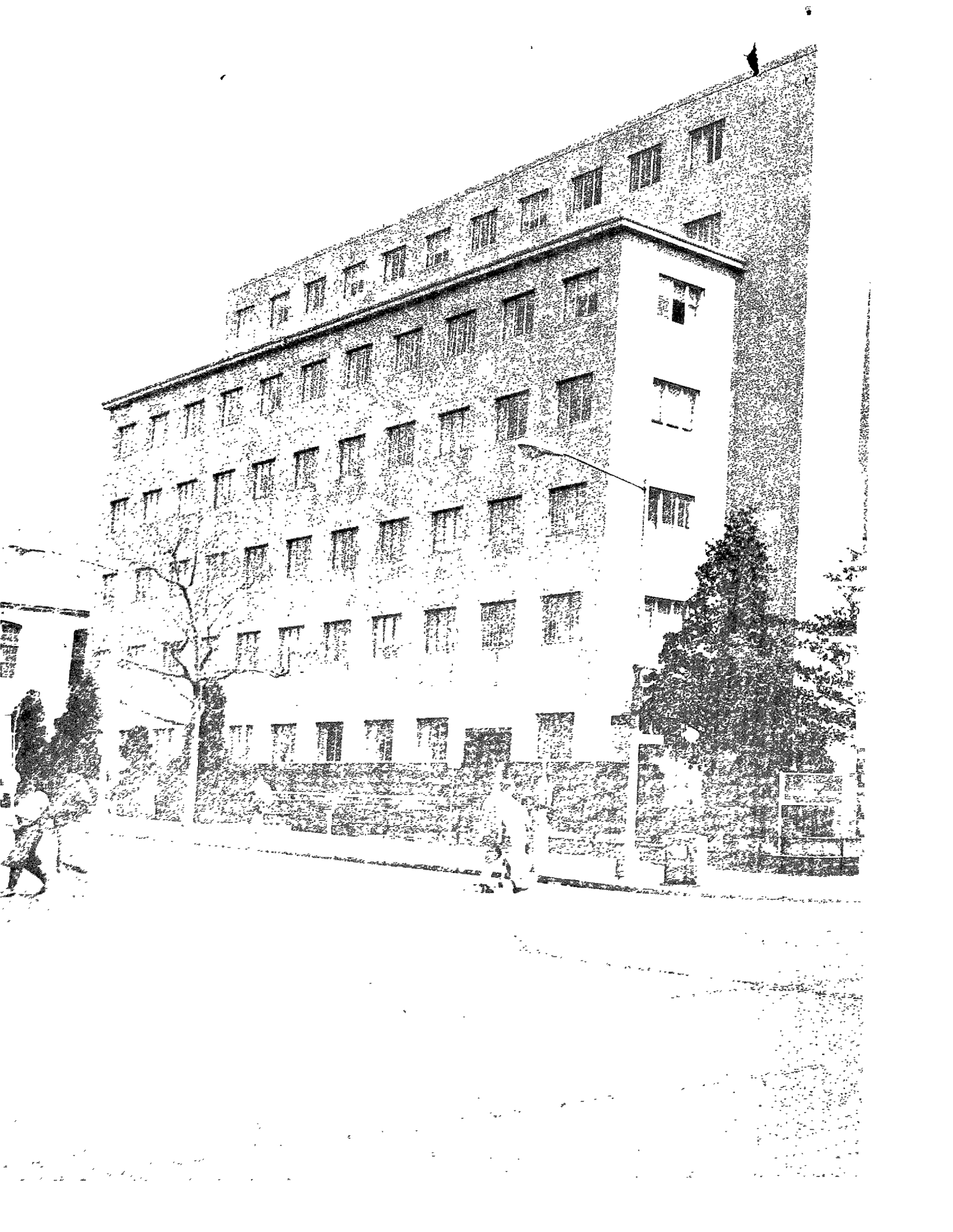
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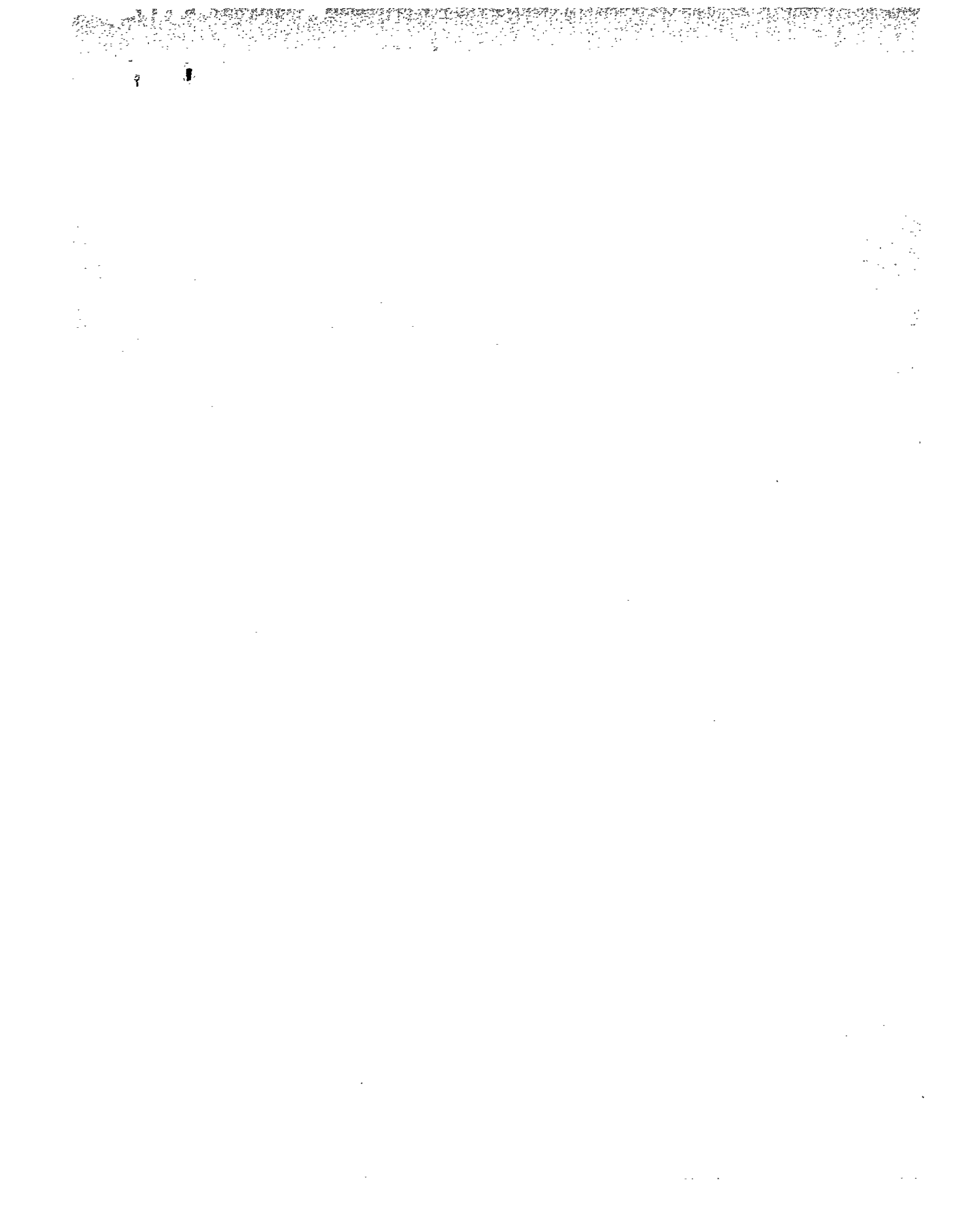
Summer 1983

REVIEW



**U.S. Refugee Admissions Policies
May Affect The Public's Health**





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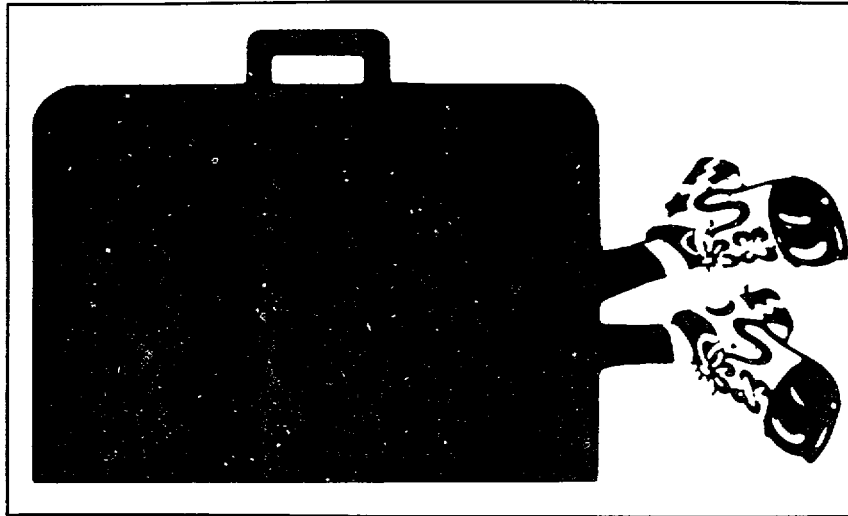
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From Our Briefcase



Accounting Update

GAO Issues Proposed Standards for Internal Controls

GAO has issued proposed standards for internal controls in the Federal Government. The Federal Managers' Financial Integrity Act of 1982 requires GAO to issue such standards and requires Federal agencies to report annually on whether their systems of internal control comply with the standards.

The proposed standards build on the standards issued in previous GAO publications and standards issued by the Office of Management and Budget and draw on the guidance provided by the accounting and auditing profession. The proposed standards emphasize the expanded scope of internal controls for Government programs by including the areas of economy, efficiency, and program results as well as the traditional financial management area. The standards also cover audit resolution, an area singled out in the act. The standards are essential to achieving the purposes of the act.

More than 50 respondents have provided comments on the proposed standards. Respondents include Inspectors General; Federal agencies; State and local governments; pro-

fessional organizations, such as the American Institute of Certified Public Accountants, the Association of Government Accountants, the Institute of Internal Auditors, and the Intergovernmental Audit Forums; public accounting firms; academia; and others. GAO's Accounting and Financial Management Division has reviewed the respondents' comments and is currently reviewing the document to reflect those comments. Final standards should be issued in mid-1983.

OMB Issues Guidelines for Evaluating and Reporting on Internal Controls

OMB has issued "Guidelines For The Evaluation And Improvement Of And Reporting On Internal Control Systems In The Federal Government." The Federal Managers' Financial Integrity Act of 1982 requires OMB to establish, in consultation with the Comptroller General, guidelines with which the agencies can evaluate their systems of internal accounting and administrative control. The evaluations will provide the basis for agencies to report annually on the adequacy of their internal control systems.

The guidelines contain a seven-phase approach for evaluating, improving, and reporting on internal

controls. OMB expects each executive agency to use the guidelines to assist in developing its own specific plans so that management can perform a self-evaluation of, improve, and report on its internal control system in the most efficient and effective manner consistent with its own unique missions and organizational structure. OMB, with assistance from GAO, has developed and implemented an ongoing effort to monitor executive agency implementation of the guidelines and to provide technical assistance where needed. OMB has completed initial efforts at most major departments and agencies.

GAO Will Develop Strategy for Implementation of the Federal Managers' Financial Integrity Act of 1982

GAO is developing a strategy to help ensure that the control and accountability objectives of the Federal Managers' Financial Integrity Act are met in the Federal Government. The strategy will involve the full range of GAO's accounting and auditing efforts and will require participation by all GAO divisions and offices.

The act provides new opportunities for bringing about long-needed improvements in control and accountability within Federal operations. For this reason, GAO is committed to seeing that the act is implemented effectively and efficiently. The strategy now being developed will reflect that commitment and will be exposed for comment in mid-1983.

For more information on the preceding sections of "Accounting Update," call Bruce Michelson on (202) 275-6222.

Ten New Directions

A look to the future without a crystal ball? This is what John Naisbitt offers in his recent book, *Megatrends: Ten New Directions Transforming Our Lives* (Warner

Books, 1982). Through content analysis, studying the daily content of newspapers, Naisbitt and his associates have developed their estimates of 10 significant trends they believe are and will continue to shape our lives. Why newspaper analysis? Naisbitt assumes that the print media present those stories most interesting to their readers and that there is a given amount of space for each major issue, such as civil rights. Thus, if so many column inches are devoted to this topic, for an aspect of it to be covered in more detail (such as ageism), some other aspect (such as sex discrimination) would receive less attention. Naisbitt documents this point quite effectively.

What are these trends? They deal with nearly every aspect of our life-style and economy.

- The United States is moving from an industrial society to an information society. As a nation, our economic strength depends now on the information services we produce rather than the goods we manufacture. To talk about "reindustrializing" America is to live in a world of the past.

- The "high tech" environment growing around us is leading to a "high touch" environment as well. Each increase in the complex technology we use leads to a new social organization among its users. It is as if we want to assure ourselves we are more than the robots we can now have working for us.

- Americans are moving west and south, leaving behind the older, industrial cities of the north and east. New issues will arise—where will we get the water for the more populous southwest?

- No longer can the United States think of itself as the center of the world's economy, or even of its own. The United States is evermore a part of the global economy, where the "made in Japan" auto we buy has parts made or assembled in several countries, and the grain grown by a U.S. farmer is likely to be consumed halfway around the world. Naisbitt sees our propensity to add more trade barriers as part of a dangerous cycle which could lead to economic collapse.

- America has evolved from the hierarchical "top-down" society of

the 1950's to a "bottom-up" society in which organizations are being rebuilt from the ground up. Naisbitt cites labor unions as one of the many examples.

- We are moving from a representational democracy to a participatory one. While our sense of political efficacy at the ballot box may be decreasing, and many do not vote, we believe we can accomplish more by ourselves. Thus you see citizen-initiated referendums on State and local ballots and individuals and interest groups taking the Government to task through the court system.

- Self-help is becoming the trademark of many, replacing our reliance upon traditional institutions. This is perhaps best evidenced through the almost meteoric rise of interest in physical fitness and natural foods.

- Informal networks of communication are replacing the traditional chain-of-command philosophy of dealing within groups. We rely on these informal contacts in politics, business, social activities, and even at home.

- As a nation, we are beginning to approach problems from a more realistic, long-term perspective. No longer do we expect the "quick fix" to social or technological ills.

- For everything we do, our options are far broader than they have ever been. Naisbitt characterizes ours as a "multiple option" society.

What does all this mean? Naisbitt characterizes the 1980's as an age of unbelievable opportunities. He notes that in stable times, when power centers are well established, the individual has little leverage. In times of change, however, people and companies who have a "sense of where we're headed" can have a real impact.

In terms of public policy, the options for addressing these and perhaps other aspects of our changing society are enormous. There are those who say *Megatrends* should be required reading for all adults and young adults. It may not be as precise as reading history, but it certainly provides a framework for dealing with the present and for making decisions about future careers and lifestyle choices.

Within the General Accounting Office, it is interesting to note the

very recent decision by Comptroller General Bowsher to establish a new division to deal with information management, ADP, and communication issues. The "information society," Naisbitt's most important trend, has come to GAO.

Bits of Information on Bytes

Your officemate has just purchased a new home computer, and you wish you knew the difference between a floppy disk and a messy desk. Your daughter is describing the computer she uses to learn math at school, and you were just adjusting to the fact that they no longer teach long division the way you learned it. How can you come up to speed without getting a degree in computer science?

Because there is an adult population with little familiarity with the world of computers and because the sometimes confusing gadgets are entering every aspect of our lives, there is now a market of books and courses designed to alleviate "computer illiteracy." This is not a very attractive term, as most of us hate to admit we are illiterate in any area. Nonetheless, county adult education programs, community colleges, and even a number of recreational organizations are now offering courses on the personal computer. There is an advantage to these courses over even some of the more technical university programs, in that most of us do not need the latter's more advanced level of information. Course work on purchasing and using the personal computer offers an understandable level of information in a form we can readily apply.

If you are looking for a really quick introduction, there are a number of books now on the market. Perhaps the most readable is *The Personal Computer Book* by Peter A. McWilliams (Prelude Press, 1982). Aside from its humor, which makes the book enjoyable as well as informative, the author's perspective is that of a "verbal" person. A writer by trade, McWilliams authored this and a book entitled *The Word Processing Guide: A Short Course in Computer Literacy*. Both are geared to the "writing" mind as opposed to the

"computing" mind. The books have an advantage for those thinking of purchasing either type of equipment—McWilliams compares specific aspects of various brands and offers cost information. While his preferences are clear, the books carry no bias toward a particular line of computer hardware or software. In addition, for the cost of postage, you can purchase updates to the two books if you buy them direct from the publisher. Thus, you can stay current as new equipment or programs enter the market. (Prelude Press, Box 69773, Los Angeles, CA 90069. Each book was \$9.95 at this writing.)

Still confused? You are not alone. Hard as it may be to believe, most of us will be as comfortable with personal computers and office automation as we now are with pushbutton phones or microwave ovens. You will probably even enjoy learning.

Can You Control Stress?

Late hours, missed lunches, a tirade from the boss . . . these are all activities we think of when we hear the term *stress*. An article by Karl A. Seger in the December 1982 issue of *American City and County* notes that recent events and changes have greatly increased the stress associated with being a government employee, especially at the supervisory and management levels. Budget and personnel cutbacks, increased workloads, and policy changes all contribute to the symptoms of stress. These can include strained interpersonal relationships at work and home, coping problems, and even ulcers or more serious health problems, often the result of internalized stress.

There are essentially two avenues to pursue in coping with stressful situations. Essentially, you can work to change the work environment or other source of stress, and you can learn to deal with stress better yourself. Clearly, these are not easy tasks to approach, and many employees believe there is little point in even approaching their supervisors about changes to office policies and procedures. Seger ad-

vocates managing stress, which he maintains can be channeled to energy. He advocates writing down the major stresses in your life and deciding which you can eliminate, which you can modify, and which you will have to learn to live with.

Having compiled your list, you will probably see many fall into the "learn to live with" category, and he offers some suggestions. Preventive stress measures include proper exercise, balanced nutritional intake, some "escape" time, and habit modification if you smoke or have other bad habits in response to stress. At times of severe stress, remedial techniques are necessary. These include social support (having someone to talk to), relaxation, sufficient rest, and some "thinking-it-out" time. Seger says those who continue to believe things don't "bother" them are those who internalize their stress and are thus most likely to become victims of illness, family problems, or some other "stress statistic."

While Seger tells you how to manage stress, Susan Seliger writes in the August 2, 1982, *New York* magazine that "Stress Can Be Good for You." She quotes Dr. Kenneth Greenspan, Director of the Center for Stress Related Disorders at Columbia Presbyterian Medical Center, who differentiates between good and bad stress. He maintains that an executive whose life can be associated with the need to make many decisions can actually be better off than his or her secretary. Dr. Greenspan notes that secretaries and assembly-line workers are "at a great deal of risk from stress because all their decisions are predetermined: when they start work, when they stop, what they do. They fear that they can be easily replaced; they see themselves as victims. And that produces bad stress."

Supporting Dr. Greenspan's position is research by Suzanne Kobas, Ph.D., a psychologist at the University of Chicago. She found that certain people were particularly able to handle stress: no matter how intense their job pressures or how ominous their family medical history, their health was not affected. She concluded that if people feel a sense of

purpose, view change as a challenge and not a threat, and believe they are in control of their lives, they are not adversely affected by stress.

What is a particularly good way to cope with stress? Laughter. While the biochemical effects of negative stress (lowered resistance to disease, buildup of adrenaline which can play a part in the buildup of cholesterol in the arteries that can lead to heart disease) have been written about often, not as much is available on the impacts of laughter as a stress reliever. Writing in *Anatomy of an Illness*, Norman Cousins notes laughter causes endorphins, the body's natural painkillers, to be released. Dr. Lorenz Ng, medical director of the Washington Pain Center, notes the biochemical reactions of stress are a new aspect of stress research and may lead to understanding the differences between good and bad stress.

As an overview of the subject, Seliger's article in *New York* (described in the previous three paragraphs) is an easy one to read. Other sources, in addition to those noted earlier, are *Stress Without Distress* by Hans Selye (1974, J.P. Lippincott Company); *The Burnt-Out Administrator* by Carolyn Vash (1981, Springer Publishing Company); *How To Get Control of Your Time and Your Life* by Alan Lakein (1973, New American Library); and many other time management books, such as Michael LeBouef's *Working Smart: How To Accomplish More in Half the Time* and R. Alec Mackenzie's *The Time Trap*. A central or implied theme in most time management books is that if you can use time effectively, you will make better use of it and feel better about yourself, your work, and your leisure activities.

GAO staff have an additional resource in the form of the Counseling and Career Development Center within the Office of Organization and Human Development. Manager Howard Johnson and his staff conduct workshops on stress management and are available to talk to staff on this or other topics related to career development. They can be reached on (202) 275-5848.

On Location

Sister Agencies To Coordinate More Closely

In response to direction from the House Appropriations Committee, the four congressional support agencies—GAO, the Congressional Budget Office (CBO), the Congressional Research Service (CRS), and the Office of Technology Assessment (OTA)—have prepared a consolidated plan to ensure that duplication of work is avoided. While there have been formal and informal liaison activities in the past, the consolidated plan is expected to integrate these procedures even more thoroughly. They supplement current information-sharing through computerized lists of all major ongoing and completed projects (the Research Notification System), coordination meetings before starting key projects, regular meetings of senior agency management, and periodic half-day meetings of senior analysts from the four agencies who work in the same areas.

The new coordination mechanisms are expected to improve even more efforts to prevent unnecessary duplication. The following points are as expressed in a joint letter from the heads of the three agencies:

- To further focus on newly initiated major projects, at the monthly meetings of the senior agency management officials, we shall review those projects started since the last meeting to ensure that they are appropriate for the proposing agency to handle and ascertain whether work done by another agency might be useful to augment or minimize the effort.
- Analysts assigned newly initiated, unusually large projects will be required to discuss the substantive work with appropriate analysts of each of the other support agencies who work in the subject area involved, subject to confidentiality constraints and client approval. These discussions, under the auspices of the senior agency management officials, should further help to eliminate any possibility of

duplication at the most fluid and formative stages of these large projects. In a more positive vein, this procedure will assure that the expertise and perspective of all the agencies can be probed and tapped in a way that can most benefit the project.

- We will increase the number of periodic half-day meetings which last year addressed defense, taxes, water reserves, and Federal personnel issues. We will continue, of course, to encourage close working communications of all kinds among agency specialists and analysts and will monitor them to make sure that our staffs are complying with these directives.

- We shall examine our project approval procedures to see if changes might be made to strengthen them.

- We shall upgrade, as necessary, our reporting systems of the day-to-day substantial contacts and meetings of analytical staff and administrators. This will enable us to better assure ourselves of the adequacy of these important informal contacts.

- We shall produce a new video training tape which will discuss the missions of the four agencies and will emphasize to staff the importance of effective liaison and avoidance of duplication of another agency's work. The tape will be used within the agencies and also in acquainting congressional staff with the different functions of the agencies.

GAO Marks Black History Month

"I believe there is (now) more grassroots support for the principles underlying the civil rights movement than at any time since the early 1970's."

So said Arthur S. Flemming, former chairman of the U.S. Commission on Civil Rights, in his keynote speech February 9, 1983, at GAO's annual observance of Black History Month. The GAO Civil Rights Office arranged the program, whose theme was "Persevering During Times of Crisis."



The audience at GAO's Black History Month observance was literally "standing room only" in the GAO auditorium.

Speaking to an overflow crowd in the GAO auditorium, Flemming drew on his broad experience as a journalist (at the old *U.S. Daily*, now *U.S. News and World Report*), university president (at Ohio Wesleyan and at Macalester, in Minnesota), and civil servant (as a member of the U.S. Civil Service Commission) to illustrate the main points in his talk.

The one-time civil servant took time out to praise the Federal worker. "I feel that our Nation is deeply indebted to the career civil servants for what they've done and for what they are doing," said Flemming, who added that he "resented and took issue with the generalized

attacks on career civil servants" that have occurred in recent years.

Flemming used the occasion to praise the founding father of Black History Day, the late Dr. Carter G. Woodson. "The scientific and systematic study of Afro-American history began with him," Flemming said of the black educator, who also founded the Association for the Study of Negro Life and History and the *Journal of Negro History*.

In the body of his speech, Flemming briefly outlined some of the strategies now being used which are aimed at reversing civil rights laws and court decisions. However, the total picture is not bleak be-

cause, he contended, grassroots America simply does not want to move backward in the civil rights arena.

"As we observe Black History Month," Flemming said, "we have to be realistic about where we are, but we don't have to be pessimistic about where we can be."

Flemming was introduced to the audience by Comptroller General Charles Bowsher, who made brief remarks. "We are here today to commemorate the many contributions made by black Americans to the life of this country," said Bowsher, who noted that this year marks the twentieth anniversary of an historic

Comptroller General Charles Bowsher (r) and GAO Civil Rights Office Training Program Manager Grady Poulard (l) exchange pleasantries with Arthur S. Flemming, former chairman of the U.S. Commission on Civil Rights and keynote speaker at the Black History Month observance.





Baritone Karl Gipson is lost in song during a solo he performed at the GAO Black History Month observance.

occasion: the 1963 March on Washington. Ms. Aletha Brown, president of the GAO chapter of Blacks in Government (BIG), introduced the Comptroller General.

Other features of the 90-minute program included a statement of the occasion by Ryan S. Yuille, deputy director of GAO's Civil Rights Office, vocal renditions of spirituals by area singers Raymond McNeill and Karl Gipson, and a poetry reading by Murray Brook. Grady Poulard of GAO's Civil Rights Office made closing remarks, and Gipson led the audience in singing "Lift Every Voice and Sing," widely known as the Afro-American national anthem.

The observance was only one part of a month-long series of Black History Month activities, including a weekly film series, an art and book show and sale, a dinner for members of BIG, and the Black History Portrait Gallery exhibit in GAO headquarters.

Secretarial/Clerical Council: What Does the Newest Advisory Council Do?

In February 1981, an Ad Hoc Secretarial/Clerical Group was formed by interested and concerned

director-level secretaries to (1) assist GAO management by providing thoughtful and unified comments on specific matters of concern to secretarial/clerical personnel and (2) determine the best means of establishing a formal council that would be most effective and representative to assist and interface with management.

During the early days, the Ad Hoc Group made significant contributions to the Office in improving recruitment, work processes, office equipment, and career development. Recognizing these past contributions, coupled with the need to provide a formal channel of communication on the changes being contemplated in personnel policies, word processing and telecommunications, and the professional capability of the secretarial/clerical staff, a formal Secretarial/Clerical Council was established. Comptroller General Bowsher signed the charter of the new council in August 1982.

The Secretarial/Clerical Council's objectives are to (1) provide a means for secretarial and clerical employees to express, through their representatives, their ideas and opinions on topics of interest and (2) make appropriate recommendations to top management for improv-

ing the policies, procedures, and work environments of the GAO. The council will become involved in all matters that are important to the employees covered by the Secretarial/Clerical Performance Appraisal System (SCPAS). The council is also concerned about other employees covered by this appraisal system and will work closely with the Women's Advisory Council on appropriately related matters. The council will be available to review and discuss matters presented by the Comptroller General or other management officials.

The Council serves as the focal point for secretarial/clerical issues and consults with all groups in the Office, such as directorates, group managers, administrative and editorial personnel, and the secretarial/clerical staff members, in developing its views. It will, in time, become the direct line of communication with the GAO's top-level management for identifying issues, developing recommendations, and seeking assistance and advice for their resolution.

Membership includes two regional representatives and one representa-

See LOCATION, p. 47



The GAO Secretarial/Clerical Council, including (l-r, standing) Thama Moreland, Beth Vannoy, Ida Groover, Ola Pelham, Kim King, Terri Eberly, Nancy Mufti, Charlean Grimes, Nancy Barrett, Frances Williams, Sandy McDonald, Ann Rucker, Lillian Frazier, Cece Niemi, Sue Conlon, Anna Hendrickson, Tina Hay, Anita Cook, (l-r, seated) Janine Cantin, JoAnn King, Adele Gabrielle, Lisa Cormier, Cyndy Podolinski, Barbara Morrison, Lucy Cole, Alice Norsworthy, Lynn Goodloe, Nancy Rollins. Elected representatives who are absent from the photo include Barbara Hughes, Cheryl Brown, and Beverly Vick.

Manager's Corner

This summer's issue of "Manager's Corner" focuses on adaptability, a quality identified as one of the competencies of an effective manager and executive at GAO. Adaptability can be defined broadly as the ability to modify one's behavior and approaches in dealing with different situations and different people. This competency, however, does not suggest a continual adjusting of one's behavior regardless of the effect of changing situations. Highly adaptive individuals will be able to demonstrate the ability both to compromise and to resist change as required by a given situation.

Adaptability is closely associated with qualities inherent in the idea of "wellness," which was the subject of last January's Executive Speakers Program featuring Dr. David Morrison.* Wellness was viewed by Dr. Morrison as using the mind constructively, being creatively involved with others, and expressing emotions appropriately and effectively, all of which are integral parts of the adaptability competency.

For this issue of "Manager's Corner," three members of the Senior Executive Service have written reviews from the bibliography on adaptability.

***Adaptation to Life.* By George E. Vaillant. Reviewed by Garry L. McDaniels.**

The ability to adapt successfully is highly valued by GAO managers and executives. This is because successful adaptation positively affects both jobs and the people performing the work, as well as being a measure of the overall wellness of the manager or executive. Why do adaptive mechanisms seem to take on such significance? The reasons are explained thoroughly in Professor Vaillant's *Adaptation to Life*, the product of a fascinating 40-year study of the human life cycle.

*A videotape of this program is available to headquarters divisions and offices and to the regions.

Vaillant presents case studies of carefully selected college students who have been rigorously interviewed at various times over a 40-year period. An unusual feature of these people is that they were selected for the study because they were judged the healthiest and most promising in their university. Such criteria were chosen because the researchers who conducted the study felt that medical research was too heavily weighted in the direction of disease. (Thus, their emphasis was on well-ness rather than ill-ness.) Their intent was to chart the ways in which a group of promising individuals coped with their lives over a long period of time. Vaillant's description of the cases provides a revealing portrait of healthy individuals dealing with life's conflicts and crises—a portrait with which all GAO managers and executives can in many ways identify.

The use of adaptive mechanisms and the ways in which an individual develops and changes over time are the themes of this book. Theory is illustrated by the case histories, and the findings have utility for each of us. The underlying assumption is that adaptive behaviors (such as anticipation and humor) allow us to go about our work with minimal anxiety or depression—the overt signs of intrapersonal conflict. Vaillant sees each of us as being constantly bombarded by emotionally laden conditions, people, and problems from the outside, as well as by aggressive internal impulses. The adaptive mechanisms mediate all of these potentially debilitating conflicts and, equally important, channel our energy to meet our leadership responsibilities.

The book gives us a chance to look at ourselves and our behavior with both insight and optimism. The sample of individuals shows great successes; the adaptive mechanisms allow most in the sample to deal with their major internal and external conflicts, while enhancing their work, their families, and their private selves.

***Stress and the Public Administrator.* By David E. Morrison, M.D. Reviewed by Virginia B. Robinson.**

Dr. Morrison emphasizes in his article that all public administrators are forced to deal with stress. It affects the human aspects of work and mental and physical health. The important relationship of stress to one's health is referred to throughout the article. We at GAO can appreciate the value of understanding and dealing with the effects of stress.

Morrison discusses the pressures which engender stress in terms of work, family, and self. In discussing the work place, he focuses on group interaction. Noting that administrators must work a great deal with groups, he states that these individuals need to understand the capacity of groups to make people malfunction. As an example, he cites how some group members may act dependent and puerile—becoming, in effect, "de-skilled"—to seduce some other member to take a leadership role. Anyone who then assumes this role steps into a "cauldron of stress," unless he or she understands the underlying dynamics of such groups.

The author reminds us that the family, too, has its pressures. Although the family exists, in part, to provide support, it also needs support. If one sees the family as "a quiet, restful lair where one can go and take without giving, he or she is in for some surprises." The family is, instead, an intricate and complex organization, "full of intrigue and exciting power plays."

The pressures from oneself—engendered by one's values, needs, and styles—are no less demanding than pressures from the outside world. An important example of a self-induced pressure common to many high achievers is the chronic inability to withdraw or give in. Perseverance—no matter what—is a quality that may have contributed to one's professional success, but many people forget how to turn this behavior off. Morrison observes:

It is then exceedingly difficult to get them to change, unless they have a heart attack. What has happened to most of our population is that their strength has become their weakness. . . . The person got what he or she went after, and found that it had a price. Is it too late to change?

At this point, the author explicitly addresses the need for adaptability. As a person goes through life, if that person is really growing and adapting, then his or her values, needs, and styles undergo certain changes. Maladaptive behavior is indicated when such changes are avoided or fought against.

The pressures from work, family, and self are obviously considerable. The author, however, doesn't leave us stewing in our stress-related problems; he offers concrete suggestions, such as the following:

- Study the phenomenon of stress. Be aware that in learning about it, you may initially experience some anxiety. This is due to perceiving the need to limit certain old options.
- Build support systems. Do this at your workplace, in your family, and within yourself. This is an art unto itself and requires much study and diligent application.
- Put your issues into words. Verbalizing and writing can help you see the bigger picture, and in that way understand your legitimate limitations.
- Be gentle with yourself. Don't condemn yourself for not anticipating problems that social and medical scientists are only now beginning to uncover.

***The Seasons of a Man's Life.* By Daniel J. Levinson. Reviewed by Bill Thurman.**

In reading Daniel J. Levinson's book, *The Seasons of a Man's Life*, I was impressed by its relationship to adaptability, one of the nine managerial competencies which we are seeking in GAO executives. We have defined adaptability as the ability to modify behavior and approaches in dealing with different situations and different persons. If a manager is to be effective in this competency, he or she must have a good understanding not only of the situation but also of the people with whom

they are interacting. For me, the book shed much light on the people side of this equation.

The book reports the results of a 10-year study of the patterns of adult development. The study attempted to address the following questions: What does it mean to be an adult? What are the root issues of adult life—the essential problems and satisfactions, sources of disappointment, grief and fulfillment? And perhaps the most important question: Is there an underlying order in the progression of our lives over the adult years as there is in childhood and adolescence?

Examined in this study were the life experiences of a carefully selected sample of 40 males in various occupations who ranged in age from 35 to 45 years. Extensive interviews were held, and life biographies were constructed for each of the men in the sample. The data collected tended to confirm that there is an underlying order and predictable periods or "seasons" that are involved in male adult development.

An example of one of the predictable seasons is what Levinson calls the "settling down period" (approximately age 30 to 40), during which one reaches the end of early adulthood. In this period two major tasks are faced: trying to establish one's place in society and working at "making it"—becoming successful. The next stage, the "mid-life transition" (lasting roughly from age 40 to 45), provides a bridge from early to middle adulthood and brings on a new set of developmental tasks. Typically, during this period it becomes very important for a man to ask, What have I done with my life? What do I really get from and give to my wife, children, friends, work, community, and self? What is it I truly want for myself and others?

(I don't know whether Levinson would venture to apply comparable stages to female adult development, but such questions as those above seem to me highly appropriate for both sexes.)

The mid-life transition period, with its bridge to middle adulthood, was a major focus of the Levinson study. While the extent of difficulties encountered by the sampled males varied, for the great majority this was a period of intense struggle

within themselves and with the external world. Their mid-life transition was a time of moderate or severe crisis and a period where nearly every aspect of their lives was questioned.

The major task during this transition concerns what Levinson calls the "polarities," sources of deep divisions in life that one needs to confront and integrate. The terms he uses for these splits are (1) young/old (2) destruction/creation, (3) masculine/feminine, and (4) attachment/separateness. I found Levinson's elaboration of all four polarities quite enlightening. The discussion that most interested me was that of the attachment/separateness polarity.

Levinson found that generally during the 20's and 30's, a man is so involved in entering the adult world that it is difficult to find time for separateness—for solitude, play, and quiet self-renewal. That such time is scarce is due in part to external urgencies: the rent must be paid, the children cared for, and the work accomplished. There are also internal urgencies: the desire to establish a place in society, attain goals, and become a success. Both types of urgencies cause a strong leaning toward the attachment side of the polarity. During the mid-life transition, however, a man begins to do the work of reappraisal; for this, he must turn inward. He needs to separate himself, to the degree possible, from external pressures and from the striving ego, so he can better hear the voices from within. Later, as he enters middle adulthood, a more equal weighting and integration of attachment and separateness is required.

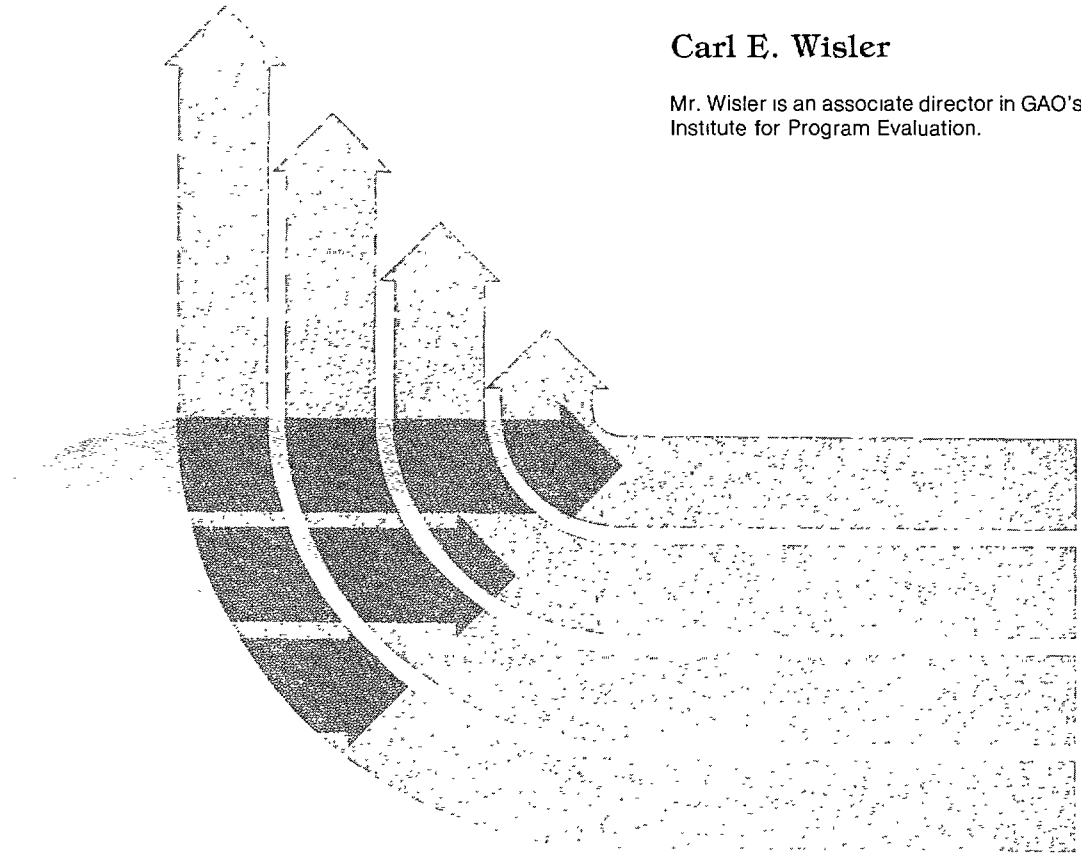
While certainly not true in all cases, Levinson notes that the mid-life transition, with its bridge to middle adulthood, can be one of the most creative seasons in the life cycle. It is a period in which a man can be less tyrannized by ambitions, instinctual drives, and the delusions of youth; thus, he can be more involved with other individuals and perform his social roles in a more responsible way than ever before. It is a period in which one can be both

See MANAGER'S, p. 48

Topics in Evaluation

Carl E. Wisler

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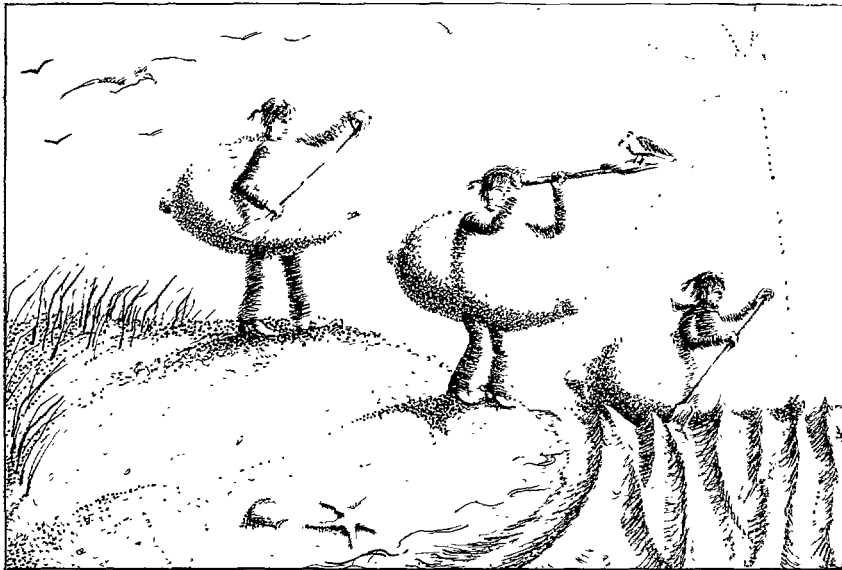


This issue's topic is evaluation design. For more discussion of the topic, see IPE's forthcoming methodology transfer paper, "Designing Evaluations."

The success, or even the completion, of a long ocean voyage during the 16th century was seriously threatened by scurvy, a disease now known to be caused by a deficiency of vitamin C. Sailors manning the ships of deGama, Cartier, Drake, Cavendish, and other great explorers weakened and often died as a result of the disease. In 1601 some empirical evidence helped solve the problem. A British captain named James Lancaster set sail from England to India with four ships. Sailors on the flagship received 3 teaspoons of citrus juice each day while sailors on the other ships received none. During the voyage, the crew of the flagship remained in

good health while the other crews were devastated by the effects of scurvy. After due deliberation, which took more than 100 years, the British Navy decided it had hit upon a good thing and began carrying lime juice on all long voyages. British sailors, required by law to drink the juice, were thereafter called Limeys.

Though no evaluators or auditors are known to have been on board Lancaster's ship, we can see several elements of an evaluation design in the captain's plan. First, there was a clear-cut question: Does citrus juice prevent scurvy? The treatment was well-defined: 3 teaspoons of citrus juice per day. Second, there was an outcome of interest, morbidity, or mortality among the sailors, which was easy to observe during and after the treatment. And third, there was a reasonably good way to compare the effects of the treat-



acquiring and using information to answer a question, and we want the design to have features which will resist counterarguments about the answer we give. It should be stressed that a good design in no way pre-determines the answer. We don't care what the answer is, but we do want the argument supporting the answer, whatever it is, to be as tight as possible.

What are the elements of a design that we should specify in advance of information collection? Some of the most important elements are shown in table 1. The evaluation question is included as an element because, although it might be regarded as external to the design, its form is almost always negotiable with the user and so open to some choice.

To illustrate the kind of choices available in a design element, consider, from Captain Lancaster's evaluation, the basis for comparing alternatives. To be able to say whether citrus prevented scurvy, the design had to include some provision for comparing outcomes when citrus was in the diet and when it was not. Captain Lancaster chose to make his comparisons between two groups of sailors on the same voyage. Another choice would have been to give citrus to all the sailors on the outbound trip but not to include it in the diet on the return to England. Yet another way would be to give citrus to the officers but not to the seamen. The possibilities are limited only by one's imagination.

For each element in the design,

ment with a relevant alternative, no treatment: sailors on the flagship were exposed to roughly the same conditions as sailors on the other ships except that the diets of the latter did not include citrus juice. These three elements, which constitute a sort of bare-bones design, can be expanded to cover other situations.

What Is an Evaluation Design?

Captain Lancaster's study of the effectiveness of citrus juice in preventing scurvy included several elements which we would consider part of an evaluation design today. But what do we mean by that term? In the most general way, an evaluation design is a plan for acquiring and using information to answer evaluation questions. The implication is that we are going to collect some information about a phenomenon and use that information to reason out the answer to the questions. In deciding on an evaluation design, we are thus positioning ourselves to answer questions in a way which will be persuasive, through the power of reason, to another person.

No doubt Captain Lancaster's reasoning was that the citrus juice almost certainly accounted for the observed difference in sickness and death between crew members of the flagship and the other ships because the sailor's consumption of citrus was the only important difference between the two groups. All the

sailors were at sea the same length of time, they were all exposed to the same weather conditions, and they all visited the same ports. But a moderately alert Lord of the Admiralty who wished to hold down the lime budget might suggest that perhaps Captain Lancaster had placed the healthier looking recruits on his own ship. The captain would have been in a better position to deal with this criticism if he could have anticipated statistical developments of the 20th century and randomly assigned sailors to duty on the four ships. Then he could have argued that differences in the outcomes could not account for differences in sailors assigned to the two groups.

Therefore, a design is a plan for

TABLE 1

ELEMENTS OF EVALUATION DESIGNS
● EVALUATIVE QUESTIONS TO BE ANSWERED
● KIND OF INFORMATION WHICH WILL BE ACQUIRED.
● SOURCES OF INFORMATION (E.G., TYPES OF RESPONDENTS).
● METHODS FOR CHOOSING SOURCES OF INFORMATION (E.G., RANDOM SAMPLING).
● HOW INFORMATION WILL BE ACQUIRED (E G., SELF-ADMINISTERED QUESTIONNAIRES)
● TIMING AND FREQUENCY OF INFORMATION COLLECTION.
● BASIS FOR COMPARING ALTERNATIVES (FOR QUESTIONS ABOUT PROGRAM/POLICY EFFECTIVENESS)
● HOW ACQUIRED INFORMATION WILL BE ANALYZED.

there are many options. Thus, the choice of a particular design implies many decisions. We shall return to this point shortly, but first, it is necessary to restate what a design is by considering more closely the two roles that a design plays. First, it dictates what, when, and how information will be collected, and second, it dictates the reasoning process that will be used to produce the answer to the evaluation question. The first role is fairly clear, but the second requires elaboration.

Reasoning from the Design

Reasoning is how we get from the information we collect to the answer. Captain Lancaster reasoned that the only important difference between his healthy and sick sailors was the consumption of citrus and, therefore, citrus must prevent scurvy. With a different design, we might be hard-pressed to make a persuasive argument. For example, if the design had been for all sailors to consume citrus on the outbound trip but none to consume it on the inbound trip, perhaps the data would have shown that most crewmen were healthy when they arrived in India but that many were sick and some had died by the time the ships returned to England. Captain Lancaster might again have argued, on the basis of the evidence, that citrus prevented scurvy. However, that skeptic in the Admiralty surely

would have protested that it was just as plausible to suppose that the sailors caught a communicable disease while the ships were docked in India. The choice of a design thus determines how persuasive an argument we can make to support our conclusions. A design which leads to reasoning that is persuasive to most people is sometimes called a high-quality design. Shouldn't we always choose the highest quality design possible? The matter is not that simple because practical constraints limit our choice and, we must add, evaluators do not always agree on what constitutes the highest quality design.

Practical Considerations in Choosing a Design

The drive to choose a design which provides the most persuasive argument must frequently be tempered by constraints, such as time and cost. This happens as each design element comes under consideration. To illustrate, it might be clear that face-to-face interviews would provide the most valid and reliable data from respondents and thereby contribute to the persuasiveness of our reasoning. But the high cost of such interviews may force us to choose self-administered questionnaires as a less expensive alternative.

As another example, the effectiveness of a program may be best

examined by making longitudinal measurements on persons exposed to the program and other persons in a comparison group. But time constraints may limit us to one-shot data collection via case studies in a few sites.

These kinds of trade-offs are made by considering various designs and the persuasiveness of the associated arguments which we would be able to make. We search for the highest quality design which fits the constraints. If no design of acceptable quality emerges, we can either try to renegotiate the question, lower our standards for what would be acceptable, or conclude that the question cannot be answered in an empirically satisfactory way.

Design Options

While the options to choose from are essentially infinite, for a GAO purpose, evaluation designs can be usefully divided into four types: comparative evaluations, sample surveys, case studies, and available data analyses. Each of these types includes many variations of design elements, but each also has a predominant feature which is summarized in table 2. For example, the comparative evaluations include those designs which have an explicit comparison base, something which is generally needed to reason about the effectiveness of a program/policy.

The four types provide a rough map of the design territory, but in practice, real designs often overlap the regions marked off in table 2. Thus, a sample survey may be combined with a few case studies. The purpose of making such combinations is either to improve the persuasiveness of an argument or to answer several different evaluation questions.

Summary

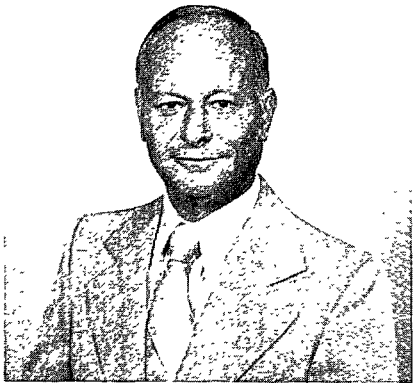
An evaluation design is a plan for acquiring and using information to answer evaluation questions. The design, because it dictates the reasoning which can be used, largely determines how persuasive the answer is. The desire to have a high-

TABLE 2

DESIGN TYPE	PREDOMINANT FEATURE
COMPARATIVE EVALUATION DESIGN	PROVIDES A COMPARISON BASE FOR DRAWING CONCLUSIONS ABOUT PROGRAM/POLICY EFFECTIVENESS.
SAMPLE SURVEY DESIGN	PROVIDES UNIFORM INFORMATION FROM A REPRESENTATIVE SAMPLE OF SOURCES.
CASE STUDY DESIGN	PROVIDES IN-DEPTH INFORMATION FROM ONE OR A FEW ENTITIES.
AVAILABLE DATA DESIGN	PROVIDES EVALUATION INFORMATION FROM AVAILABLE DATA.

See TOPICS, p. 48

U.S. Refugee Admissions Policies May Affect the Public's Health



Murray Grant

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Rodney E. Ragan

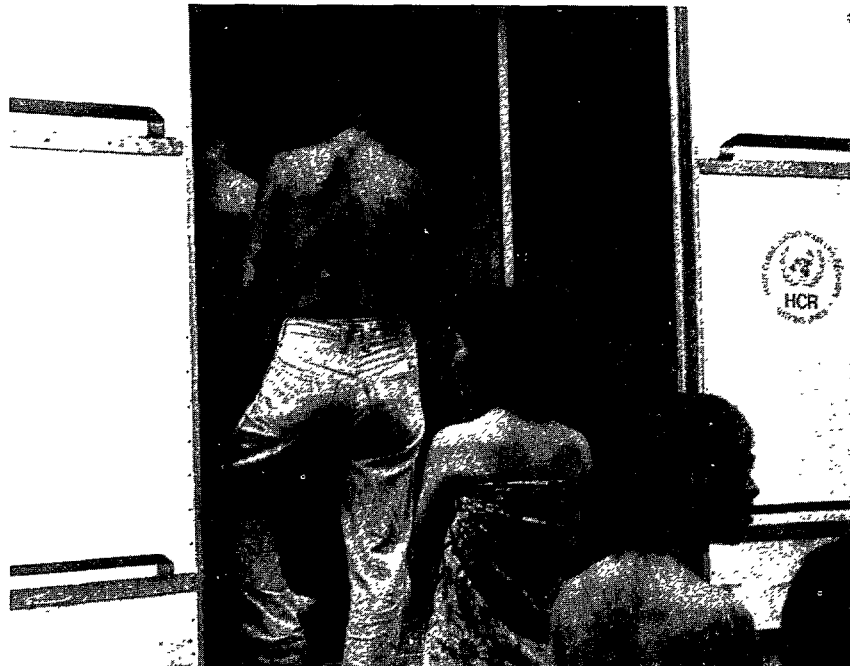
Mr. Ragan is a senior evaluator in the Human Resources Division. He joined GAO in 1968 and received his B.S. degree from Wheeling College. He has done graduate work at American and George Washington Universities. His many division and office awards at GAO include the Certificate of Merit in July 1982 for his review of the health problems of Indochinese refugees.

The end of hostilities in Southeast Asia in 1975, with the eventual Communist takeover of the region, disrupted the lives of the Indochinese people. Fearing persecution, millions fled their homelands in Vietnam, Laos, and Kampuchea (Cambodia) and became refugees—persons without a country—forced to live in crowded, unsanitary refugee camps. To lessen the suffering of these people, the United States, along with such other countries as Canada and France, agreed to resettle them as rapidly as possible. As of August 1982, the United States had resettled about 650,000 Indochinese refugees; however, with over 200,000 refugees still remaining in camps overseas, this country has pledged to resettle about 68,000 more.

As a result of the U.S. commitment, GAO's International Division reviewed the procedures under which refugees were being admitted.

During this review, GAO's chief medical advisor in the Human Resources Division (HRD) raised questions about how the health admission requirements specified in immigration legislation were being met. Meanwhile, the Centers for Disease Control (CDC) was alerting State and local health officials to the high rate of certain serious, communicable diseases found in arriving Indochinese refugees. CDC was recommending that precautions be taken to prevent diseases from spreading. In addition, articles were appearing in the news media on Indochinese refugees found to have communicable diseases.

Because of the seriousness of this issue, HRD began a survey on what effect the diseases found in arriving refugees were having in the United States and how the health admission requirements were being enforced. After pursuing these matters for about 3 months, GAO was



Refugees in Thailand entering Bangkok General Hospital mobile unit. (Photo by Gretchen Bornhop)

asked by the House Committee on the Judiciary to review several refugee resettlement issues, including whether adequate medical procedures were being used in admitting refugees. We discovered that the U.S. commitment to speed refugee processing was achieved by waiving many of the health admission requirements. As noted in our August 1982 report (GAO/HRD-82-65), this decision may cause the United States to have a public health problem for years to come.

Meeting U.S. Medical Admission Requirements

For aliens to be admitted to the United States, they must meet the medical requirements of the Immigration and Nationality Act, administered by the Department of Justice's Immigration and Naturalization Service (INS). The act's health provisions deny aliens the right to enter if they have (1) certain mental conditions, (2) any physical condition that may affect their earning ability, or (3) any dangerous, contagious disease. U.S. Public Health Service regulations define the dangerous, contagious diseases as active tuberculosis, infectious leprosy, and certain venereal diseases.

Requirements Relaxed for Refugees

Because they had difficulties meeting the U.S. medical standards, thousands of Indochinese refugees had to remain in refugee camps overseas. To ease their plight, the Congress enacted legislation in March 1980 authorizing INS to grant waivers for excludable medical conditions. INS has used this authority to routinely grant medical waivers to refugees. This allowed refugees with tuberculosis, leprosy, mental retardation, insanity, and other serious medical conditions to depart for the United States. From April 1980 to August 1981, 21,000 medical waivers were granted, 18,000 of which involved refugees with tuberculosis. While this action hastened refugee processing, we were concerned about whether adequate safeguards existed to prevent the introduction and spread of dangerous, contagious diseases, some of which had been virtually eradicated from the United States.

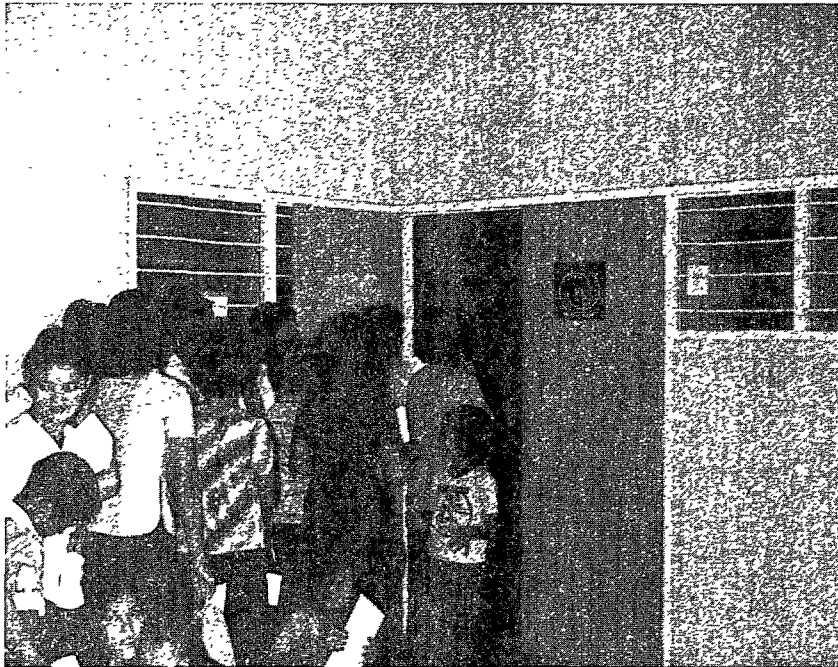
Conditions in the Camps

To see whether a problem existed, HRD's chief medical advisor traveled to the source—the refugee

camps in Southeast Asia—where he observed camp conditions, specifically medical facilities and programs and the conduct of medical examinations, and spoke with U.N. and State Department officials, CDC staff, and other medical personnel. In the camps, refugees were housed together in numbers ranging from small family groups to up to 300 in one hut. While some camps were overcrowded, communal toilet and water facilities were provided, and all came with a medical facility, an outpatient unit, and often an emergency room. They were generally staffed by physicians and other health personnel working for voluntary agencies under a contract with the U.N. High Commissioner for Refugees.

Malaria was a major public health problem in the camps, with gastroenteritis a leading cause of sickness among babies and young children. This was particularly true in certain camps where the people practiced poor hygiene and sanitation. As of April 1981, about 200 cases of leprosy were being treated in the camps, with 60 of these patients needing reconstructive surgery, which had to be deferred until their resettlement in another country. In one camp, at least 250 opium addicts needed withdrawal treatment. Tuberculosis was prevalent—its level of incidence had reached 10 percent of the population in some camps. In one large camp, amebic dysentery spread to epidemic proportions. Rat control programs were common in many camps where the rat population far outnumbered the human population.

Medical records were kept on refugees who sought and received medical care in the camps' facilities. However, these records were not made available to the physicians who were responsible for performing medical screening of the refugees before their migration to another country. This seemed to be a serious deficiency, since much valuable medical information concerning refugees was not available to the physicians when they made their judgments on the refugees' admissibility. For example, since most refugees remained at the camps for several months, information about a person who sought treatment for



Refugees in Malaysia waiting in line for ICM medical screening. (Photo by Gretchen Bornhop)

such conditions as amebic dysentery or who exhibited antisocial behavior should have been provided to the physicians as part of the medical history. Unfortunately, however, there was considerable reluctance within the camps to release such information for fear that it might prevent the timely movement of refugees to the United States.

Medical Procedures Used in Admitting Refugees

Medical examinations given to refugees before their departure from Southeast Asia for the United States are performed in several locations in Hong Kong, Indonesia, Malaysia, the Philippines, and Thailand. The physicians conducting these examinations for INS are employed by an international refugee resettlement organization—the Intergovernmental Committee for Migration (ICM)—under a State Department contract. In fiscal year 1982, these examinations cost about \$3 million.

The medical standards used and the extent of examination depended on the criteria established by the country to which the refugee planned to migrate. Thus, the medical procedures used by physicians examining refugees destined for the United States may differ from those used to examine refugees destined for other countries.

For the United States, the standards, which are set by the Public Health Service, call for

- a brief medical history,
- a visual inspection of the body,
- a chest X-ray for adults,
- a blood test for syphilis for adults,
- an observation for certain mental conditions, and
- a more comprehensive physical examination if deemed necessary.

Although these may have been the established standards, ICM's chief of medical services stated that ICM was instructed to use only a cursory procedure in which no medical history was taken and the visual inspection lasted only a few seconds. Under this procedure, it was difficult, if not impossible, to identify refugees with evidence of mental conditions, alcoholism, or drug addiction.

Furthermore, the medical procedures were inadequate to detect certain communicable diseases. For example, leprosy, a disease common in Southeast Asia but rare in the United States, could easily be undetected. The venereal disease gonorrhea would almost certainly not be seen in females and possibly in males. Tuberculosis (the disease most commonly detected in refugees) and venereal diseases in refugee children (up to age 15) would generally not be found since there were no routine requirements to examine them.

Tuberculosis examinations did not meet modern medical standards and, in our opinion and in the opinion of other medical experts, were too inadequate to prevent refugees with the disease from departing for the United States. Also, the drug treatment provided for tuberculosis was generally too insufficient to prevent it from recurring or being transmitted to the U.S. population. No examinations were performed for malaria, serious parasitic diseases, or infectious hepatitis, all of which are far more common in Southeast Asia than in the United States. Personal health problems, such as cancer or heart and kidney disease—which could prevent refugees from earning a living or result in extensive medical care costs to the United States—would usually be undetected under this type of medical screening.

Examining Refugees Destined for Canada and France

Canada and France have each accepted more than 70,000 Indochinese refugees. However, these countries use medical examination and treatment procedures that are very different from and generally more stringent in comparison to those used by the United States. Medical examinations done for refugees bound for Canada are sent to officials of the Canadian government stationed in Southeast Asia. They review each case and make recommendations to Canadian immigration authorities for final determination. The Canadian medical procedures differ from the U.S. procedures in several other respects. The medical examination

form itself requires a medical history to be obtained with responses to 70 questions, including questions about the refugee's mental status.

The Canadian procedures also require a more complete physical examination, including a blood pressure check, a heart examination, urinalysis, a chest X-ray for tuberculosis and other pulmonary conditions, and a stool examination for evidence of parasitic infestation.

Canadian immigration authorities refuse to admit refugees who have a contagious disease until the disease is treated and rendered noncommunicable. If a refugee's chest X-ray shows evidence or suspicion of active tuberculosis, the individual must undergo a complete evaluation before leaving for Canada. If treatment is necessary, a complete course of therapy is required to render the disease inactive. This therapy lasts at least 6 to 9 months and sometimes as long as 2 years. Canadian authorities also told us that refugees are excluded if they have a health problem which may cause economic difficulties for the country.

The French health system for refugees does not rely on medical evaluations in Southeast Asia, but on segregating refugees immediately upon their arrival in France. Medical evaluations are then performed before refugees are allowed to disperse. Once in France, all Indochinese refugees are physically examined; given chest X-rays, blood tests, and stool examinations; and are treated for any contagious or serious health problems. A refugee who has tuberculosis is sent to a tuberculosis hospital for treatment. Treatment must be completed before the refugee can travel freely in France.

Potential Exists To Transmit Dangerous Diseases

Several diseases classified as "dangerous and contagious" by the U.S. Public Health Service occurred far more frequently in Indochinese refugees arriving in the United States than in the general U.S. population. Included in this category are tuberculosis, serious parasitic diseases, malaria, hepatitis B, and leprosy.

The following discusses each of these diseases in more detail.

Tuberculosis

Tuberculosis may lead to disability and even death. In 1980, about 28,000 cases were reported in the United States, with 1,800 people dying from the disease. Tuberculosis is generally spread by droplet infection (breathing, coughing, and sneezing). It can be transmitted among people in close contact, particularly in crowded and poorly ventilated areas.

At the opening of this century, tuberculosis was reported to be the second leading cause of death in the United States. However, by 1980, tuberculosis had declined to a rate of *12 cases per 100,000 population*. In contrast, CDC announced that Indochinese refugees had a reported rate of more than *1,100 cases per 100,000 population*. GAO's work in California, Hawaii, Maryland, Texas, Virginia, Washington, and the District of Columbia revealed that the refugees did have a high rate of tuberculosis when compared with the rest of the population. For example, Orange County, California, had an estimated 60,000 Indochinese refugees in 1981 with a rate of tuberculosis equal to *488 cases per 100,000 population*. This is nearly *20 times* greater than the rate of tuberculosis for Orange County's general population. In Fairfax County, Virginia, the Indochinese refugees had a rate of tuberculosis equal to nearly *2,300 cases per 100,000 population* as compared with the county's general population of only *9 cases per 100,000 persons*.

One of the factors in relaxing the medical admission requirements for Indochinese refugees was that those refugees who had certain medical conditions would receive followup care by local health departments after they arrived in the United States. While more than \$200 million in Federal funds was provided for followup care in fiscal year 1982, this has still proved a financial burden to local health departments because of gaps in coverage. The ability of local health departments to provide such care depended upon several factors, including (1) a refugee's medical condition being diag-

nosed overseas and (2) a refugee's willingness to report to a health department soon after arrival for treatment.

However, this procedure frequently does not occur. In 1980, Virginia health officials said that 32 cases of tuberculosis in their State had not been diagnosed overseas. We concluded, after studying the medical records, that 16 of these 32 cases were missed overseas, with the other cases developing after refugees arrived in the United States. Similar cases of undetected disease occurred in other localities. Obviously, if a refugee's medical condition is not properly diagnosed overseas, U.S. health authorities have no way to determine, without making another examination, whether the refugee needs followup care.

Followup care is also hindered because refugees often move after arriving in this country. The Department of Health and Human Services reported in 1980 that 43 percent of all Indochinese refugees had moved from their initial arrival location. A GAO sample of 450 refugees who arrived with tuberculosis requiring followup care showed that 9 percent had moved before health officials could examine them. Compounding the problem is that refugees who move usually do so without notifying health authorities or fail to bring with them records of health care that were provided elsewhere.

The specific difficulty in properly caring for transient refugees is highlighted by the case of a refugee who arrived in Boston in January 1981 with a diagnosis of tuberculosis made by physicians overseas. This refugee was supposed to receive followup treatment to prevent the disease from spreading. However, before this treatment could start, the refugee moved to Norfolk, Virginia. Upon learning this, Boston authorities notified Virginia authorities in April 1981. Meanwhile, the refugee moved to Alexandria, Virginia, and, without the prior knowledge of Virginia authorities, went to the Alexandria health department for medical care. The Alexandria health department later lost contact with the individual, who was later located in Fairfax, Virginia. Virginia authorities subsequently lost all contact with the refugee.

These matters are of public concern because a disease such as tuberculosis is infectious. While it is difficult for any physician or health official to specifically trace the spread of an infectious disease, obviously the larger the number of cases of contagious disease existing in a community, the greater the likelihood that the disease will spread.

The chief of the CDC tuberculosis control division noted in December 1980 that while many Indochinese or other immigrants will make a valuable addition to American society, they also represent "a swell of cases of tuberculosis that will ripple across" the country in the decades ahead.

This situation is illustrated by a 16-year-old refugee who arrived in Seattle, Washington, in September 1979, and departed almost immediately for Montgomery County, Maryland. In October 1979, the county health department found that the refugee had tuberculosis. Followup examinations completed by May 1980 of 175 school contacts showed that 10 individuals had been infected with the tuberculosis germ. These individuals had to receive tuberculosis drug treatment.

Parasitic Diseases

The spread of tuberculosis is not the only cause for concern. CDC said that about 48 percent of all Indochinese refugees resettling in the United States had at least one parasitic disease. We discovered that in some locations, as many as 81 percent of the refugees had parasites. Parasitic diseases are caused by worms or other organisms that live in the human intestine. They spread when hygiene and sanitary conditions are poor, and food, soil, and water are contaminated by feces. These conditions occur frequently in Southeast Asia, whereas the risk of developing these diseases in the United States is more limited because of this country's modern sanitary conditions. Some parasitic diseases can produce severe symptoms, including diarrhea, cramps, liver abscesses, and weight loss. While proper sanitary conditions will reduce the possibility of disease spread, persons with

parasitic diseases can infect others by failing to practice good personal hygiene after using toilet facilities or by having direct contact or indirect contact (such as through food handling) with others. Since many refugees are employed in the food-handling industry, the high incidence of certain parasitic diseases is a matter for public health concern. While refugees are not examined overseas for parasites, CDC has recommended such examinations after they arrive in the United States.

Hepatitis B

Hepatitis B is an infectious viral disease that causes inflammation of the liver. It usually spreads through contact with blood or blood products, most commonly through blood transfusions or by accidental exposure to human blood by nurses, surgeons, and dentists, who can become infected through a small wound or cut in the skin. It can also be transmitted through sexual contact. Infants exposed to infected blood from their mother at birth can also contract hepatitis B. The disease is sometimes fatal because of liver failure. In 1980, about 21,000 cases of hepatitis B occurred in the United States.

In January 1980, CDC reported that 13 percent of Indochinese refugees in the United States are hepatitis B carriers, compared with less than 1 percent of the U.S. population. Health department statistics in the locations we visited showed that 12 to 22 percent of refugees settling in those locations were hepatitis B carriers.

In 1979 and 1980, CDC recommended that local health departments test Indochinese refugees for hepatitis B to detect chronic liver disease and to ensure that medical and dental personnel take precautions to protect themselves and their patients. However, of the U.S. locations we visited, only local health departments in Maryland routinely examined refugees for hepatitis B. Health department examinations in Montgomery and Prince Georges Counties showed that between 12 and 18 percent of refugees were hepatitis B carriers, compared with less than 1 percent of the overall population in those areas.

Malaria

Malaria is an infectious disease transmitted through the bite of the anopheles mosquito. Malaria causes periodic attacks of chills, fever, and sweating, and it sometimes causes death. After recovery from the acute attack phase, the disease can become chronic, with occasional relapses.

For centuries, malaria has been one of the most common and serious human afflictions. While not usually contracted in the United States, it is common in Southeast Asia, accounting for a great deal of incapacitating illness and many deaths. At the time of our visit in July 1981, up to 600 cases per month were occurring in Thailand refugee camps. The mosquito capable of transmitting malaria from an infected person to another person lives in many parts of the United States.

In 1980, CDC received reports that 1,864 people in the United States had contracted malaria; of this total, 1,034 (55 percent) were Indochinese refugees. In 1979, only 165 cases were reported, with 20 percent of that total being refugees.

CDC says it is not possible to predict with certainty the proportion of refugees whose malaria is not detected in overseas examinations, yet who could later relapse and cause infection. For these reasons, CDC recommended that local health departments follow up and provide malaria treatment where necessary. However, no location we visited routinely performed such examinations on refugees.

Because of the concern over the possible spread of malaria, the Virginia State Health Department's budget for fiscal year 1982 contains a \$280,000 annual program for mosquito control. The State justifies such action by noting that many refugees are arriving in Virginia from such endemic areas as Southeast Asia, creating the potential for an outbreak of the disease.

Leprosy

Leprosy (Hansen's disease) is a chronic infectious disease which produces lesions in the skin and damages the mucous membranes and nervous system. It can cause paralysis, gangrene, and disfiguration.

Although only occasionally found in the continental United States, this chronic and stubborn ailment is still common in many parts of the world, including Southeast Asia. In the early stages, leprosy is not easy to identify. It has a long incubation period and requires prolonged treatment, sometimes for life. CDC has recently reported that the leprosy germ often becomes resistant to the drug most commonly used against it.

Even though prolonged and close contact is usually required for a person with leprosy to infect another, it is still possible that refugees could spread the disease. CDC's examination of refugees for leprosy in 1975 recorded a case rate of about 150 per 100,000 population. In contrast, only 1 to 2 cases per million have occurred in the U.S. population since 1973.

In every U.S. jurisdiction that we visited, except the District of Columbia and Hawaii, there were cases of leprosy that had been undetected overseas. For example, Texas had 19 refugees with leprosy, 15 of whom had been diagnosed in Texas. None of these refugees were on medication when examined. In a November 1981 letter to GAO, the director of the National Hansen's Disease Center stated that 209 refugees admitted to the United States from 1975 to 1981 had leprosy. According to the director, 122 (58 percent) of these cases were not detected overseas, but most were diagnosed soon after entry into this country.

Changes Needed To Prevent Public Health Problems

With the overwhelming evidence that future public health problems will result under our existing refugee medical admissions policies, sweeping changes are needed in the overseas medical screening and treatment procedures. GAO recommended that refugees receive a more thorough medical examination and appropriate treatment before their departure for the United States. Such an examination would be comparable to those performed under

See REFUGEE, p. 49



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¹William Harrison, *An Historical Description of the Island of Britain* (London, 1577), III, iii, p. 99.

Housing Industry Assessment: Meeting Congressional Needs Quickly

“Times Change, And We Change With Them”¹

The cornerstone of GAO's long and successful existence has been its continuous evolution in response to the needs of the Congress. As the problems facing lawmakers have become more complex, GAO has grown from a relatively uncomplicated voucher auditing office to a highly sophisticated organization capable of providing analytical and evaluative studies. These range from focused financial audits to analyses of broad policy questions.

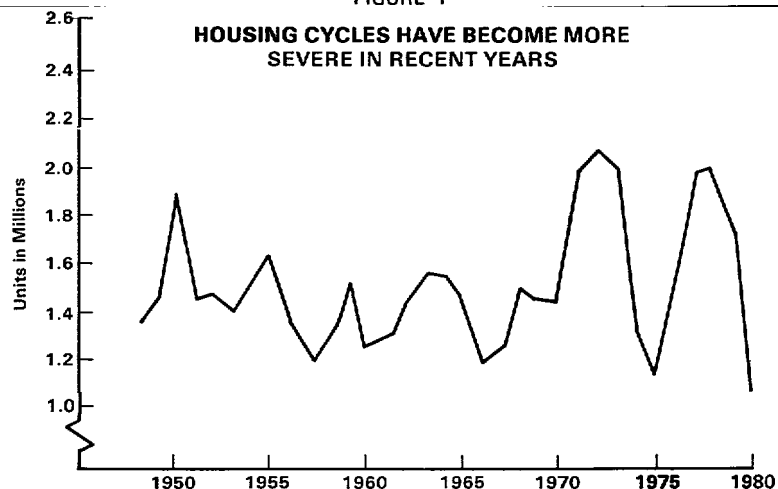
For GAO to maintain its valued reputation for sound and responsive assistance, its evolutionary process must continue. The Congress is now facing a labyrinth of increasingly troublesome economic, social, and political problems and equally complicated legislative proposals. For example, dealing with an unpredictable and seemingly unmanageable economy presents an urgent need

for thoughtful analysis and timely information. To meet such needs, the Congress has increasingly turned to GAO to study highly complex topics while allowing relatively little response time. Much of this work must be completed quickly if it is to be useful to the Congress.

Analyzing an Industry in Crisis

A request received in May 1982 from House Appropriations Committee Chairman Jamie Whitten reflected the economic problems facing the Congress in the uncertain environment of the 1980's. At the time of Chairman Whitten's request, the economy was thought to be near the bottom of a recessionary trough. The Nation's homebuilding industry, reeling under the shock of prolonged high interest rates, was in the midst of its deepest and most prolonged downturn since World War II. Housing starts, which had peaked in 1978 at over 2 million units, had fallen to a long-term low of 1.1 million in just 3 years.

FIGURE 1



Data source: Data Resources, Inc.

Concerned about the housing downturn and its effect on the economy, Chairman Whitten requested that GAO assess Federal policies relating to home construction and suggest ways in which the industry could be revived. He also expressed a particular interest in options which would aid the timber industry, which has close ties to the housing industry. In the same request, the chairman asked that GAO conduct a second study, addressing the overall condition of the economy, with special attention to the impact of monetary policy. That request became the subject of a study separate from the one discussed here.

Does Housing Influence the Economy?

In his request letter, Chairman Whitten noted that the homebuilding industry has often preceded the rest of the economy into recessionary downturns and led the way into periods of sustained growth. This "countercyclical" behavior, as it is sometimes called, is usually explained by the industry's sensitivity to interest rates and the availability of credit, coupled with its size and direct effects on other economic sectors. To describe this process briefly, during inflationary periods the demand for goods and for credit rises. The central bank often responds to inflation with a restrictive monetary policy designed to reduce demand (and inflation) by tightening the availability and increasing the cost of credit. Because homebuilders and buyers rely heavily on credit, the housing industry suffers. This in turn hurts related sectors of the economy. The general economic downturn which follows usually reduces the demand for credit, which lowers interest rates. As this occurs, the housing industry revives rapidly and leads the way out of the recession.

Since this pattern had been characteristic of most recent recessions, Chairman Whitten wondered if a housing stimulus program could accelerate this process and help lead the country out of its current recession. He also asked GAO to determine what kind of program would be most effective in accomplishing this end.

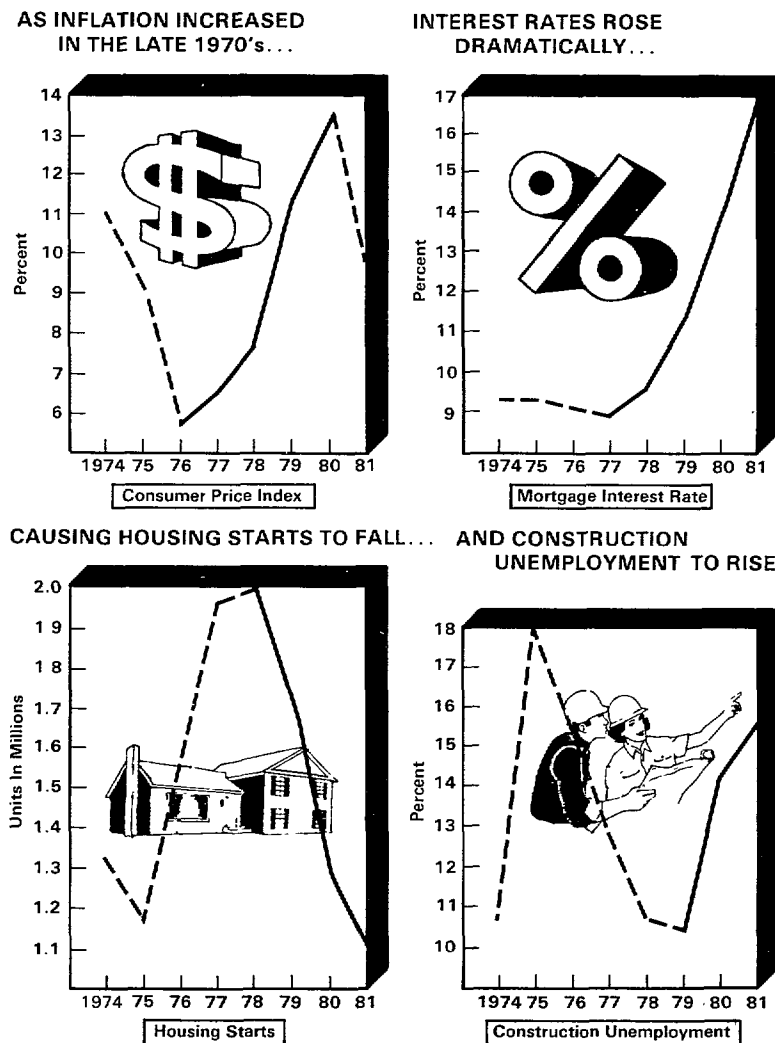
Responding Quickly

In light of the urgency of this problem, Chairman Whitten asked GAO to respond with two comprehensive reports in just 4 months. This short timeframe was only one of many unusual situations facing the "Whitten" team, as the GAO staff became known. The study had to be performed in an economic environment which baffled even leading economists. For example, although homebuilding had usually behaved countercyclically in the past, financial deregulation and a variety of changes in the economy led many experts to question whether the current homebuilding cycle would fol-

low the historical pattern.

On some assignments GAO can depend heavily on past research to help respond quickly to the Congress. However, as a result of the unpredictability of the economy, we could not use this approach in forming opinions about possible solutions. Information had to be as current as possible. Since the economic situation was changing rapidly during the course of our work, it was necessary to revise some background data repeatedly. The breadth of the issues involved also added layers of difficulty to the analytical task. To satisfy the chairman's request, we had to delve into the related problems of unemployment,

FIGURE 2



Sources: Data obtained from the Bureau of the Census; Data Resources, Inc.; and the Bureau of Labor Statistics

housing, the mortgage finance industry, and the timber industry from a variety of economic and programmatic perspectives.

Assuming that this type of request will be more common in the future, we think it is worthwhile to examine how we were able to meet the committee's needs, and in so doing identify those methods and techniques which can be transferred to similar GAO assignments. GAO's current policies dictate many of the assignment planning and management techniques we employed. Other techniques were more unusual. Those techniques which are the most interesting (and transferrable) fall into three categories: planning, staffing, and methodology.

Planning: Fast and Firm

Within a week of receiving the "go ahead" on the request, we clarified and focused the scope of the review through meetings with the chairman, his staff, the Department of Housing and Urban Development, homebuilders, lenders, and various

lobbyists. It was clear from the start that we could ill afford unproductive side-trips. By establishing the assignment's general scope and rough methodology during the first week and deciding that few deviations could be tolerated, we developed tight but necessary assignment milestones. To provide further focus and direction, we also drafted an overall "report outline" during that first week. Because data had not been gathered, the outline had to be adjusted several times. Still, it served as a valuable "homing signal" which prevented us from straying too far from the principal issues.

It was also decided that, from the planning phase onward, the review would be performed under highly centralized leadership where responsibility and accountability rested with the project manager who reported through the division director to the Assistant Comptroller General for Program Evaluation. This created a clear chain of command and permitted rapid decisionmaking during planning and implementation and quick course adjustments when necessary. The responsiveness of

the team was further enhanced by the early and firm decision that all staff assigned full-time to the job were to remain insulated from other demands.

Finally, we involved in our planning process key officials of agencies having responsibility in the finance, homebuilding, and forestry areas. We apprised these agencies of the assignment's mission and direction as soon as possible, and in the ensuing discussions were able to elicit their advice concerning the magnitude of the problem and the feasibility of the homebuilding stimulus options. The early and continued agency involvement through meetings, correspondence, and attendance at a series of symposiums undoubtedly helped shorten the time the draft report was with the agency for comments. These were received in just 1 week and resulted in only minor changes.

All these steps were more easily attained because we started with a highly knowledgeable staff selected early in the planning process.

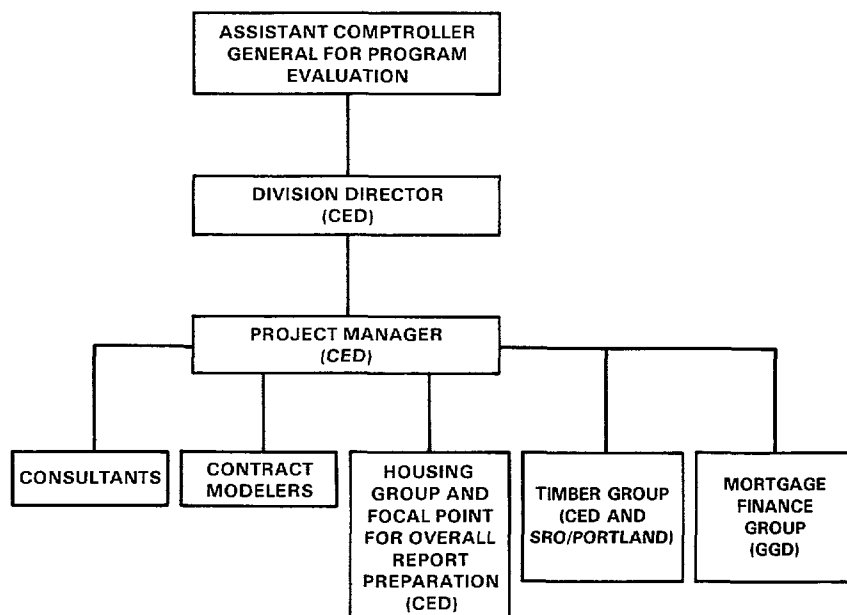
Staffing: The Right People in the Right Slots

The staffing strategy had to accommodate the breadth and diversity of issues and questions entailed in the request. In this area, we had a distinct advantage in that we could "pull" staff from other GAO assignments to permit us to meet our deadlines.

Four GAO headquarters groups—Community and Economic Development Division (CED), General Government Division (GGD), the Institute for Program Evaluation (IPE), and the Office of the General Counsel (OGC)—and two regional offices, New York and Seattle, contributed heavily to the job. Generalists, in-house specialists, and generalists with specialized skills were necessary. A number of the team members from CED, including the project manager and deputy, had from 3 to 8 years of housing experience in GAO. The mortgage finance subproject manager from GGD had an extensive background in economics and government finance, and the Portland suboffice staff was already expert on timber industry issues, hav-

FIGURE 3

THE JOB WAS STAFFED UNDER A SYSTEM OF HIGHLY CENTRALIZED LEADERSHIP



ing worked in the area for many years.

The unique demands of this assignment required a GAO staff with a variety of specific skills. After the key people were pinpointed to lead the work, a high-level staffing committee (the division director, several associate directors, and the project manager) was formed to select audit staff. This committee began with an extremely wide field of consideration and narrowed the group to those most clearly matched to the requirements of the assignment. The time spent by the committee on this skill-to-assignment matching process paid major dividends later.

Generalists were used in the areas of their greatest strength: planning and managing job segments, providing independent analysis, and synthesizing the work of specialists into a final report. To achieve the proper blend of the talents available, the job was segmented so that specialists and generalists often worked together on the same tasks and reviewed each other's work from the start.

In addition to integrating in-house specialists and generalists, we also located outside contractors and consultants to provide expert advice and to perform key tasks that could not be completed in-house in the time available or at reasonable cost. Where possible, we selected experts with knowledge of two or more of the subjects or disciplines relevant to the study, such as housing, finance, or econometrics.

Certain of the outside experts were used extensively in the first few weeks of the assignment to help us locate highly specialized contractual assistance and to advise us on the detailed planning of the job. Another consultant was selected and employed throughout the job to serve as a "devil's advocate" in reviewing products completed by GAO staff and by contractors. Finally, another group of housing economists was selected primarily to prepare specialized symposium papers and to review draft report chapters after the project manager had given preliminary approval. This combination of carefully selected GAO talent and consultant assistance allowed GAO to perform a difficult job as quickly as possible.

Methodology: Innovative Techniques, Segmentation, and Quality Assurance

In developing the job's multifaceted methodology, we first determined what information the Congress needed to decide on alternatives for aiding the homebuilding industry. Most importantly, they needed to know the costs, benefits, feasibility, and speed of implementation of a variety of proposals. With these needs in mind, we scoped the job as if we had a much longer timeframe (perhaps a year) and then selected ways to compress the work to fit the 30-60 days allowed for the implementation phase. To accomplish this, we divided the job into segments according to the principles of PPMA. However, our approach was somewhat unique in that we pursued some segments concurrently which might ordinarily have been performed consecutively. For example, we held three symposiums to help devise new homebuilding op-

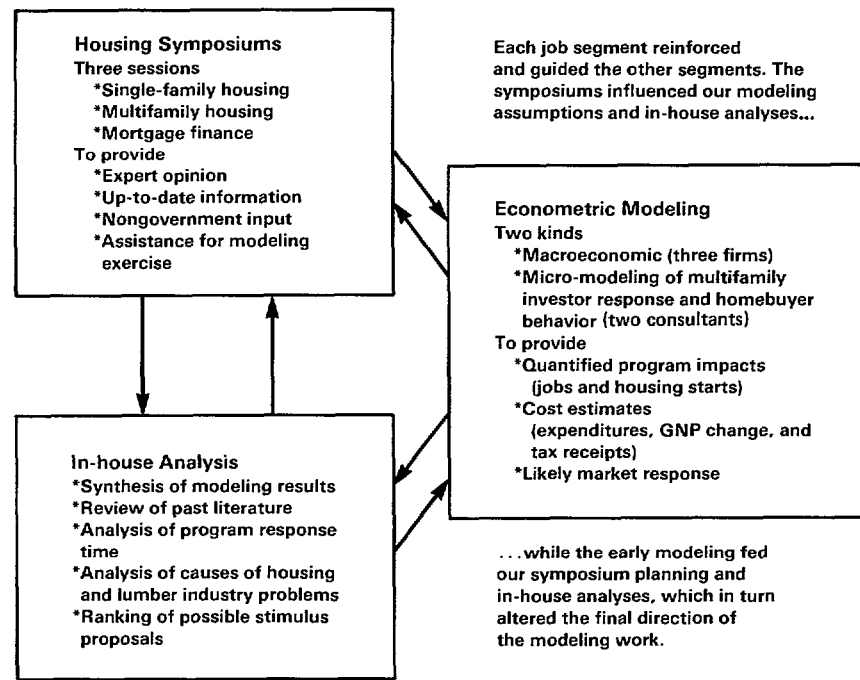
tions while our contractors were beginning to perform econometric modeling involving other options we had already defined. By closely coordinating these two segments, we were able to keep the modelers apprised of new options as they were being devised.

Evaluating the Policy Options

Although our division of the review into concurrent segments allowed us to cover a great deal of ground very rapidly, this approach requires close coordination of segments and good oversight by the project manager. To ensure that our report would not be weakened by the failure of one of its segments, we used the following parallel evaluative approaches to analyze the homebuilding stimulus proposals under consideration: symposiums, econometric modeling, and in-house analysis and evaluation. In this way, the results of one approach could be checked against the others to ensure reasonableness and consistent results.

FIGURE 4

METHODOLOGY



The three evaluative approaches we used were complementary. First, we sponsored three 1-day symposiums, one on the problems in the mortgage finance industry and one each on the single-family and multi-family housing proposals identified in the planning phase. The participants included many of the foremost housing and finance authorities from government, academia, and private industry. The symposiums were organized around prepared papers, responses, and audience input. They covered topics such as the background of the housing recession, the advantages and disadvantages of alternative stimulus proposals, and the possibility of additional alternatives not yet devised. Knowledgeable professionals addressed the questions we posed and faced cross-examination by GAO, agency officials, and other experts in the audience. This technique saved us many weeks and hundreds of staff days of interviewing, literature search, and reading.

Second, we contracted early in the job with several econometric modeling experts. Data Resources, Incorporated; James Alm and James R. Follain of Syracuse University; and Regional Data Associates were charged with performing simulation analyses for selected options to determine their effectiveness in providing short-term stimulus to the homebuilding industry and their direct and indirect costs. We also contracted with William B. Brueggeman of Southern Methodist University to provide an analysis of multi-family program options to determine their relative effectiveness. These modelers were selected because (1) they employed highly skilled individuals with sound reputations who would enhance the credibility of our study, (2) they had previously done work similar to the tasks we needed performed, and (3) they could devote adequate resources to complete their assigned tasks in only 30 days. Certain of the contract specialists performed vital modeling tasks which would have taken longer and cost more in-house, thus saving time without increasing cost. Other experts had such specialized skills that it would be impossible to keep them employed on a continuing basis even in an organization as

large as GAO.

The contract modelers were given segments which were complementary, yet which allowed enough overlap to get some cross-checks on their results and, as it turned out, to cover certain crucial gaps which developed. For example, one of the modelers was charged with analyzing the economic impact of the single-family and multifamily alternatives. When it later became necessary to adjust the workload in this major area, we were able to do so relatively easily. Had we not built in some overlap to begin with, this would have been impossible. We also started two of the contractors with particularly strong housing market expertise almost immediately. We then used the preliminary and more detailed results to refine the early housing start and job creation estimates prepared by Data Resources, Inc., and others.

Third, GAO staff analyzed and evaluated the stimulus options. This involved using GAO specialists, such as attorneys, who provided a legal review, and evaluators who met with officials from over 20 trade associations and four Federal agencies. GAO experts in housing, timber, and mortgage finance used their contacts to locate key officials, industry people, and consultants. We maintained these contacts throughout the job, using them as a research resource and a "sounding board" for our ideas and tentative conclusions. In this way, we improved our report's quality, expedited its production, and facilitated the understanding and acceptance of the report's findings.

We buttressed our evaluation by using outside consultants, such as acknowledged housing experts Patric Hendershott and Craig Swan, to review both our research methodology and our successive report drafts as we progressed. This helped us pinpoint problems that could have slowed production or detracted from the report's quality or credibility.

Some Important Lessons

As in any successful assignment, close adherence to sound manage-

ment principles and GAO's project planning and reporting policies helped the team complete the project on time. However, certain factors which were unusually crucial to the assignment's success should be highlighted. First, the careful attention given to staffing effectively combined the extensive subject area expertise of some team members with the more generalized experience of other staff. Second, the project management approach concentrated responsibility and accountability to an unusual extent with the fully isolated audit team. Third, we were able to divide the task into concurrent and reinforcing segments and bring in outside experts to perform key tasks.

It is difficult to determine how much this assignment would have cost if it had been handled in a more traditional manner and without a high priority. However, we believe that completing the assignment rapidly through the methodology we employed resulted in a less expensive and higher quality report.

Rapid and convenient access to contractual and consultant assistance has proven valuable in a wide variety of assignments. If highly technical and time-critical assignments become more common, this access will become even more important. GAO could explore ways to facilitate this whenever such assistance could be used effectively.

In addition, the likelihood of an increased need for in-house technical expertise could be considered in GAO's long-term staffing strategy and hiring decisions. Specific needs may vary from issue area to issue area, but certain universal specialties, such as economics, finance, modeling, and statistics are applicable to many subjects.

Finally, a higher premium could be placed on further developing subject area expertise in conjunction with management skills among our senior staff. To accomplish this, careful selection of job assignments, formal training in some instances, and other steps may be necessary. This will require careful reconciliation with the need for staff rotation.

Productivity: An Elusive Concept in the Defense Establishment



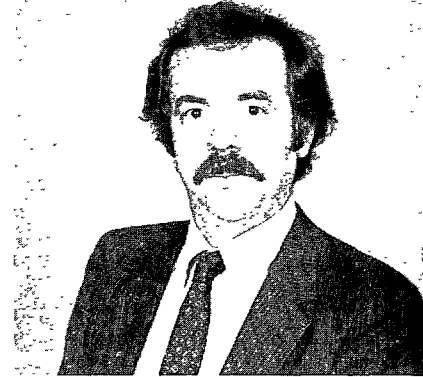
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The authors wish to thank Robert M. Gilroy and Henry W. Connor, senior associate directors in the Procurement, Logistics and Readiness Division, who reviewed and commented on a draft of this article.

Introduction

What constitutes "productivity" at the Department of Defense (DOD) and among defense contractors? How do you measure it? Who manages it? Are "productivity" increases compatible with "readiness" goals in the defense establishment? Is it a significant concept in the current debate over the size of the defense budget? These are some of the questions GAO is attempting to answer in reviewing productivity in DOD and DOD's contractors.

Improving productivity in DOD activities has become increasingly important to GAO and others because of

- an expanding defense budget that has brought louder and louder calls from Members of the Congress and the public for assurances that the additional defense funds be spent efficiently and
- public announcement and comment by DOD officials on major efficiency and productivity initiatives they claim will save billions of dollars.

Many observers believe DOD's productivity can and should be improved. Others question whether the concept can be realistically applied in the defense establishment, given the nature of defense activities.

How Does DOD Define Productivity?

The lines are blurred on the question, "What is productivity?" Definitions vary, even within DOD. The department's regulations define productivity as "the efficiency with which an organization utilizes its resources to provide final outputs." The Department of the Navy is more cryptic, defining productivity as the "efficiency with which an activity employs its resources in the performance of its mission." The Army takes a slightly different approach, defining productivity as "an improvement in the efficiency and or effectiveness with which resources are used to accomplish a function."

Air Force regulations provide a more expanded view of the term. Here, productivity refers to both "efficiency" (the ratio of inputs to outputs) and "effectiveness" (to what extent the output satisfies mission objectives). According to the Air Force, it involves not only questions of quantity and cost, but also quality, timeliness, responsiveness, and readiness. Ultimately, the term productivity is equated with "good management" by Air Force regulations.

The Air Force has adopted the motto "Productivity—It All Comes Back To You." Air Force regulations also refer to a number of "productivity-related programs," many of which would be common to all three services. These 11 programs, established during the last 30 years, include Value Engineering, Manufacturing Technology, Energy Conservation Management, Job Enrichment, and Productivity Enhancing Capital Investment, among others. Several of the programs—Manufacturing Technology and Value Engineering, for example—are used to enhance both internal DOD and contractor productivity.

There are common themes in these varying definitions of "productivity" within DOD. The variations center more on how expansively the concept is interpreted and where the line is drawn between "productivity" and other management responsibilities. More fundamental than the variations in definition, however, is how DOD translates the term into action.

Formalized Efforts To Manage Productivity

The Office of the Secretary of Defense (OSD) established in 1975 a formal DOD Productivity Program directing the military departments and their components to develop annual productivity improvement goals and programs to achieve those goals. In 1979, the program was further refined when the Assistant Secretary of Defense (Manpower, Reserve Affairs and Logistics) was given overall responsibility for its operation, and the program was specifically targeted to DOD's internal support operations. While implementation has varied across the

military services, all of the branches have established offices to develop policy and focus attention on internal productivity. In addition, reporting systems related to productivity have either been established or strengthened.

Until recently, DOD did not have a central office to coordinate defense contractor productivity programs and develop new productivity improvement incentives. Recognizing the need to fill this gap and to focus management attention on improving the productivity of contractors in DOD acquisition programs, OSD last year established the Office of Industrial Productivity. This office ultimately reports to the Under Secretary of Defense for Research and Engineering, who is responsible for all DOD weapons acquisition policies. According to the Under Secretary, the new office will provide a vital link between DOD and U.S. industry by serving as a focal point for the productivity enhancement efforts of industry, DOD, and other government agencies. One of its first initiatives is to expand the currently available guidance and techniques for encouraging productivity-enhancing capital investment in defense industries.

Improving Productivity at DOD: Techniques and Approaches

DOD has established different approaches and techniques for improving productivity. Four basic approaches employed by DOD are

- Productivity Measurement and Evaluation—defining and measuring the productivity of activities, programs, and functions.
- Methods and Standards Improvement—streamlining work procedures and processes and refining labor performance standards.
- Capital Investments—providing more efficient tools, equipment, and facilities.
- Human Resources Investments—increasing employee skill, motivation, and quality of working life.

The productivity measurement and evaluation facet of the DOD productivity program includes three related efficiency measures: work

measurement, productivity indexes, and unit cost comparisons. These measures—or "evaluation techniques"—have been used in programming and budgeting, in analyzing investment alternatives, and in determining manpower requirements. While these applications have improved productivity when used in concert with improved management, serious measurement problems still exist in DOD. For example, only 35 percent of the DOD civilian and 12 percent of the military work force are covered by the productivity measures included in the Federal productivity measurement program. Furthermore, this coverage has not significantly increased in recent years.

While DOD has undertaken initiatives to improve methods and standards, this portion of the productivity program is also limited by many problems. One GAO report, for example, disclosed that many of DOD's most serious methods and standards problems still exist.¹ These problems include the widespread use of subjective or "non-engineered" standards in DOD facilities. Despite these limitations, DOD has reported productivity increases through the application of improved methods and standards. The most intensive applications have been in the depot maintenance, arsenals, depot supply, and real property maintenance activities. All have been extensively reviewed by GAO.

Among the approaches, productivity-enhancing capital investments has received considerable attention, probably because the results can be more readily measured. Productivity-enhancing capital investments are investments in facilities and equipment which are intended to improve productivity and pay for themselves in specified periods of time. Separate funds (described in table 1) were established by DOD to encourage efficient funding and implementation of capital investment projects. The fiscal year 1983 budget includes a total of \$190 million for such projects, the largest amount being \$121 million for Productivity Investment Funds.

¹"Improved Work Measurement Program Would Increase DOD Productivity" (PLRD-81-20, June 8, 1981).

TABLE 1
The DOD Productivity Enhancing Capital Investment Program

INVESTMENT EFFORT	STARTED IN FY	PROJECT COST LIMITS	PAYBACK PERIOD	INVESTMENT TARGET
Productivity Enhancing Incentive Funds (PEIF)	1977	More than \$3,000 to less than \$100,000	2 Years	Small dollar labor saving equipment items in all DOD activities
Industrial Fund Fast Payback (IFFP)	1975*	More than \$3,000 to less than \$300,000	3 Years	Equipment to reduce operating costs in industrial-type activities
Productivity Investment Funds (PIF)	1981	More than \$100,000	4 Years	Major equipment/facilities selected on basis of rates of return—all DOD activities
Component-Sponsored Investment Funds (CSIF)	1981	Established by each Service/ Agency	Variable	Mission-oriented investment projects complement OSD funds

*IFFP was not continued after FY 1982 as a result of capitalization of all equipment in industrially funded activities.

GAO reviewed the Productivity Enhancing Incentive Funds (PEIF) program in 1978 and again in 1981 and verified savings achieved through use of this technique.² The Air Force, in particular, appears to have used the investment technique with some success. For example, the Air Force estimates its 134 PEIF investments in fiscal year 1981 yielded \$14.5 million in annual savings, in addition to significant manpower savings. Many of these small dollar investments have paid for themselves well within the first year of investment. Productivity Investment Funds (PIF) projects, on the other hand, are larger initial investments (in robotics, office automation, and materials handling technology, for example) and generally have a longer expected economic life. DOD has forecast an astounding 11-to-1 return on its 1983 investment in these projects.

Each military service also has pursued efforts to improve productivity through human resource investments. Some of these efforts are part of the DOD's formal productivity program while others are not. The Army, for example, has a relatively large Organizational Effectiveness Program outside DOD's formal productivity structure. This program has more than 600 organizational effectiveness staff officers located in

12 of the 18 major commands. The officers provide a wide range of organizational development services directly to the Army's commanders.

The Navy and the Air Force maintain smaller, though similar, programs. The Navy's Organizational Development Program is part of DOD's formal productivity program. It includes productivity-based incentive systems at various activities, over 300 quality circles,³ and several productivity awareness efforts. This program is focused on Navy's shore establishments and industrial facilities. The Air Force also employs quality circles, job enrichment, and other human resources techniques to improve productivity. While cost savings from these programs are not easily quantified, DOD managers have supported these efforts and claim significant benefits. Over the long term, we hope to analyze in depth several of DOD's approaches to improving productivity through investments in human resources.

DOD Publicizing Success of Productivity, Efficiency Initiatives

In the wake of this administration's sizeable increases in defense spending, DOD has publicized major

initiatives underway to improve efficiency and enhance productivity in the defense establishment. Moreover, DOD has publicly stated that these initiatives are affecting substantial cost reductions or avoidances.

Some recent instances of DOD pronouncements on efficiency and productivity include the following:

- A DOD announcement of the Acquisition Improvement Program (often called the "Carlucci Initiatives") which is aimed at reducing the acquisition costs of major weapons systems through improved productivity and other efficiency measures.
- A DOD announcement on the establishment of a new DOD Office of Industrial Productivity to focus on ways to improve defense contractor productivity and, in effect, institutionalize several of the Carlucci Initiatives (from a June 1982 DOD press release).

- A statement that productivity enhancement and improvements will be among the measures used to identify and eradicate inefficiency and unnecessary defense operations costs (by the DOD Council on Integrity and Management Improvement).

The fiscal 1983 DOD budget presentation included numerous references to the Department's intended productivity improvements or enhancements. Some measures cited to improve productivity were further consolidation of common activities, increased capital investments, and better use of computer capabilities. For the most part, the measures relate to improving DOD's internal productivity and are not totally new

²"Full Potential To Achieve Savings By Investing In Fast Payback Productivity Enhancing Capital Equipment Not Realized" (FGMSD-78-44, July 25, 1978) and "Incentive Programs To Improve Productivity Through Capital Investments Can Work" (AFMD-81-43, April 20, 1981).

³Quality circles are small groups of employees, generally from the same work area, who meet regularly on a voluntary basis during normal working hours to identify, analyze, and resolve job-related problems. Quality circles are founded on the concept that productivity improvements come not only from technological change but also from greater employee motivation and involvement in the work.

ideas. Moreover, the DOD budget document did not specify whether all productivity gains envisioned would be measurable.

DOD also is trying to improve contractor productivity. The Carlucci Initiatives, for example, included measures to encourage capital investments in defense contractor plants that could improve their productivity. Other initiatives included an increase in funds provided for the Manufacturing Technology Program, which pays defense contractors to demonstrate the feasibility of new technologies in manufacturing. The Carlucci Initiatives have been widely discussed in defense establishment literature, public speeches, and congressional testimony. These initiatives have been well received in some defense circles, although some observers have expressed reservations about them. Some point out that there is little new in the initiatives while others view them as a summary and reemphasis of many old concepts that have not been highly successful.

The June 1982 establishment of a DOD Office of Industrial Productivity gives a central DOD focus for its defense contractor productivity efforts and, in effect, institutionalizes several of the Carlucci Initiatives. This office has already developed an approach to test a "package" of contractual arrangements among a small number of contractors, with a goal of eventually including many more in such arrangements. Because the role and structure of the Office of Industrial Productivity is still evolving, it is premature to judge its effectiveness. GAO will, however, be monitoring its achievements.

The DOD Council on Integrity and Management Improvement, established on September 22, 1981, consists of high-level representatives from the three military services. The Council's purpose is to seek ways to improve efficiency and cut costs of defense operations. The Council explores various avenues for ideas, including internal audit reports, program status reports, and management plans. One of many areas it has expressed interest in is productivity enhancement. We have not attempted to assess whether this

high-level council has been an effective catalyst to productivity enhancement in the defense establishment, but we agree that productivity enhancement should interest the Council.

And what has DOD had to say about results? According to recent DOD public statements and congressional testimony on efficiency improvement, productivity enhancements, and cost avoidances, DOD is making great strides. For example, on February 8, 1982, the Secretary of Defense stated that actions already taken by DOD—including some productivity enhancements—would avoid over \$50 billion in costs between fiscal 1981 and 1987.

However, the Congress and the public have already raised questions about DOD's claims. For example, in March 1982 hearings before the Subcommittee on Defense, House Appropriations Committee, DOD officials were hard-pressed to show specific measurable results from the Carlucci Initiatives. During the same hearings, DOD was questioned about the appropriateness of including about \$24 billion in Government-wide "pay caps" in its claimed \$50 billion cost avoidances for DOD.

GAO continues to focus on the reality behind the public image DOD has presented. GAO divisions are monitoring DOD's progress under the Carlucci Initiatives. Also, in response to a specific congressional request, GAO was asked to analyze the \$50 billion cost avoidance DOD has claimed.⁴ GAO is reviewing in greater detail the major initiatives from which the savings were derived.

Focusing More Attention on Productivity Issues

To bring more of a centralized GAO focus to DOD productivity issues, the National Productivity Group—which has been grappling with thorny productivity issues since 1977—has decided to focus a significant portion of its work on the question of DOD's effectiveness in improving its productivity and that of its contractors. The National Productivity Group's efforts in DOD are based on a strategy to achieve long-term, agencywide approaches to improving productivity, in addition to correcting near-term productivity problems in specific programs or activities.

The emphasis the National Productivity Group is now placing on DOD productivity issues does not mean that GAO has previously been ignoring this area. Much of GAO's past and ongoing work involved reviewing issues and making recommendations directed toward enhancing defense productivity. Table 2 lists some of the reports resulting from these previous efforts.

When the National Productivity Group decided to focus more work in the defense area, we relied on previous GAO work and on a far-ranging survey of our own to identify potential reviews that show a high probability of producing significant

⁴Letter Report to Chairman, Senate Committee on Armed Services, dated April 30, 1982

TABLE 2
Some Recent GAO Reports
Which Addressed DOD Productivity Issues

1. *Followup on Use of Numerically Controlled Equipment to Improve Defense Plant Productivity* (LCD-78-427, January 17, 1979)
2. *Impediments to Reducing the Costs of Weapons Systems* (PSAD-80-6, November 8, 1979).
3. *Productivity Measurement in the Defense Logistics Agency Must Be Supported, Improved, and Used* (FGMSD-80-41, April 18, 1980)
4. *Military Standard on Work Measurement—A Way to Control Cost and Increase Productivity* (PSAD-80-46, June 3, 1980)
5. *Incentive Programs to Improve Productivity Through Capital Investments Can Work* (AFMD-81-43, April 20, 1981)
6. *Improved Work Measurement Program Would Increase DOD Productivity* (PLRD-81-20, June 8, 1981)

savings and management improvements. Since then, congressional interest has generated further GAO work in DOD productivity issues.

Our overall strategy for examining DOD productivity issues entails reviewing DOD or service-level policies and programs related to productivity as well as identifying changes needed to improve the productivity of functions, such as equipment maintenance. Reviews of policy issues will involve identifying management issues that are incentives or barriers to productivity improvement.

We also intend to deal with the "nuts and bolts" of productivity. Again, we envision two basic approaches. In the first, we will select a function common to all three services, such as helicopter maintenance. We will measure and compare productivity performance and determine methods that result in improved performance and general management issues that impede improvement. Our second approach will be to select an organization within DOD, such as a depot, and perform a productivity audit. A productivity audit is a thorough review of the organization's results and management to determine how productive it is and how management can improve productivity.

To accomplish our objective, the National Productivity Group is working closely with other GAO divisions in both planning and conducting work. By working together, we hope to capitalize on their expertise in important defense issues and our experience in addressing productivity concerns.

The National Productivity Group's work in this area is off to a fast start. Its current work is primarily in the area of contractor productivity, where it is following up a 1977 GAO

report on DOD's Value Engineering program. This program provides incentives to contractors to increase productivity, improve product quality, and reduce costs through cost-sharing. Several aspects of DOD's Manufacturing Technology and related programs also are being examined. Manufacturing Technology is designed to take lab-tested manufacturing processes and procedures and prove their feasibility on the plant floor as a way of encouraging contractors to adopt state-of-the-art technologies.

Finally, one of the group's most challenging tasks is to determine how DOD can encourage contractors to integrate design and production engineering. Lack of integration is often cited as a cause for greatly increased acquisition costs and lowered productivity. However, the issue also involves many complex DOD policies and entrenched contractor practices.

DOD Managers Emphasizing Productivity But Questions Remain

There are many indications from the defense establishment—whether because of congressional and public pressure or its own recognition of a need—that productivity management and enhancement is being emphasized by DOD management. Such indications include

- the recent formalization of productivity responsibilities within DOD and embellishment of written productivity guidance,
- a statement in DOD's last budget submission that "efficiency," including many specific references to productivity, would rank next to "readiness,"

- the "Carlucci Initiatives" to enhance defense contractor productivity, and
- the public announcement by DOD that various efficiency measures, including productivity enhancements, will save billions of dollars over the next few years.

Questions also remain as to how bright the future outlook will be for productivity improvement in the defense establishment. Our concerns include the following:

- Efforts to improve productivity do not appear to be fully integrated into all DOD activities, although responsibilities for productivity have been formalized recently "on paper."
- Results of the Carlucci Initiatives were questioned, and DOD was unable to substantiate significant measurable results it claimed, during congressional hearings.
- About 65 percent of DOD's civilian and almost 90 percent of its military personnel remain outside the Federal Government's major productivity measurement system (run by the Bureau of Labor Statistics).
- Many areas of possible productivity enhancement have been found and reported by GAO within DOD and at its contractors.

Conclusion

On balance, our contention is that productivity is and must be a viable concept in the defense establishment. While admitting that the concept is elusive, we think that it is for GAO to determine whether productivity-enhancement measures are improving productivity in the defense establishment. The Congress and the public are clearly interested. We believe the National Productivity Group's new emphasis in the area will add impetus to GAO's ongoing and future work related to productivity at DOD and its contractors.



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Understanding How the Defense Department Allocates Resources

Editor's Note: We normally avoid using many acronyms or jargon in *Review* articles. However, because the purpose of this article is to acquaint the reader with DOD's budget process and terminology, the alphabet soup has been left intact.

The Department of Defense (DOD) allocates resources through an evolutionary process embodied in the Planning, Programming, and Budgeting System (PPBS). The process reflects a management style characterized by centralized policy direction, decentralized execution, and participatory management. What makes this structured and logical process seemingly inaccessible to others, however, is the strange dialect in which it is discussed. The purpose of this article is to acquaint GAO auditors and evaluators with the language and environment of DOD's resource allocation process.

Matters dealing with the DOD resource allocation process involve a unique set of terms. Obtaining information or documents requires a working knowledge of some jargon. This ability to speak the language, combined with an understanding of DOD processes, helps the GAO staffer establish early credibility and rapport with DOD staff. There is no need to be intimidated by DOD's jargon—including such terms as Defense Guidance, Program Objective Memorandum (POM), Defense Resources Board (DRB), Program Decision Memoranda (PDM), Budget Estimate Submittal (BES), Five Year Defense Plan (FYDP), and Program Element. These terms all relate to DOD's resource allocation process which is a logical and easily understood mechanism for developing the DOD budget.

DOD's Resource Allocation Process: A Brief Overview

DOD's resource allocation process is driven by an intelligence esti-

mate of the long-term national security threat. Based on that threat, DOD components' missions are developed. DOD components respond with 5-year plans to carry out their missions and ultimately develop the upcoming fiscal year's DOD budget.

The DOD resource allocation process takes place within its Planning, Programming, and Budgeting System (PPBS). In planning, guidance is developed for DOD components, based on the threat to national security. In programming, DOD components each develop a 5-year program to carry out their missions. In budgeting, the DOD components cost out the upcoming fiscal year's portion of their 5-year program.

In the PPBS planning phase, intelligence data is considered by the Offices of the (1) Joint Chiefs of Staff (JCS), (2) Secretary of Defense, and (3) President. Mission needs are developed and programming guidance is issued to the DOD components.

In the PPBS programming phase, the DOD components develop their programs to accomplish the assigned missions. These programs are pictured for a 5-year period and describe resource levels (organization, manpower and weapons strength levels, etc.), rationale, and risk assessment. A DOD component's total program is presented in terms of broad fiscal constraints (compared to the detailed costing which comes later in the budgeting phase) outlined in the Secretary of Defense's programming guidance mentioned above. These proposed programs get a systematic, thorough review within DOD. Many parties work together in seeking the most cost-effective solution.

When these programs are firm, the DOD components cost out their programs and present separate budget estimates. The budget estimates are reviewed within DOD and by the Office of Management and

DOD component submits its POM to the Secretary of Defense.

POMs are reviewed within DOD from June through August to develop more cost-effective alternatives to the DOD components' proposals. The JCS issues a Joint Program Assessment Memorandum (JPAM) in June, which assesses responsiveness of POMs to JCS planning recommendations. OSD also reviews the POMs. In cases where reviewers propose program alternatives, the alternatives are documented in "Issue Papers." All reviewing parties and the DOD components attempt to resolve issues.

Unresolved POM issues are considered by the Defense Resources Board. The Defense Resources Board functions for DOD much the same way as a board of directors does for a large corporation. The Board consists of the Deputy Secretary of Defense (as chairman), key officials of OSD, and the Secretaries of the Army, Navy, and Air Force. Besides assisting the Secretary of Defense in resolving POM issues, the Board reviews Defense Guidance, conducts program and budget reviews, and participates in major system acquisition decisions.

At the conclusion of the POM review, the Secretary and Deputy Secretary of Defense forward their decisions to each DOD component in a Program Decision Memorandum (PDM). DOD components then modify the POMs to reflect PDM decisions, thus completing the programming phase.

The Budgeting Phase

In the PPBS budgeting phase, DOD components cost out the first year of their 5-year program, producing a budget estimate for the upcoming fiscal year. These budget estimates are reviewed within DOD and by OMB. The budgeting phase is completed when the total DOD budget goes to the President.

DOD components submit their budget estimates to the DOD Comptroller in September. This is referred to as the Budget Estimate Submittal, "BES" (pronounced "bess").

A budget review is orchestrated by the Office of the Assistant Secretary of Defense (Comptroller). OSD

and Office of Management and Budget (OMB) analysts evaluate the DOD components' budget estimates to identify cheaper alternatives. OSD and OMB hold joint hearings on the issues. OSD/OMB decisions are documented in Program Budget Decisions (PBDs). The Secretary or Deputy Secretary selects an alternative from each PBD and signs the PBDs. DOD components review and comment on PBDs. Remaining issues between OSD and the DOD components are resolved by the Defense Resources Board by November. After resolution of major issues by the DRB, the DOD components complete final pricing of their budgets.

In December or January, the President makes final decisions concerning the budget he will submit to the Congress in January or February.

For the next several months, the Congress reviews the DOD budget and must pass both authorization and appropriation legislation before the DOD components have an approved budget to start the new fiscal year on October 1.

"FYDP": DOD's Bible of Program Costs

One key document which records PPBS decisions is the Five Year Defense Plan, "FYDP" (pronounced "fy-dip"), an important acronym. The evaluator working on DOD assignments should understand what the FYDP document is, how it is formatted, and the significance of its publication three times a year.

The FYDP is an internal DOD document which summarizes the Secretary's approved programs for all of DOD. The FYDP sets out total resources in terms of (1) forces projected for 8 years and (2) manpower and dollars projected for 5 years. Program costs quoted by DOD people to GAO staff will usually be offered with the explanation that the cost figures are from one of the three annual FYDP issuances. Therefore, how "good" the figures are (i.e., whether they are DOD component proposals or whether they have the Defense Secretary's and OMB's blessings) relates to which FYDP issuance they come from—an important distinction within DOD.

The Assistant Secretary of Defense (Comptroller) maintains the FYDP. The Comptroller's office updates the computerized FYDP continually and issues a hard copy three times each year. The January issue reflects the President's budget figures. When the President submits his budget to the Congress in February rather than January, as was the case the last two times, this version of the FYDP is issued in February. The May issue reflects DOD component POM figures as the first step toward the President's next budget. The September issue of the FYDP reflects DOD component budget estimates.

The FYDP is formatted in a manner which integrates the DOD Major Force Program structure and the congressional appropriation structure. The manpower and dollar projection portion of the FYDP is organized into 10 sections, corresponding to the 10 DOD Major Force Programs. These sections are

- strategic forces,
- general purpose forces,
- intelligence and communications,
- airlift/sealift forces,
- guard and reserve forces,
- research and development,
- central supply and maintenance,
- training, medical, and other general personnel activities,
- administration and associated activities, and
- support of other nations.

The Major Force Program sections are organized by numbered program elements, listed in numerical/alphabetical order. A program element is the basic building block of the FYDP. A program element consists of all manpower and dollars required to support a specific military mission or activity. For example, program element number 11113F is titled "B-52 Squadrons." The FYDP entry for it lists the officer, enlisted, and civilian strength and the dollars programmed out to 5 years to support all the B-52 squadrons in the Air Force. The first character ("1") in the program element number identifies this program element with Major Force Program 1. The "F" in the number identifies the program element with the Air Force. The dollar resources depicted within a pro-

See RESOURCES, p. 49



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Reverse Discrimination: Legal Challenges and Major Court Decisions

The term "discrimination" has been in our equal employment opportunity (EEO) vocabulary for many years. Generally, it refers to the unfavorable treatment of minorities and white women. But white men, too, have felt discrimination. Ironically, the claims of "reverse" discrimination brought by white men usually arise from employers' efforts to redress historic discrimination through voluntary affirmative action. Striking the delicate balance between nondiscrimination and affirmative action is one of the most difficult tasks facing employers.

The controversy surrounding this issue is evident in private conversations within organizations, but there is sometimes reluctance to bring up the subject openly. After all, no one wants to appear to be against affirmative action or unsupportive of organizational goals. Nonetheless, the issues are real, and an examination of the legal challenges to reverse discrimination shows varying interpretations of the Constitution and Federal civil rights statutes in the courts.

The constitutional provision most pertinent to any debate on reverse discrimination is the Equal Protection Clause of the 14th Amendment. This clause holds that no State shall "deny to any person within its jurisdiction the equal protection of the law." In interpreting this clause, the courts have pondered several questions: What does "equal protection" mean? Does it prohibit all State-created classifications? Must all people be treated identically in all matters?

On the other hand, the language of the statute most often invoked, the Civil Rights Act of 1964, is quite clear, but it is often interpreted on the basis of legislative intent rather than on its literal meaning. For example, the law's section 703(a)

makes it unlawful for an employer to classify an employee "in any way which would deprive or tend to deprive any individual of employment opportunities or otherwise adversely affect his status as an employee because of such individual's race, color, religion, sex, or national origin." Even more explicit is the language of section 703(j) which provides that the act's language is not to be interpreted "to require any employer *** to grant preferential treatment to any individual or to any group because of the race, color, religion, sex, or national origin of such individual or group" to correct a racial imbalance in the employer's work force.

Despite the literal language of the act, affirmative action as public policy received major endorsement in a commencement address given by then President Johnson at Howard University in 1965. In what is now known as the "analogy of the footrace," he said:

You do not take a person who, for years, has been hobbled by chains and liberate him, bring him up to the starting line of a race and then say, 'You are free to compete with all the others,' and still justly believe that you have been completely fair. Thus it is not enough just to open the gates of opportunity. All of our citizens must have the ability to walk through those gates. This is the next and more profound stage of the battle for civil rights. We seek not just freedom but opportunity—not just legal equity but human ability—not just equality as a right and a theory, but equality as a fact and as a result.

These remarks, together with issuance of Executive Orders 11246 and 11375 requiring contractors who apply for Federal aid to submit goals

for utilizing minorities and women, changed the emphasis from *nondiscrimination* to *affirmative action*. Thus, public policy went beyond eliminating discriminatory practices and conditions to requiring special efforts to remedy the effects of past discrimination.

Contract Compliance

For the next decade, the contract compliance program and its provision for goals and timetables was repeatedly challenged in the courts. The courts—recognizing that the discretionary power of public authorities to remedy past discrimination is even broader than that of the judicial branch—upheld specific percentage goals and timetables for minority hiring. Judge Frank Coffin, in one of the more celebrated cases of that era, said:

*The first Justice Harlan's much quoted observation that the 'Constitution is colorblind' *** and does not *** permit any public authority to know the race of those entitled to be protected in the enjoyment of such rights,' Plessy v. Ferguson, 163 U.S. 537, 554 (1896) (dissenting opinion) has come to represent a long-term goal. It is by now well understood, however, that our society cannot be completely colorblind in the short term if we are to have a colorblind society in the long term. After centuries of viewing through colored lenses, eyes do not quickly adjust when the lenses are removed. Discrimination has a way of perpetuating itself, albeit unintentionally, because the resulting inequalities make new opportunities less accessible. Preferential treatment is one partial prescription to remedy our society's most intransigent and deeply rooted inequalities.¹*

This philosophy was mirrored in many other decisions, and, although the rationale for upholding Government-imposed affirmative action plans in the construction industry varied from court to court, two primary factors influenced their decisions:

- Discrimination in the industry was shown to exist either through administrative investigation or concurrent litigation.

- In fact, there were no quotas but rather goals requiring good-faith effort which did not involve reverse discrimination against nonminorities and women.

While the construction industry grappled with affirmative action plans, colleges and universities, in an attempt to increase the number of minorities enrolled, instituted affirmative admissions programs. The form of affirmative admissions programs varied among institutions, but the use of race as a determining factor was common to almost all of them. Since, historically, the courts have viewed State-imposed racial classifications with suspicion, challenges to affirmative admissions programs were brought on the basis of the Equal Protection Clause of the 14th Amendment.

The first reverse discrimination case to reach the Supreme Court was an affirmative admissions challenge, and the year was 1974.

De Funis v. Odegaard

The plaintiff argued that the University of Washington Law School violated his right to equal protection of the law by denying him admission while accepting certain minority applicants with lower test scores and grade point averages than his. He contended that, but for their minority status, they would not have been admitted. The trial court found in favor of De Funis and ordered him admitted to the law school. The decision was appealed to the Washington State Supreme Court, which reversed it, saying in part:

We conclude that the University of Washington has shown the necessity of the racial classification herein to the accomplishment of an overriding state interest and has thus sustained the heavy burden imposed upon it under the equal protection provision of the 14th Amendment.²

Since De Funis contended that the racial classification used was not benign with respect to the non-minority students who were displaced by it, the State had to show "a compelling state interest" existed for its policy. In the court's judgment, promoting integration in public education and in the bar was

compelling enough.

Pending appeal of his case to the Supreme Court, De Funis continued as a student at the law school. In April 1974, a majority of the high court declared the case moot, and De Funis graduated that June. But the justices did not preclude a decision at a later date: "If the admissions procedures of the law school remain unchanged, there is no reason to suppose that a subsequent case *** will not come with relative speed to the court."³

That so-called relative speed turned out to be 4 years, and the case was not at the University of Washington but at the University of California. The plaintiff was Allan Bakke.

The Decision Everyone Won⁴

Washington, June 29, 1978—The Supreme Court's long-awaited decision in the Bakke case leaves intact the bulk of affirmative action programs that give special consideration to minorities and women.

The Court voted five to four yesterday to affirm a lower-court decision ordering the University of California Medical School at Davis to admit Allan Bakke. Mr. Bakke is a 38-year-old white man who twice was rejected by Davis, although the university itself rated him better qualified than some of the 16 minority group members admitted through a special program.

Most significantly, however, a five-member court majority voted to overturn the lower court's ruling that race can't ever be a factor in admissions decisions. The four other justices didn't disagree, but said it wasn't necessary to decide that broad question at this time.

The ruling means that universities may continue affirmative action pro-

¹Associated General Contractors of Massachusetts, Inc. v. Altshuler, 490 F.2d 9, 16 (1st Circuit 1973)

²De Funis v. Odegaard, 82 Wash 2d 11, 507 P.2d 1169 (1973).

³416 U.S. 312 (1974).

⁴Regents of the U. of California v. Bakke, 438 U.S. 265 (1978).

grams, so long as they consider candidates on an individual basis and don't set aside a rigid number of places for which whites can't compete. Davis got into trouble because it reserved 16 out of the 100 places in each entering medical school class for minorities; most schools are more subtle about giving special consideration to minorities.⁵

Bakke had charged in State court that his civil rights were violated under the 14th Amendment and title VI of the Civil Rights Act. (Title VI is the provision dealing with federally funded programs and institutions.) The California Supreme Court supported Bakke's right to be admitted to medical school, but solely on the basis of the 14th Amendment.

A majority of the U.S. Supreme Court upheld the lower court's decision, but the legal justification for its action was mixed. Four justices decided on statutory ground (title VI) and one on constitutional ground (14th Amendment).

Although the Davis admissions plan was struck down, the Court, in a separate opinion, ruled 5-4 that schools could take race or ethnic background into account when admitting students. Justice Powell, who cast the deciding vote, said universities could attain "beneficial educational pluralism" by considering, in addition to race, an applicant's work experience, maturity, and history of overcoming disadvantage.

Because of this double ruling, groups for and against goals and affirmative action found their views vindicated.

Since the Bakke decision at best was confused and left unanswered many questions on the legality of affirmative action plans outside the area of college admissions, it would not be long before the high court had another opportunity to rule on a reverse discrimination case.

Weber v. Kaiser Aluminum and United Steelworkers of America⁶

Unlike *Bakke*, the Court ruled decisively in *Weber* that employers and unions could establish voluntary programs, including the use of quotas, to aid minorities and women

in employment. Such programs were legal, the Court held, even when there was no evidence of past discrimination by the employers.

Brian Weber was denied admission to a special on-the-job craft training program at a Louisiana Kaiser plant. Two black workers with less seniority than he were admitted. Weber sued, and two lower Federal courts supported his argument that the quota system resulting from the use of dual seniority lists violated title VII of the 1964 Civil Rights Act. On appeal, the U.S. Supreme Court reversed the lower courts. The majority opinion said that numerical criteria were within the law when they were needed to remedy discrimination, when they were imposed as a temporary measure, and when they did not unnecessarily trammel the rights of white workers.

Justice Brennan stressed the "narrowness" of the majority position. He noted that the plant program was intended to be temporary and would end as soon as the percentage of black skilled craft workers approximated the percentage of blacks in the local labor force. The only question before the Court, he said, "is the narrow statutory issue of whether title VII forbids private employers and unions from voluntarily agreeing on affirmative action plans that accord racial preference."

Was it the original intent of title VII only to forbid discrimination, not to require affirmative action? The Court decided that the literal language of title VII, though forceful, must be interpreted in light of the legislative history. The Congress' goal, as reflected in that history, was to open up employment opportunity for minorities.

Though the Weber decision substantially resolved the issues of reverse discrimination in employment under title VII, it did not directly address employment in the public sector. The Washington State Supreme Court, as in *De Funis*, was to figure prominently in another reverse discrimination case, this one dealing with public workers.

Maehren v. City of Seattle⁷

White firefighters who were passed over for promotion in favor

of minorities charged reverse discrimination. The Washington State Supreme Court unanimously rejected the challenge, relying in part on the Weber decision which permitted voluntary affirmative action plans. But in contrast with the private sector, an affirmative action plan adopted by a government agency is subject to challenge on the basis of the Equal Protection Clause.

The Washington Court decided that the city demonstrated its policies were necessary to accomplish a compelling governmental interest when it showed that minorities were underrepresented in city employment as a whole.

Other Major Post-Weber Cases

Fullilove v. Klutznick (U.S. Supreme Court, 1980). The congressionally mandated 10-percent set-aside for minority businesses on public works projects was upheld. The set-aside does not violate the Constitution since it is reasonably related to the legitimate governmental purpose of remedying past discrimination.

Freeze v. Aro, Inc. (U.S. District Court, Tennessee, 1980). A white security guard lost his claim that his seniority was eroded by preferential treatment for a black guard. Under a conciliation agreement with the Office of Federal Contract Compliance Programs (OFCCP), a black janitor transferred into the guard unit but retained his original date-of-hire seniority, which placed him above the white guard on the seniority roster. The white guard filed a reverse discrimination claim, but the court upheld the employing company on grounds it was complying with the OFCCP requirement to remedy past discrimination.

Association Against Discrimination v. Bridgeport (Second Circuit

⁵Wall Street Journal, June 29, 1978.

⁶United Steelworkers v. Weber, 433 U.S. 193 (1979).

⁷Maehren v. City of Seattle, 92 Wash 2d 480.

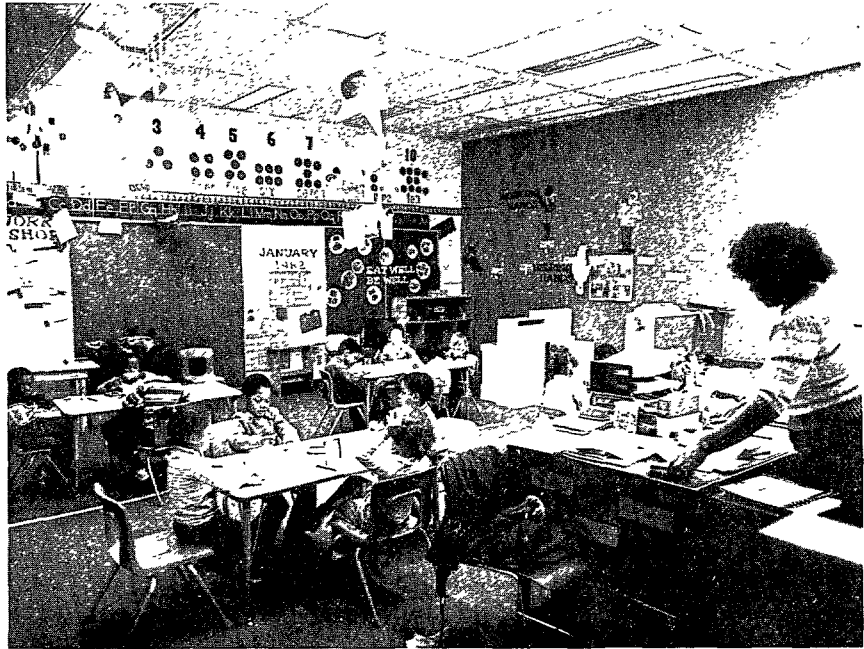
See *DISCRIMINATION*, p. 49



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Agency / Company Day Care Benefits: A Necessity for the 1980's



Workstyles and lifestyles of families have been changing. In many families, the traditional roles of a husband devoting his time to the office and the wife devoting her time to home and family are no longer the norm. The roles are merging, and often both parents have demanding responsibilities in the office as well as at home. This article will examine government and industry trends in child care and focus on specific ways in which employment policies and benefits can be altered to accommodate family responsibilities.

In GAO, the Women's Advisory Council (WAC) has taken a strong leadership position in advocating a creative child care program for the preschool-age children of GAO's working parents. The Council is convinced that a GAO day care program could help to alleviate an employee problem which ultimately affects EEO recruiting, morale, productivity, and agency effectiveness.

The responses to a questionnaire in the Fall 1981 WAC newsletter indicated a serious interest among GAO headquarters employees in a GAO-sponsored day care center. The Council's presentation to the Comptroller General on day care at a December 1981 meeting prompted Mr. Bowsher to request the director of the Personnel Systems Development Project to further investigate the day care issue. The Council is currently working with the Project members to develop a formal day care questionnaire to survey GAO employee interest in various day care options.

The Council also worked with the Office of Organization and Human Development's Counseling and Career Development Branch in presenting a luncheon seminar on the day care options for working parents.

The interest in day care options shown by GAO employees mirrors the growing concern governmentwide.

Unprecedented Changes in the Labor Force

The need for child care for the children of working parents has been increasing dramatically since World War II, and is expected to continue into the 1990's. The increase is due to a greater percentage of mothers of minor children entering the labor force each year.

This trend in the workplace has been termed a "subtle revolution"¹ and the statistical data seems to support this. The U.S. Census Bureau reports that, in 1980, 44 million women, or more than half of those over 16, were in the labor force, compared to only a quarter in 1940. Moreover, this massive swing of women to work outside the home occurred even among those with small children: 45 percent of all wives with preschool children were working in 1980, nearly four times the percentage in 1950.²

By 1980 the U.S. Census Bureau reported there were 7.5 million mothers of preschoolers; by 1990, Census projects there will be 10 million American children who will need work-related child care. In all, 48.7 percent of the children of full-time working mothers are cared for in day care centers or by babysitters who are not related to the child. The figure has doubled since 1958, the Bureau reports. The high cost of living and the increased costs of raising children have been important factors that have forced more American women into the labor force.

The growth in day care is also the direct result of the sharp drop in the number of caregivers available in each home. First, consider that the majority of homes in the early part of this century had grandparents and other relatives residing there in addition to the parents. As recently as 1958, 57 percent of the preschool children of full-time working mothers were cared for in their own homes, usually by the child's father or other relatives.³ Today that is true in only about 4 percent of all households.

Second, the traditional two-parent family itself is becoming increasingly rare. One-parent families resulting from divorce or illegitimacy are more than twice as common today

as they were only 30 years ago. The percentage of children living in one-parent families increased from 12 percent in 1970 to 20 percent, or 1 out of 5, in 1981.⁴ Since most of these single parents must work, the demand for day care services for this group is particularly obvious and acute.

As the number of working mothers increases, so does the need for reliable, quality child care during the workday. This care is not always available in the child's home or with a member of the family. Stress and anxiety generated by this need can distract the parent-employee on the job.

It is the employer who frequently bears the burden of the shortage of child care services in the community. Family demands often interfere with job performance. Tardiness, absenteeism, and high turnover, with accompanying high training costs, are often the result of the scarcity of accessible, affordable child care. The employer pays for the time an employee spends calling the babysitter and worrying about the children after school, in the summer, and on school holidays.

U.S. Child Care Policy Criticized

The U.S. Commission on Civil Rights released a highly critical report (August 4, 1981) entitled "*Child Care and Equal Opportunity for Women*" which concludes that the nation's child care policy is inadequate to meet current and projected needs. The report examined the relationship between the Federal goal of women's equal opportunity and the Federal Government's programs and policies for child care.

In sum, the commission found that inadequate child care restricts women from participating in federally supported education and employment training programs geared to equal opportunity, prevents women from taking jobs or advancing in present ones, and often keeps women in a state of poverty and dependence.

Day Care Demand Outstrips the Supply

Child care services for working parents do not seem to be keeping

up with the increasing number of children in need of services. The Children's Defense Fund estimated the need for child care and the services available in a collection of statistics on working parents, *Employed Parents and Their Children: A Data Book*. Approximately 13 million children 13 years of age and under are in households where all parents work full-time. There are less than 1 million slots in child care centers; family day care (at another person's home) and care at the child's own home by relatives and nonrelatives serve another 6.8 million children. These services provide for only 54 percent of these 13 million children in need of care. Therefore, approximately 7 million children 13 years of age and under probably care for themselves when they are not in school.

Government Support for Child Care Services

In the face of an increasing need, government agencies directly and indirectly have provided support in the area of child care services. The major funding sources for full-day care of preschool children include Federal programs for child care for low income families, food subsidies for child care, and income tax deductions allowed to full-time students and working parents for child care expenses. Since 1980, funding for child care for low income families and food subsidies for child care centers have decreased, but allowable tax credits for child care expenses have increased.

The greatest amount of Federal

¹Ralph E. Smith, ed., *The Subtle Revolution: Women At Work* (Washington, DC: The Urban Institute), 1979.

²Spencer Rich, "New Reliance on Day Care," *Washington Post*, 30 Aug 1982, Sec. A, p. 1.

³ibid.

⁴Women's Bureau, U.S. Department of Labor, *Employers and Child Care: Establishing Services Through the Workplace*, Pamphlet 23, rev. ed., p. 1

support for child care is through the child care tax credit. Any tax-paying parents who use child care services because they are working or attending school can receive some support this way. In 1981, the Federal Government allowed child care tax credits totaling approximately \$1 billion. Beginning in 1982, the Government has provided parents with a modest boost by increasing the child care tax credit, the amount each family can subtract from its income taxes at the end of the year for child care expenses incurred on a regular basis. Instead of a flat \$400 maximum credit per child (or a total allowable credit of \$800 per family), the new credit is based on a sliding scale according to income. Here's how it works:

- If you earn \$10,000 or less you can subtract 30 percent of your child care expenses up to \$2,400. This allows you to subtract \$720 per child or a maximum of \$1,400 per family from your taxes.
- The 30-percent figure drops a point for each additional \$2,000 you earn over \$10,000. For example, if you earn \$12,000 per year, your tax credit is 29 percent, or \$696 for one child.
- Once your income hits \$28,000 or over, the percentage stays at 20 percent. You can deduct \$480 per child or \$80 more per year than previously.

Yet this credit doesn't do much to offset the financial pressures parents face in paying for child care. "You have to assume a family should pay no more than ten percent of its income for child care," said one government official. "Since it's hard to find care for less than \$1,500 a year, anyone with an income of under \$15,000 a year is put somewhere between a rock and a hard place."⁵

Private Industry Increases Its Day Care Support

The private sector has recognized that certain benefits accrue to finding or providing day care. Only a decade ago, company child care was dismissed in most corporate circles as irrelevant or unworkable. But the ever-increasing numbers of women in the work force have made companies realize they must deal with their family needs. Many em-

ployers across the country have adopted family-supportive work policies. They have experimented successfully with company owned, operated, or subsidized child day care, and with a variety of services, benefits, and policies that help working parents.

Companies commit themselves to day care for a variety of reasons. Some see it as a logical and cost-effective way to reduce costs of turnover and absenteeism. Many add day care to their benefits package to remain competitive, to attract and hold top-quality people, and to provide the working conditions that foster high morale and productivity.⁶

"Parents are people whom corporations should look to and provide for because they are an ally, an asset, and they have a stake in that organization," according to Dr. Henry Morgan, dean of the School of Management at Boston University. Speaking at a conference for San Francisco employers, Dr. Morgan stated: "The employer has a responsibility to listen to the concerns of working parents because they may be the most valuable and most loyal employees that it has."⁷

Ultimately, though, executives who back day care make a leap of faith. Most companies support day care because it fits their philosophy of how a responsible corporation should behave. They feel day care is a contribution that builds goodwill and enhances productivity.

So far, approximately 50 American companies (the equivalent of 1 percent of the companies traded on Wall Street) have sponsored child care programs of some kind. Compared to health care, child care is just beginning as a company benefit, but American industry has made a promising start.⁸

Another indication of the interest and acceptance of employer involvement in child care issues is the large number of conferences that have been held around the country on employer policies and benefits that support the child care needs of employees. Dana Friedman, a consultant on employer-related child care issues, reported that she had spoken at over 50 such conferences in 1981-82. The high number of recent conferences is in sharp contrast to the 10-year period 1968-1978

when only 2 conferences on employer-related child care services were reported in the literature.⁹

Policies and Benefits that Support Working Parents

Employers and labor groups face a new problem as they consider family-oriented benefits and child care involvement. Child care services seldom have been included in employee benefit packages, and business planners lack knowledge about programs and policies that can help parents to meet both work demands and family responsibilities.

Many alternative approaches have been used by employers to help working parents, and these approaches can be grouped into two categories: (1) company or agency owned, operated, or subsidized child day care, and (2) employee assistance services, benefits, and policies.

Classified in the first category are the following models:

- the agency/company-owned, on-site model,
- the off-site consortium model,
- the vendor program, and
- the voucher program.

Classified in the second category are

- referral: matching parents with providers, and
- sensitive personnel policies.¹⁰

⁵Geraldine Carro, "Who's Minding the Children?" *Ladies Home Journal*, January 1982, p. 103

⁶Andrea Fooner, "Who's Minding the Kids?" *Working Woman*, May 1982, p. 99.

⁷Marilyn M. Snider and Jayne M. Becker, "Parents At Work: Your Assets for the Eighties," Summary of Proceedings of a Conference for San Francisco Employers, Oct. 29, 1981, p. 7.

⁸Fooner, p. 99.

⁹Women's Bureau Pamphlet 23, p. 4.

¹⁰Office of the Governor, State of North Carolina, *Helping Working Parents: Child Care Options for Business*, June 1981, pp 1-2.

The following sections are devoted to a description of each model, examples of existing settings, and a discussion of benefits and problems unique to each model. It is not the intent of this article to suggest which model is best. Rather, the individual agency or company and its employees should weigh the relative merits of each approach and adopt the option or combination of options that will best satisfy their own needs.

On-Site Child Care Center

A child care center for the use of employees can be established by the employer, by the union, or by a group of employees. Located at or near the work site, the facility may be operated as a division of the company or an independent non-profit corporation. Financial support may include start-up costs; operating expenses, including administrative and maintenance costs; and subsidies for tuition. The employer may hire professional staff or subcontract with a child care management firm.

Existing Settings

There are nine federally affiliated day care centers in the Washington area, such as those for the Labor Department and the Health and Human Services employees. These centers are private, nonprofit corporations owned and operated by the agency's employees (see chart). Other agencies, such as the Library of Congress and the Justice Department, are either investigating the feasibility of establishing a center or are in various stages of planning.

Some examples of company-owned centers are

- Stride-Rite, Boston.
- Intermedics, Freeport, TX.
- Control Data, Minneapolis, MN.
- Corning Glass Works, Corning, NY.

Benefits

- Reduces absenteeism, tardiness, turnover, and training costs.
- Improves worker morale.
- Helps the company recruit employees.

- Properly operated, can provide high-quality care at a reasonable cost.
- Helps the company develop good public relations.
- Provides employees greater access to their children and day care teachers.

Problems/Considerations

Employers considering establishment of worksite centers must weigh these benefits against questions of cost and utilization. Day care centers may be closed due to underutilization (resulting in higher costs), and prohibitive operating costs (especially during times of recession). Underutilization by employees may be explained by parental preference for residential centers.

Off-Site Consortium

A group of employers may decide to share the costs and the risks of establishing a day care center. Some examples of where this approach might be most feasible are a large office building housing several organizations, an industrial complex, or a downtown area with several large employers.

The employer provides seed money for initial construction or rehabilitation of a day care facility and may offer employer assistance through representation on a board of directors and through assistance in such areas as management, budget, personnel practice, fiscal analysis, and legal services. Employer support may underwrite operating costs of the center and partial subsidy of tuition costs for children of employees.

Existing Settings

- Control Data/Pillsbury/North States Power/Lutheran Brotherhood, Minneapolis, MN.
- Mercy Medical Hospital/Anoka Ramsey Community College, Coon River, MI.
- Urban Affairs Corporation Centers (consortium of 14 businesses), Houston.

Benefits

- Increases availability of resources for developing a quality day care

program.

- Spreads costs among member employees.
- Is less susceptible to underutilization because it draws children from a broader base.
- Company is not responsible for administration or liability.

Problems/Considerations

- Requires full commitment and cooperation of all member companies in order to work.
- May serve more community children than children of employees.
- May be underenrolled because of parent preference for residential location.

The Vendor Program

Another type of employer assistance, the vendor program, involves the purchase by the employer of a number of enrollment spaces or "slots" in one or more day care centers or homes and the subsequent resale of the spaces to employees at a reduced price. The employer may subsidize the day care cost based on the income and/or family size of the employee. This is usually referred to as a "sliding fee scale."

Existing Settings

- Orlando County Community Coordinated Child Care, Orlando, FL.
- Polaroid Corporation, Cambridge, MA.

Benefits

- Subsidizes tuition costs of employees' children.
- Can provide quality care at an affordable price for children of employees.
- Does not require capital investment or start-up costs.

Problems/Considerations

- If limited to a few day care programs, may not meet the needs of some families and some children.
- May need to reserve and guarantee payment for spaces a year in advance.

The Voucher Program

Another creative alternative for assisting working parents is the

voucher system. The voucher refers to a coupon given to the employee worth a specified amount toward the purchase of day care from any provider of service. The employer may either fully fund the day care cost or subsidize the day care cost based on the income and/or family size of the employee.

The voucher program is being considered by many companies or agencies that are too small to justify the capital expenditures and management responsibility involved in operating their own center. It is also suited to employers with multiple sites.

Existing Settings

- Polaroid Corporation, Cambridge, MA.
- Ford Foundation, New York, NY.

Benefits

- Recognizes parent preference for residential setting closer to home.
- Offers flexibility to employees who do not live near the worksite, who travel on public transportation, or who have very young children.
- Is useful to the employer with many small business locations scattered over a large area.
- Does not require capital investment or start-up costs.

Problems/Considerations

- Day care may not be available, accessible, and in ample supply.
- Voucher system requires some paperwork to be done by the company.
- A sliding fee schedule based on income or family size will require additional administrative costs.

Referral: Matching Parents with Providers

The most pressing problem for working families today may be finding and selecting child care close to home with hours that match their working hours. Parents of infants find services scarce or nonexistent. Parents of young handicapped children are extremely hard-pressed to find services. Summer, vacation day, and after-school care are special problems for parents of school-age children.

Agencies and companies can provide a valuable service by securing and developing lists of day care providers, updating those lists, gathering specific information about each child care arrangement, printing and publishing this information in map and brochure form, and answering consumer questions received by letter, telephone, and/or in person. Information may include sources of financial assistance for child care, tax information guidelines for selecting a child care arrangement, and even "provider packets" for those who would like to open a day care center or provide care in their own home.

Existing Settings

- Duke University, Personnel Dept., Durham, NC.
- Child Care Resource Center, Cambridge, MA.
- Fairfax County Office for Children, Fairfax, VA.

Benefits

- Makes existing day care services more accessible to families.

- Satisfies particular child care problems of employees.
- Is a good, visible public relations effort.

Problems/Considerations

- May lead to requests for additional services and projects.
- If the referral is a consortium project, requires full commitment and cooperation of all members to work.

Sensitive Personnel Policies

A number of employers have experimented with new personnel policies that are sensitive and responsive to the needs of working parents. Alternative work scheduling is the most popular of these approaches. Some of the most frequently cited variations are

- Flextime—flexible daily starting and stopping times based on employee's choice.
- Regular part-time—part-day, part-week, part-month, or part-year, often involving prorated pay and benefits.
- Job pairing—two or more people jointly responsible for completion of a full-time job.

In addition to the flexible work scheduling, other personnel policies help working parents reconcile work and family responsibilities. These policies include extension of sick leave to cover serious illness of a child and more extensive maternity or paternity leave policies. Finally, some businesses have adopted a fringe benefit package that is called the "cafeteria plan," which allows employees to choose which benefits best meet their own needs.

Existing Settings

- U.S. General Accounting Office, Washington, DC.
- IBM, Research Triangle Park, NC.
- Equitable Life Insurance, New York, NY.
- Honeywell, Minneapolis, MN.

Benefits

- Stabilizes safety, turnover, and absenteeism levels.

See *DAY CARE*, p. 50

GAO parents seeking information about day care options for their children need look no farther than GAO's Technical Library. The library, in conjunction with the Women's Advisory Council, has established a Day Care Information Center, located near the periodical reading area of the library, Room 6536.

The library's day care collection includes lists of licensed day care centers in the District of Columbia, Maryland, and Virginia; guidelines and models for day care; relevant GAO reports and legal decisions and opinions; reports by other Government agencies; and recent articles. The library has also started subscribing to *Parents* magazine, which will be kept on the day care shelf. Guy Wilson, who is in charge of the day care information center, said that GAO staff members are welcome to contribute information about child care to the library's collection.



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The Modern EDP Environment's Impact on Internal Controls and Auditing

Editor's Note This article summarizes a presentation by the author before the Mid-Atlantic Intergovernmental Audit Forum in November 1982, Williamsburg, Virginia.

Modern computer technology presents—along with its obvious benefits—new internal control and audit problems to users, data processors, and auditors. It can create new threats and exposures to errors, fraud, disasters, and violations of data privacy. However, some new internal control methods can be used to deal with these new threats and exposures. There are also new tools, techniques, and methods which can be applied to audit a modern electronic data processing (EDP) system.

Two common problems are that the auditor is considered the bearer of bad news and the data processors usually do not accept or understand the auditor's role. Instead of correcting auditor-reported weaknesses in EDP internal control, the data processors tend to take a well-known historical approach—that of killing the news bearer. They do this by attacking the auditor's technical credibility and sportsmanship.

The modern EDP environment includes some very complex systems and has created the need for a professional who has strong technical knowledge and ability—the EDP auditor. A review of EDP audit standards published within Government, private industry, and public accounting shows two common themes:

- Auditors need to evaluate internal controls in EDP systems.
- Auditors must get involved in system design and development.

Of course, these things are much easier said than done. It is important to recognize that these two principles are a direct result of the problems caused by the modern EDP environment. Many people in the EDP audit community are con-

vinced that auditors cannot effectively carry out their responsibilities in this environment unless these two principles are applied. This concept is best explained by examining the nature of modern EDP systems and how the EDP audit profession evolved to where it is today.

The Traditional Approach

Auditing has traditionally emphasized the verification of records, controls, and the adequacy of controls in manual systems. The approach was developed to ensure the accuracy and completeness of records and reports. In a traditional manual systems environment, auditors could directly observe transaction processing, recordkeeping, and the preparation of reports. The verification of records was performed manually from ledgers and other written documents. Then, an invention came along which has forced auditors to drastically change their thinking—the computer.

The early stages of business automation typically involved single-function application systems, such as payroll. Individual parts of the manual system were automated. These application systems were typically run on a batch or sequential basis. Input transactions were accumulated to create a batch for processing. Batch controls were usually computed by users and used by data processing personnel to verify subsequent steps. After each step, there were manual checks to ensure the accuracy and completeness of processing. If errors were encountered during processing, then processing was suspended until errors were resolved. The users normally had complete control over the organization and cutoff of transactions which affected the records

and which were being maintained for them by the data processing department. Verification of data accuracy and completeness was easily performed by reconciling beginning and ending balances with the total balances of transactions submitted for computer processing.

In a similar manner, auditors verified processing results without either reviewing controls internal to data processing operations or tracing transactions through data processing. This approach is often described as "auditing around the computer." Audit tests were performed using reports produced as normal processing outputs. This audit approach required little specialized knowledge and few specialized tools or techniques. However, it soon became apparent that substantial computer system errors or fraud could exist that this method would not readily detect. Some auditors were shocked into this new awareness when they heard about computer fraud cases, such as the Equity Funding scandal, and more recently, the Wells Fargo case. As a result, auditors now recognize that they must look for two basic internal control conditions in an EDP system—Data and Program Integrity.

Changes in Approach Caused by New Technology

As computer technology developed in leaps and bounds and system designers and programmers became more proficient in using computers, the application systems have evolved into more complex arrangements. Instead of the computer being a user-support tool, it now has become an integral part of most business and government operations. Now, it is usually no longer possible to conduct operations without interacting with the computer during the transaction cycle.

The modern EDP system in a large organization is characterized by online, real-time applications in a distributed communications network. Online means that the system components are under the direct control of software programs in the central processing unit. Real-time means that a transaction is received and

processed as soon as it is entered into the system.

The advent of powerful minicomputers, "intelligent" terminals, and advanced communications equipment has made it cost effective for many organizations to set up large networks of computer systems linking field office processing with a central site. This is done with telecommunications equipment which links two or more terminals and computer hardware components. From an information resource standpoint, this can be a very efficient, productive arrangement. However, it has a drastic effect on the way internal controls and audit approaches are structured. Major problems now exist that were not present before.

The problem of protecting computer system assets—for example, providing the means for disaster protection and recovery—is multiplied by the number of remote sites involved and the need for appropriate backup communication facilities.

Functions that formerly were performed at a single point within the data center, such as transaction entry and data editing/validation, can now be performed online at the terminal level at each site. This can create a problem in consistent application of internal control procedures at each site. What also makes this significant is that, of all the functions involved in data processing, the input function has been the most susceptible to error and fraud.

Some organizations have installed stand-alone miniprocessor systems in several departments that are not integrated with the data center. This creates another problem—users performing the data processing functions. This can be a very bad situation from the standpoint of segregation of duties and responsibilities, a basic tenet of sound internal control.

In a distributed system, a large number of users have access to terminals and share the same data base stored in the central site. This has created a major concern—how to protect the software programs and data from unauthorized access and use.

The development of advanced communications equipment has created new opportunities for un-

authorized system access. For example, computer hardware manufacturers are now selling portable terminals that can plug into a standard telephone jack and dial the central data center. Other new problems include possible wiretaps, illegal terminals inserted into the system, data errors caused by transmission problems, electronic listening devices, and the potential failure of the teleprocessing system. Some computer security experts believe that a 12-year-old, with a \$50 tape recorder attached to a personal computer and 6 months' programming experience, can access a computer system through a commercial telephone line, and then download sensitive information.

The possibility for unauthorized access also can occur because advanced computer systems tend to have very complex design arrangements with multiprogramming and multiprocessing capability. Multiprocessing means that two mainframes can share the same memory and concurrently execute their programs. Multiprogramming means that the computer can execute several jobs almost simultaneously. The processing takes place in fractions of a second under the control of a software package called an "operating system." This software acts as a system manager and usually contains certain control features to limit system access to authorized users, recover and account for attempted penetrations, and isolate system failures. If unauthorized users learn how to bypass the operating system controls, they have, in effect, captured the system and can do anything they want with it. This factor has caused grave concern about operating system programming logic integrity, not only in the central processing unit, but also the terminal and front-end processor segments. A seemingly insignificant design flaw or programming error in the operating system can have a very significant effect. It can cause multiple errors in processing transactions or can result in flaws that facilitate system penetration. The possibility that dishonest programmers are inserting hidden subprograms to penetrate the system or create exception conditions in the applications software is further

cause for concern.

Another major technological development has been the reduction in physical size of memory components. A silicon microchip, 1 inch in diameter, can store over 64,000 characters. Ten years ago, that size memory component would have taken up a large portion of a room. Manufacturers are using such chips to produce a new generation of super-minicomputers in which memory is expressed in megabytes—millions of characters. The ability to store millions of data characters online in a relatively small system package has facilitated the development of integrated data bases. Computer application systems and data records are now being tied together so that a transaction entered into one application system may eventually be processed against and affect the data in a number of previously independent master files. Also, these computer applications systems and data records can perform multiple functions.

Advanced computer programming techniques for managing the movement of data in and out of storage have paralleled advances in memory components. Complex data base management system (DBMS) software packages are now available to manage data as well as provide some of the controls over data access. In an advanced system, the DBMS works in conjunction with the operating system and can greatly reduce data redundancy in a large data base.

Manual systems and early computer systems retained complete audit trails. In the old environment, the audit trail consisted of documents, journals, ledgers, and worksheets that enabled an auditor to trace an original transaction forward

to a summarized total and backward to the original transaction. At many points during the processing cycle, hard-copy documents either existed or were produced from the computer system. However, the advent of telecommunications, data base integration, and automated transaction initiation has completely changed the character of the audit trail. We now think of audit trails as a chronological record of system activities, such as a log of messages or access attempts, as well as transaction journals. Advanced computer systems do not have the extensive paper audit trail that existed in earlier systems. In some situations, visible source documents are eliminated, certain historical records are neither available nor necessary, and other records are available in machine-readable form only. Detailed printed lists of input transactions and periodic master data file listings are being replaced by transaction journals/logs on magnetic tape or disk packs that are printed only if the need arises. Or, terminals can be used to interrogate the master files. This change in the traditional audit trail drastically affects the way the auditor evaluates a computerized system. Significantly, it is no longer possible to audit systems on an annual or periodic basis. Auditing is being forced to move much closer to the point when transactions are processed or shortly thereafter.

Another related effect is that auditors are now as concerned with the "process" which produced the result as they are with the results. Theoretically, with the proper controls in place, an EDP system should consistently process each transaction the same way. This approach is especially prevalent in the commercial world, where certain laws in the

past few years have been interpreted as placing legal liability on the auditors in cases where the internal control process broke down and losses were incurred.

Last, but not least, few organizations have completely converted to a pure advanced online, real-time system, and many systems retain elements of the batch processing environment. In fact, many system environments are "hybrid," possessing elements of both the batch and online processes. To be sure, there is a need to retain the batch controls while adding the controls necessary to cover the new threats and exposures created by the online environment.

Conclusions

The principal effect of a modern distributed system having an integrated data base and invisible audit trail has been a drastic shift in internal control emphasis. The emphasis has changed from people and procedures to the software in operating systems and DBMS. If auditors are really serious about auditing EDP internal controls, then they must become heavily involved in reviewing the integrity of these programs as well as the application software. Further, it has been proven time and time again that it costs 3 to 5 times more to implement a software into a product change than it costs to implement the function into the system during application development. Therefore, if auditors want to ensure that adequate controls are included in a system, there is a logical time to comprehensively incorporate the appropriate hardware and software controls. That time is obviously at the beginning—during system development—instead of after the system has been implemented.



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Computer-Assisted Research in GAO

Computerized data banks created by GAO, private companies, professional associations, and government agencies offer state-of-the-art data gathering capabilities to GAO's evaluators. The person who is aware of the contents in each system may save time, money, and effort by using data that has already been assembled. This article presents an introduction to online systems and their applications in the audit environment.

When GAO was created in 1921, the agency's information needs were well defined. A staff of clerks gathered bundles of forms, vouchers, and canceled checks and then proceeded to review, audit, and reconcile these pieces of paper. Today, 62 years later, the scope of GAO's work, and therefore its information requirements, has expanded. An evaluator performing issue area planning, interviewing agency officials, determining congressional intent, or preparing testimony cannot rely on the data collection techniques of the 1920's to cope with the information overflow of the 1980's. However, the computer technology that created the "information explosion" can also be used to harness it.

The large number of systems, lack of standardization, and high computer usage costs prevent the evaluator from performing his or her own computerized research. Throughout GAO, specialists advise and assist in information gathering efforts. Regional technical information specialists and division librarians monitor legislation, respond to specific reference requests, and provide research assistance through the use of computerized files. Specialists in GAO's Program Analysis Division create and maintain data bases that provide a wealth of data on Federal programs.

Data Base Structure

Computer-assisted research is performed by accessing automated data banks. GAO's "Working Glos-

sary of Computer Software Terms" defines a data bank as

A comprehensive collection of libraries of data. Each library in the data bank is made up of one or more files; each file is a collection of records, and each record is made up of a collection of items.¹

To illustrate this definition, here is a practical example. DIALOG is a commercial data base that contains over 170 subject specialty files. One of these files, ABI/INFORM, offers coverage of business management and administration-related documents. A typical record in ABI/INFORM contains basic bibliographic information, an abstract, and descriptors or index terms. A sample record from ABI/INFORM is shown in figure 1.

External Data Bases

Data banks created by private companies, professional associations, and other government agencies store information that can be useful to evaluators. Hundreds of data banks give access to thousands of files and millions of records. GAO's information specialists access externally created bibliographic and numeric data banks. A bibliographic data base usually provides either a descriptive abstract or the full text of a document. Numeric data bases store statistical or time series data.

The external data banks provide access to an extensive array of topics. Subject coverage relevant to GAO audits includes, but is not limited to, science, agriculture, energy, defense, ADP, community development, law, technology, accounting, public affairs, and sociology. Most GAO personnel are aware that basic background information on a topic can be identified through a computerized search. Legal cases, govern-

¹U.S. General Accounting Office, "A Working Glossary of Computer Software Terms," September 1977, pp. 3-4.

Figure 1

SAMPLE RECORD

82002750 ID No: 82002750
 Computer Crime: Lessons and Direction
 Simkin, Mark G.
 CPA Jnl v51n12 10,12-14 Dec 1981 Coden: CPAABS ISSN
 0094-2049
 Jnl Code: CPA
 Availability: ABI/INFORM Doc Type: Journal Paper

Accountants have an interest in computer crime because accounting information systems are often computerized and many of the systems wind up as the targets of computer abuse. Furthermore, the public is dependent on the outside auditor for representations of fairness and completeness in corporate financial statements. The accountant must be knowledgeable in both accomplished and potential computer fraud in order to provide input to governmental hearings that may result in the passage of anti-crime legislation. The most common characteristic of past computer abuse has been that it has been performed by unsophisticated procedures. Much computer crime occurs because of the absence of controls rather than the failure of controls. In order for accountants to prevent the computer crime, they must be knowledgeable of it. Unfortunately, most computer crime is discovered by luck or accident.

Descriptors: Computers; Crime; Computer Security; Software; Internal Controls; Auditing; Legislation

ment reports, books, journal articles, and other document types on specific subjects are identified.

Although most commonly used at the beginning of an audit, a computer search can also be useful at other stages. For example, legislative changes occurring during the audit can be monitored through the SCORPIO system. If a bill's current status is needed immediately, the search specialist can sit at the computer terminal, access SCORPIO, go into the bill digest file for the 98th Congress, and retrieve the current history of the particular bill. Actions taken on legislation from the 94th, 95th, 96th, and 97th Congresses are also available. These same files will also list the reports printed for each bill. If statements of a specific congressman are also needed, then other files can be used to locate the person's comments in the *Congressional Record*.

Interviews with agency, industry, or academic personnel can be enhanced by knowing basic information located through the computer. Journal articles, books, or dissertations written by the individual may provide background information for the interview. Reading the person's testimony in congressional hearings will also give the interviewer a head

start. The Congressional Information Service file identifies congressional witnesses and their testimony from 1970 to the present.

Newspaper articles are a wealth of data. They provide facts and statistics, reflect public interest in a topic, quote government and industry officials, and often refer to other relevant documents. Data base coverage of newspapers has rapidly grown in recent years. The full text of the *New York Times* and the AP, UPI, and Reuters wire services are now online. *Washington Post* articles and other regional papers are also available through commercial systems.

If the audit could profit from the comments of trade or professional organizations, the *Encyclopedia of Associations* file provides the names of relevant associations and also lists addresses, phone numbers, and background information on the groups.

When a document is not owned in GAO, the OCLC system identifies libraries in the United States that have the item. A request can then be made via computer to borrow the document. If the first library queried does not have the document available for loan, then other libraries can be contacted.

If GAO is not able to access a

data base directly, special arrangements are made to have the system searched through an intermediary. The defense-related data bases are examples of this arrangement. Defense Technical Information Center (DTIC) personnel will access their data base at GAO's request. The DTIC system identifies technical reports of completed research, ongoing research from the Research and Development Planning summaries, and completed and current research in industrial organizations. Additional defense coverage is provided through the Defense Logistics Studies Information Exchange (DLSIE). This facility collects and provides access to logistics studies and models, theses, articles, and additional document types.

Internal Data Banks

GAO and its contractors create data bases of particular relevance to evaluators. For example, by using only GAO's in-house systems, an evaluator could obtain the following types of facts on a specific program or issue area:

- GAO's past reports and recommendations.
- Decisions of the Comptroller General.
- Budget authorizations (legal citations and dollar amounts).
- Reports mandated by legislation.
- Major government information systems, publications, or facilities.
- Federal evaluation reports.

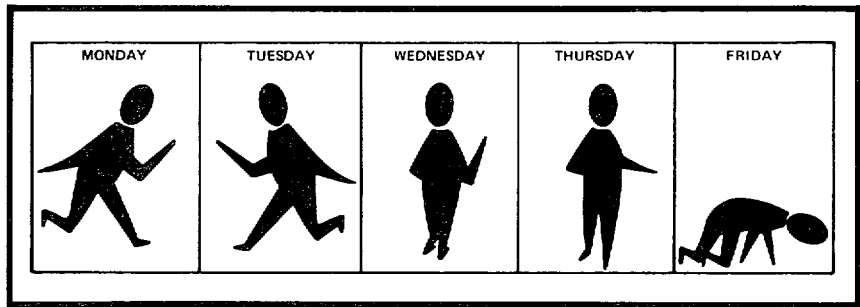
GAO Documents

The GAO Documents data base is the first place to check when looking for GAO reports, testimony, speeches, and opinions issued since the 1970's. This system can pinpoint documents by subject, issuing division, issue area, public law, or a variety of other delineators. The new GAO Reports Recommendation Follow-Up System uses the GAO Documents data base to track agency actions taken in response to GAO's recommendations. The Documents

See RESEARCH, p. 50



A Week's Worth



Wanda L. Blunt

Wanda Blunt works as a control clerk in GAO's Office of Administrative and Publishing Services. She has been employed in sections of that office since joining GAO in 1976. She attended the University of the District of Columbia before enrolling in Officer's Candidate School with the DC National Guard. Wanda has received numerous OAPS awards and commendations. She is also active in many local and community organizations, including the Red Cross, Boys' Club, and the PTA.

Monday

I entered my office this morning ready for the hectic day that Monday always seems to be. Mondays generally are hectic for everyone, but here at the OAPS Control Desk, we seem to get more than our share of work!

The Control Desk is the most recent addition to the Office of Administrative and Publishing Services. Created in November 1982, this function is the central point for submitting work for special editing, graphics, and printing. My job is to make sure each piece of work submitted is accompanied by the proper form, make sure each job is logged in properly, and then to track each job through all publishing phases so that OAPS can meet deadlines.

Sometimes we have customers at the Control Desk who know exactly what they want their finished product to look like. Other times customers are a little vague about what they want. In that case, if I can't answer questions myself, I arrange to have the customer meet with one of our specialists to get all the details ironed out. We try to provide the best service possible since OAPS is a service-oriented organization.

This morning the telephone seemed to be ringing off the hook. Approximately five jobs are scheduled to come out of the printing plant this morning, and the customers are calling to find out when the jobs will be ready. Among my other duties, I update the log to show how each job is progressing through OAPS. A quick check in this log book tells me that all the jobs are on schedule.

Earlier this morning, I heard on the radio that there had been a flood

in my neighborhood and all electric and phone service had been cut off. So much for the "Blizzard of '83!" I guess the rain on top of all the snow is really causing a water problem. During my lunch hour, I ran home to check for any flood damage. Fortunately, everything at home was fine, so I came directly back to the office.

After lunch, the pace of work slowed down. I was able to complete all the requisition forms, log in the work, and leave a clear desk this afternoon. At least I won't have a pile of paperwork waiting in the morning.

This evening, I joined my neighbors in cleaning up after the storm. Although we made some progress, I still haven't been able to dig my car out of the snow.

Tuesday

Today I came in and immediately began logging in some of the work that arrived in the office before I did! Connie Rooney, my coworker at the Control Desk, usually starts work earlier than I do, so she receives and handles a lot of the "early bird" work.

After I got settled with the log book, Connie made the rounds in OAPS and delivered work to editing, graphics, and printing so that those departments could get started on their respective parts of the jobs. Every publication that comes out of GAO—from one-page memos and fliers to full-length books—comes through the Control Desk first. That includes "blue cover" reports, the *GAO Review* magazine, and GAO's annual report to Congress. No matter what the job is, we generally try to get it out of the Control Desk and into processing within 3 hours. As a

rule, we've been pretty successful, but every now and then we hit a snag. Today, I noticed one of the jobs I was logging in required approval from another office because the job had unusual specifications. I contacted the customer immediately, and we had our approval within the hour.

Things were quiet during lunch, so I made a phone call to the senior TAC (Tactical Assistance Center) officer of my Officer's Candidate School (OCS) class. I joined the Army Reserve in 1978 but transferred to the D.C. National Guard in 1981 to attend OCS. I will graduate on August 28, 1983, and will become a second lieutenant in the Army.

At present, I am the platoon leader of my OCS class, and one of my duties is to contact the senior TAC officer twice a week with a status report. If the officer has any information for me, I must make sure that all 11 members of my class are notified of the information.

After lunch, I had to arrange a customer conference between a GAO evaluator and one of OAPS' graphics specialists. Conferencing with the customer is an important part of this job. In the "old" days before the Control Desk was in operation, customers would drop by the OAPS work areas with their questions, which would often slow down the pace of the work. Now that the Control Desk is arranging conferences, OAPS is able to get the work done a lot faster than before.

As I'm closing out the log book for the afternoon, I noticed we logged in 50 jobs today. This might turn out to be a very busy week! Luckily, I don't have anything major scheduled for this evening. I am going to get my curly perm touched up at the beauty salon, and then I will spend the rest of the evening with my son Robert.

Wednesday

Today, as I open the door, I notice six jobs spread out on the floor—customers had pushed them under the door before I arrived. Each job had to be logged in, so I took a few minutes to make sure each requisition was filled out correctly.

Frequently, requisitions will contain mistakes which make it very difficult to track a job through the process. But that's what the Control Desk is

here for—to catch mistakes before they become problems.

Today the work seems lighter than it was yesterday. Most of the jobs are routine, and the telephone isn't ringing very often. However, the paperwork is still piling up.

Most people usually eat lunch during their lunch hour, but I always end up having to do an errand. Today I had to run over to the National Guard Armory and pick up a piece of equipment I need for training. It didn't take me very long, thank goodness.

As soon as I returned to the office, the phone rang. It was a customer wanting to check the status of a report submitted to printing about 2 weeks ago. I checked my daily status report and discovered the job was no longer in the printing plant. One more phone call lets me know that the job went into distribution yesterday for mailing. I called the customer and told him his job was being mailed out, and he seemed very glad to hear the news.

Sometimes we are not so fortunate with our customers. Just 2 weeks ago, a gentleman bypassed the Control Desk and went directly to the printing plant for the status of his job. He was horrified when he discovered the job had never been received in the plant, and our printers had no record of where the job might be. Naturally, our printing people referred the gentleman back to the Control Desk, and I think I helped prevent an embarrassing scene when I explained that the job had been contracted out to a private printing company. I was able to give the customer all the information he needed. It pays to use the Control Desk!

This afternoon, several completed printing jobs arrived in my office, and I called each customer as a pick-up notice. All in all, the day has been pretty peaceful—only 36 jobs logged in.

After work, I was happy to find that the snow had melted enough for me to dig my car out. I'm glad I live so close to a bus line. I haven't been able to use the car for 5 days, and the bus has been a lifesaver.

Thursday

Today it was my turn to open up the office because Connie is on

leave. This also means I'll have to hold the fort by myself. I had been in the office about 5 minutes when my first phone call came in. It was from a customer who had some questions about the illustrations in her job. The customer also needed priority printing—4 working days instead of 7—but I'm not authorized to approve priorities. That has to come from an associate director or someone higher in the customer's division. I explained to the customer that I would consult our graphics personnel if she would try to get the priority approved by the appropriate person in her division.

I spent the rest of the morning logging in jobs, bringing our logs up to date, and answering phone calls. When the morning goes smoothly, I can really see our finished work adding up.

After lunch, I came back to the office and called this morning's customer about her illustrations. Our graphics section will be able to meet her request, but the illustrator would like me to arrange a conference for ironing out details. It looks like the customer has been able to get priority approval, so I need to notify the printing plant of what date they can expect to receive the job.

After getting home, I ate a light meal and checked Robert's homework. Since I was so tired, I went to bed early.

Friday

I feel much better this morning than I did yesterday afternoon! Today is my favorite day of the week. I like my job, but I like the weekends, too.

I began to help Connie sort out and log in the first requisitions of the day. I know these won't be the last ones, either. Today, we've gotten a job that already needs some changes to it. On requisitions which are to be reworked, an asterisk is used to distinguish the rework from the original. Also, this system is used to indicate which reworks are caused by contractor errors and customer errors. This information is very helpful in our productivity reports.

I spent the late morning checking with the editing, graphics, and printing staffs to make sure our log book is accurate. Connie and I find that

See WEEK'S WORTH, p. 51

Legislative Developments



Judith Hatter

Federal Oil and Gas Royalties

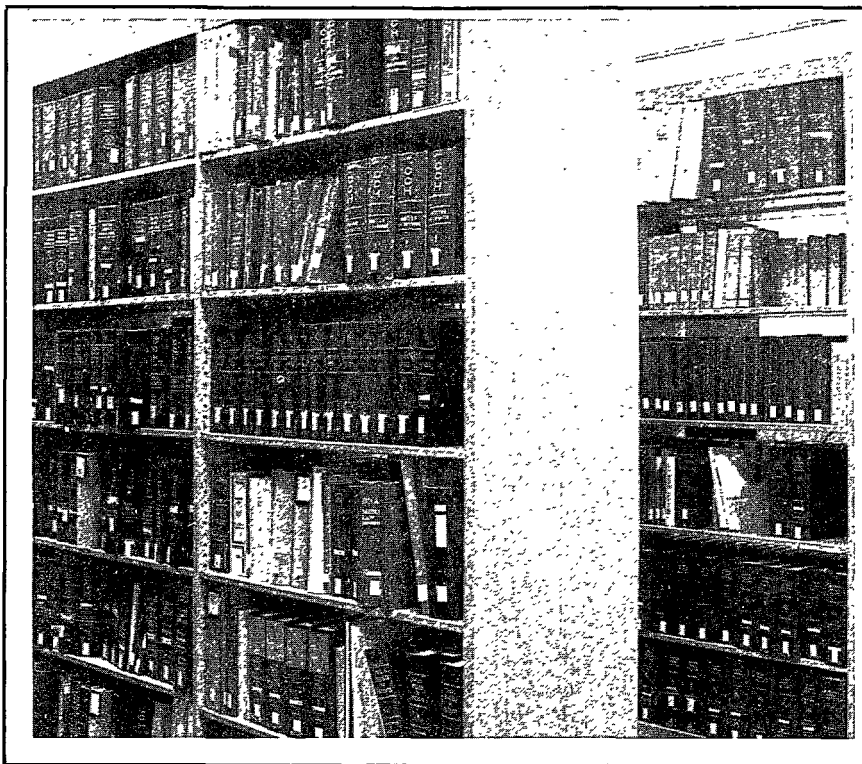
During the debate in the Senate on the Federal Oil and Gas Royalty Management Act of 1982 (Public Law 97-451, January 12, 1982), Sen. Henry M. Jackson of Washington referred to the fact that "For over 20 years, the General Accounting Office has been reporting on the need for major improvements in the Federal Government's oil and gas accounting system. * * *" He went on to say that the findings of the Linowes Commission on Fiscal Accountability of the Nation's Energy Resources "basically confirm the reports of the General Accounting Office * * *."¹

Consolidated Federal Funds Report Act of 1982

The Comptroller General is to conduct a review and report to the Congress no later than October 1, 1984, on the data systems and reports to be prepared by the Director of the Office of Management and Budget pertaining to data on geographic distribution of Federal funds under the Consolidated Federal Funds Report Act of 1982 (Public Law 97-326, October 15, 1982, 96 Stat. 1607).

Refugee Assistance

The Refugee Assistance Amendments of 1982 (Public Law 97-363, October 25, 1982) amends the Immigration and Nationality Act to require



annual audits by the Comptroller General of funds expended under grants and contracts incident to the initial resettlement program.

ZIP + 4 Proposal

Congressman William D. Ford of Michigan made the following remarks concerning the GAO study of the ZIP + 4 proposal:

** * * during consideration of the 1981 Reconciliation Act, the House, acting on a recommendation by the Post Office and Civil Service Committee, voted to bar implementation of the controversial ZIP + 4 proposal of the Postal Service until October 1983.*

The Committee contended, and the House agreed, that the Postal Service was moving too hastily on a program which is extremely worthwhile in concept, but which needed more study.

Today the General Accounting

Office released the findings of its own study on ZIP + 4. I am pleased to note that the GAO report ratifies the decision of the House: ZIP + 4, if carefully implemented, will be an extremely worthwhile program.

GAO concludes that successful Postal Service automation through ZIP + 4 will result in lower future postal costs and lower postal rates for all Americans.

From the beginning, the committee had no problems with the concept. But, like the GAO, it saw the need for additional time and study. Now, in its report, GAO has recommended an implementation procedure which should guarantee success.

I congratulate GAO on an outstanding job.²

¹Cong. Rec., Vol. 128 (Dec. 6, 1982), p. S13941.

²Cong. Rec., Vol. 129 (Jan. 6, 1983), p. H77.

See DEVELOPMENTS, p. 47

Reflections



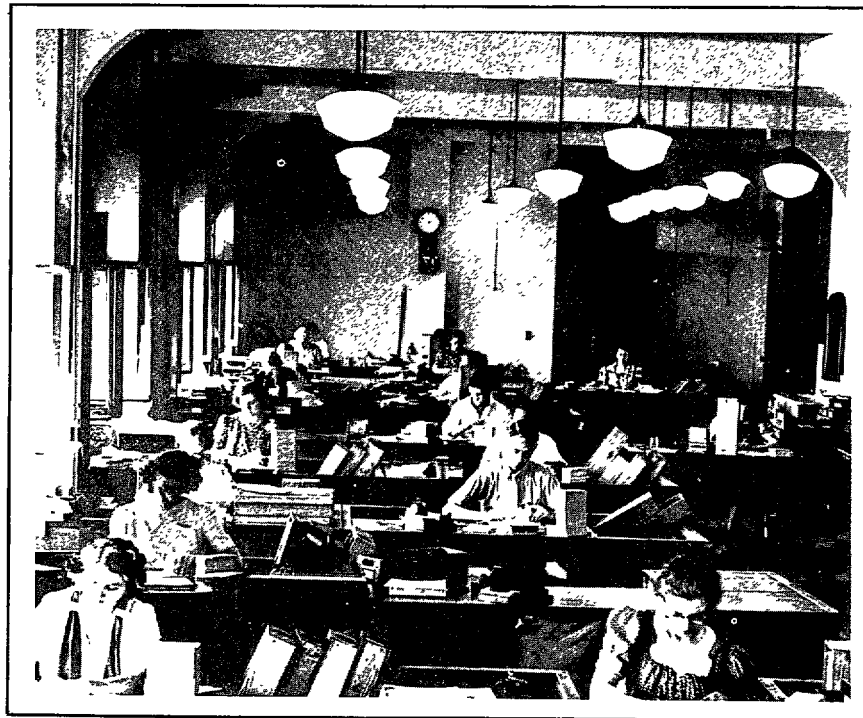
Diane E. Grant

Since the *Staff Bulletin* stopped appearing in March 1960 and the *GAO Review* was not published until the winter of 1966, here are several interesting items taken from the 1963 summer issues of the *Watchdog*. Twenty years ago

- Walton H. Sheley, director, Mission Analysis and Systems Acquisition Division, was designated by Comptroller General Joseph Campbell to be the manager of the New Orleans Regional Office, effective in July 1963.

- Henry Eschwege, Assistant Comptroller General for Planning and Reporting, was designated by Comptroller General Joseph Campbell to be an assistant director of the Civil Accounting and Auditing Division, July 1963.

- Effective August 19, 1963, Joseph Campbell, Comptroller General, announced the establishment of the International Operations Division (now the International Division) under the supervision and direction of Oye V. Stovall, formerly deputy director of the Civil Accounting and Auditing Division. Mr. Stovall was responsible to the Comptroller General for the administration and operation of that division and for carrying out the accounting, auditing, and investigative functions of the General Accounting Office relating to all U.S. Government programs and activities conducted in foreign countries, excepting those specifically exempt from audit and investigation by law. This included military and



civil activities of the various Government agencies that were responsible for the programs administered in foreign countries.

The following agencies and/or agency programs were assigned to the director, International Operations Division, for the development and execution of work plans and audit programs:

- Department of State, including the Agency for International Development and the Peace Corps, but excluding the International Boundary and Water Commission, U.S. Section,
- Department of Defense—Military Assistance Program Functions,
- Export-Import Bank of Washington,
- United States Information Agency,
- Department of Commerce—International Programs and Affairs,
- United States Arms Control and Disarmament Agency,
- Department of Agriculture—Foreign Agricultural Functions, including Agricultural Trade Development Programs and Assistance,
- Department of the Treasury—International Finance Functions.

The European and Far East Branches, Defense Accounting and

Auditing Division, were also transferred to the International Operations Division.

The directors of the Civil Accounting and Auditing Division and the Defense Accounting and Auditing Division, in cooperation with the responsible office heads, arranged for the transfer of staff to be assigned to the new division.

Ten years ago, in the summer 1973 issue of the *GAO Review*, you will find

- Werner Grosshans, deputy director, Procurement, Logistics and Readiness Division, was designated an associate director in the Logistics and Communications Division, effective July 22, 1973. Mr. Grosshans was responsible for GAO reviews of Federal materiel management and readiness of military forces.

- John F. Simonette, associate director, Accounting and Financial Management Division, was designated an assistant director in the Office of Policy, effective March 18,

See REFLECTIONS, p. 47

REFLECTIONS, *con't. from p. 46*

1973. He was involved in the formulation, application, and communication of office policies.

- Robert H. Hunter, Jr., assistant general counsel, was designated senior attorney in the Office of Gen-

eral Counsel in October 1972.

- Ronald F. Lauve, senior associate director, General Government Division, was designated an assistant director in the Manpower and Welfare Division, responsible for audits at the Social and Rehabilitation Service, Department of Health, Education,

and Welfare, involving the welfare and Medicaid programs, services programs for older Americans, and the vocational rehabilitation program. Also, he was responsible for audits involving the Office of the Secretary of Health, Education, and Welfare, effective April 15, 1973.

DEVELOPMENTS, *con't. from p. 45*

Merchant Seamen Health Care

On January 26, 1983, Sen. Daniel K. Inouye of Hawaii introduced a sense of the Congress resolution (S. Con. Res. 4) that it is in the national interest for GAO to conduct a comprehensive review regarding the importance of ensuring that our Nation's merchant seamen once again have ready access to high-quality health care.³

Audit of the Federal Reserve

Among the first measures introduced in the 98th Congress was one by Congressman Ron Paul of Texas to require GAO to conduct a complete and thorough audit of the Federal Reserve System and banks (H.R. 877).

GAO Audit of Legislative Accounts

On January 6, Congressman Elliott H. Levitas of Georgia reintroduced as H.R. 627, the Legislative Accounts Audit and Control Act, which requires an annual audit by GAO of House Members' and committees' accounts. He states:

**** At the present time, every appropriation made by the Congress for any function of the Federal Government is subject to an annual audit by the GAO, except for the Congress of the United States. ***⁴*

Civilian Cost Overruns

Sen. William Proxmire of Wisconsin introduced S. 421, to require the Comptroller General to ascertain increases in the cost of major acqui-

sition programs of the civilian agencies of the executive branch.

The Senator explains that the bill is "to stop cost overruns on nondefense Government projects."

**** The Comptroller General would be responsible for accumulating statistics on the cost of civilian projects, when any project runs over the 25-percent limit, the Comptroller General would have the power to notify Congress and the agency responsible. From that point on, the money stops until Congress gives the go-ahead. ***⁵*

LOCATION, *con't. from p. 6*

tive from each of the other divisions and offices. Listed here are the Secretarial Council subcommittees and what each plans to accomplish during the coming year.

Subcommittee on Electronic Word Processing (EWP): The subcommittee plans to monitor GAO's transition from Lexitron to MICOM and to identify ways to make the transition more efficient and orderly. Specific activities include

- ensuring that operators are initially trained and that additional instruction is available to those who need it,
- evaluating and resolving potential health risks associated with equipment operation,
- making MICOM guidelines consistent with the new secretarial manual and creating a MICOM manual with uniform directions on reporting and product formats,
- resolving existing problems on

the conversion of Lexitron tapes to MICOM disks (tape erasures, safeguards, and disk storage), and

- allowing an adjustment period before assessing MICOM operators' performance.

The subcommittee plans to work closely with the Office of Organization and Human Development's Training Group to make sure that specific training needs are met during the MICOM transition period.

Subcommittee on Personnel System/Appraisals: The subcommittee plans to obtain feedback from managers and employees covered under the new Secretarial/Clerical Performance Appraisal System (SCPAS) on whether they understand the appraisal system and whether rating standards are being consistently applied. Specific activities have included

- receiving feedback from a random sample of employees covered under the new appraisal system in relation

to the implementation of the new appraisal system within GAO and

- obtaining formal responses from a random sample of managers and employees covered under the appraisal system through distribution of a questionnaire between the end of the first rating period and the midpoint rating period.

The council believes the information obtained should be especially useful to each office's efforts in monitoring the appraisal system. The subcommittee also anticipates working with the Personnel Systems Development Project on other related personnel system matters.

Subcommittee on Procurement: The subcommittee plans to work with OAPS to identify specific problems and propose solutions to improve activities relating to publication services, administration, and document production. Specific ac-

³Cong. Rec., Vol 129 (Jan. 26, 1983), p. S563

⁴Cong. Rec., Vol 129 (Jan 6, 1983), p. E75.

⁵Cong. Rec., Vol 129 (Feb. 3, 1983), p. S989-990.

LOCATION, con't. from p. 47

tivities include

- upgrading the quality, quantity, and availability of supplies,
- improving the timeliness and reliability of mail services, maintenance repairs, and facilities services (i.e., telephone, electrical, building maintenance, and labor services), and
- assessing the quality, quantity, and maintenance of office machines.

Subcommittee on Training: The subcommittee plans to look into secretarial/clerical training needs and availability of appropriate courses. Specific activities include

- assuring the availability of internal training in the regional offices,
- counseling secretaries on their training needs and providing required training,

- determining the availability of advanced training (offered by professional organizations or college courses related to the functions at GAO), not necessarily secretarial-related, and
- monitoring the status of Upward Mobility.

Subcommittee on Recruitment/Publications: The subcommittee plans to provide Personnel with information to improve the recruiting and hiring of high-quality secretarial/clerical staff. The subcommittee also plans to assure that the secretarial staff is aware of orders, manuals, etc., dealing with work processes or environments critical to them. Specific activities include

- ensuring that secretaries stay involved in recruiting and hiring clerical staff,

- identifying staffing needs to better balance the ratio between secretaries and the evaluator/management series (more evenly distribute the work flow), and
- reviewing and commenting on changes to GAO orders, manuals, etc., that affect the secretarial/clerical staff.

In addition to these items listed, the council will also consider other activities suggested by council members or by GAO's management to promote direct communication links between the secretarial/clerical staff and GAO management. The council's efforts will focus on improving the quality of the secretarial/clerical staff in GAO in an effort to support GAO's overall mission, as well as to provide feedback to management for improving day-to-day operations.

MANAGER'S, con't. from p. 8

more deeply attached to others and yet more separate and more centered in the self.

Levinson makes an extremely good case for the proposition that men tend to go through a predictable pattern of periods or seasons and attempt to come to grips with the various challenges and developmental tasks which accompany each season. I think the basic utility of this book to managers is in helping them understand the kinds of conflicts and issues that affect themselves and the people with whom they work. Increasing understanding of the adult development process cannot help but improve one's ability to appropriately adjust behavior and approaches in dealing with others.

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TOPICS, con't. from p. 11

quality design must be balanced against constraints, such as time and cost. Choosing an evaluation design from available options is a judgmental process set in motion by the need to answer specific questions and guided by considerations of time, cost, and quality.

For More Information

Cronbach, L. J. *Designing Evaluations of Educational and Social Programs*. Jossey-Bass, 1982.

A reconsideration of design issues by a major contributor to the field.

Hoaglin, D.C., Light, R. J., McPeck,

B., Mosteller, R., and Stoto, J. A. *Data for Decisions: Information Strategies for Policymakers*. Abt, 1982.

A very readable account of ways to provide decisionmaking information. Many examples.

See TOPICS, p. 49

TOPICS, con't. from p. 48

The Institute for Program Evaluation. *Designing Evaluations.* GAO, forthcoming.

A guide to designing evaluations for which Congress is the primary client.

Rossi, P. H. and Freeman, H. E. *Evaluation: A Systematic Approach,*

Second Edition. Sage, 1982.

A leading introductory textbook in evaluation.

Toulmin, S., Rieke, R., and Janik, A. *An Introduction to Reasoning.* Macmillan, 1979.

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ing originated by the British philosopher Toulmin.

Wholey, J. S. *Evaluation: Promise and Performance.* The Urban Institute, 1979.

An approach to design based upon the "sequential purchase of information."

REFUGEE, con't. from p. 16

U.S. standards and would be closer to the requirements of immigration law. The cost is modest to carry out such procedures. The United States spends about \$27 for each refugee examined overseas using its limited screening standards. A thorough medical examination would cost \$58 per person, a modest cost increase when compared with the considerable amount already spent by the United States. Examinations overseas would also help avoid the other difficulties in dealing with refugees' medical problems after they arrive here.

GAO expressed its concerns and recommendations for corrective ac-

tion on three occasions in congressional testimony and raised questions with the Department of Health and Human Services about whether refugee medical procedures were adequate. In reauthorizing refugee admissions legislation for fiscal year 1983, the Congress appropriated funds totaling \$14 million to further help local health departments provide health screening and medical care for Indochinese refugees. The Congress emphasized, however, that this was not enough and instructed the Secretaries of HHS and State, as well as the Attorney General, to improve the overseas medical processing of refugees. In response to recommendations in

GAO's report, HHS agreed to require all refugees overseas to receive a more thorough medical examination followed up by appropriate treatment, as necessary. HHS also agreed to use more acceptable medical practices in conducting the examinations. These new procedures include a more thorough examination and treatment for tuberculosis, hepatitis B, and mental conditions. Further, HHS agreed to ensure that physicians stationed overseas and in the United States are provided with refugees' medical records. This approach should go far toward improving the health status of refugees while better protecting the health of the American public.

RESOURCES, con't. from p. 29

gram element are allocated into the following congressional appropriation headings:

- Research, Development, Testing, and Evaluation,
- Procurement,
- Military Construction,
- Operations and Maintenance, and
- Military Personnel.

Conclusion

DOD program or system costs are usually important factors to an auditor evaluating DOD matters. Costs obtained from DOD people or docu-

ments are invariably identified as being the output of a specific stage in the DOD resource allocation process.

Auditors need a basic understanding of the DOD resource allocation process to appreciate the relative volatility of cost data obtained. That is to ask, for example, are the costs perhaps the most up-to-date estimate of a DOD component program manager, but subject to significant change; are the costs of a somewhat older estimate, but approved by the Secretary of Defense; or are the costs the most officially approved available, having

been submitted by the President to the Congress, albeit much earlier than the aforementioned estimates?

An auditor obtaining cost figures from DOD will invariably encounter another potential stumbling block—unique DOD resource allocation jargon.

Understanding the DOD resource allocation process and terms will make life easier for the auditor evaluating DOD matters because he or she will be able to relate to the volatility of cost figures obtained and will have enhanced credibility with DOD people.

DISCRIMINATION, from p. 32

Appeals Court, New York City, 1981). The Supreme Court refused to hear an appeal from white firefighters that a minority hiring quota was unlawful reverse discrimination. The lower court had ordered minority hiring after finding that the department used a discriminatory hiring exam.

Van Aken v. Young (U.S. District

Court, Michigan, 1982). The court ruled that the Detroit Fire Department's voluntary affirmative action plan was not reverse discrimination but lawful because the department had a record of past discrimination, still suffered from serious racial imbalances, and whites were not excluded from competing for positions.

Jurgens v. Thomas (U.S. District

Court, Texas, 1982). The court found that the Equal Employment Opportunity Commission hired and promoted women and minorities in percentages that far exceeded their representation in the U.S. labor force. The court declared that EEOC's preferential treatment of

See DISCRIMINATION, p. 50

DISCRIMINATION, from p. 49

these groups was unjustified because it had no past record of discrimination. The court also said title VII does not require or permit preferential treatment intended only to match or exceed labor force percentages. The class action suit was brought by a white EEOC attorney after he was passed over for promotion.

From a pragmatic point of view, if statistics show that an employer has significant underrepresentation of minorities and women without sufficient justification, then affirmative action is called for. Reverse discrimination is, however, a real possibility if affirmative action is not properly administered and if close attention is not paid to the statistical impact of affirmative action on the majority group over time.

GAO management, with direction from the Civil Rights Office, has developed EEO objectives that are reasonable in light of the problems disclosed by periodic work force analysis. According to the Equal Employment Opportunity Commission's Affirmative Action Guidelines,⁸ reasonable action may include goals and timetables or other appropriate employment tools which recognize the race, sex, or national origin of applicants or employees. It may also include adoption of practices which will eliminate the actual or potential adverse impact, dispar-

ate treatment, or effect of past discrimination by providing opportunities for members of groups which have been excluded, regardless of whether the persons benefited are themselves victims of prior discrimination. Such policies which are conscious of race, sex, and national origin should be maintained only so long as is necessary to eliminate adverse impact, disparate treatment, or the effects of past discrimination. Goals and timetables should be reasonably related to the magnitude of any problems identified in the work force analysis, as well as to the availability of qualified or qualifiable applicants, and the number of employment opportunities expected over a given timespan.

The major lesson that can be learned from these court challenges is that minorities and women cannot be preferred simply because they are minorities and women, and white men cannot be discriminated against for that reason.

As the Commission on Civil Rights has declared:

*Support for affirmative action *** does not mean insensitivity to the interests of white males. *** In fashioning remedial relief for minorities and women, the courts have tried to avoid penalizing white male workers who were not responsible for the challenged discrimination.*

Although affirmative action plans

*may adversely affect particular white men as individuals, they do not unfairly burden white men as a group. For example, Allan Bakke may have been denied admission to medical school because of an affirmative action program, but nearly three-quarters of those admitted were white. Affirmative action plans reduce the share of white men as a group to what it would roughly be had there been no discrimination against minorities and women. *** Affirmative action plans often produce changes in our institutions that are beneficial to everyone, including white males. In eliminating the arbitrariness of some qualification standards, affirmative action can permit previously excluded white men to compete with minorities and women for jobs once closed to them all. *** Employers have used the self-analysis required by affirmative action as a management tool for uncovering and changing organizational deficiencies.⁹*

⁸Affirmative Action Guidelines, Equal Employment Opportunity Commission, Federal Register, Vol. 44, No. 14, January 1979

⁹Affirmative Action in the 1980's: Dismantling the Process of Discrimination, U S Commission on Civil Rights, November 1981.

DAY CARE, con't. from p. 37

- Provides opportunity for part-time people to work full-time.
- Provides opportunity for mothers of school-age children to work and care for children.

Problems / Considerations

- Difficulties in supervising large groups of employees who work at different times.
- Possibility of abuse by some

employees.

Employer Benefits

Employers can benefit in many ways through support for working parents who need day care services. Programs designed to help working parents with their child care needs can reduce stress, thereby enhancing productivity and safety on the job. Reliable child care arrangements can also reduce the tardi-

ness, absenteeism, and job turnover that result from disruptions in child care. Policies and benefits for working parents can further help recruitment efforts as well as provide an image of the employer as an agency or company that supports families.

In short, the benefits of day care appear to far outweigh the drawbacks, both for the agency or company involved, and for the parents who need these services.

RESEARCH, con't. from p. 42

file includes a public file for general distribution items and a restricted file for internal GAO use only.

LAPIS

When looking for program- and budget-related data on Federal pro-

grams, the Legislative, Authorization, Program, and Budget Information System (LAPIS) should be checked. GAO's Program Analysis Division developed and maintains LAPIS. The evaluator can find authorizing legislation citations, budget function and subfunction codes, appropria-

tion account numbers, authorization amounts, budgetary data, authorization and appropriation committee jurisdictions, program descriptions and objectives, and GAO issue area and lead division codes.

See RESEARCH, p. 51

RESEARCH, con't. from p. 50

CISID

The Congressional Information Sources Inventories and Directories (CISID) is a "data base of current inventories of requirements for recurring reports, evaluation studies, and fiscal, budgetary, and program-related information sources and systems."² This data base is available in a three-volume printed version or online in three separate files in the SCORPIO data bank. In addition, PAD's program information specialists can perform more detailed and current searches on their in-house system that contains four files.

The "Requirements for Recurring Reports to Congress" file contains the data the title implies. If an evaluator suspects that an agency has neglected to produce a required report (either recurring or onetime), checking this file will provide the citation of the statutory or nonstatutory requirement, the report title, due date, congressional recipients,

and agency contact. A person researching a specific agency may want to check the agency index section to find what kind of data the agency is already collecting for transmittal to the Congress in a required report. Other index listings are by subject, congressional committee, law, and budget function.

"Federal Information Sources and Systems" gives descriptions of major publications, information dissemination centers, and data collections in the Federal Government. This source is particularly valuable when performing ADP audits. Checking the subject or agency index may alert the evaluator to data collection installations or internal data bases operated by or for a specific agency. Issue area planners can use this system to expand awareness and use of government facilities specifically relevant to their subject areas.

Last in the CISID series is "Federal Evaluations." This file or volume describes program evaluation studies completed by Federal agencies. This is a good source for identifying agen-

cies' internal reports that are often not included in other data bases.

F.Y.I.

For more information about any of these systems, contact a regional office technical information specialist, GAO librarian, or the Program Analysis Division's LAPIS and CISID specialists. In addition, various printed sources give detailed explanations of the data banks available in GAO. GAO Order 0650.2 presents a subject listing of external data banks and a description of the contents of select files. The *GAO Project Manual* is also an excellent reference tool. Check the following chapters for information:

SUBJECT	CHAPTER
LAPIS	13
CISID	14
Library resources	14
Modeling	15
Specialized data bases	15

²U.S. General Accounting Office, "Federal Evaluations," (PAD-82-9), p. iii.

WEEK'S WORTH, con't. from p. 44

this last weekly check is a big help on Monday mornings, usually our busiest time.

My lunch activity today is giving blood. I don't like the needles (who does?), but it's good knowing this blood might make all the difference to someone who needs it in the future. After lunch, I updated and corrected the log. Sometimes I wonder how I manage to keep all this paperwork straight! What makes it worse is that as platoon leader for my OCS class, I must do a lot of paperwork

for the National Guard, too. Good thing I know how to stay organized.

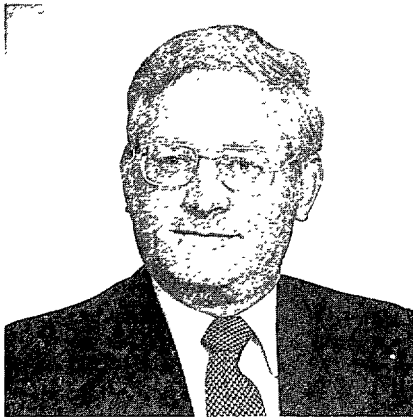
This afternoon I wrote a rough draft of some ideas I have for improving the Control Desk function. Although it's working very well, I still think we can improve it. I'm enthusiastic about my job and always try to think of new ways to do the work better. For example, I've already submitted my idea for a new requisition form to replace the four existing forms we now use to process jobs. I hope someone upstairs likes the idea because it might make this job

a little easier!

Since I'm feeling a little light-headed from giving blood this afternoon, I asked Connie if she could take over the desk for the last few hours this afternoon. All blood donors receive administrative leave on the days they give blood, and today I think I need the leave.

This evening, I am planning to take Robert out for dinner and a movie. Because my National Guard and OCS duties take up 2 weekends each month, I always try to do something special with my son on the weekends I am free.

GAO Staff Changes



John D. Heller

John D. Heller, Assistant Comptroller General for Policy, retired from GAO on March 31, 1983, to accept the newly created position of Auditor General with the Washington Metropolitan Area Transit Authority.

Mr. Heller has the distinction of being the first employee to enter GAO service as an auditor-trainee, remain with the agency, and be appointed an Assistant Comptroller General. In the latter position, which he accepted in 1978, Mr. Heller was responsible for the overall direction of the Office of Policy and the Office of Foreign Visitors and International Audit Organization Liaison. He also served as editor of the *International Journal of Government Auditing*, the *GAO Review*, and was responsible for producing the *Annual Report of the Comptroller General*.

Mr. Heller joined GAO in 1959. During his career here, he served as director of the Office of Program Planning, deputy director of the General Government Division, associate director in the Human Resources Division, and assistant director in the Human Resources Division, and assistant director in the Civil Division. A CPA, Mr. Heller is a member of the American Institute of Certified Public Accountants, the National Association of Accountants, the International Organization of Supreme Audit Institutions, and the Association of Government Accountants. He received a B.S.



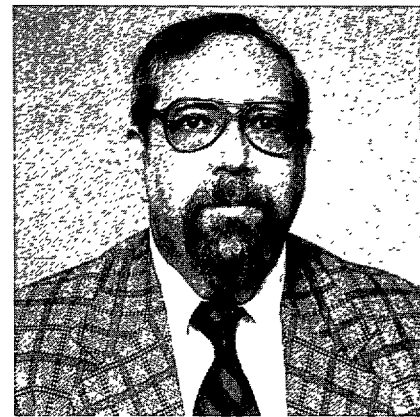
Ira Goldstein

Ira Goldstein has been named director of GAO's new Office of Quality Assurance.

Mr. Goldstein came to GAO in January 1982 from the Department of Health and Human Services, where he most recently served as Director of Policy and Acting Associate Commissioner of Social Security for the Aid to Families with Dependent Children and Low Income Energy Assistance programs.

Mr. Goldstein graduated with a B.S. from the University of Pennsylvania and holds an M.B.A. from the Harvard Business School. Since joining GAO, Mr. Goldstein has assisted in the area of block grants and served as chairman of the Task Force on Reports.

degree in accounting from King's College in Pennsylvania and completed the Program for Management Development at the Harvard University Business School. He won the Comptroller General's Award for Distinguished Service in 1978, 1979, and 1981 and won GAO Meritorious Service Awards in 1961, 1972, and 1981.



Morton A. Myers

Morton A. Myers, director, Program Analysis Division, will assume the role of regional manager, Boston, later in 1983. In his new position, he will continue as a member of the Reports Task Force, EWS Steering Committee, and CAMIS Financial Management Users Group.

Mr. Myers received a B.S. degree in accounting from Quinnipiac College in 1961. He attended the George Washington University Graduate School of Business and was also a graduate fellow at the University of California under the Federal Government's education program in systems analysis. He has completed the Federal Executive Institute's senior executive education program and Harvard University's program for senior managers in Government.

Mr. Myers has been an active member of the National Conference for the Advancement of Research; American Association for the Advancement of Science; National Association of Accountants; Association of Government Accountants; and Phi Theta Kappa National Honorary Society. In 1970, he received the GAO Special Education Award; in 1972 and 1973, the GAO Meritorious Service Award; and in 1981, the Senior Executive Service Performance Award.

Additional Staff Changes

NEW SUPERVISORY ACCOUNTANT

Accounting and Financial Management Division

Roy Taylor

NEW INFORMATION SYSTEMS & SERVICES OFFICER

General Services and Controller

Marju Parming

NEW SUPERVISORY GAO EVALUATOR

Procurement, Logistics and Readiness Division

Kevin Tansey

NEW SENIOR ADVISER ON INTERNATIONAL AUDIT ORGANIZATIONS

Office of the Comptroller General

James P. Wesberry, Jr.

RETIREMENTS

James R. Crouch
George W. Dee

GAO Evaluator
Accountant

Dallas
Accounting and Financial
Management Division

Edwin C. Eads
Anthony W. Eleamos

Supervisory Evaluator
GAO Evaluator

International Division
Los Angeles

John J. Filan
Paul M. Foley

GAO Evaluator
Supervisory Evaluator

International Division
Boston

Donald R. Keelan
Marvin Kesler

GAO Evaluator
GAO Evaluator

Boston
Atlanta

Joseph J. Kobylski
Edwin J. Kolakowski

GAO Evaluator
Supervisory Evaluator

International Division
Los Angeles

Leroy Kovale
Katherine Marcum

GAO Evaluator
Secretary

Chicago
Dayton

John E. Murphy
John R. Pennington, Jr.

Supervisory Evaluator
GAO Evaluator

Denver
Resources, Community and
Economic Development Division

Geraldine M. Rubar
Edward J. Simons
Nancy St. Clair

Attorney-Adviser
GAO Evaluator
Science Policy Assistant

Office of General Counsel
Denver
Program Analysis Division

ATTRITIONS

The following staff members left the agency during the period November 1982-January 1983.

Division/Office Personnel

Name
Sherrie Moore
Christine Weslie

To
Not specified
Not specified

Accounting and Financial Management Division

Oral Butcher
Curtis Carter
John Gillespie
Russell Greata
Margaret Klimczah
Joseph Nairn
Steve Sadler

Dept. of Commerce
Air Force Audit Agency
GPO
Federal Housing Administration
Not specified
Federal Home Loan Bank Board
Dept. of Commerce

Attritions - continued

	Kim Schafer Russell D. Schmidt	Private industry Air Force, Office of Inspector General
	Mary Simmons Lisa Stello Cynthia Tilghman Carol Weaver	Private industry Attend college Federal Home Loan Bank Board Private industry
Human Resources Division	Geraldine McCarthy Robin Maxie	Walter Reed Hospital Not specified
International Division	Betty Hooper Martha L. Pollie	Home Private industry
Program Analysis Division	Geraldine A. Gerardi Robert L. Lacy Catherine H. Myrick	Congressional Research Service Virginia State Corp. Commission Not specified
Resources, Community and Economic Development Division	Hamner, Larry	Agency for International Development
Atlanta	Jesse L. Beach Carol A. Collier Peter E. Martin	HUD Law school Private industry
Denver	John Dial Jeff Jordan Ken Moyers John Russo	AID Dept. of the Interior Dept. of the Interior Dept. of the Interior
Detroit	James S. Hay	Not specified
Kansas City	Cheryl Aldeman	Dept. of Agriculture
Los Angeles	Roger Flann	Air Force Audit Agency
Seattle	Thomas E. Birmingham Carolina D. Nuckols Lewis S. Smith	VA Blue Cross Graduate school
Washington	Gilbert Bowen Brent Fletcher Nadine Glenmore Richardo Gonzales Carl Grant Leo LaMotte James Langford Ronaldo Serrano Brenda Sinkavitch Sandra Zeller	Not specified CPA firm Not specified Not specified Dept. of Treasury AID Defense Advanced Research Command Not specified U.S. Army Defense Advanced Research Command

New Staff Members

The following new staff members reported for work during the period November 1982-January 1983.

Office of Administrative and Publishing Services	Burke, Gerard S. Green, Eric A. Kneeland, Thomas Leavitt, Jon D. Meeks, Robert Worth, Suzanne	Office of University Relations, University of Maryland Library of Congress Dept. of Treasury GSA HUD Social Security
Office of Organization and Management Development	Mayhew, Gilbert	VA
Federal Personnel and Compensation Division	Dixon, Renee L.	U.S. Forest Service
Human Resources Division	Bonin, Paula J. Hart, Debra L. Kushner, Iris S. Meade, Ora Lee	Amstar Corp. Nuclear Regulatory Commission Social Security Sears, Roebuck & Co.
Institute for Program Evaluation	Bernstein, Jill Rezmovic, Eva	Advance Technology, Inc. JWK International Corp.
Mission Analysis and Systems Acquisition Division	Rich, Christine	Dept. of Energy
Dallas	Gersh, Deborah E.	Dept. of Justice
Denver	Hinnen, Patricia	Peace Corps
Detroit	Anthony-Stewart, Susan B. Garcia, Marcos Harju, Donna L.	U.S. Customs Service University of Detroit U.S. Navy Department
Kansas City	Holman, Betty Jo	Marine Corps Finance Center
Los Angeles	Agcaoili, Dehlia Lamont, Diane Norwood, Jill Pickup, Sharon White, Valerie	Private industry Private industry University of Southern California Office of the Federal Inspector Private industry
New York	Scherer, Neil J.	University Hospital, Madison, Wis.
San Francisco	Monroe, Myrtle	U.S. Attorney's Office

Professional Activities

Office of the Comptroller General

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

Fifth Biennial Symposium on Auditing Research, Department of Accountancy, University of Illinois, Champaign, Nov. 4.

National Association of State Auditors, Controllers and Treasurers, Nashville, Nov. 15.

Office of Management and Budget, Monthly Speakers Meeting, Washington, Dec. 1.

Detroit Economic Club, Detroit, Jan. 11.

Montgomery County/Prince Georges County chapter, National Association of Accountants, Jan. 12.

Fairfax Auditors Forum, Fairfax, VA, Jan. 13.

Harry S. Havens, Assistant Comptroller General:

Gave a luncheon speech on "Accounting and Public Policy," at the University of Maryland, College Park, Nov. 5.

Attended the Brookings Accountants Roundtable Forum, with **Mr. Bowsher**, at The American University, Washington, Nov. 18.

Participated in a conference on "The Reagan Presidency at Mid-Term," sponsored by the Woodrow Wilson School and the Garfield Foundation, Princeton University, Princeton, NJ, Nov. 18-20.

Participated in a public policy research program of the Conference Board entitled "Toward a Reconstruction of Federal Budgeting," at the Washington Hilton, Washington, Dec. 2.

John D. Heller, Assistant Comptroller General for Policy, addressed the following groups:

OPM Executive Seminar on Public Program Management on "Executive Competence: A Panel Discussion," Kings Point, NY, Nov. 4.

National Intergovernmental Audit Forum on "International Audit Organizations," Washington, Nov. 12.

International Agencies Responsible for the Control of Public Spending on "Oversight of the United States Government: Role of the United States General Accounting Office and the Inspectors General," Madrid, Spain, December 1982.

Washington Semester Program of The American University on "The Evolving Role of the General Accounting Office Under the New Comptroller General," Washington, Jan. 18.

Francis X. Fee, Assistant Comptroller General for Operations, addressed the new Fort Meade Chapter of the American Society of Military Comptrollers. The Chapter is composed of both military and civilian personnel who work as resource managers either in budget, manpower, force structure management, accounting, and automation at Fort Meade, MD. Mr. Fee's comments were well received by the attendees and he was presented with a token of their appreciation in the form of a plaque, Fort Meade, MD, Jan. 21.

Office of the General Counsel

Rollee H. Efros, associate general counsel, participated in a panel discussion on "Funding Uncertainty and Federal Operations: Problems of Continuing Resolutions, Funding Gaps, and Governmental Shut-Down," sponsored by the American Association for Budget and Program Analysis, Washington, Jan. 13.

Seymour Efros, associate general counsel:

Spoke before the Air Force Major Command Directors Contracting Conference on "Procurement Matters of Congressional Concern from GAO's Perspective," at the Pentagon, Nov. 15.

Spoke before the Legal Education Institute, Department of Justice,

on "Bid Protest and Evolving Role," Washington, Nov. 22.

Spoke before the George Washington University Law School on "GAO Bid Protest Claims," Washington, Nov. 30.

Spoke before the Judge Advocate General's School on "Bid Protests," Charlottesville, VA, Jan. 12.

Ronald Berger, assistant general counsel, spoke on "The Impact of the Federal Courts Improvement Act of 1982 on Government Contracts," before a seminar for Forest Service contracting officials, Washington, Jan. 19.

Brian T. Kildee, senior attorney, spoke before the Department of Energy's Procurement Counsel on "Contract Award Disputes: GAO's Evolving Role," Washington, Jan. 25.

Accounting and Financial Management Division

Wilbur D. Campbell, acting director, spoke on "A Changing Environment for the Government Auditor," before the Montgomery-Prince Georges Chapter, Association of Government Accountants, Nov. 10.

Walter L. Anderson, senior associate director:

Led a roundtable discussion on "Skill Requirements for Management Information Systems in the Late 1980's" at the winter session of the American Management Association's Information Systems and Technology Council in West Palm Beach, FL, Jan. 24.

Presented a keynote address, "Doing More With Less—Using Advanced Technology Can Help," at the National Conference on Small Computers in Government sponsored by the Public Management Institute, George Mason University, in Washington, Dec. 13.

George L. Egan, Jr., associate director:

Spoke on "The Single Audit Experience" before the New York Chapter

of the Association of Government Accountants, New York, Nov. 17.

Spoke on "The Single Audit Concept" before the Maryland Association of Certified Public Accountants, Inc., in Columbia, MD, Nov. 30.

Participated in the Federal Audit Executive Council meeting, Washington, Dec. 1.

Participated in the Association of Government Accountants' seminar on "The Organization-Wide Single Audit Concept" in Des Moines, IA, Dec. 15.

Ronald J. Points, associate director:

Spoke on the Governmental Accounting Standards Board before the Association of School Business Officials' Annual Conference, Atlanta, Nov. 4.

Spoke on "Opportunities in and Update in Government Accounting" before the Auburn University Student Accounting Association, Auburn, AL, Nov. 12.

Spoke on the Federal Managers' Financial Integrity Act of 1982 before the AGA Seminar, Washington, Jan. 26.

Virginia B. Robinson, associate director:

Will be President-Elect, Washington Chapter, Association of Government Accountants, during fiscal year 1984.

Spoke on "Standardization of Federal Accounting and Reporting Systems: The Path to the Future" at the National Institute for Management Research Conference, Washington, Dec. 10.

W. A. Broadus, Jr., group director, conducted briefings and workshops on government audit standards and governmental auditing for the AGA Quantico Chapter, Quantico, VA, Nov. 15; Louisiana Society of CPAs, New Orleans Chapter, Nov. 17; Louisiana Society of CPAs, Baton Rouge Chapter, Nov. 22; Minnesota State Auditor's staff, St. Paul, Nov. 22; Hawaiian Society of CPAs and Hawaiian Chapter of AGA, Honolulu, Dec. 6-7; Georgia Society of CPAs, Atlanta, Dec. 10; Washington Chap-

ter of AGA, Washington, Jan. 24; Navy Auditor General's staff, Baileys Crossroads, VA, Jan. 25; and Government Affairs Institute, Office of Personnel Management, Washington, Jan. 26.

Joseph L. Boyd, senior group director, with **Roger T. McDonald**, senior ADP auditor, spoke on "Computer-Assisted Audit Techniques" before combined auditing classes at Georgetown University, Washington, Nov. 18.

Joseph J. Donlon, senior group director:

Spoke on "Government Accounting Systems" at the Department of Agriculture's Graduate School Seminar on Financial Management, Washington, Nov. 3.

Spoke on "The Prompt Payment Act and Fast Pay Procedures" at an Office of Personnel Management training session, Washington, Nov. 8.

Kenneth Pollock, deputy associate director:

Discussed GAO's review of computer benchmarking at the Federal ADP Procurement Conference, Washington, Dec. 1.

Spoke on GAO work in computer security and contingency planning at DOE's Computer Security Conference, Knoxville, TN, Nov. 18.

Wrote an article entitled "Ten Years of Computer Auditing in the U.S. General Accounting Office" which was published in the *EDP Auditor's Journal* of the EDP Auditor's Foundation, Winter 1982/83.

Ronell B. Raaum, group director, had an article entitled "A Recipe for Writing Management Audit Reports" published in the *Government Accountants Journal*, Summer 1982.

Joint Financial Management Improvement Program

Susumu Uyeda, executive director:

Gave two presentations to students from Georgia State University on "Government Accounting and Careers in Government," Atlanta, Jan. 18.

Gave a presentation on "What's Happening Today?" at a seminar on "The Federal Managers' Financial Integrity Act of 1982" sponsored by the National Office and Capital Region Chapters of the Association of Government Accountants, Washington, Jan. 26.

Kenneth M. Winne, senior project director:

Moderated a workshop sponsored by the Washington Chapter of the Association of Government Accountants on "Internal Controls in Computer Systems," Washington, Nov. 4.

Gave a presentation on grant cash management in the States to the Montgomery/Prince Georges Chapter of the Association of Government Accountants, Silver Spring, MD, Nov. 10.

Moderated the afternoon session of the seminar on "The Federal Managers' Financial Integrity Act of 1982" sponsored by the national office and local chapters of the Association of Government Accountants, Washington, Jan. 26.

General Government Division

William J. Anderson, director:

Addressed the Office of Personnel Management's Management Training Center's Seminar on Administration of Public Policy on "The Role of GAO in the Administration of Public Policy," at the Executive Seminar Center in Oak Ridge, TN, Nov. 4.

Addressed the National Center for Tax Education and Research, National Institute on State and Local Taxation, on "Tax Issues Affecting the Multijurisdictional Corporation," Dallas, Nov. 9.

Addressed the American Mining Congress and State Mining Association's AMS State Tax Workshop on "A Review of the GAO Report on Taxation of Multinational Corporations," Phoenix, AZ, Nov. 15.

Addressed the Business Advisory Council on Federal Reports' annual meeting on "Paperwork Challenges for 1983," Washington, Nov. 17.

Human Resources Division

John Lainhart, group director, spoke on "GAO's Approach to Evaluating Internal Controls Computer-Based Systems," at the New York Chapter meeting of the EDP Auditors Association, New York, Dec. 13.

Institute for Program Evaluation

Patrick S. Dynes, social science analyst, gave a presentation to a student and faculty colloquium on "Congressional Assistance," at the School of Public Administration at Ohio State University, Columbus, Nov. 19.

International Division

Samuel Bowlin, associate director, and **Harry Finley**, associate director, participated on a National Academy of Public Administration Panel on International Affairs at The Brookings Institution, Washington, Nov. 17.

Procurement, Logistics and Readiness Division

Don Horan, director, discussed GAO's operations at the Brookings Institution's Conference on Federal Government Operations, Oct. 4.

Bob Gilroy, senior associate director, spoke on "Federal Procurement: A GAO Perspective," before the National Contract Management Association, in Wiesbaden, Germany, Sept. 21.

Ken Hoeth, group director, discussed GAO's views on the Federal Cataloging System before the Federal Supply Management Council Working Group on Cataloging Systems, Washington, Sept. 16.

Bob Bontempo, senior evaluator, participated on a "mini-panel" of government and industry representatives discussing "Government Requirements and Standards for Multiyear Procurements," at the Electronic Industry Association's fall seminar, Oct. 21.

Paul Jones, group director, and **Harold Andrews**, senior evaluator,

led a workshop on contracting out, at the Office of Personnel Management's regional management conference, Atlanta, Oct. 26.

Julia Denman, senior evaluator:

Gave a presentation on "Post-Production Support: New Challenge for Supporting Old Systems" before the Baltimore Chapter of the Society of Logistical Engineers, Sept. 16.

Presented lectures on the "Integration of Acquisition Management and Life Cycle Management" before government and industry representatives in Sweden and France during the period Sept. 20-28, 1982.

Gave a presentation entitled "Optimizing Limited Defense Dollars: A Challenge for Logisticians" before the Philadelphia chapter of the Society of Logistical Engineers on Nov. 17.

Discussed "A GAO Perspective of Life Cycle Cost Management" before the Life Cycle Cost Management Seminar at the Defense Systems Management College, Nov. 18.

Addressed a 600-person assembly of students and faculty at the Air Command and Staff College, Maxwell Air Force Base, AL, and discussed GAO's role in reviewing Department of Defense programs and budgets on Dec. 15.

Ken Brubaker, senior evaluator, lectured before a class at the Advanced Traffic Management Course conducted at the Army Transportation School, Fort Eustis, VA, September 1982.

Program Analysis Division

Kenneth W. Hunter, senior associate director:

Participated on a panel of government executives discussing "Cut-back Management Systems" at the American Association for Budget and Program Analysis' fall symposium, Nov. 19.

Was elected Treasurer of the new Issue Management Association.

James L. Kirkman, management analyst:

Presented a paper entitled, "Congressional Budget Process Reform Ideas: 1981-1982," at the Southern Political Science Association, Atlanta, Oct. 29.

Moderated a panel discussion on "Funding Uncertainty and Federal Operations: Problems of Continuing Resolutions, Funding Gaps, and Governmental Shut-Down," sponsored by the American Association for Budget and Program Analysis, Washington, Jan. 13.

Jayetta Hecker, group director, participated in a panel discussion on "The Compatibility of Regulatory Reform with Efforts To Expand Public-Private Partnerships," before the annual meeting of the National Capital Area Chapter of the American Society for Public Administration, Washington, Dec. 1.

Brad H. Hathaway, supervisory evaluator, discussed the joint GAO-DOD study of the Defense planning, programming, and budgeting system, before the Budget Officer's Conference, Jan. 11.

William A. Hill, evaluator, participated on a panel discussion on "Credit Programs and Their Hidden Effects" at the American Association for Budget and Program Analysis' fall symposium, Nov. 19.

Resources, Community and Economic Development Division

Luther Atkins, evaluator, discussed the Nuclear Regulatory Commission's physical security program before the Physical Security Coordinating Group (representatives of more than 30 utilities which operate nuclear power plants), Washington, Oct. 21.

Ed Averman, evaluator, discussed GAO's report, "Department of Agriculture Could Do More To Help Farmers Conserve Energy" (GAO/EMD-82-30, Sept. 30, 1982) with Pam Drum of Iowa Public Radio. The interview was broadcast on "Iowa Morning Edition."

Kevin Boland, senior associate director, was interviewed by KTUU-TV, Anchorage, AK, on GAO's report on Federal Energy Regulatory Commission's expenses for the Trans

Alaska Pipeline case (GAO/EMD-82-132, Sept. 29, 1982).

Joseph Christoff, evaluator, was interviewed on GAO's report, "Need for Guidance and Controls on Royalty Rate Reductions for Federal Coal Leases" (GAO/EMD-82-86, Aug. 10, 1982) over WXRT radio, Chicago, Aug. 27.

Charles Cotton, evaluator, discussed "Actions Needed To Promote a Stable Supply Strategic and Critical Minerals and Materials," before the Federation of Materials Societies' Board of Trustees/Advisory Board, Washington, Sept. 22.

Keith Fultz, senior group director, was interviewed live on KYXI radio, Portland, OR, on GAO's report, "Congressional Decision Needed on Necessity of Federal Wool Program" (GAO/CED-82-86, Aug. 2, 1982).

William Gainer, issue area planning director:

Participated in a panel discussion on "How Effective Is the Existing Housing Program: Views from the OMB, GAO, and HUD Inspector General," at the 1982 Fall Section 8 Existing Housing Conference, Washington, Sept. 28.

Discussed "Financing Alternatives for Housing," at the national convention of the National Association of Housing and Redevelopment Officials, Boston, Oct. 25-26.

Paul Grace, evaluator, taped an interview with Jim Wynbrandt of the Progressive Radio Network on GAO's report, "Problems in Air Quality Monitoring Systems Affect Data Reliability" (GAO/CED-82-101, Sept. 22, 1982).

John Harman, issue area planning director, and **Dwayne Weigel**, evaluator, spoke on "GAO and Its Role at the Nuclear Regulatory Commission," before the Government Affairs Institute's Executive Forum, Bethesda, MD, Oct. 6.

Walter Hess, evaluator, discussed "GAO and Its Study of the Economic Research Service," before the Northeastern Agricultural Economics Association, Washington, Oct. 12.

William Kruvant, group director, **Patrick Valentine**, evaluator, and **Carlisle Moody**, consultant, are coauthors of an article entitled,

"Sources of Productivity Decline in U.S. Coal Mining, 1972-1977," published in the July 1982 issue of *The Energy Journal*.

David Pariser, evaluator, spoke on "Economics and Management Issues in Federal Coal Lands Leasing and Control," at a seminar on mineral economics sponsored by the University of Arizona College of Mines, Tucson, Sept. 2.

Dennis Parker, evaluator, was interviewed live by Bob Levey on WRC radio, Washington, on GAO's report, "Changes to the Motor Vehicle Recall Program Could Reduce Potential Safety Hazards" (GAO/CED-82-99, Aug. 24, 1982), Sept. 1. He also conducted interviews on tape for later broadcast over NBC, CBS, and Mutual Broadcasting System radio stations around the country. AP radio interviewed **Kevin Donohue**, group director, on the same report.

Chicago

Roger E. Kolar, evaluator, spoke on performance auditing in GAO before the advanced auditing class at the University of Illinois, Champaign, Nov. 11.

Cincinnati

Arthur Foreman, operations systems analyst:

Spoke to the Ernst & Whinney Career Explorers Post on EDP Auditing in the Federal Government, Cincinnati, Jan. 10.

Chaired a roundtable discussion on personal computers at the January meeting of the Greater Cincinnati Chapter of the EDP Auditors Association, Jan. 12.

William C. Kennedy, evaluator, was appointed Chairman, Research Committee, Indianapolis Chapter of the Association of Government Accountants.

Dan McCafferty and **Bob Kissel**, evaluators, attended the Annual Meeting of the Non-Federal Advisory Committee on Water Data for Public Use, Kansas City, Nov. 16-18.

Dallas

Francis Langlinais, GAO evaluator, made a speech on Internal Con-

trols to the St. Louis Chapter of AGA, Nov. 17. He is also currently the National Chairman of AGA's Membership Retention Committee and is on a National Blue Ribbon Panel reviewing AGA's organizational structure.

Detroit

William F. Laurie, evaluator:

Was appointed a reviewer on the Ohio CPA Journal by the Ohio Society of CPAs, Dec. 16.

Was chairperson of a symposium on "Issues in Aging" at the Gerontological Society of America's national meeting in Boston, Nov. 23.

Robert T. Rogers, audit manager, and **Alfred C. Long**, supervisory auditor, spoke to the Employment Service Committee of the Interstate Conference of Employment Security Agencies, on "Employment Service Reporting Requirements and Problems," Washington, Nov. 10.

Patrick Iler, evaluator, presented a paper entitled "Graying of the National Budget: The Impact on An Aging Population," at the Gerontological Society of America meeting, Boston, Nov. 22.

Kansas City

David A. Hanna, regional manager, spoke on "A General Overview of GAO's Function" at a meeting of Kansas City Financial Executives, Nov. 9.

Susanne Valdez, executive director, Mid-America Intergovernmental Audit Forum (MAIAF), led the semi-annual meeting of the Iowa, Kansas, Missouri, and Nebraska Societies of CPAs representatives to the MAIAF in Kansas City. Points of continuing common concern among CPAs and Government auditors were identified for the 1983 agenda, Dec. 2.

David A. Hanna, regional manager, and **Susanne Valdez**, executive director, MAIAF, hosted the fall meeting of the Mid-America Intergovernmental Audit Forum on Operational Auditing. The program featured presentations from the Kansas Legislative Post Auditor, a representative from the AICPA's Special Committee on Operational Auditing, and Atlanta

regional office staff who demonstrated the use of electronic technology in operational auditing, Kansas City, Dec. 3.

Carl Lee Aubrey, senior evaluator, discussed "The Certified Government Accountant: Is It An Idea Whose Time Has Come?" before the St. Louis Chapter of the Association of Government Accountants, Oct. 13, and the Kansas City Chapter, Jan. 11.

Los Angeles

Fred Gallegos, supervisory evaluator, Management Science Group:

Taught a course in Data Processing Management during the fall quarter 1982, at California State Polytechnic University, Pomona.

Is teaching a graduate course on Management Information Systems at California State Polytechnic University, Pomona.

Spoke before the Student Accounting Society at California State University, Long Beach, on "Use of Microtechnology in Operational Auditing," Dec. 8.

Spoke before the Association of Government Accountants, Orange County Chapter, on "Use of Microtechnology in Operational Auditing," Jan. 18.

John Hillman, evaluator, spoke before an auditing class at California State-Los Angeles on Financial Versus Operational Auditing, Dec. 27.

Lee Cooper, evaluator, served on a panel with representatives of other Federal agencies in Los Angeles to discuss career opportunities before faculty at California State-Northridge, Dec. 1.

Marco Gomez, evaluator, discussed career opportunities in GAO with the Latin Latino Business Association, Loyola-Marymont College, Nov. 23 and with the Latin Business Student Association, University of Southern California, Dec. 2, the Hispanic Business Society, California State-Los Angeles, Jan. 14, and with the American G.I. Forum, D.C. Chapter, on Nov. 18.

Philadelphia

Michael Keppel, Pittsburgh sub-office site coordinator, recently passed the CPA examination in the State of Pennsylvania.

San Francisco

Tim McCormick, regional manager; **Hal D'Ambrogia**, assistant regional manager; and **Jack Birkholz**, supervisory evaluator; participated in quarterly meetings of the Western Intergovernmental Audit Forum, Carson City, NV, Nov. 18-19, and in San Diego, Feb. 17-18.

Charlie Vincent, supervisory evaluator:

Talked to the accounting honor society, Beta Alpha Psi, at San Jose State University about financial auditing versus program auditing, Nov. 12.

With **Jack Birkholz**, supervisory evaluator, gave a seminar on operational auditing for the Peninsula-Palo Alto Chapter of AGA, Jan. 18.

Hans Bredfeldt, operations research specialist, was elected Chairman of the Office Automation Research Forum of San Francisco, December 1982.

Jack Birkholz, supervisory evaluator:

Spoke as a panelist on "Implementing the Single Audit" at a meeting of the National Association of Counties, Los Angeles, Nov. 23.

Discussed the activities of the Western Intergovernmental Audit Forum at a meeting of the California Society of Certified Public Accountants' Committee on Governmental Accounting and Auditing, Burlingame, CA, Jan. 21.

Spoke on "New Federal Block Grant Programs and Audit Requirements" at a meeting of the California Society of Certified Public Accountants' Committee on Governmental Accounting and Auditing, San Francisco, Jan. 26.

Discussed "Benefits to Local Governments from Expanded Scope Auditing" at the annual meeting of the Nevada Municipal Finance Officers Association, Reno, Dec. 7.

Seattle

Stephen J. Jue, technical assistance group manager, discussed "Auditing Computer-Based Systems—Reliability Assessment and

Systems Development" and participated in a panel discussion on "Today's Issues in ADP Auditing" before the annual seminar of the Tri-Cities Chapter, National Association of Accountants, Pasco, WA, Nov. 17.

Alvin S. Finegold, senior evaluator, accompanied by Daniel F. Betts, evaluator, and Kenneth W. Edmonson, assistant regional manager, briefed the Washington State Legislature's Joint Select Committee on Mount St. Helens on GAO's report on "Federal Involvement in the Mount St. Helens Disaster: Past Expenditures and Future Needs" (GAO/RCED-83-16, Nov. 15, 1982), Kelso, WA, Dec. 7.

Brent L. Hutchison and Sherry A. Davis, evaluators, spoke about GAO—its history, authorities, and responsibilities; how its audits are conducted and reports used; its co-op program; experiences of the first-year auditors; and pros and cons of employment—to the Professional Accounting Seminar class, Portland State University, Portland, OR, Dec. 12.

Patrick J. Sweeney, evaluator, discussed GAO's review of land conveyance programs in Alaska and a questionnaire sent to Alaska Native corporations at a meeting of the Alaska Native Land Manager's Association, Anchorage, AK, Jan. 20.

Randall B. Williamson, senior evaluator, spoke on "GAO's Roles, Responsibilities, Functions, and Operations" at the Broadway Kiwanis Club, Seattle, Jan. 27.

Washington

George D. Gearino, assistant regional manager, chaired a Mid-Atlantic Intergovernmental Audit Forum Committee that looked into problems encountered by audit organizations in implementing effective quality control procedures. A report on Quality Control was issued in December 1982.

Leslee Bollea, evaluator, accepted a Certificate of Appreciation from the National Capital Association for Cooperative Education which cited GAO as an honored employer. Howard University nominated GAO for its active participation in cooperative education, Dec. 3.

Annual Awards for Articles Published in The GAO Review

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

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

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

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

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

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

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

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