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THE GAO REVIEW

SPRING 1975

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THE GRAND REVIEW

The Capitol dome in Washington has witnessed many parades up Pennsylvania Avenue. One of the first after the dome was completed in 1863 was the Grand Review of the Union Armies in May 1865—a 2-day parade of 150,000 men.

This picture—by M. B. Brady—was taken from the point where the avenue turns by the U.S. Treasury. Soon after, the columns passed the reviewing stand in front of the White House where President Andrew Johnson, General U.S. Grant, and members of the Cabinet watched the spectacle.

> "Across the Potomac, the guns had fallen silent. The guards were gone from the Washington bridges. Virginians were no longer enemies * * *. Rich with the wastage of armies, the perennial fields were green. On the Capitol dome, Armed Freedom rested on her sheathed sword." (*Reveille in Washington* 1860-1865, by Margaret Leech (1941))

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Contents

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ELMER B. STAATS
COMPTROLLER GENERAL OF THE UNITED STATES

Needed—A National Productivity Center

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On December 17, 1974, the Comptroller General testified before the Senate Committee on Government Operations on bills introduced by Senators Nunn (S.4130) and Percy (S.4212) to strengthen national-level leadership for improving public and private sector productivity. This article is based on the Comptroller General's testimony.

We in GAO have a major interest in Federal productivity both because of our regular audit programs and because of the joint Federal project in which we participate. To a lesser degree, we have contacts with performance improvement programs at State and local levels. We are also brought into contact with many private sector organizations which conduct research and development and furnish goods and services to governmental agencies.

Federal Sector Productivity Programs

Since 1970 we have been a partner with the Office of Management and Budget, the Civil Service Commission, the Bureau of Labor Statistics, and, more recently, the General Services Administration in fostering efforts to measure and enhance productivity of Federal activities.

Today we have an ongoing program in which participating agencies collaborate in an annual review of the productivity trends of about 200 Federal activities having 850 measurable outputs. These organizations employ 1.7 million people, representing the output of about two-thirds of all Federal employees.

Annually, we examine the trends and report to the President and the Congress on observed causes of productivity gains and losses, and any actions which are recommended to foster improved productivity. In summary, we found last year an overall gain in productivity averaging over 1.5 percent per annum, but about half of the activities reviewed had shown productivity gains, and about half had declined. We have learned that no organization stands still and that progress demands constant attention to such improvements—the keys to which are long-range planning, introduction of better systems, installation of modern equipment, more effective work organization and techniques for improving employee skills, job satisfaction, and incentives.

The Federal Government has much

to learn from its own experience and by systematic study of the practices of non-Federal organizations. The present National Commission on Productivity and Work Quality has been very supportive, but a still stronger national organization would be of value in advancing these efforts.

Productivity Improvements in State and Local Governments

We have been encouraged to see the rapid growth in interest in productivity improvement among these jurisdictions, and the strong leadership taken by their national associations. We believe the stress given to improved State and local programs by the bills recently introduced in the Senate is very appropriate. This is particularly true of S. 4130 with its concept of productivity centers at the State level.

There are some 39,000 jurisdictions, many of which perform similar if not identical functions. One out of every six American workers is employed by the public sector. Government purchases of goods and services now absorb about 22 percent of the gross national product, and their payrolls are close to $150 billion. This is the second fastest growing segment of our economy, following services in general.

Many elements of the Federal structure are making some contribution to State and local government improvements although in a very loosely coordinated fashion. This includes, for example:

—Grant programs of the National Science Foundation.

—Grants by the Department of Housing and Urban Development under the section 701 program.

The excellent work of the Civil Service Commission under the Intergovernmental Personnel Act, and various other technical assistance programs. For example, GAO is working with local jurisdictions to introduce the use of performance auditing techniques and has participated in productivity improvement demonstrations and projects.

The National Commission on Productivity has from the outset of its work given priority attention to public sector productivity problems, and has made a valuable contribution in selected areas. But the efforts I have mentioned are but a small beginning toward exploiting the vast opportunities for improved economy and effectiveness in State and local government operations.

Federal Interest in Manufacturing Technology

The Commission on Government Procurement found expenditures on procurement by the Government agencies to be $57.5 billion in fiscal year 1972—with the Department of Defense, the Atomic Energy Commission, and the National Aeronautics and Space Administration being the largest purchasers of goods and services from the private sector.

Since manufacturing technology is an important factor in future costs of complex systems, GAO is examining programs in the United States and other countries concerned with advancing the state of the art, particularly in the manufacture of parts and components produced in medium and small lots—with special attention to the potential for further application of computers to design and manufacturing processes. The increased output may be five times as great under today's methods.

While the United States has long been the pioneer in the development of these advanced tools, and probably enjoys the highest state of technological achievement in the world today, we have not established a focal point to oversee research into advanced manufacturing technology—either for the Government's account or for the private sector. Other nations are beginning to do this—notably West Germany and Japan. We understand that there is a proposed government program in Japan to develop an unmanned manufacturing facility by about the mid-1980s, at a reported cost of $100 million. It is of interest that this is a joint public and private effort. There is no comparable national program in the United States, although there are 10 or more Federal agencies with an interest in this subject. This is another illustration of the need for a strongly-established productivity leadership at the national level.

Need for a National Productivity Center

I have been interested in the concept of a national productivity center or institute since Dr. C. Jackson Grayson, Jr., Dean of the School of Business Administration at Southern Methodist University, began advocating this idea some time ago.

In studying the proposals for a national productivity center, the first question which occurs is: "Why is a new organizational approach needed; that is, why does the present National Commission not meet these requirements?"

The history of the National Commission on Productivity since its creation in June 1970 has been one of constant struggle to maintain its identity and even minimal financial support for its efforts. In fiscal year 1973 it had an extremely modest budget of $2.5 million and a 20-member staff. In 1974 it was terminated and absorbed by the Cost of Living Council. Recently it was reborn with a $2 million budget, but still with a very small staff. Such a stop-and-go existence, coupled with a low financial base, is not conducive to maintaining a consistent and effective program.

It is thus clear that the time has come for a stronger commitment by the Congress and the executive branch. Key principles which we would stress in establishing a national productivity center are as follows:

- *First,* we believe that the center should be an independent agency replacing the existing Productivity Commission and with direct and authoritative access to the Director, Office of Management and Budget; the Council of Economic Advisers; and the heads of principal departments and agencies concerned. These agencies include: Commerce, Labor, Treasury, HUD, HEW, NSF, DOD, NASA, AEC, CSC, GSA, and GAO.

- *Second,* we favor a small, but fully-empowered board of directors, appointed by the President and confirmed by the Senate. Its membership should be representative of private sector management, and labor. I would also urge that a top educator be included so as to form a knowledgeable team of those who will perceive the opportunities for advancing national productivity and will understand how to apply the results of the center's work.
- *Third*, the charter for the mission of the center should be broadly stated. In this connection, we would endorse definitions and mission goals which stress the importance of equal emphasis on programs and projects designed to improve the utilization of technology, on the one hand—and those designed to achieve improvements in the utilization of human resources and work quality, on the other hand. The authorizing statute should be free of regulatory detail—such as a requirement for productivity impact statements. We believe such matters should be left for later determination rather than be part of the statute.
- *Fourth,* the center should have a life expectancy and adequate funding for at least 5 years so that it can be held accountable for bringing to fruition long leadtime efforts which are frequently the nature of productivity research and application.
- *Finally*, the center's professional staff should be the most capable that can be brought together for this period. Also, maximum use should be made of available funds for grants and contracts.

The statute authorizing the center should spell out its role as (1) a constructive coordinator and expert catalyst to identify and disseminate knowledge, (2) the sponsor of education and training activities, and (3) the sponsor and financer of demonstration projects and research projects of the type which other organizations are unable to support due to the leadtime, financial requirements, etc. The statute should also emphasize proper documentation and measurement of results.

Another principal need is the development of a corps of personnel with leadership and analytical skills, who would be motivated to work on projects to improve performance in productivity—particularly in the public sector. This would include engineers, behavioral scientists, public administrators, management generalists, etc.

At a recent conference of public sector leaders, which canvassed the prime opportunities for productivity improvement in the public sector, the need for "capacity building" as described above was stressed as perhaps the single most important requirement for significant improvements. Thus, it is believed that the charter for a productivity center should acknowledge the importance of determining the need for managerial and analytical skills—working with universities, as well as public and private organizations—and charge the center with a responsibility for fostering programs to produce such trained personnel.

Another frequently discussed issue is the extent to *which*, and *when*, the center should be divorced from Federal management and primary reliance on Federal financing. Dr. Grayson, in a recent lecture to the GAO staff, offered the goal of making such a center self-supporting after 5 years. It is of interest that in Japan, over 90 percent of the support of the Japan Productivity Center is from private sources—and in Germany, Israel, and Norway, private support is reported to be one-third to one-half. This poses a challenge. One alternative would be for the national productivity center to underwrite the establishment of both national- and State-level centers which would become self-supporting. Of course regional and perhaps metropolitan centers should not be precluded in appropriate situations.

Another alternative which has been proposed is to establish the national productivity center, at the outset, as a Government corporation in order to give it more independence of the Federal structure, while holding it accountable to the Congress and the President. In any event, it would appear wise to authorize and encourage the national productivity center to engage in cost-sharing, to require reimbursement for technical assistance not related to research and demonstration projects, and to encourage private financing.

Further development of productivity measures, and conduct of research into designing better measures, should stress the importance of assessing trends in quality of performance and results of programs, especially in the public sector. Simple productivity indices expressed as "output per unit of input" are essential and must be continued. We must, however, learn how to measure program effectiveness and how to apply appropriate measures of progress against program objectives. We likewise need to continue our search for techniques of measuring employee attitudes and "quality of work" factors.

Accountability and Postaudit

Accountability is a concept inherent in the idea and practice of representative and democratic government and the postaudit is an integral component of the quest for accountability.

Burton D. Friedman
in *The Quest for Accountability* (1973)

ROBERT B. HALL 731796

A Framework For Acquiring Major National Systems

** * * a non-market system exists for a majority of America's military procurement. * * * The basic force propelling this is contemporary technological development. * * * as high technology phenomena become commonplace in civilian affairs, a [similar] shift * * * may be expected for the rest of society.*[1]

The authors of this observed shift in Government-business relationships contend, as do many others, that the complexity and cost of the modern technology used in our major national defense, space, energy, and transportation systems today preclude a meaningful buyer-seller competitive setting. This article, taking an opposing view, points up the new and confused buyer-seller roles that have emerged in the high-technology era. The confusion begins with an agency's (the customer's) design of a baseline system as *the* solution—a *fait accompli.* Innovation and technological competition is thereafter restricted to the design details and cost of that one given solution.

With the system concept chosen; its preliminary design completed; the technologies picked, sized, and arranged; and system performance requirements stated, about 80 to 90 percent of the eventual program costs are thus predetermined—that is, no

[1] Peter Goudinoff and Carol Contes, "Technology, the Military and the Decline of the Market System: The Case of the GAP Instrument Company," *The Western Political Quarterly*, 1974, pp. 80-91. During the company's performance of defense contracts for advance technology hardware, the Navy saved the company from bankruptcy by purchasing 17,141 shares of preferred stock.

Mr. Hall, assistant director, Procurement and Systems Acquisition Division, is a National Contract Management Association Fellow. He served on the staff of the recent congressional Commission on Government Procurement.

Much of the material for this article is based on a number of major system acquisitions studies in which Mr. Hall participated, including: "Evaluation of Two Proposed Methods for Enhancing Competition in Weapons Systems Procurement" (GAO, B-39995, July 14, 1969); "Actions Needed to Reduce the Proliferation of Tactical Air-to-Ground Missiles" (GAO, B-160212, Dec. 31, 1970); and "Report of the Commission on Government Procurement," Part C, Acquisition of Major Systems, Dec. 31, 1972.

longer controllable.[2]

Responsibility for building the baseline system then shifts to a large industry firm (the supplier) through a contracting process more suitable to low-technology acquisitions. The supplier is often plagued with performance and cost problems and has the added burden of meeting voluminous administrative requirements that are imposed in an effort to control this noncompetitive environment.

The agency head and the Congress do not enter the picture until long after the baseline technological solution and its cost, schedule, and performance are largely predetermined. Having little or no role in affirming the need or in exploring competing solutions, their latitude for judgment and choice is considerably narrowed. They have little recourse except to the details of program implementation. Much time and effort is then spent by the agency head, the Congress and GAO in monitoring the cost, schedule and performance goals derived from the one technological solution.

The number of acquisition programs in the Federal Government which depend on a systems approach to incorporate advanced technology and their dollar value are vast. The Department of Defense, for example, has at least 150 major and minor systems acquisition programs which will ultimately cost more than $200 billion. The subsequent cost to operate and maintain these systems may easily be double this amount.

A systems approach is a set of organized activities for solving an important problem. It has some very basic steps. But no common understanding has been reached among Federal agencies or in the Congress as to what these basic steps are; how new programs should be organized; or how competition can be used to create, explore, and choose the preferred technological/cost solution. This article suggests that a programmatic framework recommended by the recent Commission on Government Procurement for acquiring major national systems would

—organize new acquisition programs according to basic steps in systems engineering;
—introduce meaningful technological competition at the outset;
—clarify roles of the agency head, his components, industry, and the Congress in the systems acquisition process;
—give agency heads and the Congress visibility over early decisions that shape the acquisition program's purpose and direction;
—restore the Government-industry contractual relationship to a more competitive, fixed-price character;
—relieve the acquisition process of unnecessary administrative requirements; and
—provide a model for program evaluation.

Current Dissatisfactions

Although there is little agreement on the real problems in systems ac-

[2] A number of industry studies, for example, a Boeing study of the B-52 aircraft program, are said to have supported this conclusion.

quisition today, there is substantial agreement on the symptoms.

Industry is dissatisfied with

—low profits, worsened by current inflation;
—too much Government red tape and regulation;
—inflexible requirements;
—technical leveling of proposals and little room for innovation;
—cost "auctioneering" of contracts; and
—premature fixed-price arrangements.

Government agencies are dissatisfied with

—poor product performance, reliability, and maintainability;
—proliferation of regulations, management layering, and endless audits;
—runaway cost growth; and
—contract claims in the hundreds of millions.

The *Congress* is dissatisfied with

—the accelerating cost of major systems;
—reductions in agency capabilities (particularly in defense); and
—uncertainty: Is a proposed new system really needed? Will it do what it is supposed to do? Can it be built for the expected cost? Are there better alternatives?

How We Got Here

Some 25 years ago, in response to the cold war, the President declared a temporary national emergency which set off a whole chain of events. The United States began to focus on advanced technology in national defense and space systems. Concentration on quick results led to

—a new Government-industry relationship;
—voluminous and complex laws, regulations, management systems, and contracting procedures, which replaced normal competition; and
—large staffs in Government and industry to police this new way of doing business.

The new Government-industry relationship to procure urgently needed weapons systems began to permeate systems acquisition generally. Agencies began taking unvalidated technical information from inside-agency sources, such as users and laboratories, and from outside sources such as "think tanks" and major suppliers, and amalgamating them into a baseline system. This information became the basis for formulating a rather precise statement of the baseline system's operational requirements.

The operational requirements, together with the system baseline solution, described

—the system concept and operational approach, such as a manned aircraft;
—the kinds of technologies involved, such as the kinds of aerodynamics, guidance, propulsion, and structures;
—how these technologies would be shaped, sized, and interrelated;
—the main design features, such as the number and type of engines, fire control system, and armament; and

—the performance requirements and characteristics, such as takeoff and landing distances, speeds at different altitudes, weight, and maneuverability.[3]

Thereafter, system technical work by the agency and interested contractors focused on refining one preliminary design. Alternatives were not considered responsive. Typical alternatives presented to higher agency management were (1) accept the proposed system, (2) modify existing systems in the inventory, and (3) cancel and do more studies. Sometimes a fourth alternative surfaced, which was to develop a prototype of the proposed system before full-scale development.[4]

Meanwhile, an intense marketing effort would unfold as each major supplier tried to anticipate the agency's request for proposal. Each supplier created some unique feature in order to differentiate his eventual proposal from others, but always within the preset baseline system. Specifications in the request for proposal were advance paper simulations of the required hardware, and the contract would become a paper forecast of a hardware future.[5]

A complicated and lengthy procedure for selecting an industry supplier ensued. Technical ideas on design details in one proposal were transfused into another (technical leveling). Contractor proposals, having been technically leveled, were subjected to so-called price competition in an effort to create an award situation that the agency could successfully defend. But this would be much too early to price a high-technology system solution still in its conceptual, preliminary design stages. Overoptimistic estimating became the survival strategy, both for industry in contract award situations and for the agencies in obtaining congressional funding.[6]

The resulting award granted a license, usually to a single company, to build according to the agency's baseline system solution and performance requirements. Competition was locked out at both ends: first, in what kind of system hardware could best satisfy the agency's need, and second, in the design of the system itself. Neverthe-

[3] "Report of the Commission on Government Procurement," vol. 2, pp. 98, 99, 117-123. The Commission's findings were based on an analysis of various agency statements of required operational capabilities, reviews of individual programs, and interviews with officials associated with the system requirements process.

[4] *Ibid.*, p. 121. The Commission's findings were based on an analysis of over a dozen current development concept papers prepared for top agency management program decisions.

[5] "Contracts Don't Count," remarks by Allen E. Simon, Assistant Director (Air Warfare), Director of Defense Research and Engineering, before the Washington chapter, National Contract Management Association, 1971.

[6] The Commission took the position that, when design features originate from multiple Government-industry sources and the system is selected before development begins, there is little chance that any one organization assuming systems development responsibility knows whether desired performance is achievable or what it will cost. "Report of the Commission on Government Procurement," vol. 2, p. 147.

less, both the agency and industry spent enormous sums and several years to create the baseline system, define its operational requirements, develop a request for proposal, prepare industry responses, and select an industry source.[7]

Some agencies today are using the parallel development approach; that is, letting two companies build advance-development prototypes of the agency's baseline system solution.[8] The latest substitute for real competition is an attempt to control the ultimate cost of the given baseline system solution through use of "design to cost". Here, the agency attempts to set an early unit-cost goal for bidders to meet.[9] A design-to-cost goal presumes a defined system solution and a certain number of units required. Early design-to-cost goals limit competing candidates because system solutions with differing performance and schedule characteristics logically must have differing unit costs.[10]

Since the national emergency in the fifties, many individual efforts have been made to improve major system acquisitions. Each attempt has fragmented the acquisition process into disconnected pieces, omitted the early part of the process, often attacked symptoms rather than causes of problems, and recommended fixes to individual parts of the process.[11]

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[7] The long gestation period for these emerging systems caused industry to do more and more independent research and development and to run up bid and proposal expenses. These accounts were also used as devices for holding industry teams together pending the ultimate selection of a contractor. "In the case of the B-1 program, the Air Force spent $140 million on feasibility and other studies during the period 1965-1970 to write the development specifications. Seven companies spent $66 million while preparing and waiting for receipt of the request for proposals. It cost five companies a total of $36 million in company funds." *Ibid.*, p. 137. Instead of correcting the underlying problem, we now have costly administrative and legislative procedures which constrain the true purpose and use of contractor independent research and development efforts.

[8] For discussion about parallel development or competitive prototyping of a given system solution, see "Evaluation of Two Proposed Methods for Enhancing Competition in Weapons Systems Procurement" (B-39995, July 14, 1969). For a discussion about opening up the competition to a mission function, see "Actions Needed to Reduce the Proliferation of Tactical Air-to-Ground Missiles" (B-160212, Dec. 31, 1970), pp. 70-76.

[9] See, for example, OPNAVINST 5000.42, "Weapon Systems Selection and Planning" (Department of the Navy, June 1, 1974).

[10] A variety of systems, each with different performance characteristics and unit costs, might be bought to achieve the same level of mission capability at the same total cost. At the very outset, it is difficult to set goals based on a particular system. To set a unit-cost goal for an airplane, for example, someone must know what the technical and performance characteristics of the airplane will be and, consequently, how many will be needed to achieve a certain level of mission capability. This is impossible to know before a system is designed in one way or another. If programs start with a unit-cost goal, then they have already passed into the choice of a preferred system. "Report of the Commission on Government Procurement," vol. 2, p. 100.

[11] For current examples, see the three recent acquisition studies by the Army (AMARC), the Air Force (ACE) and the Navy (NMARC).

Creation of a Programmatic Framework

This systems acquisition history is what confronted the Commission on Government Procurement during its 2½-year study of Federal Government procurement. To avoid similar pitfalls, the Commission scrutinized the total acquisition process, from program inception through operational use. None of the resulting recommendations were developed in isolation; rather, they were designed to work together to control the whole process. In other words, the Commission used a "systems" approach to identify the underlying problems in systems acquisition. This approach required a comprehensive framework of understanding. The framework was constructed from well-established principles, variously referred to as "systems engineering," "program analysis," or "systematic problem solving." [12]

The Commission's framework has four dimensions; it

—defines the most fitting roles in systems acquisition under our economic and political system for all involved organizations: the agency component, the agency, the private sector, and the Congress,

—sets out four logical problem-solving steps that are basic to any program,

—gives to agency heads and to the Congress visibility and information necessary to exercise their responsibilities at crucial turning points in a program, and

—provides means of assuring public accountability without excessive Government controls.

[12] *Ibid.*, vol. 2, p. 91.

Roles and Relationships of Program Participants

The first dimension of the framework defines the roles of the sponsoring agency, the agency head, the contractor, and the Congress. The Commission found that these roles were often reversed, responsibilities for key decisions were organizationally misplaced and ill-timed, and design responsibilities for new systems were diffused among the agency and its suppliers; that is, total system design responsibility had disappeared.

To illustrate, agency components, unchallenged by technical competition, were determining the baseline system solution. Industry suppliers were bidding on a solution which they had neither created nor designed. As programs encountered difficulties, agency heads and congressional committees combed the mass of program detail for relief. In so doing, they usurped the program manager function. Their reviews were too late to confirm the need for the program or to encourage exploration of competing solutions. Suppliers found their roles to be somewhere between free enterprise and nationalization, with the Government dictating more and more management decisions on their new products and procedures.[13]

To help clarify these roles, the Procurement Commission relied on proven aspects of our economic and political systems and on fundamental logic. The Commission said, for example, that the *agency's* initial role is to define its mission need or problem and to set program goals; that is, the amount it can afford, the time allowed, and the capability required to solve the problem. The *Congress'* initial role is to confirm the mission need and authorize the funds needed to explore the most promising candidate solutions. The *private sector's* role is to independently create, design, and demonstrate candidate solutions for agency testing and evaluation.

The Four Basic Steps

The second dimension of the framework sets out four basic steps for organizing new programs, each of which systematically develops information needed for the next step. In the *first* step, the need is stated not as a particular kind of system but as a function to solve a mission problem within an expected operational environment. Segregating the problem from its solution in stating mission needs and program goals permits alternative concepts and technical approaches to be considered and explored in the *second* step. Competition is introduced early by financing small design teams whose proposed system candidates warrant exploratory efforts. Starting industry competitions at this early stage

—introduces competition at only a fraction of the cost needed in later full development and production phases;

—opens the way for innovation—simpler and differing technological solutions—rather than concentrating resources on a single, sometimes conventional approach;

—broadens the competitive base by permitting other than a few major firms the opportunity to create and prove out solutions to new needs; and

—simulates forces in the commercial marketplace which can be used as a substitute for detailed agency surveillance of contractor activities.[14]

In the past, all but major firms have

[13] In a recent publication, an eminent management consultant points out that the relationship between business and Government is in disarray and urgently needs rethinking, reappraising, and restructuring in order to preserve the autonomy and accountability of business enterprise. Peter F. Drucker, *Management: Tasks, Responsibilities, Practices* (New York: Harper & Row, 1974), pp. 352-365.

[14] The Air Force's lightweight fighter program illustrates the use of earlier-than-usual competitive design efforts, greater design latitude, and fewer administrative controls. Early competitive design efforts were narrowed down to a contest between two companies to develop superior but radically different fighter planes. The contest was called "the dogfight of the century." Pilots have described the winning version as the "hottest dog in the sky."

been fenced out of these competitions because of the late point in the process at which they were held, the high cost of entry, and the requirement for full-scale development and production capacity.[15]

The *third* and *fourth* steps of the programmatic framework are not entirely new, at least not to DOD. They involve test demonstrations to choose a preferred system and to carry it through final design, production, and operational use. These four steps form a framework in which to bring along programs in an orderly manner. Each step is logical and is built on the learning acquired in the prior step.[16]

The framework, through its first two steps, permits top agency participation in why and how new acquisition programs get started—the so-called "front end" of the acquisition process. Such front-end participation is currently missing from Defense's systems acquisition policy Directive 5000.1. This is the new policy document developed by former Deputy Secretary of Defense, David Packard. The Commission recognized in its report his outstanding effort to improve system acquisition practices.[17] In a 1972 farewell statement, former Secretary Packard emphasized the need for better decisions at the beginning of new programs—before momentum sets in. The Commission's programmatic framework responds to his concern for a rational decisionmaking process within which to start new programs.[18]

Visibility Over Key Decisions

The third dimension of the framework is to provide the visibility needed by agency heads and the Congress over those key decisions that shape the purpose and direction of any major program. Agency heads and the Congress have not had visibility over early program decisions that influence the program's outcome and commit major national resources. Such decisions in the past have

—locked the program into a single solution, eliminating real competition and forestalling a hard look at alternatives;

—committed, almost irrevocably, the kinds of agency capabilities that will be available for national defense and other public needs; and

—foreclosed the agency's spending

[15] "Report of the Commission on Government Procurement", vol. 2, pp. 124-126.

[16] *Ibid.*, pp. 90-94.

[17] *Ibid.*, p. 75.

[18] The Commission report shows that mission statements of the Army, Navy, and Air Force cannot be reconciled with each other and do not match mission statements used at the Office of the Secretary of Defense level. The report illustrates the difficulty in reconciling military service mission responsibilities and how this both influences the kinds of systems the military services propose and contributes to unplanned duplication. The report makes the recommendation that the agency head reconcile individual service needs at the very beginning of new programs and assign responsibility in such a way that (1) one service is clearly responsible for developing systems alternatives or (2) competition between two of the services for system alternatives is recognized as a desired approach. "Report of the Commission on Government Procurement," vol. 2, pp. 101-105.

priorities for the next decade or more.

The Commission believed that the decisions over which agency heads and the Congress should have visibility are the ones that initiate the four basic steps previously described since they represent the major turning points in a program. (See fig. 1.)

Public Accountability Under The Programmatic Framework

The fourth dimension of the Commission framework offers means for assuring public accountability that can help replace the wealth of administrative procedures that currently exist. These means consist of high visibility of key program decisions, of substantive private enterprise competition in creating and developing system solutions, and of test demonstrations for choosing the preferred program solution.

To repeat, system solutions have often been chosen without the aid of competitively designed and tested hardware; the Government is then committed, often prematurely, to a single undertaking. The dominance of single undertakings has caused a growth in the size and complexity of regulations and contracting procedures. Since there are no standards to measure the efficiency of a single undertaking, more and more administrative controls and regulations have been imposed to assure accountability of public funds. So many, in fact, that it is now difficult for industry suppliers and agency contracting personnel to comprehend them. One procurement policy official recently said that the regulations, which now exceed 3,000 pages, are often ignored or used as a crutch.[19]

Public accountability under the recommended framework for major systems suggests instead:

For the agency:

Expose agency heads and the Congress to relevant needs and goals decisions at program inception and to decisions at three turning points—when beginning to demonstrate competitive systems (or when entering noncompetitive development), when choosing the preferred system solution, and when implementing the system chosen for operational use.

For industry:

Operate in a competitive environment of ideas, design efforts, and system hardware test demonstrations and accept responsibility for business and technical judgments.

Genuine alternatives, with demonstrated differences in performance values and long-term costs, and independence of action by the buyer and seller, are the essential ingredients for effective competition.[20] Reliance on such competition in choosing program

[19] "Procurement Regulations, A Help or Hindrance to Systems Acquisition," Remarks by Admiral Kenneth L. Woodfin, Deputy Chief of Naval Material (Procurement and Production), before the Washington chapter, NCMA, January 1975.

[20] For discussion of effective or workable competition, see Joel Dean, *Managerial Economics* (Englewood Cliffs, N.J.: Prentice Hall, Inc.), p. 55.

solutions, together with visibility of major program turning points, should lead to true decentralization of day-to-day program management decisions. Also, there should be fewer regulations and procedures, simpler contractual arrangements, and reduced reporting and auditing requirements. The extensive detailed surveillance we have today creates an enormous cost to the taxpayer and hinders both public and private business initiative.

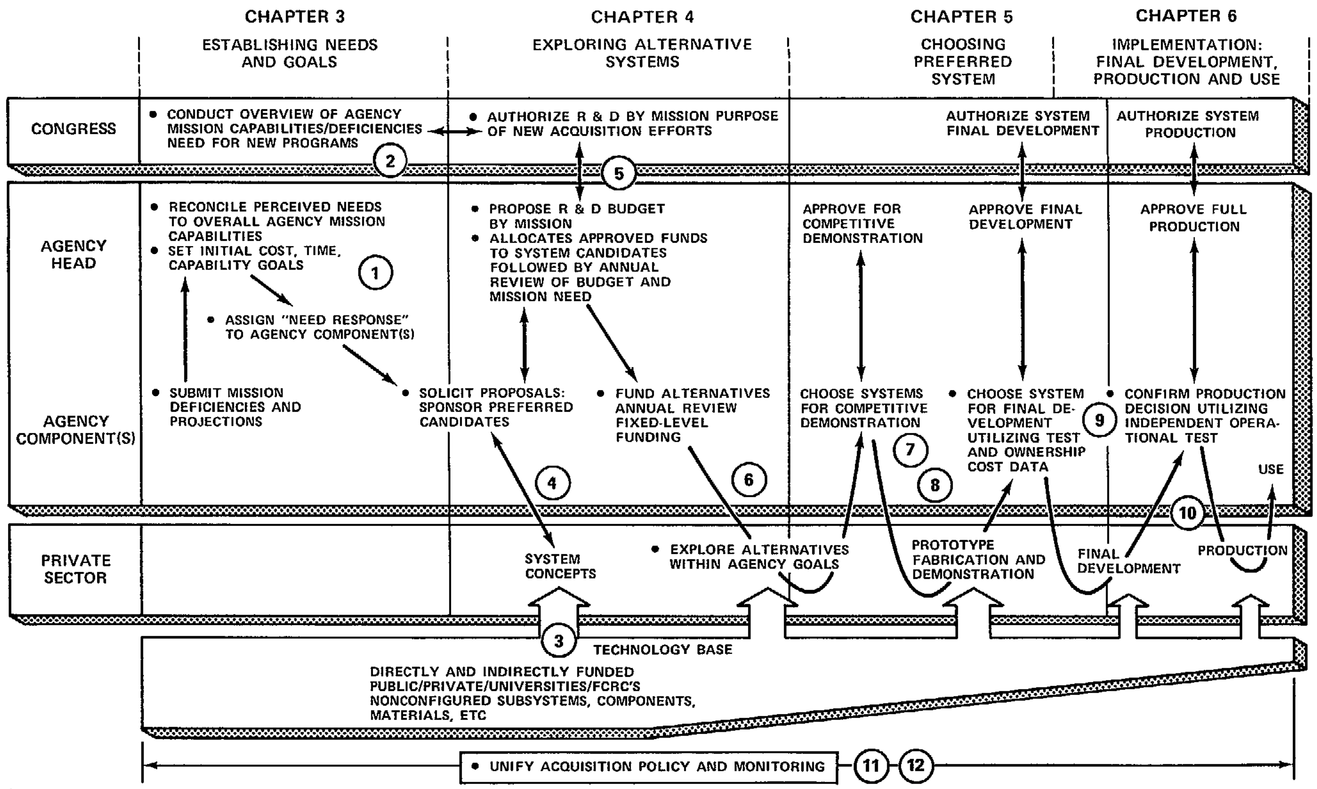
One way to keep Government surveillance over private enterprise management to a minimum would be to gradually shift the business posture from cost-based contracts to competitive and fixed-price kinds.[21] The Commission envisioned that such a shift could occur by beginning acquisition programs with short-term (about 1 year), fixed-price-type contracts. Under these contracts, the scope of work would be limited to investigating and proving out proposed concepts and the most critical unknown design elements of candidate systems. These contracts could be renewed if progress were made and if the candidate system remained sufficiently competitive to warrant further development. Ultimately, the competition would be narrowed down to a test demonstration phase. Such an incremental approach develops high confidence in design information and could lead to a final design effort with a fixed-price ceiling. At this point, a fixed-price option for a limited production run could be added if high risk areas have been resolved.

Under this approach, the agency would be directly financing competitive exploratory efforts on a short-term basis and renewing only those warranting further development on a fixed-price or fixed-ceiling basis. Administrative controls could gradually be relaxed as industry sources became more competitive and fixed-price in character.

Figure 1 depicts the four-dimensional programmatic framework and the 12 recommendations developed by the Procurement Commission for (1) roles of program participants, (2) execution of the four basic program steps, (3) agency head and congressional visibility over key program decisions, and (4) means of assuring public accountability. The recommended actions represent functions which the executive agencies were not carrying out in system acquisition programs at the time the Commission made its report. (See action items in bold print, preceded by a bullet.)

[21] See "Report of the Commission on Government Procurement," vol. 2, pp. 128-129. However, the Commission saw possible exceptions to its competitive model in the form of a "super system" committed early with one contractor bcause of the system's physical and financial magnitude and urgency of need. Here, cost-type contracts were recommended. See pp. 83-84. It seems unreasonable to question normal business costs, and to encumber industry, in toto, with all the reviews, controls, and administrative regulations that need only be employed for those few companies which must work predominantly under cost-based contracts or which, for some other special reason, cannot be relied upon to prudently manage their affairs. Since past attempts by the executive branch to resolve this problem (such as "CWAS") have yet to produce meaningful results, the solution may lie in clarifying congressional intent in a new procurement statutory framework now under study in the 94th Congress.

MAJOR SYSTEM ACQUISITION
• RECOMMENDED ACTIONS



Source: Commission Studies Program.

FIGURE 1

Earlier discussion identified present-day dissatisfactions with system acquisition programs. Such dissatisfactions are largely symptoms of underlying problems. An analysis of the impact of the Commission's framework and related recommendations on the symptomatic problems follows.

WHAT HAPPENS TO THE SYMPTOMATIC PROBLEMS?

Nature of symptomatic problem	*Impact of framework's recommendations*
Low profits, worsened by inflation	Profits will not be cost-based, but rather the result of the contractor's efficiency in a competitive environment. Higher profits will accrue from innovative, simpler, lower cost solutions to national needs.
Too much Government red tape, regulation	Government will oversee programs at crucial turning points; rely on competition and test demonstrations; and reserve regulatory approach for few noncompetitive exceptions.
Inflexible system requirements	Instead of imposing individual system requirements at the outset, such requirements will result from a competitive development effort oriented to a needed mission function and program goals.
Technical leveling of proposals and cost auctioneering of contracts	Contractors will have the design freedom to differentiate their solutions; technical transfusion between proposals will be precluded; system choice decisions will be made in lieu of source selection decisions; such choices will be based on a combination of performance and long-term acquisition/ownership costs; technical features enhancing the winning contractor's system design will be procured by him directly from the losing contractor who designed the feature.
Premature fixed-price arrangements	Short steps in the initial program phase, focused on high-risk areas, will develop high-confidence information for continued use of fixed-price arrangements.
Poor product performance, reliability, and maintainability	Performance factors will be important criteria in evaluating alternatives to be explored and in choosing the preferred system; test demonstrations will yield information for final choice and undue reliance will not be placed on contractor proposals.
Proliferating rules and regulations, management layering, and endless audits	Government agencies will rely principally on competitive forces, test demonstrations, and visibility on key program decisions, unless program is sole source. Agency components will have full flexibility to explore system alternatives. Overall, a simplified and flexible decisionmaking process is called for that places greater reliance on sound judgment and less reliance on detailed regulations and complicated contracts and clauses.

Nature of symptomatic problem	*Impact of framework's recommendations*
Runaway cost growth	Cost growth will continue to occur but large unanticipated growth will be precluded by not imposing premature system requirements, by short-risk reduction steps in the initial program phase, by higher confidence information acquired for decisions and by reduced emphasis on initial system proposed costs that are subject to buy-ins.
Contract claims in the hundreds of millions	Large claims are unlikely because (1) the Government will not make design decisions or impose commercially impractical system requirements at the beginning of development, (2) high-confidence information developed in initial steps will improve the estimating base, and (3) large contractor buy-ins will be more discernible and of limited value in view of emphasis on long-term costs and demonstrated performance values.
Accelerating cost of major systems, reductions in agency capabilities	Only system alternatives within the reach of program cost goals and at quantities needed to perform the mission function will be explored and sustained. Criteria used for system choice will compare competing alternatives as to the cost to acquire, operate, and maintain in inventory.
Congressional uncertainty as to system need, performance, cost, and better alternatives	Congress will have the opportunity to confirm program need at the outset and authorize R&D monies for exploring competing candidates; Congress will not be asked to fund program implementations until system performance and cost can be reasonably forecasted and at least partially validated through test demonstrations.

Executive Branch View of Programmatic Framework

The executive branch established an interagency group, led by the Defense Department, to prepare a policy position on the Procurement Commission's major system recommendations. The interagency group reported favorably on the framework and proposed that the executive branch adopt the recommendations, subject to some modifications of individual parts.[22]

In December 1974, the new Administrator of Federal Procurement Policy testified at Senate hearings that he had had a number of exploratory meetings on this subject with agency and industry people. He found that nearly everyone accepted the basic philosophy and rationale behind the recommendations but that a clear understanding of the problems of putting them into effect

[22] For a full review of the executive branch position, see the fifth in a series of GAO progress reports, "Executive Branch Action on Recommendations of the Commission on Government Procurement," PSAD-75-61, March 1975.

did not yet exist.[23] Although he did not go into implementation problems or issues, it is likely that they fall into five areas.

1. *Separating the problem from the solution*—Whether techniques can be developed for stating mission needs and program goals independent of any system solution. While the principle is neither new nor revolutionary, imaginative techniques may be required.
2. *Congressional change* — Whether congressional committees are willing to shift some of their attention away from the large sums spent in program implementation to the earlier, more crucial, program steps that involve only small expenditures. Current frustrations in the Congress over systems' cost escalation may create an atmosphere for change.[24]
3. *Application to all Federal agencies* —Whether an integrated systems acquisition policy framework can be applied Government-wide to agencies with differing missions, operating environments, and public-private sector relationships. The framework, however, is founded on a systems approach and basic program steps, not any one agency's operational environment.
4. *Represents an ideal* — Whether Commission recommendations represent an ideal or model that may be difficult to achieve in actual practice. Some recognition of this is embodied in the Commission's "exception" recommendation C-8 which, after the exploration of alternatives, allows a noncompetitive development approach to be used for urgently needed systems of massive physical and financial magnitude.
5. *Time and cost*—Whether Commission recommendations will add time and cost to systems acquisition programs. The Commission took the position that, by spending more time and money on the early pivotal steps in systems acquisition, there would be a net savings in time and money in the larger commitments that followed—and a substantial reduction in nonproductive activities.

[23] U.S. Senate hearings held Dec. 19, 1974, before the Committee on Government Operations, "Nomination of Hugh E. Witt to be Administrator of the Office of Federal Procurement Policy," 93d Congress, 2d session, p. 19.

[24] "The most effective way to control program funds is to control the early steps which lock in the levels of spending that eventually will concern Congress. An improved framework for accountability will require that information come to the Congress at all steps of program development—from the time the goals are set and while alternative means of achieving those goals are being explored so that it can *restrain* itself from trying to second-guess and reverse detailed program decisions at later stages. Legislation to lay the groundwork for that kind of well-ordered program information was included in Title VI of the Congressional Budget and Impoundment Act of 1974. Over the next several years, hopefully, *all* major programs of all agencies can be exposed in such a regular, evolving fashion." Senator Lawton Chiles, "Changing Concepts of Responsibility for Federal Procurement", *Defense Management Journal*, January 1975, p. 34.

The agencies who acquire major systems are being asked to develop implementing proposals for the consideration of top agency officials and the new Office of Federal Procurement Policy. A better view of the implementation problems may come from this effort.[25]

Overview

On the surface it appears that a large percentage of program costs are controllable because of the many year-to-year decisions in the agency and in the Congress to alter quantities and to slow down or accelerate programs. As program operating officials and contractors well know, however, these decisions ultimately add to the program's cost or result in a lesser capability than is needed to fulfill a particular mission.

Once the system's concept has been chosen, its technologies selected and arranged in a preliminary design phase, and its performance requirements stated, about 80 to 90 percent of the eventual lifetime program costs of a system are no longer controllable in any real sense. The program manager, upper layers of agency management, and the cognizant congressional committees do not ordinarily get involved until after these early but crucial program decisions are made. And, a great number of expensive Government controls, in the form of agency acquisition policies, program budgeting, regulations, competition, reporting, management systems and techniques, such as design to cost, are *all* focusing on only 10 to 20 percent of the total program costs that still remain variable.

One of the main purposes of the Commission's programmatic framework is to make visible the key systems acquisition decisions that shape the entire program and control most of its cost and performance.

The Commission's programmatic framework can be expected to achieve better agency and congressional understanding and oversight of Federal programs that consume so much of our national budget. Although the framework was designed for acquisition of major national systems to meet defense, space, energy, and transportation needs, it is essentially applicable to any program requiring a major resource investment. This is because its four basic steps are fundamental to any careful endeavor.

In summary, the proposed framework envisions new standards for (1) organizing and conducting major acquisition programs, (2) introducing technological competition at the outset of programs, (3) providing visibility

[25] "Even though well meaning criticism may be directed against the Commission recommendations, the proposals should be recognized as a coherent analysis of all the major issues in systems acquisition; indeed, a concerted, if not brilliant, effort to pull the threads together into a single pattern. * * * The Commission has given us a path to follow if we want to avoid the continuing dilemma of cost restraints for system acquisition programs and congressional criticism coupled with public dissatisfaction based, in part, upon a lack of credibility for the program's need and its planned performance." "The Acquisition of Major Systems: Which Path Out of the Wilderness?" *Federal Contracts Report*, January 27, 1975, p. K-2.

to top agency management and the Congress at key turning points, and (4) achieving built-in public accountability, without undue reliance on governmental control. Finally, the framework would help to slow down the present trend toward nationalizing our industries.

> * * * the [British] government lived up to campaign pledges by promising to nationalize the shipbuilding and aircraft industries * * * a National Enterprise Board will be set up to further nationalization, in whole or in part, of other industries. The board will offer cash-starved businesses the funds that they need to prevent bankruptcy, in exchange for partial government ownership and representation in management.
>
> *Time*, November 11, 1974

TALMAGE E. COX AND WILLIAM C. MEREDITH

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Applying GAO's Auditing Standards To Local Government Operations

This article describes some of the progress and some of the political and management problems of local governments as they volunteer for GAO's brand of in-depth probing.

"Asking whether we should adopt the GAO audit standards is like asking whether we are for responsible government," concluded a local auditor as the city-GAO demonstration audit ended. The need that local governments have for the kind of comprehensive performance auditing GAO is promoting is just that obvious, but adoption and growth of performance auditing within local governments will not be that easy. We discovered some challenges during our experience with two of them.

Teaching Performance Auditing to Volunteers

In cooperation with the International City Management Association, GAO is assisting 12 local governments that volunteered to use GAO's "Standards for Audit of Governmental Organizations, Programs, Activities, and Functions" in making performance audits of local activities. The audit standards, published in 1972, are to provide all levels of government in the United States with uniform guidance on the scope and quality of audits and on meaningful audit reporting. The standards call not only for financial and compliance auditing but also for auditing of the economy, efficiency, and achievement of desired results—referred to collectively in this article as performance auditing.

The 12 participating local governments, which range in population from about 8,000 to 3 million, are in 8 States and the District of Columbia. In each local government, a service or activity, such as fire protection, park maintenance, or tax assessment, was selected for audit. Most of the detailed work was done either by internal

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auditors, CPA firms, management analysts, or management consultants. GAO auditors provided guidance and assistance by interpreting the audit standards and by demonstrating the use of GAO audit techniques.

The purpose of the demonstration audit projects is to promote adoption of the standards by local governments by demonstrating their usefulness. It is believed that, if local governments can do more of this type of auditing, their work can be used to meet both their own needs and the needs of the Federal Government for information on grant and revenue-sharing programs.

This article is based primarily on the progress and problems of two of the participants, a small city and a large metropolitan county.

Arrangements for Audit

For an audit subject the city selected its use of automotive equipment, which consisted of about 300 cars, trucks, earthmovers, motorcycles, and other items. The annual cost of using this equipment was about $400,000, and additions were costing about $200,000. For its audit subject the county selected its parks department's capital improvement program, which included a 10-year, $100 million bond program for acquiring, constructing, and improving parks and recreation facilities and for constructing a zoological park. In addition, the department's annually funded improvements program had a $3.4 million balance of uncompleted projects.

Local officials selected these subject areas because they believed they were significant in terms of cost and were in need of operational improvement.

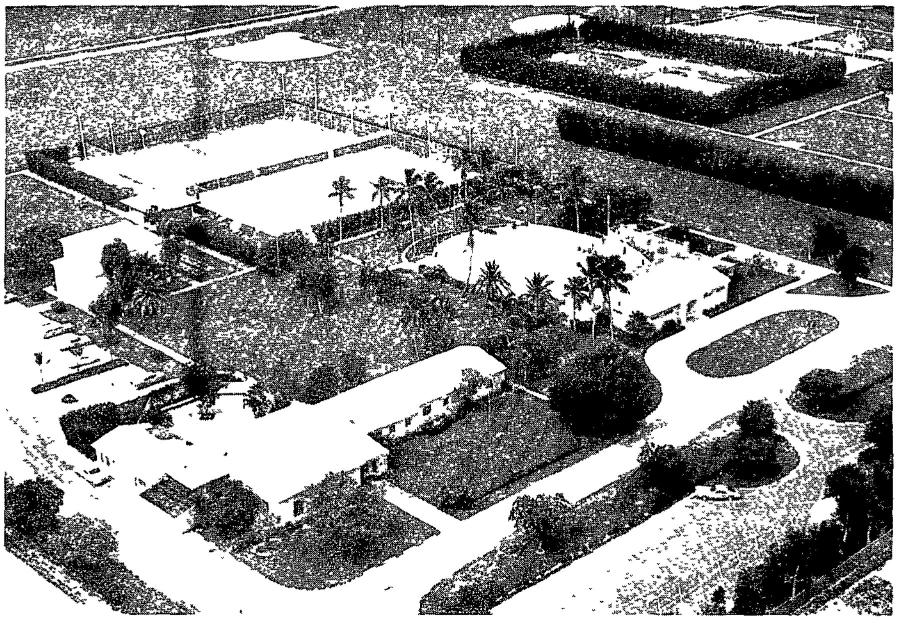
GAO assigned experienced auditors to work full time with the city and the county in surveying the subject areas to better identify improvement potential and to determine whether detailed reviews were necessary. Both surveys identified significant problems with enough potential for improvement to justify detailed reviews. GAO helped the city and county prepare review guidelines and continued to provide assistance and guidance on a part-time basis throughout the review.

Commitment Needed

Neither the city nor the county had staffs with enough independence to do the type of audit work required by the standards. Management or technical staffs were assigned to the audits, but the staffs retained most or all of their regular duties. Such staffing was not ideal, but it was the local governments' preference for staffing a new venture that they had made no commitment to continue.

The city manager assigned his administrative services director to participate with GAO in performing the audit. The joint city-GAO audit team developed survey plans; collected, analyzed, and summarized survey information; and developed review guidelines. Following the survey, the administrative services director, assisted by technical and clerical staff from the city's accounting and administrative offices, made a detailed review and prepared an audit report.

The county had an internal audit



Recreational center with swimming pool and tennis courts built under the county park department's capital improvement program.

staff, but the county's share of the work was not assigned to that staff because the county manager believed the staff lacked management experience and would be unable to effectively evaluate management's performance. Instead, he initially formed a temporary task force of nine county employees from key departments under the direction of the budget and analysis department. The county staff's commitment to the survey soon diminished because of continuing obligations to regular duties and because no one county official was solely responsible for the staff's participation. GAO continued the survey and prepared the review guidelines with only occasional participation by the county staff.

The county manager formed a replacement audit staff, under the supervision of the county's program analysis division, to remedy the participation problems of the first group. The review effort was helped by the formation of the second team because the program analysis division was experienced in making general studies of county operations and was familiar with the kind of information gathering and analysis that characterizes performance auditing. Despite the break in continuity of effort, this team performed the detailed review and prepared an audit report.

The city and the county found that using management or technical staff as part-time auditors resulted in teams with useful knowledge of the activities audited. However, the practice also resulted in teams that lacked the independence called for in the standards.

In their regular positions, some of the auditors were either partly responsible for the activities audited or subordinate to officials who were responsible. Also, the part-time auditors were frequently required to interrupt their audit work to discharge their regular duties.

Local governments that use internal staffs to apply the audit standards may find it necessary to begin with a borrowed, part-time staff before deciding on permanent staffing. To be fully effective, however, auditing must be a permanent part of the management process and, the audit staffs must be free of any organizational or other impairments that might prevent them from being objective.

Evaluation Criteria Missing

One of the city's early basic audit findings was that it did not have adequate policies, procedures, or records for managing its use of automotive equipment. The county had the same general problems in managing capital improvements in its parks department. Neither had specific objectives or the means to measure progress. As a result, the auditors did not have adequate criteria or information for a detailed evaluation of either activity. The evaluations, therefore, focused on opportunities to improve management controls.

As stated in the audit standards, management of an organizational activity should include a system of internal control. The system should include policies, procedures, and practices and a plan of organization adequate to insure accurate information, promote compliance with applicable laws and regulations, and provide for efficient and effective operations. Neither the city nor the county had such a system. In each case, officials believed that their chosen activity was not being adequately managed, but they had varying opinions as to the most serious problems and the possible causes, effects, and cures. Establishing specific criteria and information for measuring performance, as suggested to the city and county during the audits, will help them to recognize problems and to devise means to solve them.

In both the city and the county, the demonstration audits pointed out some of the adverse effects of the lack of such criteria and prompted the development of adequate policies, procedures, and information—tools for effective management. If suitable action is taken to make these new policies and procedures work effectively, many cost-saving improvements should result. Future performance audits of the same activities can then be a search for any needed refinements of an established system of management control and a search for achievement of greater operational economy, efficiency, and effectiveness.

Time and Costs Are Important

Time requirements and related costs will be of vital interest to local governments as they consider embracing performance auditing. Without experience in such audits, however, they will have little basis for reliably estimating time and cost requirements.

The demonstration audits cost more than subsequent audits should because they were made for a purpose broader than just improving the activities being audited. The city's audit spanned 190 calendar days and cost about $13,000 for the staff-days spent by the city and GAO. The county's audit spanned 250 calendar days and cost about $20,000.

Since those audits were demonstrations, time and costs are meaningful in relation to the gains to be made by the city and county through improving the operation of the activities audited and the knowledge they have acquired on how to make and benefit from performance audits. Corollary benefits are the knowledge other local governments may obtain from their experience and the information GAO gains about application of the audit standards by local governments.

As those cities participating in the joint demonstration audits move ahead into additional audits on their own and as other cities venture into performance auditing, a useful base of time and cost experience can be built. First attempts at performance auditing may seem time consuming and costly because of the learning that must take place. But for those cities that want a tool for promoting more efficient and effective management, the gains from performance auditing can soon be greater than the cost.

After reviewing the audit report on automotive equipment use, the city manager commented that, if the city had invested in an adequate cost accounting system for automotive equipment 5 years ago, the investment could have been recovered many times through the improved cost control that could have resulted.

They See the Need

Through the demonstration audits, city and county officials saw that they needed to establish and enforce specific policies and procedures for controlling and improving the audited activities. More significantly, however, they saw a demonstration of the benefits of performance auditing as a management tool. After completing the review of automotive equipment use, the city began a similar review of its personnel management practices. The county began audits of activities of its housing and employment commission and its public safety department.

Lessons Learned

The demonstration audits taught us some valuable lessons about local officials' concepts and the political environment in which they operate.

Local Misconceptions About Auditing

Many local officials do not understand performance auditing, and they may expect too much from it. Some viewed performance auditing as a proposed substitute for performance management. That is, they did not have adequate policies, procedures, performance standards, or information for managing an activity; yet, they thought auditors could evaluate their performance in detail and could provide a detailed plan for improvement.

In some cases, officials knew generally what their management problems were but had not taken corrective actions. They looked to performance auditing for alternatives to corrective management actions.

Part of the auditor's responsibility is to help correct such misconceptions by clearly explaining that performance auditing is to be only a part of management's internal control system, not a substitute for it.

Management—Not Surveillance

To embrace performance auditing, local governments must see its potential as one of their internal management tools.

Generally what local governments have seen and have considered as performance auditing has been external Federal surveillance of their execution of Federal grant-in-aid programs. Such audits are designed to answer questions that are of interest to Federal agencies and to insure compliance with program requirements based on national priorities. Local governments often feel they do not benefit from such audits and may find themselves in an adversary position with the auditing agency.

We need to emphasize that the performance auditing we are promoting is not just an extension of the Federal Government's audit arm. Instead, it is a management tool that local governments can use to meet their specific needs. It can also replace some of the external Federal surveillance.

At the end of the demonstration audit in the county, the county manager suggested that Federal agencies, which sponsor several county programs, should consider discontinuing their direct reviews of these programs in favor of sponsoring and using the county's auditors. He believed that county auditors, who are familiar with county policies and procedures, could perform a comprehensive review which could satisfy the needs of all concerned. Such sharing of audit responsibility and results was an underlying premise in developing the audit standards.

Sensitivity to Criticism

A primary obstacle to perpetuation of performance auditing at the local level is management's understandable reluctance to invite public criticism. The Federal auditor will find that many issues which at the Federal level might not generate much political concern may be vital political issues in local government.

Citizen reaction and voter response to local government's performance—particularly that performance which is perceived to be unsatisfactory—can be very direct. Some managers are concerned that any audit results criticizing local government's performance could be misused to generate an undue amount of public dissatisfaction and political heat. Managers serving at the will of elected councils, and perhaps the councils themselves, can feel they are in a precarious position if they promote performance measurement and performance auditing and thus bare their performance to public and political criticism. To avoid the possibility of the above reactions, the county audit team screened politically sensitive matters from its published report and made them the subject of a separate report with distribution limited to the county manager.

Political obstacles to successful performance auditing may be seen also in the organization, personnel practices, and operating procedures of local government. Through political influence, tenure, or personality, some department officials can be largely independent of top local management and may not comply with certain management policies and procedures. Departments or individuals may thus avoid following what top management considers to be sound management practices. The manager is then caught in a conflict between political reality and responsible management.

Considering the understandable reluctance of a manager to invite criticism of his own performance and considering the other political realities that may limit his ability to exercise complete administrative authority, the manager's office is not the ideal level of responsibility for performance audits. The alternative is to have performance auditing as a function of the policymaking body of local government; however, the policymaking bodies in many local governments are part time and are without staff support. As a result, the manager's office may be the highest practicable point of responsibility at which a performance audit effort can be sustained.

Conclusion

All levels of government need performance auditing. It is an essential part of a good management control system. It can also point out the absence of and need for such a system, as it did in the two local governments referred to in this article. Performance auditing needs to be better understood, and it needs acceptance at the highest level in government. The demonstration audits are one way that GAO is helping to gain that greater understanding and acceptance.

In Plain Language

Sticking to plain language, those seeking to improve the accountability of a particular governmental unit must ask these kinds of questions of it: First, does this outfit get things done economically and well? Second, is the price right and is the operation clean and honest? And third, are they properly set up to do things right? There is nothing terribly exotic or mysterious here.

Burton D. Friedman
in *The Quest for Accountability* (1973)

JOHN J. RECK

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Financial Auditing of Federally Assisted Programs

Growth in federally assisted programs and the need for using non-Federal auditors to assist in auditing Federal program funds requires coordinated approaches to financial audits.

It comes as news to practically no one that about the only area of growth within the American economy that exceeds the inflation rate is the growth in funding of federally assisted programs. From a "mere" $2 billion in 1950, these funds will have grown to over $50 billion by 1975.

The growth has been rapid, and there have not been enough Federal auditors to see that the use of funds has been subjected to proper audit scrutiny. Moreover, the situation becomes complicated because grant funds usually flow into regular State or local accounting systems and become intermingled, which increases the complexity of auditing uses of the Federal portion of the funds. Accordingly, Federal officials have increasingly turned to State and local auditors, including independent public accountants, to meet their audit requirements.

Changes in Federal Policy

Accompanying this growth in federally assisted programs are recent changes in types of grant programs, as well as changes in administrative and costing requirements applicable to State and local grantees. Both the general and special revenue sharing programs mark a change from traditional programs, highlighted by Federal control and Federal standards, to programs funded by Federal dollars but subject to local controls and standards.

Federal policy covering grant administration, as set forth in Federal Management Circular No. 74-7, issued by the General Services Administration, provides for simplified and uniform administration of grants awarded to State and local governments. Other management circulars issued by GSA and the Office of Management and

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Budget provide uniform principles for determining costs under grants to State and local governments and educational institutions. These circulars have substantially reduced the conflicting criteria for cost-element allowability which existed among the various regulations issued by the agencies before these uniform principles were implemented.

Although much has been accomplished in the area of standardizing grant administration and accounting practices, achievements in the postaudit area have not matched this record.

The problem in the postaudit area is characterized by conflicting audit approaches among the various Federal departments and agencies and by individual agencies focusing on their own programs to the point of excluding broader coverage of the audited organization. The problem however, is not due to a lack of Federal policies in the area, but to a failure to implement these policies.

Federal Management Circular No. 73-2, issued by GSA, provides that the Federal agencies coordinate their audit requirements and *approaches* with non-Federal auditors to the maximum extent possible. The circular also states that:

> * * * each Federal agency will give full consideration to establishing cross-servicing arrangements under which one Federal agency will conduct audits for another * * *. This is particularly applicable in the Federal grant-in-aid * * * programs where two or more Federal agencies are frequently responsible for programs in the same organizations * * *.

In addition, the Comptroller General has issued audit standards which encourage coordination and efficiency in undertaking governmental audits.

Current Status of Audit Guides

Despite the Federal policy and the Comptroller General's promulgation of standards, audit coordination has not been achieved to a satisfactory degree. A survey of Federal agency audit guides for use by non-Federal auditors is helpful in determining why audits of federally assisted programs are not being better coordinated.

The level of detail and suggested testing procedures contained in the agency audit guides vary from agency to agency. In addition, the audit guides, for the most part, contemplate audits which are almost exclusively directed to serving Federal needs as defined in the program legislation and regulations. Except in a passive way, the guides do not take into account other audit work which may be done at the grantee organization.

The audit guides also do not provide for situations when specific grant audit requirements can be satisfied as part of an examination of an entire grantee organization. This is most noticeable in those guides which present detailed guidance in audit program format. In these cases the guidance is limited to a series of suggested audit procedures covering various program cost elements (e.g., travel expenses, consulting service cost, etc.).

A number of the audit guides require that the auditor review and report on the adequacy of internal controls. However, most of the agency audit guides do not indicate the potential usefulness of the internal control review work for reducing the extent of tests of cost-element balances.

The absence of uniform audit approaches, coupled with the proliferation of audit guidance directed to program cost-element type examinations, reduces the potential for coordinating audit efforts at organizations administering federally assisted programs.

Many of the Federal agency audit guides provide that other audit work done at the organization be considered for possible application to the specific grant audit at hand. However, this is a passive approach to achieving efficient use of audit resources. Perhaps the best way to efficiently use audit resources would be to develop audit procedures which would satisfy individual grant audit requirements as part of a single audit of an entire grantee organization.

Change Contemplated

The Financial and General Management Studies Division of GAO, working with the National Intergovernmental Audit Forum, has begun developing audit guidelines applicable to financial audits of grantees receiving funds under federally assisted programs. The objective of this project is to develop a standard audit program for the financial portion of any grantee audit. It is expected that this program will provide the means to achieve more efficient use of audit manpower and improve the coordination of Federal, State, and local audit efforts.

The financial audit guide is being designed to provide for a uniform approach to auditing organizations which receive Federal assistance. The primary difference between the proposed audit guide and the existing agency guides is in the area of internal control review and audit universe. Unlike the existing agency guides, the focal point of tests under this approach is the accounting system applications (e.g. cash disbursement, purchasing, etc.) as opposed to approaches which focus on program cost-element details. The audit universe under this approach includes all transactions processed under the pertinent accounting system applications, including federally assisted grant program transactions. The suggested audit and review programs would cover organizational, financial, and accounting matters, as well as those aspects relating to uniform Federal requirements for federally assisted programs.

The following is an example of how audits could be conducted under the new financial audit guide.

Assume that a department of a non-Federal governmental unit had a payroll system which functioned for all activities within that department, including several federally assisted programs. The audit guide would provide guidance on (1) the review of internal controls in the payroll system and (2) criteria and suggested testing procedures for payroll transactions and balances. The latter would include guidance pertinent in any audit of a payroll system, as well as specific audit and review procedures directed toward Federal requirements (e.g., review for compliance with minimum wage laws).

If a State or local auditor followed the audit guide procedures, this one audit test should serve as a basis for evaluation by Federal, State, and local officials as to whether payroll procedures are working adequately and whether basic Federal laws have been complied with. In addition, specific requirements that might be imposed by an individual grant, State law, or local ordinance could be added by special addendum to the program.

By designing audit approaches to cover a natural accounting universe (i.e., all transactions processed under the accounting system application) it is possible to satisfy a variety of needs and to better coordinate audit efforts. If both Federal and non-Federal auditors agree to this audit approach, more effective use of audit resources should result.

About That Term "Audit"

Here are some of the ways the word has been used.

financial audit	fiscal audit
fidelity audit	fiduciary audit
operational audit	program audit
efficiency audit	responsibility audit
performance audit	internal audit
organizational audit	functional audit
management audit	external audit
preaudit	postaudit
independent audit	opinion audit
compliance audit	comprehensive audit
contract audit	grant audit
project audit	accountability audit
personnel audit	in-depth audit

quality assurance audit

Burton D. Friedman
in *The Quest for Accountability* (1973)

MONTE CANFIELD, JR.

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Oil and Gas Leasing of the Outer Continental Shelf

The following article is based on testimony by the author before the Senate Committee on Commerce, National Ocean Policy Study, at hearings held in Santa Monica, California, on September 28, 1974.[1] The hearings were held because of public protests over Department of the Interior plans to auction leases amounting to 2,400 square miles of the Outer Continental Shelf off California by May 1975. The State of California has filed suit to block this action on the ground of inadequate assessment of environmental impact.

The focus of this article is the specific issue of further Federal leasing of the Outer Continental Shelf, but viewed in the context of a larger national issue: How do we, as a Nation, attempt to balance our supply of and demand for energy at minimum cost—not just in dollars, but also at minimum cost to our environment?

GAO Reviews

GAO is involved in a number of reviews concerning the Outer Continental Shelf and the study of national ocean policy. In particular, we have been working very closely with the National Ocean Policy Study group and have four separate reviews[2] in that area which are being carried out on a priority basis.

We reported last year to the Conservation and Natural Resources Subcommittee of the House Committee on Government Operations that improved inspection and regulation of the Outer Continental Shelf by Interior could

[1] The author wishes to thank Herman Galvin, assistant director, Office of Special Programs, for his help in preparing both the testimony and this article.

[2] "Review of Availability of Northern Anchovy for Production of Fish Meal"; "Revitalizing U.S. Fishing by Better Resource Management"; "Revitalizing U.S. Fishing by Developing New Fisheries"; and "Review of the Federal Organizations Involved in Marine Science and Oceanic Affairs Programs."

Mr. Canfield is the director of the Office of Special Programs, a position he has held since July 1974. Previously, he served as deputy director of the Energy Policy Project, established by the Ford Foundation in 1972, and has held positions in the Bureau of the Budget and the Department of the Interior. He holds B.A. and master's degrees in political science.

reduce the possibility of oil spills—and we made recommendations to the Secretary along these lines. In addition, work is now underway to determine if Interior's programs are helping to maximize the discovery and development of energy resources, both onshore and offshore. We are considering lease production experience, environmental impact, and whether the public is recovering a fair return on the disposition of its natural resources.

All of this work is designed to help illuminate the issues and opportunities associated with the complex problems surrounding development of a national ocean policy and a national energy policy. The prudent management of Federal oil and gas resources on the Outer Continental Shelf poses issues at the very interface of these important national tasks.

Issues and Options

Some of the basic questions to consider are: Can we get by in this country without oil and gas from the California Outer Continental Shelf? If not, how soon do we need it? What options do we have?

The west coast as a whole was able to supply about 56 percent of its demand for oil in 1972 and about 50 percent in 1973—and this percentage is expected to go lower. For natural gas, the corresponding number has been about 21 percent both years. If we, as a Nation, continue on our historic course of increasing energy consumption by about 3.4 percent a year, in some 20 years we would double our consumption. To stay on that road would require full development of most of our major energy sources—all of our Outer Continental Shelf resources, western coal, oil shale, and nuclear power. We would also have to depend on imported oil.

Of course, there are options. They are real, they are possible, and they could happen. The Ford Foundation's Energy Policy Project, whose final report was recently published,[1] studied these options in detail. As deputy director of the project, I was able to consider firsthand the social, political, and environmental implications of reducing U.S. demand for energy and am convinced that we can do it.

In fact, by the late 1980s we can even get to a situation that has been called "zero energy growth." We could do this by sharply limiting dependence on fossil and nuclear fuels, using all possible means of conserving energy, and increasing the rate of shift of future economic growth to sectors of our economy having low energy consumption. This means decreasing the demand for the more energy-intensive activities that we are so accustomed to associating with national economic growth and health.

Then there is a middle way, a "technical fix," which emphasizes conservation by squeezing the fat out of our energy consumption. More will be said about this method later.

Under either of the lower growth alternatives, I can say unequivocally that we can do without further leasing

[1] Energy Policy Project of the Ford Foundation, "A Time to Choose: America's Energy Future" (Ballinger Publishing Co., October 1974).

of the California Outer Continental Shelf indefinitely. I must immediately point out that such an action might not make sense from a national point of view. Any decision to develop or not develop any resource makes sense only in the context of weighing the trade-offs among alternative options. There truly is no such thing as a free lunch.

The Trade-Offs

If we decide not to drill the Outer Continental Shelf off the California coast, we must pay a price. We must either put the burden on other sources and localities—which are no more anxious to develop their resources than are people in California—or we must all make the hard decisions, even sacrifices, required to reduce consumption. We cannot just stop everything and do nothing. We have only a limited number of options for improving supply, and there are trade-offs among those as to costs, environmental damages, and dependability. Although there are greater options for reducing demand, they tend to be difficult to implement because of traditional fears that reduced demand necessarily means reduced economic growth—a proposition, incidentally, that I do not belive.

The Timeframe

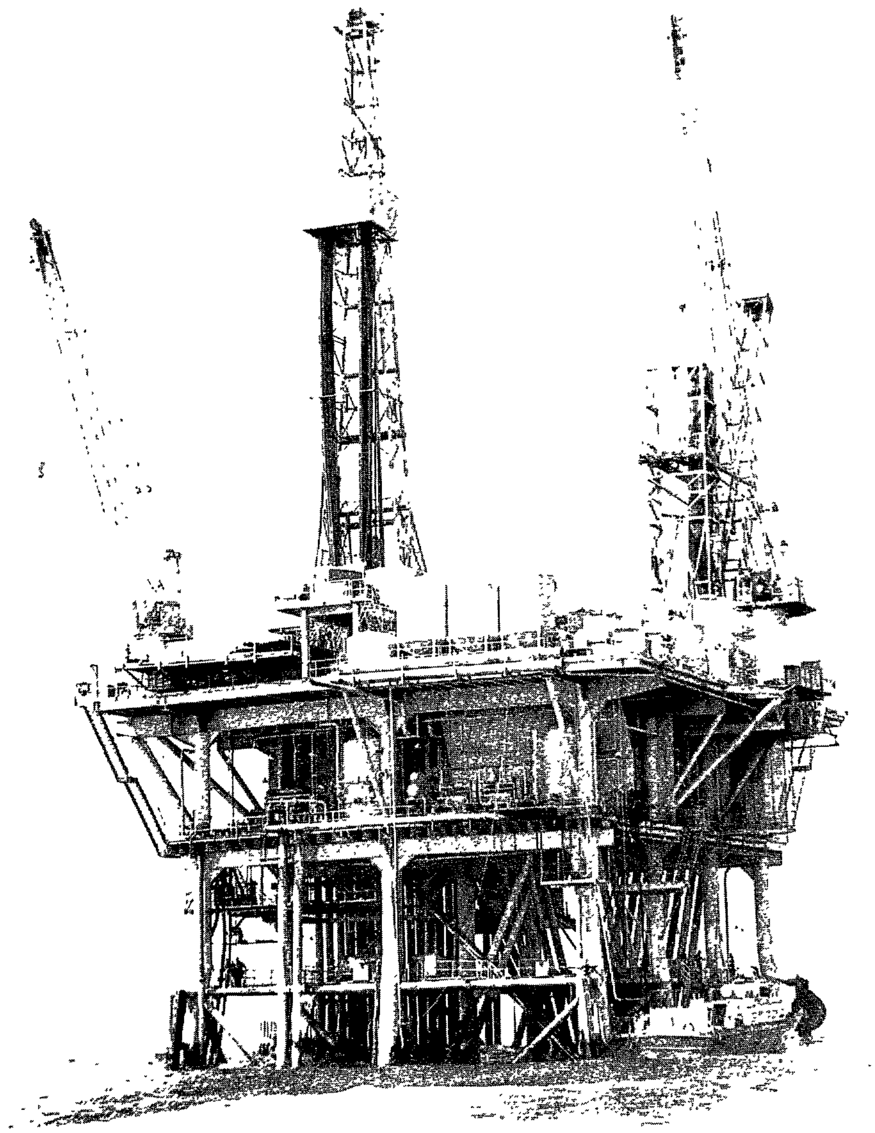
The timeframe of these decisions is important too. We will need to depend mainly on oil and gas for energy in the next 5 to 10 years. Even crash efforts to develop the western oil shale and coal options or to make large increases in nuclear power generation will take at least that long before a significant impact will be felt in the form of reduced pressure for oil and gas.

How Much Do We Know?

If it is going to be difficult to decrease demand and troublesome to increase imports, we ought to make sure that we drill for oil where it is most likely to be found and least likely to do irreparable damage. Not until we answer some basic resource questions can we really make sensible leasing decisions. For example, what are the potential recoverable resources in this region? How do they relate to regional and national supply projections? What economic, social, and environmental impact can be expected?

It is impossible to understand the role of the Outer Continental Shelf in the national energy picture without an adequate understanding of the physical data base of the public's resources. If we do not know what we own, it is pretty hard to know what to do with it. There is a wide divergence in resource estimates, partially because there has been little detailed geological or geophysical exploration activity and partially because much of this "science" is still as much an art as a science.

Official U.S. Geological Survey estimates are that the potential for the Outer Continental Shelf off the Pacific Coast, compared to the potential of the total Outer Continental Shelf, is only about 8 percent for oil and 2½ percent for natural gas. This is not a very big



Outer Continental Shelf drilling and production structure.

percentage. But industry estimates are much higher—26 percent and 25 percent, respectively. I submit that decisions on whether to develop the California Outer Continental Shelf should take these enormous discrepancies into account.

In addition, in past lease sales, the Government has depended almost entirely on industry nominations in deciding when and where to hold the sales. With an inadequate understanding of our resources and their potential value, the Government is not in a position to select wisely which tracts to offer, nor is it in a very good position to determine whether it is receiving a fair market value return from the sale of public resources, particularly in situations when there are relatively few bidders per tract. We need to improve our understanding of resources. We should not lease the Outer Continental Shelf at so fast a rate that the market becomes glutted and competition for tracts weakens.

And we must keep in mind that leasing does not mean production. If we were to open the entire Outer Continental Shelf to leasing today, no one would have a clear idea of how much more production could be expected or when. The constraints—lack of rigs, pipe, and trained labor and environmental and legal concerns—argue against a policy of rapid leasing.

Congressional Guidance

In this connection the House Appropriations Committee, in reporting out Interior's 1975 appropriations, expressed its concern for expeditious exploration and development of those Outer Continental Shelf lands which are leased. The Committee also insisted on assurances that the environmental impact of proposed leasing actions be carefully and fully assessed before the leases are made. It further insisted on full public participation and complete knowledge by the Government and the public of the impact which leasing or not leasing might have on the relationship between production, consumption, and energy needs.

The Committee directed that, before expanding its leasing program beyond 3 million acres a year, Interior acquire and evaluate data which would, at a minimum, justify the proposed leasing level in terms of (1) the role of offshore oil and gas in a comprehensive energy strategy or plan, (2) the availability of rigs, material, and manpower, (3) the availability of capital to purchase and develop the leases, (4) the ability of Interior's bureaus to administer the program, (5) the effects on revenues returned, (6) the relative environmental risk, (7) the onshore environmental, social, and economic impact, and (8) the relationship of potential offshore production to total reserves, consumption, and energy conservation practices.

Full compliance with the Committee's desires in this area would go a long way toward better understanding of Outer Continental Shelf leasing issues and would lead to a more rigorous appraisal of problems and trade-offs before final decisions are made than is typically the case.

Energy Conservation—A Different Option

I remarked earlier about the possibility of reducing the pressure on developing new supplies by considering the potential for energy conservation. For example, the industrial and commercial sectors of our economy account for about 55 percent of our total energy consumption; this compares, say, to the 20 percent of the total that goes for household use. There is a large potential for saving energy in these sectors, most likely in the four following major categories:

1. More efficient steam generation.
2. Waste heat recovery.
3. Materials recycling.
4. More efficient building, heating, and cooling system design.

Large energy savings are also possible in particular industries. For example, in aluminum production, a new smelting process has the potential for saving about 30 percent of the energy now used, and savings of about 50 percent appear possible in the papermaking process by reducing water requirements. Interestingly, both of these new energy-saving technologies were *not* the fruit of an energy conservation effort but rather of a need to meet air and water pollution limits. But, the main point is that savings of 25 to 40 percent are possible in these and many other areas.

Can We Afford It?

Many people argue that we, quite literally, cannot afford to save energy. Recent analyses made by the Ford Foundation's Energy Policy Project indicate this is not the case. From a national perspective, in general, the capital costs for energy-conserving technologies are substantially lower than the corresponding capital costs of energy production and processing. The cumulative capital requirements for industrial and commercial energy conservation measures between 1975 and 2000 would be about $200 billion to $250 billion (in 1970 dollars). To produce the equivalent energy in terms of oil, coal, natural gas, and electricity would require capital costs of about $350 billion. Thus, it appears that saving energy also saves money—money which could be invested in public service programs, such as mass transit and new community development, which reduce energy demand even further.

Will We Do It?

These conservation actions will not be taken without firm national commitments to them. They won't enact themselves and they won't administer themselves. With the Arab embargo lifted, the Nation is going back to sleep, and in a real sense the options are being narrowed as the dialogue narrows. For example, if the issue of leasing the Outer Continental Shelf is described and argued purely as development versus environment, many options are foreclosed simply by the way the issue is framed. Add, however, the issue of balancing national supply with demand, of considering regional supply and demand needs, and factor in other social values. Suddenly, the options, including energy conservation, open up. Decisions made in such a broad context are, it seems to me, better decisions—no matter which way they go.

Environmental Effects

If it turns out that more energy supply is needed, as it likely will even with conservation, then we must decide how we can trade off the likely environmental damages resulting from such things as exploration of Alaska oil and gas, Outer Continental Shelf oil and gas, and western coal and spills from tankers carrying increased imports.

In a recent University of Oklahoma technology assessment of Outer Continental Shelf oil and gas operations, the environmental impact due to increased operations was compared with the environmental impact of increased oil imports and the use of the trans-Alaska pipeline. That study concluded that increasing Outer Continental Shelf operations was less of a threat to the worldwide environment than increased imports. (If only U.S. waters are considered, imports appear to have the advantage.) And, so far as the pipeline is concerned, the study concluded that its environmental risks are probably greater than those of Outer Continental Shelf development. Such conclusions must, of course, be viewed simply as the intelligent guesses that they are, since there is no experience on which to base an estimate of the environmental damage of the Alaska pipeline.

The Council on Environmental Quality has reported on the relative risks of oil and gas development in the Atlantic and Gulf of Alaska Outer Continental Shelf. The Council undertook an analysis which incorporated computer modeling techniques and arrived at an estimate of the overall relative degree of risks to the marine, coastal, and human environment. An extension of such an analysis could be undertaken to obtain a ranking of relative risks for the Outer Continental Shelf areas off California which are now in question. One cannot hang one's hat on such analysis entirely, but it is better than no analysis. In any event, there appears to be considerable potential for improving the technology of Outer Continental Shelf operations to decrease spills, blowouts, and other accidents and to clear up spills once they occur. But, according to a recently conducted study of oil spills in the marine environment which was done for the Ford Foundation's Energy Policy Project, we have a very long way to go in this area.

To summarize then, the pressure to develop new Outer Continental Shelf supplies can be lessened by conservation practices which act to decrease demand or to hold it constant. Increasing supply or decreasing demand are like two sides of the same coin.

If it turns out we need to increasingly exploit one or another of our energy resources, we ought to have some way of deciding which is the best bet in terms of limiting environmental damages and in terms of its being worth exploiting. We have to have a fairly good notion of what is there, what it is worth, and what it will cost to exploit it. And by this I mean all the costs: economic, social, and environmental.

Conclusions

The problems inherent in attempting to accelerate Outer Continental Shelf leasing to an arbitrary rate of 10 million acres a year stem from our inability to evaluate fully what is being offered, to obtain a fair value for it, to insure that the development pace can match the leasing pace, and to assure ourselves that we can protect our environment if we do it.

Finally, it seems to me that the kinds of analysis expected to be undertaken under the Coastal Zone Management Act of 1972 and the National Environmental Policy Act of 1969 are precisely the kinds of analysis which must be made if intelligent decisions are to be made regarding Outer Continental Shelf leasing.

If it is indeed absolutely critical to the Nation that the California Outer Continental Shelf be developed immediately, then such studies must be set aside and the development must proceed apace.

However, let us assume that such analyses could be done in a reasonable period of time, say 1 or 2 years. And let us remember that the development which would follow leasing would be, for all intents and purposes, irreversible. Given these assumptions, I would argue that the burden of proof must rest on those who would proceed with immediate leasing without the benefit of such analyses.

Appetite For Oil

Look at the figures. This nation currently consumes 17 million barrels of oil per day. Of that 17 million barrels, over 6 million barrels per day are used by motor vehicles. We can save three million barrels per day by switching to smaller cars. What I am saying is that motor vehicle consumption of petroleum products equals our total oil imports!

Donald E. Weeden
President, City Club of New York, addressing Federal Energy Administration, Aug. 22, 1974

JULIUS S. BROWN

From Career Army Officer To GAO Auditor

A reflection on coping with the transition.

Suddenly, after a 20-year Army career, the last 10 being in the field of procurement, and after "suffering through" many visits by "GAO types," I find that I am a GAO auditor with credentials in pocket and attache case in hand. As luck would have it, I am assigned to the Logistics and Communications Division, whose primary area of concern is the Department of Defense.

What about the myths I have heard about GAO visits? Will I be able to conscientiously audit areas that I was previously responsible for? Must I alter my style and techniques now that I am an auditor? Will my former friends and associates still consider me as a friend, or as a person to be treated with great caution? These are only a few of the questions that I pondered on joining GAO in August 1973.

Myths Attached to GAO Visits

Most GAO "oldtimers" are familiar with many myths involving GAO audits of agencies. I suppose the one that is most widely known is the so-called "biggest lie ever told." This, of course, is the one that takes place during the first few moments of an opening conference when the agency official says, "It's nice to have you here," and the GAOer retorts, "We are here to help you."

Since I have been on the opening end of that brief dialogue many times, I can say unequivocally that, as far as I am concerned, it was a lie. Most activities in the military are inspected and audited continuously, but no notice of audit or inspection generates as much activity or anxiety as the announcement of an impending visit by GAO.

Most commanders take internal army inspections and audits seriously enough, but these are considered to be, for the most part, internal matters that can be controlled. Not so for GAO reports that may go to the Congress

Mr. Brown is a supervisory auditor in the Materiel Management Group, Logistics and Communications Division. He received his B.A. degree from Virginia State College with further studies at Ohio University and the University of Virginia. He joined GAO in August 1973 after retiring as a lieutenant colonel from the U.S. Army. During his 20-year Army career, he specialized in the field of logistics.

and possibly make headlines across the country. Many in the officer corps feel that, if one wants a swiftly curtailed military career, an adverse GAO report will provide it.

Managers react differently before GAO arrives. I generally cautioned my personnel to be cooperative, but to answer only the questions that were asked or furnish only the data that was requested. This system worked most of the time, but sometimes it did not. Much depended on the auditors' attitudes.

Most auditors and inspectors are generally looking into specific areas. When they start delving into other areas, it is usually because employees talk excessively. This leads to my point on the auditors' attitude. If the auditors seemed unusually aloof or "holier than thou," I knew that I would have little trouble with excessive talk. However, if they had that certain mixture of "earthiness," I usually had problems.

Technique and Style

By far my biggest adjustment as an auditor was in realizing that not everything is accomplished within 24 hours, as seems to be the goal of most Army managers and commanders. By comparison, I dare not go into the involved report-processing procedure at GAO that begins with identifying an auditable area and ends with the final report being released many months later.

No radical change in my style or techniques was required. Usually, success in any endeavor requires a pleasant manner, an ability to relate to other people, and a certain power of persuasion. GAO auditing is no different.

Former Associates' Reactions

Since my assignment to the staff, I have visited many Army installations in the United States and one in Europe. It is a rare occasion when I do not meet a friend or former associate on these visits. Most of them are surprised that I am with GAO, primarily because of my lack of an accounting background. After a brief discussion on the Office's role in expanding to other than accounting disciplines, most jokingly ask, "Well, what are you doing working for the enemy?"

Invariably the discussion ends on a serious note, with my explaining that the job is important and exciting, and these friends and former associates often inquire about their prospects of becoming a part of GAO on the completion of their military career.

Although I look forward to it, I have not had the opportunity to participate in an audit of an installation or activity that I was assigned to while in the military.

That Myth Again

Since I have had the opportunity to sit in on opening conferences with Army officials during the past year, I now have a keener insight into that familiar myth that I spoke of earlier.

I now believe that the agency official's sincerity depends to a great degree on the level at which the conference takes place. Senior Army officials, for the most part, are conscientiously striving for better management and realize that occasionally an outside agency like GAO is in an excellent position not only to identify problem areas but more importantly to promote changes.

As to the statement that GAO is there to help, I can refer to many actual instances in my brief career with GAO when I helped the agency correct deficiencies or operations, and not all of these necessarily wound up in reports to the Congress. The Comptroller General's emphasis on striving to bring about corrective action and measuring performance on such action should go a long way to strengthen the cooperative spirit between GAO and its audit clientele.

Granted that 1 year is a short period, I nevertheless find it a proud moment to say, "We are here to help."

Health Care and Longevity

Health care is overrated in its influence on longevity. Most people are born healthy and if they don't step in front of a truck they will live until they begin to disintegrate, at which point physicians cannot help them very much.

Prof. Eli Ginzberg
Columbia University
Lecture at GAO
March 22, 1973

WILLIAM BOSHER

7218-'i

Investigating the Condominium Industry In Southeast Florida

A GAO auditor assigned as a consultant to the Florida State Attorney General during the 1974 Intergovernmental Affairs Fellowship Program reports on his assignment and his observations of Florida's rapidly growing condominium industry.

During 1974, I had the good fortune of being selected as a participant in the 1974 Intergovernmental Affairs Fellowship Program. A primary objective of the program is to permit the sharing of professional talent with other government agencies (State and local) in solving problems.

An outstanding feature of the program is its attempt to permit the participants to select their own host agency and to work in an area in which they are most interested. After having indicated to the program director that I preferred working in the area of consumer protection, I was selected for a 3-month assignment with the State of Florida's Fair Trade Practices Office, a consumer protection agency under the authority of the State Attorney General.

The Florida Fair Trade Practices Office

The Fair Trade Practices Office, Department of Legal Affairs, Office of the Attorney General, is a relatively new organization which began functioning on October 1, 1973, primarily for the purpose of enforcing the Florida Deceptive and Unfair Trade Practices Act (the Little FTC Act), which became effective on that date. The office is empowered to seek a cease and desist order against any company which has pursued unfair acts or practices in the conduct of its business and also to act on behalf of consumers to seek remedies for reported abuses.

Because of the high volume of condominium development in the State,

Mr. Bosher was a supervisory auditor in the Resources and Economic Development Division until assigned to the Office of Internal Revenue in February 1975. A graduate of Temple University, he joined GAO in 1963. Mr. Bosher is a certified public accountant (Virginia), a member of AICPA, and an associate director in the Washington chapter of the National Association of Accountants.

particularly in the populous southeastern region; the frequent newspaper accounts of abuses in the condominium industry; the large and growing number of consumer complaints; and the expressed interest of the State legislature in this area, the Attorney General's office initiated an inquiry into various aspects of the condominium industry to determine whether the State's Little FTC Act was being violated by developers who may have been engaging in unfair or deceptive sales practices.

Assignment Activities

My role during the assignment was to act in the capacity of an investigative consultant for the Fair Trade Practices Office. My assignment was to conduct a study of the economic conditions of the condominium industry to determine how the industry functioned and whether true free enterprise was working.

The primary purpose of my study was to obtain and evaluate statistical data relating to southeast Florida's population, migration, income levels, available housing, and related costs, so that I could determine the extent of the condominium industry's control over the housing market in that region. I also tried to determine whether the amenities offered and cost of housing at 11 selected developments provided them with a degree of uniqueness unavailable at other housing developments in the area. By ascertaining whether these developments were, in fact, unique, I could determine whether the project developers had sufficient leverage over the housing market to impose unfair restrictive requirements on buyers.

During the course of the assignment, I (1) held interviews with State officials to obtain information relating to the condominium industry, (2) attended legislative conference sessions considering amendments to the existing State condominium statute, (3) visited 11 of the largest condominium developments in the State, located in Broward and Palm Beach Counties, (4) evaluated the data gathered during my discussion and visits and prepared a report, "Condominiums—Their Impact on the Southeast Florida Housing Market," and (5) presented an oral briefing to the Attorney General on the results of the study. The State plans to use the report as evidence in court actions against several condominium developers in southeastern Florida who possibly are violating the Little FTC Act.

Although I worked closely with the Attorney General's staff, I enjoyed complete freedom of movement to conduct my assignment in the manner I felt best. I had the opportunity to plan the review, conduct the fieldwork, meet with many State officials, and prepare my report in a minimum of time—10 weeks. All work was completed on schedule because I was permitted to proceed and conduct the review as I saw fit without restriction.

I believe that the experience gained during this assignment will be beneficial to me in my career with GAO because I gained an increased awareness of the rights of the people served by government. In evaluating how an agency functions, I will particularly bear in mind that the ultimate goal of government is to serve the people. This additional insight should provide me with a greater degree of perception which will help me carry out my future duties.

Observations on the Condominium Industry in Southeast Florida

A common practice of condominium developers in southeast Florida is to retain title to the recreation facilities at a condominium development and permit residents to use the facilities only if they agree to a long-term recreation lease, generally for a 99-year term. These leases are generally "net leases" in that the maintenance, insurance, and taxes on the recreation facility are also paid by purchasers as part of a long-term management or maintenance contract with the developer. These leases and contracts are generally subject to escalation clauses which require periodic upward adjustments based on the cost of living.

Condominium purchasers own their individual units in fee simple title and also a proportionate share of the common facilities shared by all owners, with the exception of the recreation facilities. In addition to their normal mortgage payments, they are subject to substantial assessments under the long-term recreation leases and management or maintenance contracts. The late payment or nonpayment of these assessments could result in the developer obtaining a lien against the condominium owner's interest in his housing unit.

Possible Restraint of Trade

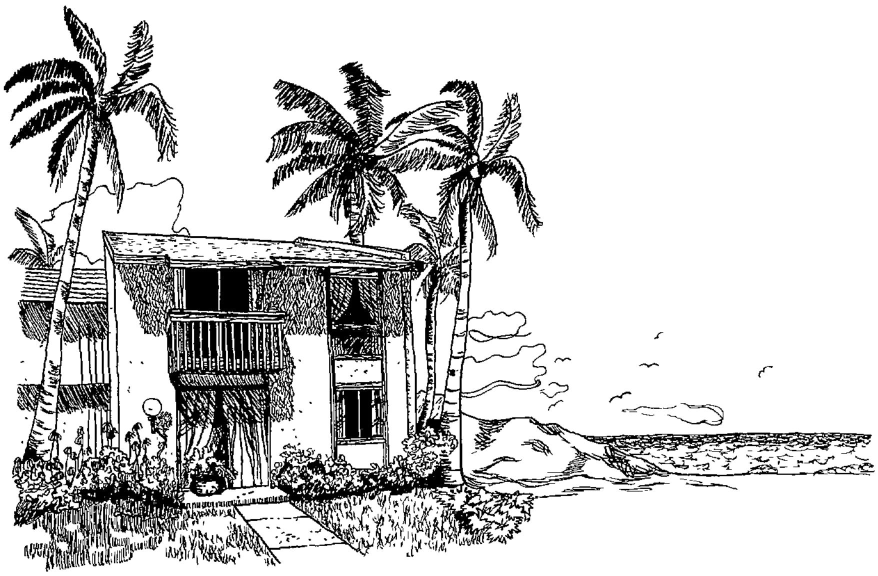
The Attorney General believes that the sale of a condominium unit conditioned upon the purchaser accepting a long-term recreation lease and management or maintenance contract is an unlawful "tying" arrangement, which is a violation of section 1 of the Sherman Act (15 U.S.C. 1) and presumptively a violation of the Florida law. A tying arrangement, as described in Federal court, is

> an arrangement by a party to sell one product but only on the condition that the buyer also purchase a different (or tied) product or at least agrees that he will not purchase that product from any other supplier * * *. They [tying arrangements] deny competitors free access to the market for the tied product, not because the party imposing the tying requirement has a better product, but because of his power or leverage in another market. At the same time, buyers are forced to forego their free choice between competing products.

Lack of Low-Cost Housing in Southeast Florida

The population growth trend along Florida's "Gold Coast"— Dade, Broward, and Palm Beach Counties—has been and will continue to be a northward migration from Dade to Broward and Palm Beach Counties. This wave of population movement has created and will sustain a strong demand for housing—particularly low-cost housing.

Broward and Palm Beach Counties have a proportionately greater number of the State's residents age 65 and older; they also have a significantly greater proportion of families living



at least in part on retirement income, which is generally relatively stable.

With a median income of less than $10,000, the average family in Broward and Palm Beach Counties cannot comfortably afford to own a home costing more than $20,000. The trend during the period from 1960 to 1970 has been away from single-family houses in the two counties. Of all housing completed during 1973, about 85 percent was condominium housing. Families in the two counties, notwithstanding their annual income level, are generally restricted in their choice of new housing to condominiums. This condition has been generated as a result of the high cost of construction and land and the growing scarcity of land suitable for construction.

Condominium Developments Visited

The 11 condominium developments I examined exercised a substantial control (about 21 percent) over the condominium housing market in the 2 counties. The seven developments in Broward County contained about 26 percent of the condominium units in the county; the four developments in Palm Beach County contained about 14 percent of the units in that county.

This control over the overall housing market in the two counties has permitted the developments sufficient economic control to offer housing units for sale coupled with (1) a long-term lease of the recreation facilities, (2) a contract with the development firm or a subsidiary to manage and maintain the common facilities and the recreation facilities, or (3) both a long-term recreation lease and a management contract.

Although none of the 11 developments visited had land leases, 9 had recreation leases and all had management contracts.

Of the nine developments with recreation leases, five did not prominently indicate the existence of such leases in promotional materials. The lease charges were included with the total estimated monthly maintenance charges levied on purchasers.

Regarding the two developments with no recreation lease, the developers retained title to the recreation facilities and permitted the homeowners to use them pursuant to their being parties to long-term management contracts. Because the homowners had no vested interest in the facilities per se, the developer could refuse homeowners further use of the recreation facilities if the management contracts were terminated at the end of their terms. In no case did the homeowners own a portion of the recreation facilities; ownership was always retained by the development firm.

The recreation leases examined were all net leases requiring homeowners to pay taxes, insurance, and maintenance costs as part of their monthly maintenance fee. The recreation leases, however, were subject to recurring upward adjustments based on the cost of living. Although the developers' investment was not subject to such increases because such expenses were paid for by the homeowners, the cost-of-living adjustment insured a constant return on the developers' investment, consistent with general inflationary price increases.

Of the 11 developments visited, only 5 fully disclosed pertinent facts. The other 6 refused a request for the condominium declaration and related exhibits. The sales representatives indicated that, before releasing such documents to a prospective buyer, a sales contract had to be signed and a deposit received.

The 11 developments were each selling units for under $35,000. Because of the relatively low cost of the units, none of the developments was located on high-cost beach property. Each was several miles west of the beach area but within relative proximity to shopping, medical facilities, and places of worship. The apartment units at each development appeared to be quite similar and offered no particular uniqueness for consumers.

Uniqueness of Recreation Facilities

The primary feature of each development which placed it in a unique position in terms of having a competitive advantage was the recreation facilities within the development itself. The more elaborate and abundant the facilities, the more attraction they held for prospective purchasers. As indicated above, however, the use of such facilities was generally contingent upon a long-term lease which purchasers of apartment units were required to participate in. In addition, the contract for management or maintenance of the recreation facilities and common condominium property was with the development firm or a subsidiary. Such contracts restricted homeowners from securing these services from other firms offering similar and possibly less costly services, thereby limiting this aspect of free enterprise in the two counties.

Conclusions

Because of the large proportion of the State's population that is living or will live in condominium housing, certain reforms are needed to protect the consumer. Such reforms would require legislative action and should be considered during the next session of the legislature. These include:

—Prohibiting long-term recreation leases and management or maintenance contracts.

—Requiring full disclosure of pertinent facts by condominium developers prior to the sale of a housing unit.

—Creation of an independent State regulatory agency to oversee the activities of condominium developers.

Recently publicized abuses by certain unscrupulous developers in the condominium industry are giving the State significant adverse publicity throughout the Nation and are creating serious financial problems for consumers. These abuses must be corrected, and the public should be provided with the degree of consumer protection to which it is entitled.

As for the recreation facilities, they should be sold at inception to home purchasers, giving them a proportionate share in ownership. Once a significant portion of the units are sold, homeowners should have the option of voiding management contracts with the developer without penalty.

Concerning the question of full disclosure, it would be reasonable and prudent for a prospective buyer to have full disclosure of needed information before entering into a purchase agreement. Many of the purchasers are elderly persons with fixed incomes who cannot afford the constantly escalating charges presently imposed on them.

There is no single agency within the State assigned the responsibility of regulating the condominium industry. It appears that there is a need for such an agency, and it should have the authority to enforce the condominium statute, resolve complaints made by condominium owners, and insure that condominium developers complete promised facilities.

These actions, if implemented, should provide a greater degree of protection for purchasers of condominiums.

Editor's note: The Department of Housing and Urban Development has published an informative booklet, "Questions About Condominiums—What to Ask Before You Buy." Free copies may be obtained from: The Public Documents Distribution Center, Consumer Information, Pueblo, Colorado 81009.

PETER J. McGOUGH

72/SC)

The Time Value of Money and Investment Decisionmaking

Before investing, a decisionmaker should make sure that economic returns will exceed costs and should also compare alternative ways to pay for the investment. The time value of money is an important factor in investment decisionmaking and its proper consideration is essential to making the "right" decision.

How many of us consciously consider what we can do with our money or, more appropriately, what our money can do for us if we decide not to make a purchase or if we defer payment on purchases over some period of time?

By deferring payments, we can use money to earn interest on savings or to earn even higher rates of return on other investments. If what we are able to earn is greater than the charges that accompany time-purchase plans, we are better off to defer payments; if not, the lump-sum payment should be selected. The important point to realize is that money has alternative uses that yield different returns. By making lump-sum purchases we give up those alternative uses, along with the ability to earn money with our money. This is the essence of the time value of money concept.

Present-Value Analysis: the Recommended Approach

Investment alternatives normally involve different costs occurring at different points in time. For such alternatives to be compared on an equal economic basis, their costs must be compared at the same point in time. Present-value analysis is an accepted

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technique for making such comparisons.

Since money has earning power over time, costs that will occur in the future are "discounted," at an appropriate rate, to bring them back to their present value. Discounting is simply the reverse of computing compound interest. Its use discloses the amount of money which, if invested today at a given interest rate, would be sufficient to meet future cash payments. Discounting is based on the concept that every dollar not spent today can be invested until needed and that interest earned on such investments can then be used to pay part of the future cash requirement.

Because discounting has the effect of reducing future cash flows when converting them to their present values, investments costing more dollars over a number of years may be more economical than those costing less in a lump-sum payment. If you have grasped the time value of money concept, this statement should not be a surprise. The following example illustrates.

You have decided to buy a boat. It will cost $10,000 if you pay cash, or $12,500 (25 percent more) if you spread your payments over a 5-year period. However, to pay cash would require the withdrawal of $10,000 which is currently invested in stocks that have yielded 15 percent in each of the last 5 years. Because you realize that the lump-sum payment will cause you to forgo earning the 15-percent return on your invested cash, you decide to determine the present value of the $12,500 purchase price. The timing of your required payments under the 5-year payment alternative would be $2,500 down and $2,000 a year for the 5-year period.

The present-value computation follows.

Payments	×	*Present-value factor @ 15% (note a)*	=	*Present-value cost*
$ 2,500		1.000		$2,500
2,000		.870		1,740
2,000		.756		1,512
2,000		.658		1,316
2,000		.572		1,144
2,000		.497		994
$12,500				$9,206

[a] Present-value factor tables are readily available in textbooks on capital budgeting and in other books dealing with mathematics.

Since the present value of the 5-year payments is less than the $10,000 lump-sum payment alternative, it is the most economical chóice. In other words, the above analysis shows that $9,206 invested today at 15 percent would yield enough money to make the initial and yearend payments totaling $12,500.

Government Cost Comparisons Should Recognize the Time Value of Money

In making financial decisions, the Federal Government should be no different, in concept, than we are as individuals. It, too, should carefully compare different financial choices and consider its time value of money before deciding among the available alternatives. The fact that the estimated Federal outlay for fiscal year 1975 will total over $300 billion accentuates the importance for Government decisionmakers to accurately compare the costs of different investment alternatives and to select the least costly one. As with individuals, the Government has alternative uses of money available to it; therefore, the time value of money is a significant consideration in its decisionmaking process.

Virtually every investment situation confronted by a Federal decisionmaker requires him to select one of several available alternatives. Initial decisions address whether a proposed investment is justified in terms of benefits exceeding costs. Additional decisions among alternative ways to finance the investment must also be made once it has been decided to proceed with an investment.

Typically, the second-level investment choices include purchasing, leasing, or leasing with the option to buy. Government-wide regulations require that cost comparisons be used as the basis for selecting the most economically advantageous alternative. Cost comparisons may also be required when investment choices include using in-house Federal personnel and resources rather than contracting with the private sector for needed products and services. Although the general Government policy is to rely on the private sector in these investment situations, exceptions to the policy are permitted when cost comparisons show that substantial savings to the Government can be realized by using in-house resources.

Federal cost comparison criteria, prescribed in circulars issued by the Office of Management and Budget and by the General Services Administration, require that the time value of money be recognized. However, the approach for recognizing this important cost factor and the rate prescribed for measuring the time value of money differ among the current circulars. As a result, GAO has recommended that OMB and GSA update and prescribe consistent cost comparison criteria.

What Is the Government's Time Value of Money?

As noted above, there is a distinction in decision levels between (1) initial investment decisions on *whether* a proposed investment should be made and (2) second-level decisions on *how* to finance an investment once an investment decision has been made. The distinction is important because the Government's time value of money is viewed differently at each of the two decision levels, as explained below.

Before the Government undertakes a new investment, it has a responsibility to determine whether benefits will exceed costs by at least the same rate that benefits would exceed costs on an average private investment. The need to make this determination stems from the fact that Government activities are paid for by the general taxpaying public; if proposed Government investments will not yield as much as private investments, they should not be undertaken.

According to guidance on the discount rate to be used in benefit-cost analyses (OMB Circular No. A-94, Revised), the average rate of return on private investment, before taxes and excluding inflation, is 10 percent. Therefore, if a Government benefit-cost analysis shows that a proposed investment will not yield benefits totaling at least 10 percent more than costs, the proposal should be rejected and the resources left with the private sector.

Once a proposed investment has been justified and approved, Government decisionmakers must identify the least costly way for the Government to finance the investment. Financing decisions—purchase versus lease, inhouse versus contract—necessarily have an impact on Treasury borrowings, and it follows that the interest the Government pays on borrowings is the best basis for measuring the time value of money when making financing decisions.

The position that interest paid on Treasury borrowings is a cost related to all Government financing decisions is based on the fact that, when receipts are insufficient to meet demands, the difference is obtained through Treasury borrowings. When receipts exceed demand, outstanding Treasury borrowings can be repaid and interest costs reduced.

Treasury's borrowing cost is reflected by the average yield rate at which Treasury obligations are trading in the over-the-counter market. The yield represents a composite of the coupon (interest) rate, the amount of discount or premium at which the security is trading, and the remaining length of time before the security is payable. As such, it approximates the rate Treasury would have to offer on any new issue for that issue to effectively compete with those already outstanding.

The significance of recognizing the impact investments have on Treasury borrowings can be appreciated when we realize that the Federal debt and corresponding interest costs are large and growing. At the end of 1970, the interest-bearing Federal debt totaled $380 billion and interest paid in 1970 on that debt totaled $20 billion. Treasury estimates that by the end of 1975 the interest-bearing Federal debt will have risen to $508 billion and interest payments will have increased to over $31 billion annually.

Summary

In summary, an investment that costs the fewest total dollars may not necessarily be the most economical choice because money has value or earning power over time, and that value may be greater than the difference in cost between two or more investment alternatives. Therefore, the time value of money is an important consideration in investment decisions, and present-value analysis is a generally accepted technique for putting investments on an equal economic basis for comparison purposes.

The selection of an appropriate discount rate is essential for using present-value analysis. The discount rate must be an accurate measurement of one's time value of money. As individual investors, our time value of money might be the 5 percent we can earn on our savings accounts or, if we decide to pay off our charge accounts, it could be as high as 1½ percent a month (18 percent a year).

Within the Government, the time value of money may be measured by the earning power of money in the private sector (used only in benefit-cost analyses) or by the cost of U.S. Treasury borrowings (used in all cost comparisons of alternative ways to finance an approved investment). Since the Treasury does not periodically publish a rate that represents its full cost of borrowing, the yield on outstanding marketable obligations of the Treasury is an acceptable indicator of that borrowing cost and may be used in Government cost comparisons.

The Trouble with Budget-Based Institutions

Finally, being budget-based makes it even more difficult to abandon the wrong things, the old, the obsolete. As a result, service institutions are even more encrusted than businesses with the barnacles of inherently unproductive efforts. In an institution that is being paid for its performance and results, the unproductive and the obsolete will sooner or later be killed off by the customers. In a budget-based institution no such discipline is being enforced. The temptation is great, therefore, to respond to lack of results by redoubling one's efforts. The temptation is great to double the budget, precisely because there is no performance.

Peter F. Drucker
"Managing the Public Service Institution"
The McKinsey Quarterly
Spring 1974

NICHOLAS M. ZACCHEA

72/802

Social Responsibility and the Professional

How members of the New York regional office staff helped minority businessmen learn more about accounting and financial management through participation in a special educational program of the Federal Government Accountants Association and the Office of Minority Business Enterprise of the Department of Commerce—and what the benefits were.

Business as an institution exists primarily because it is sanctioned by society. It is therefore inevitable that the business community and its professional members will fall into step with society's expectations. Adam Smith, in his "Wealth of Nations," believed that, as each businessman pursued his own self-interests, the public good would be served. While no one can deny that the public good has certainly benefited from business, neither can anyone deny that certain segments of society have not always fared as well as others and have indeed suffered.

Fortunately, however, social commitment, or the tangible expression of concern for society's many problems, is a growing phenomenon among members of today's professional community.

Although initially undertaken out of enlightened self-interest, rather than pure altruism, companies today have come to accept social commitment as a valid organizational component. Many large corporations not only are supporting socially constructive programs at an increasing rate but also are regularly lending employees to such projects.

GAO—A Professional Organization With Social Responsibilities

GAO is an organization of profes-

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sionals whose responsibilities have been well established by law. Its specific responsibilities relate directly to the service it must provide to the Congress. As professionals, however, the staff of GAO assumes collateral responsibilities to the communities which comprise its work environment.

The execution of any responsibility required by law or organizational mandate is, for the most part, guided by well-defined policies and procedures. For social responsibilities, however, requirements and guidelines rarely exist. So, whether the professional recognizes these responsibilities and carries them out depends on what both the organization and the professional perceive as their social roles.

An organizational awareness of the importance of social responsiveness is an absolute requisite for participation in socially oriented projects, whether by an organization or its employees. In other words, a climate for social concern must exist.

Historically, GAO, by virtue of its responsiveness to the priorities of congressional concern, has consistently maintained a keen awareness of those problems which confront society. This kind of awareness, because of the orientation of many of GAO's assignments, grows in GAO's professionals as they carry out their daily responsibilities.

It is widely held that members of the professional community are generally most able to recognize the need for social programs. With this belief goes the theory that, given the encouragement of an organization, the professional not only will want to participate in such programs but will be skillful and resourceful enough to carry them out. An organization like GAO makes significant community service contributions by encouraging its multi-talented manpower to participate in socially oriented programs. However, the extent to which social responsibilities are carried out depends almost entirely on the initiative and desire of each individual professional.

Nature of Socially Oriented Projects

The numbers and types of socially oriented projects run the gamut of social priorities—health, the aged, ecology, counseling, and job training, to mention a few. The activity the professional chooses to participate in depends in many respects on the organization the individual works for and, more importantly, on the individual's particular skills. These activities may include participation in almost any form of social service sponsored by a public or private nonprofit organization that is willing to accept such help.

Involvement in social projects may bring the professional into contact with closely knit religious, fraternal, or philanthropic organizations. Or, it may engage the professional in voluntary participation with loosely organized, civic-oriented programs operating principally for the benefit of the community at large.

Regardless of the type of sponsorship, such projects have characteristics which almost always cause those involved to feel that something that was lacking, but necessary and essential, has been put back into the world around them. The feeling of making a personal contribution to society as a result of one's efforts commonly pervades an individual's involvement in such undertakings.

FGAA's Social Project

Minority businessmen have traditionally considered basic accounting one of their most needed skills. To meet this need, at least one of the large CPA firms has sponsored accounting programs carried out by members of its professional staff.

Last year, members of GAO participated in a similar project, sponsored by the Long Island chapter of the Federal Government Accountants Association. Chapter members, recognizing an opportunity to provide an essential service to their community, applied for a grant from the Office of Minority Business Enterprise to finance a social project. The project's objective was to enhance the business skills and acumen of businessmen from the Long Island area.

The FGAA program was designed to provide instruction in basic accounting. Financial statement preparation, ratio analysis, budgeting, merchandise control, procurement, contracting, and other selected aspects of financial management were included. FGAA's program, like that of the large CPA firm, emphasized the translation of academic principles into real work situations.

Program Logistics

Through a local economic development organization involved with small businessmen, the project coordinators, Don Mulhern of the Department of Transportation and *Herb Larson* of GAO's New York regional office, obtained lists of minority and small businessmen from the Long Island area and then asked them if they were interested in attending classes in accounting and financial management. The response was good. About 25 men and women, all blacks, said they wanted to participate.

FGAA provided the program curriculum. The coordinators obtained all other materials locally and supplied them to the students. Arrangements were made through a local county-based training center for classrooms in which to conduct the program sessions.

Staffing the Project

Once the project's logistics were set, the coordinators made inquiries, through FGAA, for instructors and counselors.

Members of FGAA, including GAO staff and professional members of other agencies, were solicited. Those who responded were evaluated and selected for the positions of instructors and counselors.

This selection was one of the most important elements of the program. It is essential that a person's participation in these projects be motivated by a desire to respond to social needs. Program leaders must be more than just capable. The president of a major corporation actively engaged in such programs indicated that the critical ingredient in such projects is people with talent, dedication, imagination, determination, and competence.

The two instructors selected for the teaching phase of the program were Lester Lord of the Federal Aviation Administration, Department of Transportation, and myself. We both were qualified, experienced accountants, with records of achievement and recognition in the field. We had advanced training in the profession and prior professional teaching experience.

We were to teach by giving lectures exposing the students to selected aspects of financial management.

Members of GAO's New York regional office—*Ronald Parker, Bob Murray,* and *Al Gendler*—were selected to be counselors along with several members of other agencies, *Paul Trapani,* a recently retired 20-year veteran of our New York office, also lent his expertise and many years of experience to the counseling efforts.

The counselors, providing one-to-one assistance to the students, hoped that the businessmen could practice what they had learned during classroom sessions when they returned to their respective places of business. The importance of their counseling was realized when the businessmen came back to a session with problems they had encountered in applying classroom theory in their work. Counseling also helped the students conform their current accounting and bookkeeping practices to the principles of proper accounting.

The Program

The program consisted of 2-hour sessions twice a week for about 2 months. The classroom meetings, though basically instructional in character, provided ample time for frank and open discussions.

The students were encouraged to discuss any problems they were encountering—especially those problems related to financial management in the business environment. Some of the problems were the types generally confronted in the day-to-day operations of any business, large or small. Significantly, however, many problems tended to be exclusive to the small minority businessman.

To provide the group with as many sides and solutions to the problems as possible, the instructors and counselors encouraged and generated very informative discussions. The participants found that these discussions added a very important dimension to the instructional phase of the program.

At one session the students were invited to bring their financial records to class. Each businessman was assigned a counselor to go over the books and discuss the techniques used in keeping them.

This session was extremely valuable to both the teaching team and the students because it helped complete the transition from accounting theory to actual accounting practice and gave the teaching team direct knowledge of its own effectiveness. Furthermore gave the businessmen a chance to review, in a fashion structured for maximum learning reinforcement, what was presented in class.

The students said that this particular exercise gave them a better understanding of their records. Some even admitted that the manner in which they or their accountants were keeping their books was no longer a mystery. The differences between expenses and liability accounts, between asset and income accounts, finally became clear.

Some students who brought their books to this session realized for the first time where they stood financially, and many discovered the relative health of their respective businesses. For the first time, many of them had books, records, and financial statements they could understand and use.

Two other sessions of particular significance were lectures by representatives of the Internal Revenue Service and the Small Business Administration.

Some Problems

Some of the pitfalls encountered during the 8 weeks were typical of this type of instruction, especially because of the heterogeneous participant profile.

The students' schooling, for example, ranged from the primary school level to the college level. Therefore, the instructors and counselors had to pay careful attention to communication techniques, including language, attitudes, and teaching speed.

The technical aspects of financial management, difficult for most to comprehend, had to be carefully tailored to be understood. It was expected that some of the students would be unable to completely relate to the jargon and terminology used during some class sessions. Therefore, the instructors had to be alert to adverse reactions to the class material.

The businesses the students were engaged in were diverse. As could be expected, some were relatively successful and had large revenues and some were not so successful. Therefore, instructors had to constantly exercise caution in discussing and illustrating accounting principle applications.

The program participants included a beautician, a barber, an interior decorator, a mortician, an electrical contractor, a retailer, a trucker, a limousine service owner, a maintenance contractor, a watchmaker, and a nursery school operator. The instructors had to be careful to use examples which were relevant to all, regardless of the type of business and whether it was successful. While one may imagine that business problems are business problems regardless, the importance the students assigned to these problems depended a lot on the relative health of their individual businesses.

Another hazard encountered during the program was class absences—students' business hours often conflicted with the class sessions. This caused a loss in continuity between sessions for some students and often imposed a burden on instructor and student alike. The instructors had to set aside a period before each class to review past lessons, and those who missed sessions had to be certain to make them up.

It did not take long for the teaching team to become sensitized to all these problems. After the first couple of sessions, neither team members nor students were reluctant to explore and discuss the effects these obstacles were having on the learning process. As soon as these elements were recognized, immediate and generally successful steps were taken to lessen their impact.

Program Benefits

It is generally recognized that in some way every participant in a social program benefits. Some say that doing something in the social area tends to energize an entire organization and that the revitalization spreads easily to all the organization's activities. Those volunteers who share in program guidance and instruction discover a welcome opportunity to discharge a recognized professional obligation and the addition of yet another dimension to their professional careers.

Employers have also benefited because they have had an opportunity to observe their employees in difficult and challenging situations. In some instances, employers have observed an increase in employee morale.

Easily the most important aspect of these programs is the benefits the students themselves receive. Not only have these programs imparted technical knowledge not otherwise available to these individuals, but they have often stimulated an interest in additional learning. Students have often expressed a desire for additional similar training and sometimes have even gone on to take university-level courses.

The FGAA-sponsored program in which GAO participated reflected concrete evidence of student success. Many of the students expressed a sincere interest in any followup programs FGAA would run. As to whether or not the students absorbed the course material, it was their consensus that at least some of them had become better businessmen.

Our major concern, however, is not necessarily the extent that the organization, the professional, or the student benefits from these programs. Of major importance is the fact that the community itself has woven all three inextricably together and is unquestionably richer for it.

A Mechanization Principle

There is nothing excellent, brilliant or economical in employing higher levels of mechanization than are needed. A yearning for the prestige of owning a computer may prod a department into getting one when an abacus could handle all its needed calculations.

Monthly Letter of Royal Bank of Canada
September 1967

GREGORY BOOTH, JOHN BROWN,
GEORGE BUERGER, and NORBERT TRAPP

Experience With Junior Achievement

In an effort to become involved with its community, the Cincinnati regional office sponsors a Junior Achievement company in suburban Covington, Kentucky. The authors describe their involvement, their problems, and their personal satisfaction with the experience.

What Is Junior Achievement?

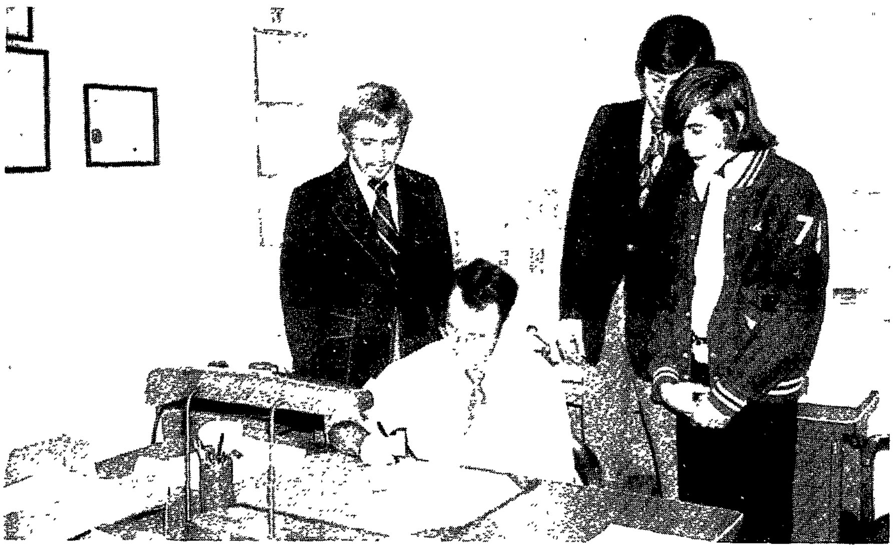
Junior Achievement is a program to teach high school students about business systems in a learn-by-doing atmosphere. The program began in 1919 in Springfield, Massachusetts, as a sort of urban 4-H club. Its emphasis soon shifted from the development of handicraft skills to practical business experience. The program was expanded to a national scope at the end of World War II and today boasts over 7,000 Junior Achievement companies in hundreds of communities throughout the country. Programs have also been organized in 10 foreign countries.

Junior Achievement companies use a corporate form of organization with charters issued by the national organization. Company members capitalize their organizations by selling stock for $1 a share. As the board of directors, the members elect company officials and make major business decisions at regular monthly board meetings. Company meetings are held each week to conduct specific business activity.

The program is financially sponsored, both nationally and locally, by business and industry. Each company is sponsored by a business firm or Government agency which furnishes advisers and encouragement, but not necessarily money.

Junior Achievement companies are involved in a variety of enterprises. For example, each Junior Achievement center has several individual companies, such as a bank, an auditing company, a management consultant company, and various types of manufacturing companies. In Cincinnati there are also newspaper companies and a

The authors are all members of the Cincinnati regional office staff. Mr. Booth, a management analyst, received an M.A. degree in economics from Ohio University in 1972. Mr. Brown, a supervisory auditor, is a 1970 graduate of Morehead State University, where he received a B.S. degree in accounting. Mr. Buerger, a supervisory auditor and regional training coordinator for the last 2 years, is a 1964 graduate of Thomas More College. Mr. Trapp is a supervisory auditor. He graduated from Xavier University in 1968 with a B.S. degree in accounting.



Arthur Gross, audit manager, Cincinnati, buys a share of stock in the Wax-N-Plax Junior Achievement company. Looking on are John Brown and Greg Booth, supervisory auditors and advisers, and Fred Spanier, vice president of the company.

television company. The purpose of each company is to manufacture a product or render a service which can be sold for a profit.

Role of the Adviser

Junior Achievement advisers are nonpaid volunteers. Adviser teams of three or more persons, working under the policy set by the national organization and the local board, are assigned to each company.

Advisers do a lot more than attend one 2-hour meeting a week for 30 weeks. Their primary role is to help the achievers learn by doing. One of the advisers' most difficult tasks is to stay out of the way and allow the achievers to produce and sell their own products and, most importantly, make their own decisions.

The advisers are also part of the achiever recruiting process. The local Junior Achievement staff visits high schools and takes applications from many students. These applications are given to the advisers, who must contact the potential achievers and encourage their attendance at the first company meeting. We were given 120 applications with the hope of convincing about 30 people to attend our first meeting.

Advisers also select and build a prototype of the company's product. They must then convince the company members to manufacture and sell this product. Advisers also teach members a safe manufacturing process and quality assurance.

Once the product is in production, advisers begin with sales education. This phase involves showing the achievers how to sell and motivating them to go out and try. The advisers also help the achievers learn the record system and encourage them to keep their paperwork up to date.

Organization of Wax-N-Plax

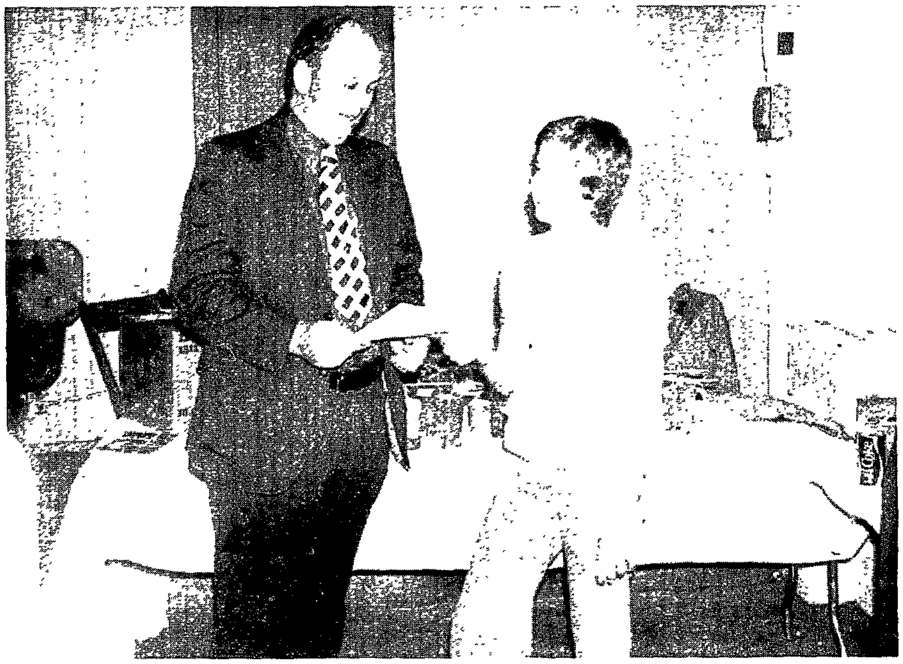
Our first duty, after the company was organized, was to select the company's product. After several discussions with the local Junior Achievement staff and advisers from other companies, we decided to produce flare chocks because the raw materials were inexpensive and readily available, they were simple to produce, and they had been successfully marketed by a Junior Achievement company in Michigan.

Twenty-two teenagers from five area high schools attended the first meeting. After a brief get-acquainted period, including an informal discussion of goals and objectives, we introduced the product.

The reactions, ranging from "underwhelming" to "how do I quit Junior Achievement," became our first crisis. The remainder of the meeting was spent discussing alternative products. The 15 girls wanted to make candles and the 7 boys insisted on wood plaques.

They eventually compromised—our primary product would be candles and name plaques would be produced on a customer-order basis. The company was named "Wax-N-Plax."

Organizational matters, such as issuing stock and electing officers, occupied the next several meetings. These activities culminated during our first



Robert W. Hanlon, regional manager, Cincinnati, presents the company charter to Lisa Knochelmann, president of Wax-N-Plax.

board meeting when our regional manager, *Robert W. Hanlon*, presented the Junior Achievement charter to the company president.

Problems

Problems arising from GAO's involvement in the program can be divided into two categories—those stemming from the conflict between GAO audit assignment travel requirements and Junior Achievement program requirements and those stemming from the company's internal activities.

GAO—Junior Achievement Requirements

Our primary problem was attendance at company meetings. The travel required in the Cincinnati region made it impossible for us to attend all 30 company meetings. A previous attempt to sponsor a company had failed because all the advisers had assignments outside the region during the first and second company meetings.

Junior Achievement officials told us three advisers would be sufficient. Considering our travel requirements, we believed that at least four advisers would be necessary. Though we were able to maintain overall company continuity, various functional components, such as sales, finance, and production, suffered on occasion due to the absence of one or more advisers. For example, the finance and sales advisers missed two successive meetings because they were traveling on GAO assignment.

Future Cincinnati sponsorship of Junior Achievement companies will require more advisers. Five or more may be adequate to prevent the loss of continuity among the company's various functional components.

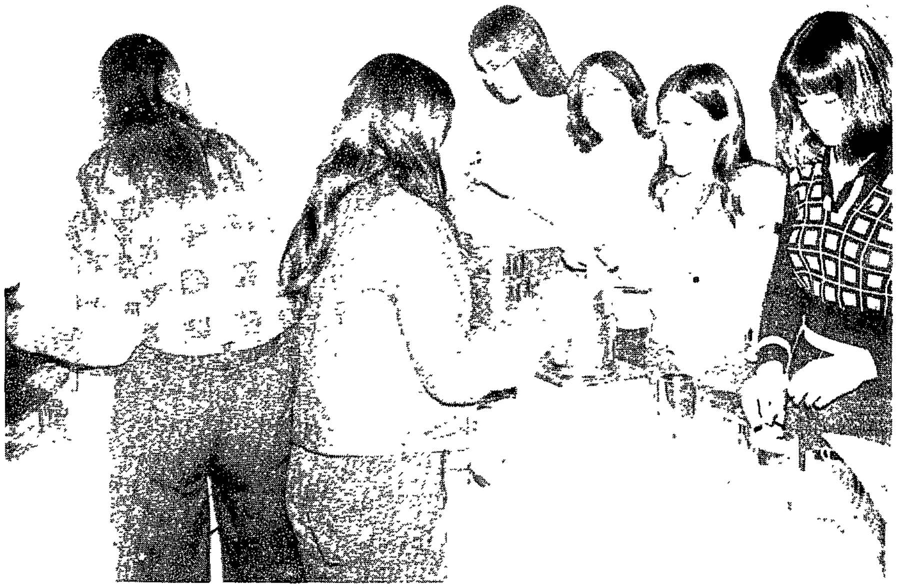
Company Production Activities

The decision to change products during the first meeting delayed production for 2 weeks. Also, the advisers and achievers knew little about the candlemaking process, the equipment required, and production leadtime and did not foresee many of the technical problems that would come up.

The company decided to produce a candle which looks like a mug of draft beer. This required a two-step manufacturing process. First, beer-colored wax was poured into a glass mug. When the wax cooled, the "head," made from clear wax which became white and fluffy when whipped, was added. The second step could not be accomplished until the wax poured in the first step cooled. This cooling time prevented the company from finishing more than 20 candles during the regular 2-hour production meeting.

To increase production, we held extra production meetings to complete the first step on a large number of candles. During the regular meeting the achievers concentrated their efforts on the second step—adding the head. This increased production to between 50 and 60 candles a week. Other technical problems related to the quality of the finished candle. Most of these problems were eventually solved, but energy and materials were wasted.

The company's plaque production did not experience the same technical diffi-



Company achievers producing candles.

culty as that of candlemaking, but it had greater production delays. Most of the problems were equipment-related. Twice the bandsaw blades broke shutting down production completely. On another occasion the table saw blew a fuse early in the evening and we lost our lights. Since no one could find the fuse box, all production ceased, including candlemaking.

Production was also slow because only one achiever could write the names for the custom-ordered name plaques free hand. He was also the only one who could operate the bandsaw. Production capacity depended totally on the speed of this individual.

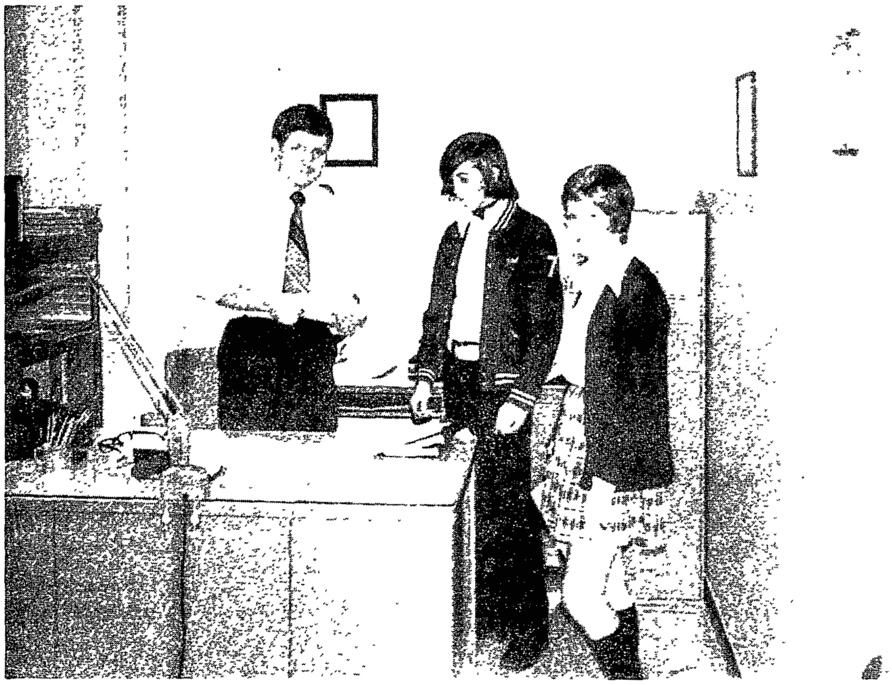
Company Financial Activities

The production and technical problems initially resulted in an adverse cash flow. Resource and equipment bills mounted and sales could not be generated. Now, sales have exceeded production capabilities and the company's problem is one of satisfying the existing demand.

In addition to guidance on business activities, motivation of the achievers was essential. Despite early disappointments, the enthusiasm and energy of these young people resulted in their assuming greater responsibility and achieving satisfactory results, such as increased production, increased sales, and greater financial stability.

Achievements

At the first company meeting the achievers appeared unwilling to even speak to company members other than their friends. After about a third of



Cincinnati staff member purchases a share of stock from company president and vice president.

the program year they became a unified group with a common objective. With a great deal of enthusiasm they now manufacture and sell products of their own choosing. The company isn't making money yet, but it is helping educate its members in the business process.

The four of us have experienced very personal achievements in the feelings of satisfaction we receive when we can see the young people in our company becoming more involved in its operation, its business decisions, and its financial future. Our final message is simple—if you haven't tried it, get involved with young people; it's rewarding.

CHARLES J. STOKES

72/803

How the General Accounting Office Evaluates Urban Housing Policies

The following paper is based on the experience and observations of a university professor who spent a year on the staff of the General Accounting Office as a Sears-American Assembly of Collegiate Schools of Business Fellow under the Federal Faculty Fellowship Program. The paper deals with GAO's work in evaluating Federal urban housing programs and brings out—probably better than can be done internally—how GAO work fills an important information gap for the Congress and the public in evaluating the effectiveness of the Federal programs.

The purpose of this paper is to examine the role of the General Accounting Office (GAO) in the evaluation of U.S. housing programs and policies. The method of the paper is to present the task of the GAO as it is conceived in the evaluation of national housing and urban development programs and policies, to examine and analyze a number of recent GAO reviews and evaluations in these areas, to assess the likely impact of these reviews on policy formation and administration as well as on the operation of the market place, and to attempt a statement of methods for improving evaluation in housing and urban development.

A study by J. S. Wholey *et al.* of attempts made to evaluate Federal policies and programs concludes that "the most impressive finding about

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the evaluation of social programs in the Federal Government is that substantial work in this field has been almost nonexistent." [1] The study went on to say that we ought not to have evaluation for its own sake, but for "the development of a necessary, useful tool for improving social programs." It argued that "the essence of evaluation is the comparison of both outcome (what happened that would not have happened in the absence of the program?) and relative effectiveness (what strategies or projects work best?)." Evaluation, it said, is "concerned with questions of effectiveness more than efficiency. It is goal-oriented, focussing on output rather than input." [2]

Yet these strictures spell out what the General Accounting Office regards as its task. The Comptroller General has said recently that the task of GAO is to ask three crucial questions: Are the programs achieving their objectives? Are they costing more than they should? And, are there other approaches which would better accomplish these objectives at less cost? [3]

It is important to observe that the GAO seeks to meet the information gap that many observers have alleged exists between the Congress and the executive agencies. To a great extent, that gap is being filled. In the housing and urban development area alone, there were some 31 reports, reviews, and analyses published during 1972 (21 to the Congress or members of the Congress, and 10 to HUD). And there were many others under way.

It is not clear, however, that the general public or even professionals in urban economic research, real estate, and Government economic research, are aware of the kinds of information available from GAO reports. This is said not so much to boast about the volume of GAO's analytical work, or even to invite a critique of the quality of its work, as to make known the fact that a good deal of useful information is available. And the use of this information, speaking as an economist on leave from the university, would significantly improve the accuracy and relevance of what researchers have to say about housing market activities (especially as Government actions impinge on them) and about urban development generally.

It is not the task of GAO to make political evaluations, of course. By the very nature of its relationship to the Congress, the Office must eschew a political approach. For some, this seems to mean that GAO "waters down" what it has to say. Nothing could be farther from the truth. On the other hand, GAO staff do bend over backwards to give the Administrator a chance to defend and explain what he is doing. And they publish his reactions and those of affected third parties, where relevant, right along with their own findings, recommendations, and observations.

Admittedly, too, there is a difference between evaluative research, and evaluation as such. GAO publishes its evaluations. Behind these evaluations, there are very often reams of valuable basic research material, but the agency publishes only what is necessary to make the points it feels are essential.

Seven recent GAO reports have been

selected to indicate the nature of the agency's evaluation procedures. These reports cover a relatively wide range of matters, such as the effectiveness of recent programs to stimulate homeownership, reducing interest costs in housing subsidy programs, housing code enforcement, and the Forest Hills low-rent housing project in Queens, New York City. They have been selected because: they focus on essentially social issues; they examine Government impact on urban housing markets in specific places; they assess the relative advantages of several possible approaches to reaching national housing goals; and they illustrate the methodology used by GAO in obtaining the data, in analyzing those data, and in using them to develop findings and make recommendations.

In the pages that follow, then, are seven exhibits, A through G, summarizing these reports. Each exhibit contains a statement of the basic question in the report, the essential focus of the report, its recommendations, its findings, and the method used together with a discussion of some of the implications of the report.

EXHIBIT A

Title of Report: "Opportunities to Improve Effectiveness and Reduce Costs of Homeownership Assistance Programs" (B-171630, Dec. 29, 1972).

Basic Question: Did the resources assigned by HUD to the homeownership program get used effectively in meeting housing needs and goals?

Focus: Sections 235 and 502, HUD Act of 1968.

Issues: Resource allocation; quality control of housing output; default record; costs of financing.

Recommendations: 1. Resources ought to be allocated proportionate to need.

2. Inspection of housing production must be improved.

3. Develop a clear definition of the type of dwelling to be subsidized in each relevant market.

4. Establish more effective coordination of the activities of the Departments of HUD and Agriculture in the housing field.

5. Make in-depth studies of defaults as a basis for screening and counselling guidelines.

Findings: 1. HUD/USDA did not insure that all eligible households had equal access to program resources.

2. The need criteria were not established, nor was there any adequate identification of need.

3. Allocations in individual housing markets were on a first-come, first-served basis.

4. Housing supplied under the program was too often defective.

5. Financing costs of the entire program were unnecessarily high.

6. Mortgage defaults were unusually high.

Method: 1. A survey was made in housing markets in Alabama, Arkansas, Georgia, Louisiana, South Carolina, Washington, and Utah.

2. Industry participants—mortgage bankers, builders, brokers, and the like—were interviewed.

3. Families living in housing provided under the program were interviewed.

4. A careful comparison and analysis of all available data was made.

Discussion: 1. The report compared the intent of Congress with the performance of HUD.

2. This is an almost classic case of an agency putting together in hasty fashion regulations and procedures, plus faulty administration, to get as much production as possible in the shortest possible time. Though it could be said in defense that more housing for homeownership was produced than under any comparable program, this was hardly an example of an effective effort to meet established need.

EXHIBIT B

Title of Report: Opportunities to Improve Effectiveness and Reduce Costs of Rental Assistance Housing Programs (B-171630, Jan. 10, 1973).

Basic Question: Did the rental construction program meet national housing goals?

Focus: Section 236 of HUD Act of 1968 (the rental market).

Issues: Land value appraisal; methods of financing; investor incentives, their adequacy (e.g., tax shelters), and quality of production.

Recommendations: 1. Allocate resources more proportionate to need.

2. Determine actual need, market by market.

3. Monitor land valuation techniques.

4. Improve management incentives (if necessary restructure tax shelters and the like).

5. Provide for direct Government financing of program.

Findings: 1. Evidence that there was no equal access to benefits of program by geographical location, by type of family, and by income range.

2. The allocation factor was not need but capacity of the local housing-finance-construction complex in the market place.

3. Land value appraisal was very poor.

4. Financing costs were unnecessarily high.

5. Tax shelters were not tied to effectiveness of management.

Method: 1. Surveys of 68 sec. 236 projects in Atlanta, Dallas, Los Angeles, and New York HUD regions.

2. Intensive interviews of HUD, State, and local officials, real estate market makers, project owners, tenants.

3. Thorough comparison and analysis of data.

Discussion: 1. Report sets a standard for performance in quality, costs, and coverage, and then measures what actually happened against these standards.

2. Report raises basic question of whether Government ought not to have mortgage banking functions and avoid heavy additional costs in a social program. Why should benefits be diluted through an inefficient market process?

3. Report also raises question of Federal budgetary practice in handling encumbrances.

EXHIBIT C

Title of Report: Opportunity for Reducing Interest Costs Under Sections 235 and 236 Housing Programs (B-171630, Nov. 22, 1972).

Basic Question: Is it possible to reduce interest costs to both Government and program participants by changes in accounting and billing procedures?

Focus: Monthly payment of mortgage insurance premiums under HUD's monthly assistance payments for sects. 235 and 236 programs.

Issues: There is a distinct saving possible to Government if HUD would retain funds it now pays out to mortgagees, but which it must re-collect from them. Thus, the Government, on the average, now loses 6 months interest on these funds.

Findings: 1. For the fiscal year 1973, for example, interest costs in excess of the $1.6 million could be involved.

2. HUD allows mortgagees to hold Government funds in escrow and earn interest on them.

Recommendations: 1. HUD should deduct mortgage insurance premiums from the monthly assistance payments.

2. HUD should change its premium billing and collection procedures.

Method: 1. A review of procedures of HUD.

2. An analysis of costs of these procedures.

3. Intensive discussions with HUD about the implications of both costs of money and the changes in accounting necessary.

Discussion: 1. This is a fairly direct, though somewhat complicated, example of how money could be saved and devoted to more effective use in meeting national housing goals.

2. Savings are estimated at $140,000 for every billion dollars of insurance outstanding.

EXHIBIT D

Title of Report: "Enforcement of Housing Codes: How It Can Help to Achieve Nation's Housing Goals" (B-118754, June 26, 1972).

Basic Question: Why was federally assisted local code enforcement largely ineffective?

Focus: Housing acts of 1964 and 1965, code enforcement grant programs.

Issues: 1. Has the code-enforcement grant program been effective in any meaningful sense? Can it be shown that code enforcement has arrested urban decay effectively?

2. Indeed, what is code enforcement's role in urban development?

3. The tendency is to emphasize public works improvements to the exclusion of actual building code enforcement. Why?

Recommendations: 1. In view of lack of local acceptance of the concept of code enforcement, HUD should promote its positive aspects.

2. HUD should set minimum standards of performance as prerequisites for approval of community upgrading plans.

3. Take examples such as the Detroit plan and encourage nationwide use.

4. HUD should develop adequate work patterns, staffing plans, and monitoring and reviewing procedures so that communities will know how to go about code enforcement effectively.

Findings: 1. Of the 29 cities surveyed in detail, only one has an effective code enforcement procedure.

2. Community resistance to code enforcement is high.

3. Use of HUD funds in area actually beyond restoration to good living conditions was not the most effective use of funds and was not the intent of the Congress.

Method: 1. Visits to cities such as Minneapolis, Detroit, Salem (Ore.), Wichita, Joplin (Mo.), Mansfield (Ohio), Chicago, Hamilton County (Ohio), and other areas.

2. Interviews with local and State officials.

3. Careful review and analysis of available data.

4. Development of evaluation standards.

Discussion: 1. This report raises a basic issue about the role of code enforcement. In effect, it says that code enforcement works only when the neighborhood is capable of being restored at reasonable cost (and through use of largely private funds) to livable conditions. Otherwise, it is either useless or actually reduces the housing supply without an effective way of replacement.

2. The temptation of the local community was to use code enforcement as the springboard for seeking Federal funding of new streets, paving of alleys, sewage, drainage, and the like. It is questionable whether these play any major role in

making for an improved quality in the housing stock per se, though they may aid the environment. Moreover, they do tend to make development of central city areas more possible for other than housing purposes.

3. There is no general agreement on a code enforcement strategy, despite textbook examples.

EXHIBIT E

Title of Report: Benefits Could Be Realized Through Reuse of Designs for Public Housing Projects (B-114863, Dec. 2, 1971).

Basic Question: Can costs of low rent public housing (LRPH) be reduced by effective use of existing inventory of architectural designs?

Focus: LRPH designs.

Issues: Design reuse; large design inventory; question of architects' attitudes and fees.

Recommendations: 1. HUD should encourage greater reuse of designs for LPRH.

2. HUD should require that local housing authority (LHA) contracts provide for acquisition of titles to designs so that they will be available for other projects.

Findings: 1. If 50 percent of the projects under construction in fiscal year 1970 had used designs from the available inventory, about $31 million could have been saved in design and construction costs.

2. Design costs are generally reduced about 50 percent if reuse takes place. This would have meant saving $12 million in design costs alone in FY 1970.

3. With reuse, less time is lost in getting started. This saving of at least 5 months time on the average might have saved $19 million by avoiding cost escalation through delay.

4. The inventory at present consists of at least 1,400 designs so that stereotyping could readily have been avoided.

5. Most LHA's are willing to cooperate.

6. Many architects are willing to cooperate.

Method: 1. On-site surveys in Ft. Worth, D.C., Philadelphia, San Francisco, Seattle, Chicago, and LHA's in these HUD regions.

2. Use of specific examples in Minneapolis and Seattle to establish pattern.

3. Use of industrial experience where applicable.

4. Careful review of all available data.

Discussion: 1. This report fits the popular image of GAO: to save money. Yet, in fact, the emphasis is upon making sure that more social impact can be obtained for outlay of money in LRPH program.

2. Report shows that response of professional architects was not as negative as had been expected.

EXHIBIT F

Title of Report: Inquiry into the Low-rent Housing Project at 108th Street—62d Drive, Queens, New York, Proposed by the New York City Housing Authority (B-118718, Dec. 1, 1971).

Basic Question: Did proposed Forest Hills project meet normal criteria for LRPH design and location?

Focus: Operations of New York City Housing Authority (NYCHA) in LRPH planning.

Issues: 1. Was the site suitable under normal criteria?
2. Were the cost estimates reasonable?
3. What was the effect of the high-rise restrictions?
4. Were the neighborhood resources sufficient to meet increased population?

Recommendations: None.

Findings: 1. All normal criteria had been met by NYCHA.
2. High-rise restriction did not apply in this instance.
3. Schools would be a problem.
4. Foundation costs, given nature of soil, did not get careful review.

Method: 1. On-site review of criteria.
2. Comparison and analysis.

Discussion: This is an example of a "congressional request." GAO defined its task of seeing to it that all criteria were met.

EXHIBIT G

Title of Report: Inquiry into the Low-rent Housing Project at 157th Avenue—79th Street, Queens, New York, Proposed by the New York City Housing Authority (B-118718, March 14, 1972).

Basic Question: Should this LRPH be placed on the site, given its environmental characteristics?

Focus: Operations of the NYCHA.

Issues: Environmental impact statement; site suitability; and cost estimates.

Recommendations: None.

Findings: Siting very poor (near Kennedy Airport on several flight paths). Site costs low, but almost all other HUD site criteria not met.

Method: On-site review; comparison and analysis.

Discussion: 1. This is an example of the consequences of using the Environmental Impact Statement regarding site selection.
2. This would have been another Cow Island (Boston) project, in an area

where there could have been no social protest, out of the way of trouble, a kind of isolation ward; but schools, transport, stores, and the like were decidedly lacking.

In table 1, it will be noted that social concerns ranked first in five of the seven cases (exhibits A, B, C, D, and E). Efficiency was the basic point in two of them (F and G) and in none did performance stand out as the key issue. On a summary ranking basis, social concern was the essential thrust of the GAO's work. These examples of analysis of the Federal impact on local urban housing markets also show the breadth of GAO's concern (table 2).

Note, too, the essentially nontheoretical approach taken. The typical GAO report does not begin with a viewpoint or a theory to be tested. Rather, it takes as given the intent of the Congress, examines the performance of the agency by working out a set of criteria based on observation at the site of the program in action, and then draws conclusions designed to aid in reaching the presumed objective. To be sure, GAO can seldom escape completely from the "conventional wisdom"; but it does not take such wisdom as given.

It may be surprising to learn that GAO does not often use totally specialized services. In the normal course of 3 or 4 years work on housing audits, each auditor may be working with many different kinds of matters. Also, every 2 to 4 years he will move from housing to perhaps transportation, or defense, or possibly to health, education, and welfare. Whatever the disadvantages of this system of rotation, it does mean that the auditors assigned have the task of learning, almost from the bottom up, what is at issue. This almost necessarily insures a certain objectivity, since there is no professional position to be defended.

GAO does emphasize, in the housing and urban development field, reviews of on-going programs. It tends to stress those programs which take up a major share of the agency budget. But it also decides how frequently it is necessary to review particular activities to assess their efficiency and effectiveness. In some way or other, just about every phase of the operating activities of HUD, for example, gets a review, no matter how small that activity is.

GAO analysts like to work on reviews of major programs where there is substantial congressional and public interest. They also try to be responsive to congressional requests for reviews and information both from committee and subcommittee chairmen, and from individual members. In directing these efforts, they watch the public reaction, the press and the media, to make sure that they keep on top of things that are likely to lead to questions by the Congress. Take the case of landsale in exotic parts of the country, using practices that certainly deserved censure. Take flood insurance or crime insurance or new communities. GAO analysts have been alert to these questions and have had something to say, often before it becomes a headline matter.

TABLE 1

Analysis of Cases Ranked by Relative Importance of Three Evaluation Criteria

Criteria	A	B	C	D	E	F	G	Rank Summary	
Performance	3	3	2	2	2	2	2	16	(3)
Social Concern	1	1	1	1	1	3	3	11	(1)
Efficiency	2	2	3	3	3	1	1	15	(2)

TABLE 2

Breadth of Issues Illustrated by Cases

Case	Issue Illustrated
A	Home ownership: If we want it, how best to achieve it?
B	Rental market: Can it be made to reach social goals?
C	Mortgage insurance premiums: Should interest savings be effected?
D	Code enforcement: Is this really a viable option in improving the lives of poor people?
E	Achitectural design: Are we more concerned with architecture than with providing housing?
F	Is Forest Hills project technically viable?
G	On 157th Avenue project: Can environmental impact be ignored?

There is great latitude in the way GAO goes about its reviews. It selects the people it thinks can do the job. It supplies them with assistance, travel funds, consultants, and all that is necessary. The analysts develop the approach to the job. They write their reports. There are no real constraints on what is to be looked into, where, or how. And if new methods have to be developed; this is encouraged. In a sense, the proof of the pudding is in the "blue book," the report itself. If it "flies," as they say, then it must be good. And, given GAO's stringent internal review and editorial processes, that is saying a good deal.

Continuing emphasis is being placed on bringing about improvements in Government operations. The contributions of GAO are being considered in terms of the extent to which they improve efficiency of Government operations; save public funds; increase compliance with applicable laws and regulations; make for more effective operations; and increase congressional understanding of Government operations. In this respect, GAO's stress is on not the number of reports, but on improvements, disclosures, and the use of results. "The real test is what happens directly or indirectly as a result of our work—how we contributed to better Government." [3]

In conclusion these points are emphasized: First, GAO is very much involved in the evaluation of social programs. Second, GAO is concerned with equity and social justice, as well as performance and efficiency, in the operation of the Nation's housing markets. And third, GAO's approach, while low-key, fact-oriented, carefully substantiated, and almost painfully referenced and reviewed, does produce a quality of social program evaluation that is worthy of wider study.

[1] J. S. Wholey, J. N. Scanlon, H. G. Duffy, J. S. Fukumoto, and L. M. Voit, *Federal Evaluation Policy: Analyzing the Effects of Public Programs* (Washington, D.C.: The Urban Institute, 1970), p. 15.

[2] Pp. 19-23.

[3] E. B. Staats, Comptroller General, address at the University of Hawaii, April 3, 1973.

Targets Must Be Defined

Achievement is never possible except against specific, limited, clearly defined targets, in business as well as in a service institution. Only if targets are defined can resources be allocated to their attainment, priorities and deadlines be set, and somebody to be held accountable for results.

Peter F. Drucker
"Managing the Public Service Institution"
The McKinsey Quarterly
Spring 1974

Reputation: The Most Prized Possession

Over the years, the GAO has earned a reputation for accuracy, objectivity, fairness, and probity in its work. The value of its reputation has sharply come into focus in the light of recent developments associated with the so-called 'Watergate' affair. The reputation which we have earned is valuable, if not vital, to the effectiveness of GAO, the credibility with which its reports are received, and the professional reputation of its staff.

While we have much to be proud of, we should also be aware that a reputation of organizations, like individuals, is a fragile matter. We all bear a personal responsibility for preserving a public trust and it is only as each individual shares in this trust that the organization will continue to preserve its reputation untarnished.

These remarks were registered by the Comptroller General, *Elmer B. Staats,* in recommending to all members of the GAO professional staff the following short article on the value of a reputation. The article is by James L. Hayes, President and Chief Executive Officer, American Management Associations, and was published in the AMA *Manager's Forum* for November 1974.

According to an old fable, a young man told his confessor that he had damaged the reputation of another person in the village. The confessor ordered the man, as part of his penance, to go to the nearest hill and empty a bag of feathers to the wind. After he had done so, scattering the feathers far and wide, the confessor told him to gather up all the feathers again. "Gather them all! Impossible!" cried the young man. "So too with the reputation you have damaged," replied the confessor. "I can give you absolution, but I doubt that you will ever be able to correct what you have done."

Professional managers in the public and private sectors often find themselves involved with other people's reputations. Many of them know things that, if generally revealed, would hurt the reputation of someone on their team, a customer, a vendor, a patient, or a competitor.

These professionals often—even at the risk of taking abuse themselves—make judgments without telling all they know. This is to their credit. I recall the case of a president who happened to discover that his controller had systematically falsified the company's records. He requested the resignation of the controller, who left the company quietly. But when others in the firm learned of his departure, their reaction was anything but quiet. The controller had been well liked and competent, and of course they knew nothing about the record falsification. A vice-president accused the president of being a dictator, and several members of the board criticized him for his "inability to keep good people." Naturally, this was not a pleasant experience for the president, but he silently rode it out so as to preserve the controller's reputation.

This is not as unusual a situation as you might think. Even more common is the "letter of reference" case where a manager is asked to comment on a former employee who has left because he has failed at his job. No manager wants to mislead other managers about a prospective employee. Yet how does he know that one failure will guarantee another? It would be highly presumptuous—and irresponsible—to endanger another person's future on the basis of one's own subjective prediction; discretion here is the better part of valor.

In these cases, at least, the manager has some facts to deal with. He is on shakier ground when falsities and half-facts intrude into the decision process. In both public-sector and private-sector organizations, one hears about "leaks" that crush or threaten reputations. Sometimes such leaks come from disgruntled employees, sometimes from those seeking political advantage in the organization, sometimes from careless gossips, sometimes from malicious busybodies. Since many rumors are only loosely based on truth, managers would do well to check out all negative inputs from "reliable sources." One director of security, told of a guard who had fallen asleep on the job, ordered the guard dismissed—only to learn later, to his dismay, that his tipster had not told him the guard had worked two consecutive shifts because one of his friends was ill.

Organizations have reputations too, and they deserve the same care as do the reputations of individuals. The manager who tries to tarnish the reputation of another organization is recognizing that his own cannot win on its own merits. This does not mean that an organization should never appeal to law, or bring another organization to court, in order to protect its own rights. But stating publicly that another organization *may* be violating the law not only is cowardly and predatory but casts grave doubt on the character of the one who makes the statement. Legal requirements give no one the right to ignore ethical considerations; ethics often begin where the law leaves off.

The credibility of management depends in part on trust. We are (or hope to be) trusted by those who report to us, by those to whom we report, and by those we deal with outside our own organizations. A manager's position of trust requires that he protect the reputations of those with whom he interacts. For, once that trust is damaged, it is as difficult to repair the damage as it would be to put the feathers back in the bag.

Don't Wait

Wait not to be backed by numbers. Wait not till you are sure of an echo from a crowd. The fewer the voices on the side of truth the more distinct and strong must be your own.

Channing

The Watchdog Reports

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

Brandt Appointed Director, European Branch

February 1959

Joseph Campbell, Comptroller General of the United States, has announced the designation of Robert F. Brandt as director of the European Branch of the U. S. General Accounting Office with headquarters in Paris, France. Mr. Brandt will succeed Smith Blair, Jr. who will complete a three-year tour as director in August 1959.

Mr. Brandt has been with GAO since 1946. At present he is director of the GAO Far East Branch located in Tokyo, Japan. Prior to his assignment to Tokyo, he was director of the planning staff in Washington and an assistant director of DAAD.

Before coming to GAO, Mr. Brandt had experience in banking and publishing and was on the staff of Scovell, Wellington and Company, certified public accountants. He holds the degree of bachelor of science in business administration and master of business administration from New York University. He is a certified public accountant in the District of Columbia and is a member of the American Institute of Certified Public Accountants.

Lippman Heads Far East Branch

March 1959

Joseph Campbell, Comptroller General of the United States, has announced the designation of Joseph Lippman as director of the Far East Branch of GAO with headquarters in Tokyo, Japan. Mr. Lippman will succeed Robert F. Brandt who will complete a three-year tour as director in July 1959.

Mr. Lippman joined the GAO staff in 1950, coming from the New York office of Arthur Andersen & Co. At present he is an assistant director of the Defense Accounting and Auditing Division and has directed the examinations and audits of the military assistance and other defensewide programs. He has had broad experience in management and accounting fields and served the Office in Europe for 4 years. Mr. Lippman has performed effective liaison work for congressional committees and has received both congressional and agency commendations for his outstanding work and contributions to international programs.

Mr. Lippman received degrees of bachelor of science from the City College of New York and master of business administration (with distinction) from the University of Michigan. He is a certified public accountant in the District of Columbia.

Litke and Hirschhorn To Be Assistant Directors

May 1959

Joseph Campbell, Comptroller General of the United States, has announced the designation of Max Hirschhorn and Arthur L. Litke as assistant directors of CAAD.

Mr. Hirschhorn received the degree of bachelor of business administration from City College of New York in 1942. He served in the United States Army from 1943 to 1946. From 1946 to 1952, when he joined GAO as a senior accountant, he was employed by various firms of certified public accountants in New York City. Since joining the Office, Mr. Hirschhorn has assumed positions of increasing responsibility and most recently was assigned as supervisor of GAO's audit of the U. S. Post Office Department.

Mr. Hirschhorn became a certified public accountant in New York in 1950 and is a member of the American Institute of Certified Public Accountants.

Mr. Litke, a graduate of Trinity College, received his master's degree from Wharton School of the University of Pennsylvania in 1946. He joined the staff of GAO in that year. He has broad experience in both corporation and agency accounting and auditing assignments.

He has performed in the capacity of junior, senior, and supervisory auditor with GAO in a variety of audit assignments. His most recent assignment has been as supervisor of GAO's audit of the Atomic Energy Commission. Mr. Litke is a certified public accountant of North Carolina and is a member of the American Institute of Certified Public Accountants.

Drakert Is Assistant Director of European Branch

June 1959

Joseph Campbell, Comptroller General of the United States, announced the designation of Robert Drakert as assistant director of the European Branch of GAO with headquarters at Paris, France. Mr. Drakert will succeed Robert S. Rosenberger who will complete a 3-year tour of duty as assistant director in August 1959.

Mr. Drakert attended New York University and the College of the City of New York, and became a certified public accountant in New York in 1940. He served in the United States Army from 1942 to 1945.

Mr. Drakert joined the New York staff of GAO in November 1951, after a number of years in public accounting and private business. He had previously served in 1945 and 1946 with the former Corporation Audits Division of GAO. He has been manager of the New York regional office since July 1954.

Krieger New Regional Manager in New York

July 1959

Joseph Campbell, Comptroller General of the United States, has announced the designation of Hyman L. Krieger as regional manager of the GAO regional office at New York. Mr. Krieger succeeds Robert Drakert, who has been named assistant director of the European Branch of GAO.

Mr. Krieger received the degree of bachelor of business administration from City College of New York in 1941 and later attended George Washington University. He joined the Washington staff of GAO in 1946 after a 4-year tour of duty with the United States Army.

In 1950, he was again called to military duty and served in a military and civilian capacity until 1954, when he returned to GAO. He has been manager of the regional office at Chicago since August 1956.

Mr. Krieger is a certified public accountant of North Carolina and Illinois and is a member of the American Institute of Certified Public Accountants.

Wolfson Is Chicago Regional Manager

July 1959

Joseph Campbell, Comptroller General of the United States, has announced the designation of Myer R. Wolfson as regional manager of the GAO regional office at Chicago, Ill. Mr. Wolfson succeeds Hyman L. Krieger who has been named regional manager of the New York regional office.

Mr. Wolfson received the degree of bachelor of science from the University of South Carolina in 1934. He joined GAO in June 1935 and has had broad experience in governmental auditing and accounting since that time. For the past 5-years, Mr. Wolfson has been principal supervisory auditor on the staff of the Chicago regional office.

Irwin S. Decker Retires

July 1959

A cocktail party and buffet were held for Irwin S. Decker at the Kennedy-Warren on June 18, on the occasion of his retirement. Approximately 120 of his friends attended. Frank H. Weitzel, Assistant Comptroller General, reviewed Mr. Decker's service in GAO and gave some interesting comments on his life. E. H. Morse, Jr., presented Mr. Decker with a parchment on behalf of Mr. Decker's associates, in recognition of his loyal service, and in appreciation of his friendship.

He received an attache case, with briefcase enclosed, a pocket-size transistor radio, and a parchment from the wives of his associates as a tribute to his graciousness.

Blair New Dallas Regional Manager

August 1959

Joseph Campbell, Comptroller General of the United States, announced the designation of Smith Blair, Jr., as regional manager of the GAO regional office at Dallas, Texas.

Mr. Blair succeeds Harold P. Batchelder who will assume charge of the San Antonio office. Mr. Batchelder, a certified public accountant in Massachusetts, New York, Ohio, and Texas, joined the Washington staff of GAO in 1946 after a number of years with a large national public accounting firm. He has been manager of the Dallas regional office since its establishment in 1952.

Mr. Blair attended George Washington University, Benjamin Franklin University, and the Washington College of Law (now American University), Ll.B.-1941. He was admitted to the Bar of the District of Columbia in 1941.

Prior to joining the Washington staff of GAO in 1952, Mr. Blair was a special agent and supervisor for the Federal Bureau of Investigation. In 1954 he was assigned to the European Branch of GAO with headquarters in Paris, France, and for the past 3 years he has been director of the branch.

Roman Is Assistant Director

October 1959

The Comptroller General, Joseph Campbell, has announced the designation of Charles H. Roman as assistant director, Defense Accounting and Auditing Division.

Mr. Roman, a graduate of Ohio State University, joined GAO in 1947 as an accountant-trainee. He has had broad experience in both corporation and agency accounting and auditing assignments. He has performed in the capacity of junior, senior, and supervisory auditor with GAO in a variety of audit assignments.

His most recent assignments have included supervisory responsibility for the planning, programing, and execution of GAO's review program in Navy's Bureau of Aeronautics, review of supply management in the Marine Corps, and review of the procurement of major naval vessels.

Floyd, Wilson & Cooper To New Positions

October 1959

Comptroller General Joseph Campbell has announced the designation of Robert A. Floyd as associate director of the Transportation Division. Mr. Campbell also designated Hillis K. Wilson and John H. Cooper as assistant directors.

In his new post, Mr. Floyd is second-in-command of an organization of 1,200 people which is responsible for auditing all payments for transportation services made by the Government, an activity which resulted in the recovery of about 30 million dollars last year, and for reviewing and evaluating the transportation and traffic management operations in the Federal agencies.

Mr. Floyd, 37, attended Southwest Missouri State College, received a degree in Business Administration in 1948, and is a CPA. He served 6 years in the United States Navy. Since early this year, Mr. Floyd has been serving as assistant to the director, Transportation Division, and recently he was given a Meritorious Service Award for sustained superior performance on that assignment. His prior service in GAO includes varied audit assignments in such diverse agencies as the Maritime Administration, Civil Aeronautics Board, Veterans Administration, and Atomic Energy Commission. Before joining the staff of GAO in 1950, he was associated with Touche, Niven, Bailey and Smart, Certified Public Accountants, in Chicago.

Mr. Cooper has had extensive experience in the field of transportation both in private industry and in Government service, having served in various responsible traffic, accounting, and legal capacities. He is a graduate (cum laude) of Southeastern University and a member of the bar of the District of Columbia.

Mr. Cooper joined GAO in 1942, becoming one of the original members of staff assistant consultants established by the chief, Claims Division. For many years he was chief of the passenger subdivision and more recently he has served as chief of the special reports section.

Mr. Wilson served many years in the railroad accounting field with different carriers. He joined the GAO staff in 1934 and has worked in every phase of the transportation audit work of GAO.

Since 1947, Mr. Wilson has been chief of the freight subdivision.

Stovall Gets New Position

November 1959

Oye V. Stovall was recently designated as associate director of the Civil Accounting and Auditing Division by Joseph Campbell, Comptroller General.

Mr. Stovall has been on the staff of GAO since 1946 except for a period of industrial employment in 1955-56 as Controller, Uranium Division of Mallinckrodt Chemical Works in St. Louis. He has had broad experience within GAO in conducting accounting and auditing assignments, as well as responsibility for long-range planning, manpower utilization, and program priorities while assigned to the Accounting and Auditing Policy Staff.

Before coming to the Office, Mr. Stovall was associated with the New Orleans and Houston offices of the public accounting firm of Ernst & Ernst. He served with the U.S. Navy in World War II in the Navy Cost Inspection Service, attaining the rank of Lieutenant Commander.

Mr. Stovall is a certified public accountant in Louisiana and Mississippi and is a member of the American Institute of Certified Public Accountants and the District of Columbia Institute of Certified Public Accountants.

Stovall Is New Transportation Director

December 1959

In a recent announcement, Oye V. Stovall was designated as director of the Transportation Division by Comptroller General Joseph Campbell.

Abbadessa Is Deputy Director

December 1959

John P. Abbadessa has been designated to be deputy director of the

Civil Accounting and Auditing Division. The announcement was made recently by Comptroller General Joseph Campbell.

Mr. Abbadessa, a certified public accountant, is a graduate of the American University and received his master's degree from the Wharton School of the University of Pennsylvania.

Mr. Abbadessa joined the GAO staff in 1947 and has had broad experience in both corporation and agency accounting and auditing assignments, has performed effective liaison work for Congressional committees, and has received several commendations for his work. He has served in the capacity of junior, senior and supervisory auditor with GAO. In September 1956, he was promoted to the position of assistant director, Civil Accounting and Auditing Division, and in September 1958 was designated as associate director of that division. In this capacity Mr. Abbadessa directed GAO's audits of the Tennessee Valley Authority, the Atomic Energy Commission, and the Post Office Department. He also served as director, Transportation Division.

Gerhardt Is Associate Director

December 1959

L. Kermit Gerhardt was designated as associate director of the Civil Accounting and Auditing Division recently by Comptroller General Joseph Campbell.

Mr. Gerhardt has been associated with GAO since 1948. He had had broad experience within the Office in conducting and directing a wide variety of accounting and auditing assignments. He has been an assistant director since 1952.

From 1942 to 1947, Mr. Gerhardt was a chief accountant in the Cost Inspection Service of the United States Navy. Before entering Government service, he had a number of years of banking and industrial accounting experience and about 15 years' experience in public accounting with Charles F. Rittenhouse & Company, Certified Public Accountants, Boston, Mass., and with Touche, Niven, Bailey and Smart, New York, N. Y.

Mr. Gerhardt attended Acadia University, Nova Scotia, and the Bentley School of Accounting, Boston, Mass. He is a certified public accountant in Massachusetts and is a member of the Massachusetts Society of Certified Accountants and the National Association of Accountants.

News & Notes

Proposed Congressional Institute for Research and Evaluation

In its report dated September 1974 on "Congressional Decision Making for National Security," the Committee for Economic Development recommended the establishment of a congressional office, institute, or institution for research and evaluation to help the Congress play a stronger role in scrutinizing and reviewing the defense budget and weapon programs.

Comptroller General *Elmer B. Staats* registered exception to this recommendation recently. He wrote to the chairman of the CED Research and Policy Committee as follows:

> This Institute * * * would, in my opinion, directly duplicate the work of the General Accounting Office and other research and evaluation resources available to the Congress. The report states that 'such an organization should be both loyal to Congress and independent of it. It should be located in the capital city and should be capable of initiating research on matters of interest to Congress and of responding to appropriately authorized inquiries from Congress and its committees.' It further provides that it should 'have a professional staff and retain consultants from private organizations.' This recommendation describes fully and accurately the General Accounting Office in its present work and relationship to the Congress.
>
> I find elsewhere in the report—on page 43—a statement to the effect that Congress generally has refrained from burdening that Office (GAO) with responsibilities that would dilute or detract from its central tasks. I am not clear what this is intended to imply since what is described is GAO's central task and which the Congress has specifically provided by law that it should perform. It certainly is not an accurate statement since approximately 35 percent of our total staff effort of nearly 3,700 professional employees is providing direct assistance to the Congress in many different areas. Overall, nearly 40 percent of our work is in the evaluation of program effectiveness with special emphasis upon new programs and programs which will be coming before the Congress for authorization or funding. Some of this work is in response to congressional requests but much of it is being done on our own initiative.
>
> With respect to the Defense Department, a major part of our effort is in the analysis of weapons systems, including critical reviews of the alternatives provided by the Defense Department to the Congress. Currently, this includes such weapons systems as AWACS, the B-1 bomber, and the alternative proposals for a new lightweight fighter aircraft. We have also prepared analyses of alternative families of weapons systems.

In his letter, the Comptroller General went on to quote the provisions of the Congressional Budget and Impoundment Control Act of 1974, which not only directs GAO itself to review and evaluate the results of Government programs and activities but also to develop and recommend to the Congress methods for reviewing and evaluating Government programs and activities. He noted further that the same act requires GAO to assist the Congress in "appraising and analyzing fiscal, budgetary, and program related data and information."

His letter then added:

> Responsive to this Act, we established some time ago, a program evaluation staff to give technical advice and assistance to the General Accounting Office professionals and, more recently, we have established an Office of Program and Budget Analysis as a focal point for GAO work in support of new congressional budget procedures.
>
> The CED staff who developed this report do not appear to be aware of the enlarged and changing role of the GAO. This may be due in part to the fact that much of our work in the defense area has to be classified but our reports are made available to both the authorizing and the appropriating committees, as well as other committees, under the usual restrictions applying to classified information. To the best of my knowledge, however, no one from the CED has been in touch with us with respect to the extent and type of work which we have been performing for the Congress and increasingly so over the past several years. It is possible that the CED could have reached the same conclusion had this been done, but I do not believe so.

After mentioning the staff resources of nearly 12,000 already available to congressional committees and members and the existence of other separately established organizations in the legislative branch with professional staff of about 4,300 (GAO, the Congressional Research Service, the new Office of Technology Assessment, and the new Congressional Budget Office), the Comptroller General concluded:

> The real need, in my judgment, is not for additional staff resources but rather for making the output of existing staff more available, timely, and useful as Congress makes the decisions which it will be called upon to make.

An acknowledgment received from CED noted that it was important that their representatives obtain enough background about GAO's role "so that at the appropriate time and place we can make adequate amends."

Demonstration Audits in Michigan

The State of Michigan Department of Treasury and the Detroit regional office of GAO worked together for several months during 1974 on demonstration audits of four Michigan county functions in accordance with the "Standards for Audit of Governmental Organizations, Programs, Activities & Functions" issued by the Comptroller General in 1972. In December, the State Treasurer informed the Comptroller General that much progress had been made in achieving the department's objectives of

- —developing processes to assure that audit effort is centered on those areas where the promise of improvement is greatest,
- —providing on-the-job training to certain staff members which should be of benefit to others,
- —assessing its present proficiency and determining what new skills are needed to expand its audit effort, and
- —deciding whether to propose changes in the State's accounting and auditing laws for local gov-

ernments to include all elements set forth in the standards.

The State Treasurer also stated that:

> * * * the opportunity to work closely with * * * your Detroit Regional Office has contributed greatly to the cause of effective intergovernmental relations, and we look forward to continuing this cooperative effort at all levels of government.

Radio Frequency Spectrum— A Little-Understood Resource

Readers wishing to fill any gap in their knowledge about this important but generally not well understood natural resource would do well to read GAO's report of September 13, 1974, on the subject.

The report, signed by *Fred J. Shafer*, director, Logistics and Communications Division, was addressed jointly to the Chairman of the Federal Communications Commission and the Director of the Office of Telecommunications Policy.

The report starts out by defining what the radio frequency spectrum is—the range of radio frequencies used to transmit information from one place to another without connecting wires. Over $90 *billion* has been invested in the United States for spectrum-dependent electronics equipment, and about 55 percent of this was spent by the Federal Government. These facts establish the financial importance of this resource.

For other useful, interesting, and important information on this subject, consult the report.

Major General Jack A. Albright of the Army's Communications Command took pains to write the Comptroller General not long ago citing the report as a "truly outstanding study." He stated further that "The report clearly and concisely simplifies a complex subject and in my opinion is one of the finest reports ever prepared by your office."

New Booklet on Federal Financial Management Functions

For over 20 years, the GAO Comprehensive Audit Manual contained a special reference section containing descriptive information on the functions of various Federal agencies and programs directly related to the work of GAO auditors. The early editions of the audit manual contained reference information, for example, on GAO itself, the Treasury, the Federal financial system, Federal budgeting, financial reporting, and the Joint Program to Improve Accounting in the Federal Government.

As the years went by, this section was expanded and some subjects were removed and published separately for wider distribution.

As of September 1974, the section was completely updated, removed from the audit manual, and published in booklet form by the Joint Financial Management Improvement Program. In addition to internal GAO distribution, a large supply of copies were printed for distribution to management personnel in other Federal agencies and interested persons and organizations outside the Federal Government.

The booklet, developed by GAO's

Office of Policy with the assistance of the several agencies covered, is an excellent reference document. It is designed to familiarize users with the key central agencies of the Federal Government and with the Federal budgeting process. In its republished form, it contains chapters on the functions of the:

General Accounting Office
Treasury Department
Office of Management and Budget
General Services Administration
U.S. Civil Service Commission
Joint Financial Management
Improvement Program
Cost Accounting Standards Board
Renegotiation Board

Copies can be obtained by applying to:

Joint Financial Management
Improvement Program
441 G Street, N.W.
Washington, D.C. 20548
(Phone: 376-5372)

Accounting for Uncertainty

A recent announcement by the Securities and Exchange Commission underscores quite well the fact that accounting is not a science of precise measurement so much as it is an art of challenging estimating. This view is usually recognized by professional accountants and sophisticated financial analysts but rarely by others. The Commission's introductory comments for its announcement are of interest:

> The Commission recognizes that a large number of estimates are required in the preparation of all financial statements. Management must estimate the economic life of assets, the magnitude of mineral resources, the outcome and timing of long-term contracting activities, the outcome of legal and regulatory matters, the collectibility of receivables and many others. Since investors are aware of the need for such estimates, in the normal case it is not necessary for management to point out that they have been made and to indicate that some uncertainty exists as a result. Indeed, such disclosure would amount to little more than "boiler plate" which would not be useful to investors.
>
> On the other hand, when unusual circumstances arise or where there are significant changes in the degree of business uncertainty existing in a reporting entity, a registrant has the responsibility of communicating these items in its financial statements. It is not sufficient to assume that the numbers shown in conventional fashion on the face of the financial statements will adequately inform investors. The basic accounting model is by its very nature a single valued one in which a single best estimate is reflected in the face of the statements. While in most cases, this presentation effectively communicates business financial position and results of operations, under some conditions of major uncertainty it may not adequately inform investors of the realities of a business being reported. In such cases, registrants must consider the need for substantial and specific disclosure of such uncertainties and, in extreme cases, the need for deviation from the conventional reporting model. In addition, independent public accountants must consider the need for disclosure of such uncertainties in their report.

(*SEC Docket*, Jan. 6, 1975)

Change in Fiscal Year

The Congressional Budget Act of 1974, enacted last summer, requires a change in the beginning and ending dates for the fiscal year used in the budget. Since 1843, the fiscal year has begun on July 1 of one calendar year and ended on June 30 of the following year. The 1976 budget is on this basis. Beginning with the 1977 budget, however, the fiscal year will run from October 1 of one calendar year through September 30 of the following year. This change is being made to allow Congress additional time to review the President's budget, which will continue to be submitted near the beginning of each session of the Congress, and to carry out new procedures called for under the act. (From the Budget of the United States Government—1976.)

Report on Nuclear Power Plant Safety

Henry Eschwege, director, Resources and Economic Development Division, recently received the following complimentary observation from the Atlantic County (New Jersey) Citizens Council on Environment:

> The letter report of October 16, 1974 on safety of nuclear power plants was reviewed and highly concurred with by the Atlantic County Citizens Council on Environment. Action since taken by the U.S. Atomic Energy Commission on major shortcomings of the nuclear power plant safety program is indicative of the good results of this effort by your organization. Our council commends such objective and perceptive reporting on a critical program which threatens significant adverse impact to the public if adequate analysis, planning, and subsequent action is not properly pursued by all concerned.

The GAO audit referred to was carried out under the direction of *Philip Charam*, associate director, recently retired. (See p.   .)

Clyde Merrill Retires

The pleasures and privileges of retirement catch up sooner or later with all veteran GAO staff members and the urge caught up with *Clyde E. Merrill* at the end of December 1974.

Mr. Merrill, an assistant director in the Washington headquarters office of the Field Operations Division, had almost 40 years of Federal service, of which 35 years were with GAO. He served in a variety of positions and locations during his career—as a staff member of the Detroit field office and from 1952 to 1965 as regional manager of the Richmond—later Norfolk—regional office. In 1965 he moved to Washington and became a part of the office of the Director, Field Operations Division.

Among his duties there, he served as the Washington liaison representative for GAO's 15 regional offices for *The GAO Review* since the first year of its publication—1966. In this capacity, he assisted greatly in the review and processing of articles and other materials submitted for publication by regional office members. The *Review* acknowledges his able assistance and wishes him well.

Annual Report of the Comptroller General

The Comptroller General's Annual Report for 1974 was submitted to the Congress as of January 15, 1975. This report, required by law, covers the 53d year of the operations of the U.S. General Accounting Office.

Its 300 pages, which contain many pictures, present a vast array of diverse activities of the 5,200 employees of GAO for the year. It summarizes work done and accomplishments, and among other things, lists all reports prepared during the year and transmitted to the Congress, to its committees and individual Members, and to agency officials (there were 1,079 reports).

For those interested in what Government auditors, lawyers, accountants, analysts, and other professionals and their assistants can do—and do—this report is a valuable source of information. It is also a very useful reference work for information relating to Federal programs and activities and their evaluation.

Saga of a GAO Mine "Inspector"

The GAO field auditor's life is fraught with unexpected experiences—some good, some bad, some strange. Recently the Norfolk regional office staff was doing a job requiring that they visit a number of West Virginia coal mines and observe the miners at work.

One staff member, *Pat Kalk*, was forewarned at the time he visited that one of the miners with a different sense of humor made a point of kissing all visiting mine inspectors. Pat's experience was recorded for posterity by the Norfolk house poet (whose identity was not disclosed).

A BLISSLESS MINING ADVENTURE

It was autumn late, in the Mountain State. where the miners dig for coal;
That Pat Kalk went to a mine when sent to observe the miners' role.
Judging foul or fair, he would test the air and would watch the miners too;
Just to see if they, while earning their pay, did the things they're required to do.

He was going slow, in a mancar low, when the fellow beside him said,
"Do you see that guy with the look so sly?" and Patrick nodded his head.
"Well the guy's okay, but has funny ways; this isn't idle conjecture,
Though it gives us fits, every chance he gets, he kisses a mine inspector."

Pat watched him a while, and he'd often smile, but he never came Pat's way,
Still Pat watched him good, every chance he could, as he wiled away the day.
Now you might have guessed, Patrick wasn't missed, though he wasn't really blissed.
Once he turned his back, and he was attacked, yes beloved Pat got kissed!

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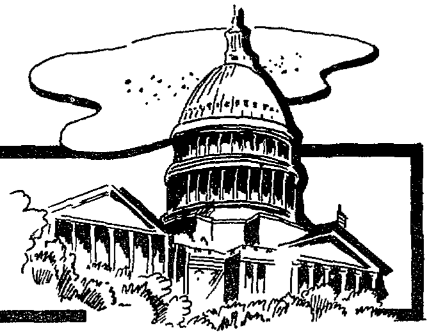
Hearings & Legislation



By Judith Hatter
Chief, Legislative Digest Section

General Accounting Office Act of 1974

On January 2, 1975, Public Law 93-604, the General Accounting Office Act of 1974, was signed by the President. As finally enacted, the legislation comprises eight titles, as follows: Title I—Statistical Sampling Procedures in the Examination of Vouchers; Title II—Audit of Transportation Payments; Title III—Audit of Nonappropriated Fund Activities; Title IV—Employment of Experts and Consultants; Title V—General Accounting Office Building; Title VI—Audit of Government Corporations; Title VII—Revision of Annual Audit Requirements; Title VIII—Limitation of Time on Claims and Demands.

The Senate Government Operations Committee, on the first page of its report on the measure (S. Rept. 93-1314), stated that the purpose was

> to streamline and modernize the role and responsibility of the General Accounting Office so that it may more fully utilize its resources as an arm of the Congress.

Impoundment Control Act of 1974

On December 19, 1974, the Comptroller General appeared before the Senate Budget Committee to discuss the December 4, 1974, letter which addressed the question whether, under the Impoundment Control Act of 1974, presidential withholdings of budget authority for temporary periods for "fiscal policy" reasons are properly treated as "deferrals" rather than "rescissions." The Comptroller General concluded that such withholdings are properly reported as deferrals, as long as their duration is proposed to be less than the current fiscal year. (Other participants: *Keller*, *Hughes*, *Socolar*, *Pierson*, and *Sperry*)

Federal Energy Administration Compliance and Enforcement Effort

Phillip S. Hughes, Assistant Comptroller General, appeared on December 11 before the Subcommittee on Reorganization, Research, and International Organizations of the Senate Government Operations Committee to discuss the Federal Energy Administration's compliance and enforcement activities which are being monitored and evaluated by GAO pursuant to the provisions of section 12 of the Federal Energy Administration Act of 1974.

There were significant problems in FEA's compliance and enforcement program at all levels of petroleum industry operations.

Mr. Hughes summarized the problems as follows: (1) there was almost no direct audit of crude oil producer operations, (2) little audit effort was made at the wholesale level, where there was evidence of major violations, (3) the audit of refinery operations had not been completed, (4) substantive issues relating to the adequacy of regulations remained unresolved, and (5) organizational disputes within FEA hindered audit work at refinery operations. (Other participants: *Peach, Tejas, Lotkin,* and *Sperry*)

Federal Grant and Cooperative Agreement Act of 1974

The provisions of S. 3514, 93d Congress, to distinguish Federal grant and cooperative agreement relationships from Federal procurement relationships, were discussed for the Subcommittee on Legislation and Military Operations of the House Government Operations Committee by the Comptroller General on November 25. The act would have the effect of adopting the substance of two recommendations of the Commission on Government Procurement and the Comptroller General favored its enactment. (Other participants: *Crowther, Williamson, Davis,* and *Sperry*)

Hill-Burton Program

On November 25, *Gregory J. Ahart,* director, Manpower and Welfare Division, appeared before the Subcommittee on Health of the Senate Labor and Public Welfare Committee to discuss compliance with Hill-Burton program legislative requirements that special consideration be given to constructing or modernizing out-patient facilities in poverty areas and that hospitals assisted by the Hill-Burton program provide a reasonable volume of free service to residents of the communities in which they are located. (Other participants: *Elmore, Garbark, Watson,* and *Bowlin*)

National Productivity Policy

The Comptroller General appeared before the Senate Government Operations Committee on December 17 to discuss the establishment of a National Productivity Center, as envisioned by S. 4130 and S. 4212, 93d Congress.

Mr. Staats discussed GAO's concern with improving national productivity and reviewed the objectives of the two bills, giving suggestions for the Committee to consider in its deliberations.

Mr. Staats pointed out that a need not specifically addressed in either bill is the development of a corps of personnel with leadership and analytical skills who would be motivated to work on projects to improve productivity, particularly in the public sector. (Other participants: *Morris* and *Kull*)

Secret Service Protective Services

On February 6, 1975, *Robert F. Keller*, Deputy Comptroller General, appeared before the Subcommittee on Administrative Law and Governmental Relations of the House Judiciary Committee to discuss the provisions of H.R. 1244, 94th Congress, the Presidential Protection Assistance Act of 1975.

Mr. Keller reiterated recommendations contained in GAO's report on "Protection of the President at Key Biscayne and San Clemente (With Information on Protection of Past Presidents)" previously discussed before the Subcommittee in connection with testimony on H.R. 14499, 93d Congress, and pointed out that the new bill is consistent with all the principal recommendations made by GAO in its report. (Other participants: *Crawford* and *Griffith*)

Trade Act of 1974

Public Law 93-618, January 3, 1975, 88 Stat. 1978, Trade Act of 1974, requires the Comptroller General to conduct a study of certain adjustment assistance programs established under the act and to report the results of the study to the Congress no later than January 31, 1980.

The report is to include an evaluation of (1) the effectiveness of such programs in aiding workers, firms, and communities to adjust to changed economic conditions resulting from changes in the patterns of international trade and (2) the coordination of the administration of such programs and other Government programs which provide unemployment compensation and relief to depressed areas.

Federal Paperwork Commission

The Comptroller General is a statutory member of the Federal Paperwork Commission. The Commission was established by Public Law 93-556, December 27, 1974, 88 Stat. 1789, to reexamine Government policies and procedures which have an impact on the paperwork burden for the purpose of ascertaining what changes are necessary and desirable in information policies and practices.

Rehabilitation Act Amendments of 1974

Section 211 of Public Law 93-516, December 7, 1974, 88 Stat. 1617, the Rehabilitation Act Amendments of 1974, requires that the Comptroller General conduct regular and periodic audits of all non-appropriated-fund activities which receive income from vending machines on Federal property.

Arthur T. Andersen

Arthur T. Andersen was designated associate director to head the Food and Materials staff in the Office of Special Programs, effective January 20, 1975.

Most recently Dr. Andersen was Senior Economic Affairs Officer at the United Nations. Prior to this he served as Chief Economist in the Office of Antitrust and Indemnity at the Atomic Energy Commission. Other Government experience includes 5 years as Chief of the Division of Industry Analysis at the Federal Trade Commission where he received awards for Superior and Distinguished Service.

Dr. Andersen received his undergraduate degree in economics from the City College of New York and his Ph.D. from Harvard University. Prior to joining the Federal service, he taught full time at Boston University. While in Washington he has continued to teach part time, first at the University of Maryland and more recently at the Virginia Polytechnic Institute (Reston). He is currently associate editor of the *Industrial Organization Review.*

Philip Charam

Philip Charam, deputy director of the Resources and Economic Development Division, retired on December 31, 1974, after more than 32 years of Federal service—all in GAO.

Joining GAO as an auditor in 1942, Mr. Charam served as chief, Chicago area office; manager, Dayton regional office; and assistant director and associate director in the former Civil Division responsible for audits of major agencies, including the Departments of Agriculture and Health, Education, and Welfare. With the creation of the Resources and Economic Development Division in 1972, he was designated deputy director for nuclear, water and power, and environmental programs, and most recently energy research and regulatory programs.

Mr. Charam pioneered for GAO in a number of important areas. In 1951 and 1952, while serving in the field, he directed GAO's initial reviews of the procurement practices and policies of the Army Ordnance Corps and the Air Force. He helped broaden the focus of GAO's work to encompass concern as to whether authorized benefits were actually being received by intended beneficiaries. In 1970 he led a study to determine the possible savings to the Government through a program to assist its civilian employees in the prevention and treatment of alcoholism. The study report helped spur the establishment of such a program.

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

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

Albert M. Hair

Albert M. Hair, Jr. has been appointed an associate director, General Government Division, effective January 6, 1975. In this position he has responsibility for GAO's programs in intergovernmental relations, general revenue sharing, the District of Columbia Government, and the Federal statistical programs.

Mr. Hair joined GAO in 1973 after serving as assistant city manager, Anaheim, California, 1955-58; county manager, Charleston County, South Carolina, 1958-62; and city manager, Alexandria, Virginia, 1962-70. He was in private business during 1970-72.

Mr. Hair is active in numerous professional organizations and has served on governmental advisory committees at the local, State, and Federal levels. He graduated from the College of Charleston in 1951; served with the Navy as a legal officer, 1951-53; and completed the course work for the master's program in public administration at the University of Southern California, 1953-54.

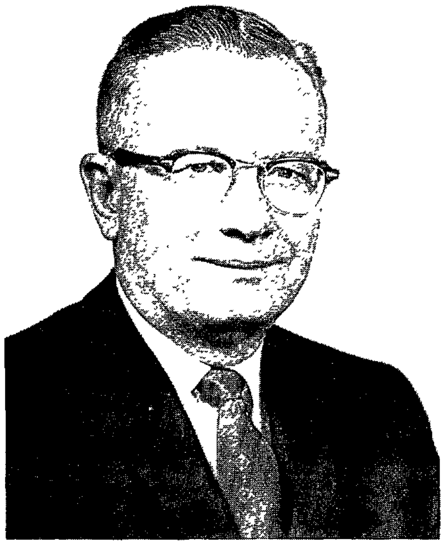
James H. Hammond

James H. Hammond, deputy director, Procurement and Systems Acquisition Division, retired from GAO December 27, 1974.

Mr. Hammond joined GAO in 1937 upon graduating from Western Kentucky University with a B.S. degree in accounting. He served GAO in various capacities. He was manager of the Kansas City regional office from July 1952 to August 1954 and later was placed in charge at the Washington level of the review of various Department of Defense activities. For many years he played a leading role in GAO's audits of Defense procurement activities, particularly the pricing of Defense contracts.

In 1966 he was designated associate director in the former Defense Division and in March 1972, as part of the reorganization of GAO in that year, was made a deputy director in the newly formed Procurement and Systems Acquisition Division.

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



Leo Herbert

Leo Herbert, director, Office of Personnel Management, retired on December 27, 1974, after 18 years of service in GAO.

Mr. Herbert was appointed director of the former Office of Staff Management in 1956. The Office of Staff Management was merged into the Office of Policy and Special Studies in November 1966 and Mr. Herbert was designated deputy director for staff development. In April 1969 the Comptroller General named him director of the Office of Personnel Management.

Mr. Herbert received his B.S. degree in 1939 from Brigham Young University and M.B.A. and Ph.D. degrees in 1941 and 1944 from Louisiana State University. He taught accounting and statistics, first at Louisiana State University and later at Brigham Young University and Louisiana Polytechnic Institute, where he became professor of accounting and head of its Department of Business Administration. He was Assistant State Auditor of Louisiana from 1952 to 1956.

Mr. Herbert is a CPA (Louisiana and Utah) and a member of the American Assembly of Collegiate Schools of Business (secretary-treasurer, 1974-75), American Accounting Association (vice president in 1964), American Institute of CPAs, Southwestern Social Science Association, National Association of Accountants, Society of Louisiana CPAs, District of Columbia Institute of CPAs, Society of Virginia CPAs, and the Federal Government Accountants Association.

When Mr. Herbert retired, the Comptroller General gave him

> high praise for his leadership in building our professional and support staffs and introducing many innovations in our recruiting and training programs. Of particular importance is the close working relationship Mr. Herbert has developed between the General Accounting Office and the colleges and universities, and his untiring efforts in having GAO experience recognized by most states as qualifying for a CPA certificate.

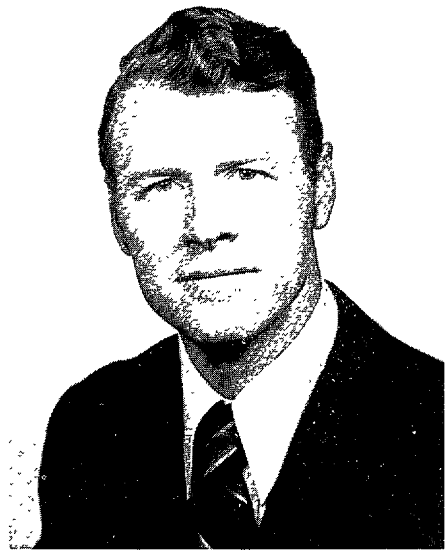
Daniel P. Leary

Daniel P. Leary was designated a deputy director in the Transportation and Claims Division, effective February 14, 1975.

Mr. Leary served in the U.S. Army from 1953 to 1955. After receiving a bachelor of science degree from LaSalle College in 1959, he joined GAO. He received a master of business administration degree from the American University in 1962. In 1969 he attended the Program of Management Development at the Harvard University Graduate School of Business Administration.

Since joining GAO, Mr. Leary has had a wide variety of responsibilities, having served in the Civil Division, the Logistics and Communications Division, and the Field Operations Division.

Mr. Leary is a CPA (Maryland). He is a member of the National Association of Accountants and the American Society for Public Administration.



James D. Martin

James D. Martin was designated deputy director for operations in the Manpower and Welfare Division, effective December 20, 1974. From October 1973 until his new appointment, he served as associate director for health research, resources and service programs, Manpower and Welfare Division.

Mr. Martin served in the U.S. Navy from 1952 to 1956. He received a bachelor of science degree in accounting from Central Missouri State College in 1958 and attended the Program for Management Development at the Harvard Business School in 1967. He is a CPA (Virginia) and a member of the American Institute of CPAs and the Federal Government Accountants Association.

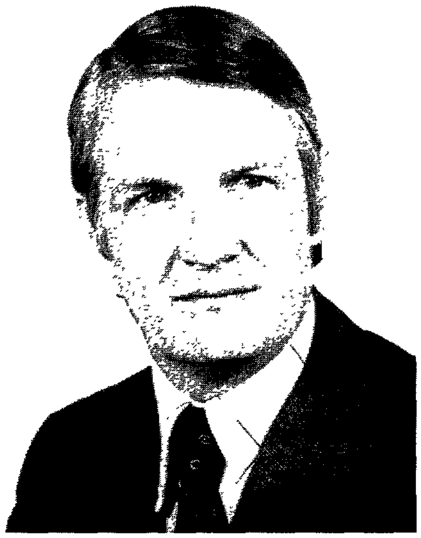
Since joining GAO in 1958, Mr. Martin has had a wide variety of experience in the former Civil Division, the European Branch of the International Division, and the Manpower and Welfare Division. He received the GAO Career Development Award in 1967 and headed the task force on health facilities construction costs which received the Comptroller General's Award in 1973. He also received the Federal Government Accountants Association's (Washington chapter) Outstanding Achievement Award for 1973 and the Federal Government Accountants Association's Achievement of the Year Award for 1973.

Morton A. Myers

Morton A. Myers was designated deputy director of the Procurement and Systems Acquisition Division, effective January 6, 1975. He is responsible for reviews of research and development programs of the Department of Defense, the National Aeronautics and Space Administration, and the military side of the Energy Research and Development Administration, as well as R&D programs having governmentwide implications. He is also responsible for providing leadership in GAO on science and technology matters and for assuring coordination and cooperation with the Office of Technology Assessment.

Mr. Myers has had a widely diversified experience, including audits at the Food and Drug Administration, the National Institutes of Health, the Consumer Product Safety Commission, the Occupational Safety and Health Administration, and the National Institute for Occupational Safety and Health. During 1970-71, he was a member of the systems analysis staff of the former Office of Policy and Special Studies.

Mr. Myers received a B.S. degree with a major in accounting from Quinnipiac College in 1961. He joined GAO in the same year but was on active duty in the U.S. Army from July 1961 to February 1962. He attended The George Washington University graduate school of business and in 1969-70 was a graduate fellow at the University of California under the Federal Government's Educational Program in Systems Analysis. He is a member of the National Association of Accountants, the Federal Government Accountants Association, and the Association for Public Program Analysis. He received the GAO Special Educational Award in 1970 and the GAO Meritorious Service Awards in 1972 and 1973.



J. Dexter Peach

J. Dexter Peach was designated deputy director of the Office of Special Programs, effective January 20, 1975.

Mr. Peach joined GAO in 1960, after receiving a bachelor of science degree in business administration with a major in accounting from the University of South Carolina.

His diverse experience in the audit of Government programs has included assignments at the Departments of Agriculture, the Interior, and the Treasury; the District of Columbia Government; the Virgin Islands Government; and the Report Review Staff of the former Civil Division. He has also served as the assistant to the director for planning, Resources and Economic Development Division. Prior to his new appointment, Mr. Peach served as associate director of the Energy Staff of the Office of Special Programs.

Mr. Peach received a master of science in administration degree from The George Washington University in 1973 and attended the Program for Management Development at the Harvard Business School in 1972. He received the GAO Career Development Award in 1969 and GAO's award for significant contribution to financial management in literature in 1971.

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

John W. Sprague

John W. Sprague was designated associate director to head the budget issue analysis staff of the Office of Program and Budget Analysis, effective January 19, 1975.

Prior to joining GAO in June 1974, Mr. Sprague worked in various executive branch agencies, including Interior, Labor, and Treasury. He has also had some work experience in banking and finance.

Mr. Sprague graduated from American University in 1958 with a B.A. degree in economics.

Harold L. Stugart

Harold L. Stugart was designated associate director for education and human development in the Manpower and Welfare Division on December 23, 1974. In this position, he is responsible for planning, directing, and reporting on all GAO work involving the Office of Education, the National Institute of Education, and the Office of Human Development, Department of Health, Education, and Welfare; the National Science Foundation; and the Corporation for Public Broadcasting.

Mr. Stugart served in the U.S. Navy from June 1954 to October 1957. He received a bachelor of science degree with a major in accounting from Lycoming College, Williamsport, Pennsylvania, in 1962 and attended the Harvard Graduate School of Business Administration, Program for Management Development, in 1974.

Mr. Stugart is a CPA (Virginia) and a member of the American Institute of CPAs and the National Association of Accountants. He received Meritorious Service Awards in 1967 and 1971, the GAO Career Development Award in 1968, and the William A. Jump Memorial Foundation Meritorious Award in 1972.

Richard J. Woods

Richard J. Woods was designated associate director in the Resources and Economic Development Division, effective January 6, 1975.

Mr. Woods served in the U.S. Army from 1944 to 1946. He joined GAO in 1951 and has had varied experience in the Corporation Audits Division, Civil Division, International Division, and Resources and Economic Development Division. Over the past 14 years he has been in charge of GAO site audit work at the Department of State, the U.S. Information Agency, the U.S. Arms Control and Disarmament Agency, the Department of Labor, and the Department of Agriculture.

Mr. Woods attended the Virginia Military Institute while in the Army, graduated from St. Vincent College in 1951 with a degree in business administration, and attended the Federal Executive Institute in 1971. He is a CPA (Virginia).

Mr. Woods received the GAO Distinguished Service Award in 1974.

Other Staff Changes

New Assistant Directors

Office of Special Programs

John R. Hadd

Office of Program and Budget Analysis

John H. Keith, Jr.

New Assistant Regional Managers

Atlanta

Solon P. Darnell

Philadelphia

Stanley E. Dyal

Washington

George D. Gearino

New Senior Attorney

Edward A. Chicca

Retirements

Financial and General Management Studies Division

Herbert L. Feay—assistant director

Logistics and Communications Division

William A. Calafiura—assistant director

Procurement and Systems Acquisition Division

William D. Lincicome—assistant director
Charles Weinfeld—assistant director

Office of the General Counsel

Willis K. Schuler—deputy assistant general counsel
Milton E. Wertz—deputy assistant general counsel

Transportation and Claims Division

Joseph Goldman—assistant director

Professional Activities

Office of the Comptroller General

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

Congressional Fellows, American Political Science Association, Washington, D.C., on "The Congress and the GAO," December 2.

Conference on Evaluating and Strengthening Government Performance (sponsored by the Institute of Government, University of Virginia, in cooperation with Virginia Municipal League), Charlottesville, Va., on "Performance, Measurement, and Evaluation of Public Programs," December 5.

Following are recently published articles of the Comptroller General:

"GAO Studies Revenue Sharing," Tax Foundation's *Tax Review,* November 1974.

"Intergovernmental Relations: A Fiscal Perspective," *The Annals,* American Academy of Political and Social Science, Intergovernmental Relations in America Today, November 1974.

"Internal Auditing: An Independent Stimulus to Management Action," *Defense Management Journal,* January 1975.

"Objective Information is Essential to the Congress and to the Public," *The GAO Review,* Winter 1975.

E. H. Morse, Jr., Assistant Comptroller General, addressed the following groups:

Washington chapter of the Institute of Internal Auditors on "The Nature and Importance of GAO's Auditing Standards," December 16.

Southwest Intergovernmental Audit Forum, Oklahoma City, Okla., on "Standards for Audit of Governmental Organizations," January 9.

Oklahoma City chapter of the Institute of Internal Auditors, Oklahoma City, Okla., on "Internal Auditing and GAO's Audit Standards," January 9.

Brookings Institution Conference for Business Executives on Federal Government Operations on "GAO's Role in the Government," Washington, D.C., January 27.

Nashville chapter of the National Association of Accountants, Nashville, Tenn., on "Auditing in the Federal Government," February 18.

Mid-Atlantic Intergovernmental Audit Forum meeting on "GAO's Auditing Standards and Their Application," Annapolis, Md., February 19.

Office of the General Counsel

Paul G. Dembling, general counsel, spoke to a Yale University Law School Seminar on Government Contracts on

"GAO and Government Contracting," November 15, in New Haven.

Paul Shnitzer, associate general counsel:

Conducted a 1-day workshop on Open Marketing Purchasing, spoke on "Competitive Negotiations" at the Bonneville Power Administration, and spoke before the Oregon chapter of the Federal Bar Association on "Contractors' Rights Before the General Accounting Office," November 24-25, in Portland.

Spoke on "Material Shortages and Inflation" as part of "The Appeals Board Chairmen and the GAO" panel at the Material and Cost Conference, November 26, in San Francisco.

Spoke on "GAO Perspective on Government Procurement Problems" before a Public Health Service Headquarters and Management Seminar at the National Institutes of Health, December 5.

Addressed the National Contract Management Association on "GAO Decisions on Source Selection in Competitively Negotiated Procurements," February 13, in Owego, N.Y.

Rollee Lowenstein, assistant general counsel, addressed the Society of Federal Labor Relations Professionals on "Review of Arbitration Awards: The Respective Roles of the Federal Labor Relations Council and the General Accounting Office," January 16, Washington, D.C.

Robert H. Rumizen, assistant general counsel, addressed a Service-wide Forest Service Workshop for Contracting Officers on "Presenting a Case to the Comptroller General," January 16, in Reno, Nev.

Vincent A. LaBella, deputy assistant general counsel, spoke on "Protests of Contract Awards" before the Federal Bar Association/National Contract Management Association and University of Texas Law School Contract Symposium, January 21, in Dallas.

Ronald Wartow, senior attorney, addressed the Atlanta chapter of the National Contract Management Association on "Bid Protests Before the General Accounting Office—Who Wins and Who Loses and Inflation, Cost Escalation and the GAO—Recent Decisions," November 26.

Thomas Williamson, senior attorney, spoke before a Civil Service Commission Symposium on Public Policy and Legislation on "Legal Aspects of the Impoundment Control Act of 1974," January 21, in Washington, D.C.

Ronald Berger, attorney-adviser, addressed a meeting of the Atlanta chapter of the National Contract Management Association on "Competitive Range," January 28.

Joel S. Rubinstein, attorney-adviser, addressed the St. Louis chapters of the Federal Bar Association Public Contracts Section on "Cost Escalation, Inflation and Government Contracts" and the National Contract Management Association on "Bid Protests and Procedures," January 9.

Office of Program and Budget Analysis

Harry S. Havens, director:

Spoke at the Joint Financial Management Improvement Program's fourth Financial Management Conference on "The Impact of Inflation on the Federal Budget" at the Sheraton Park Hotel, Washington, D.C., January 20.

Participated in a briefing on the congressional budget process by the Civil Service Commission, January 21.

Spoke at an American University symposium on the Congressional Budget Reform Act, February 16.

Herbert N. Jasper, special assistant to the Assistant Comptroller General for Special Programs:

Spoke at the Joint Financial Management Improvement Program's fourth Financial Management Conference on the Congressional Budget Act at the Sheraton Park Hotel, January 20.

Participated in a panel discussion of the Congressional Budget Act at the Woodrow Wilson School of Princeton University, January 29.

Spoke at a seminar on the Congressional Budget Act before a group of Public Administration Fellows in Washington, D.C., February 13.

Addressed a graduate class at American University on the Congressional Budget Act, February 13.

Spoke at an American University symposium on the Congressional Budget Act on February 15.

Spoke at a seminar on Congressional Economic Policy Formulation presented by the Industrial College of Armed Forces at Fort McNair, February 24.

An article by Mr. Jasper entitled "A Congressional Budget: Will it Work This Time?" appears in the January 1975 issue of *The Bureaucrat.* Mr. Jasper also wrote the Introduction to the Public Policy Forum on "The New Congressional Bureaucracy" which is in the same issue.

Office of Congressional Relations

Smith Blair, director, participated as a panelist in a congressional staff orientation seminar sponsored by the Capitol Hill chapter of the Federal Bar Association, Washington, D.C., January 20.

Martin J. Fitzgerald, Jr., legislative attorney, addressed participants in American University's Washington Semester Program on "The Role of the General Accounting Office as an Independent Agency of the Legislative Branch," Washington, D.C., January 22.

Office of Policy

Donald J. Horan, director, spoke on "Quality Control Over the Audit" at the Conference on Governmental Auditing sponsored by the Institute of Internal Auditors in St. Charles, Ill., January 20-22.

Office of Program Planning

William N. Conrardy, director, conducted a seminar discussion at the Washington Public Affairs Center of the University of Southern California's graduate school of public administration covering his perceptions of GAO's impact on public policy and government operations, January 24.

Ray S. Hausler, assistant director, presented a case study in management by objectives for the Civil Service Commission's executive program in planning and leadership, January 7.

Office of Special Programs

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

The Northern Virginia chapter of FGAA on "America's Energy Future" on January 21.

The 21st Annual Conservation Conference on "The Environment and a National Energy Policy," December 11, in Washington, D.C.

Financial and General Management Studies Division

Donald L. Scantlebury, director:

Participated as a panelist in a workshop on "Federal Department and Agency Experience in Using Program Evaluation" at the National Capital Area chapter of the ASPA's Fifth Annual Conference in Washington, D.C., November 15. The conference theme was "Opposing Forces in Public Administration." *Keith E. Marvin*, associate director, served as chairman of a panel on "Program Evaluation: Does it Improve Public Policies and Administration," at the same conference on November 14.

Was chairman of a workshop on "The Accountant and the Auditor—Their Contribution to Managerial Control" at the Productivity Symposium for the Federal, State, and Local Community jointly sponsored by FGAA and ASMC at Williamsburg, Va., December 8-10. *Howard R. Davia*, assistant director, discussed governmental accounting for productivity measurement as a member of the workshop.

Spoke on "Audit Standards—Their Application" at the Washington chapter of the Institute of Internal Auditors Dinner Meeting, December 16. *Mortimer A. Dittenhofer*, assistant director, was presented the chapter's Person of the Year Award —1974 at the meeting.

Fred D. Layton, deputy director, was chairman of a seminar on "Impact of Inflation on Financial Management" at the Fourth Financial Management Conference presented by JFMIP in Washington, D.C., January 20.

Richard W. Maycock, deputy director, was a panel member for a seminar on "Use of Operating Budgets for Program Management," January 20. The seminar was a part of the Fourth Financial Management Conference sponsored by JFMIP.

James P. Oliver, deputy director, provided briefings on the Congressional Budget and Impoundment Control Act of 1974 and GAO's role under it to congressional staff personnel of the Senate Committee on Agriculture and Forestry on November 22; the House Rural Caucus on December 12; and the Democratic Research Organization on January 24.

Kenneth W. Hunter, assistant director, addressed American University's Symposium on Congressional Budget Reform on November 11. His topic was "The Need for Technical Support: The Relationship Between the General Accounting Office and the Congressional Committees Under the New Budget Control Procedures."

John J. Cronin, Jr., assistant director, made a presentation to auditors of the Army and Air Force Exchange Service in Dallas, Tex., December 18. The topic was "Effective Communication of Audit Results to Management."

Ken Pollock, assistant director, has been selected as president-elect for the EDP Auditors Association, National Capital Area chapter, and will serve as president during the 1976 fiscal year. *George Sotos*, assistant director, is serving that organization as chairman of the National Education and Training Committee.

Howard R. Davia, assistant director, spoke on the emerging changes in governmental accounting to the Madison chapter, FGAA, November 19.

Ernest H. Davenport, assistant director, spoke at the American Association of State Highway and Transportation Officials Annual Meeting in Detroit on "Towards Generally Accepted Auditing Standards for Government," November 18.

Mortimer A. Dittenhofer, assistant director:

Addressed the Governmental Committee of the Washington State Society of CPAs in Bellevue, Wash., November 15, on "CPA Audits of Governments Under the Audit Standards."

Gave a talk on "Principles for State Auditing" to the controller section of the National Association of State Auditors, Controllers and Treasurers, in Mobile, Ala., November 20.

Addressed the Omaha chapters of the Institute of Internal Auditors and the Federal Governmental Accountants Association on December 2 in Omaha. The title of the talk was "Auditing Under the GAO Standards."

Gave a talk on "Auditing of Management Functions" to a joint meeting of the St. Louis chapters of the Institute of Internal Auditors and the Federal Government Accountants Association in St. Louis, December 12.

Gave a talk to a joint meeting of the Buffalo chapters of the Institute of Internal Auditors and the Federal Government Accountants Association, December 18, on "Auditing Under the GAO Standards."

Robert J. Ryan, Sr., assistant director:

Participated as a speaker and panel member for Workshops on Federal Grants in New York City on October 24-25 and in Philadelphia on October 30-31. The workshops were conducted jointly by GSA, OMB, and GAO. They were sponsored by the Federal Regional Councils in cooperation with several public interest groups.

On January 20 addressed the Institute of Internal Auditors Seminar on Government Accounting at St. Charles, Ill., on "Public Information Aspects of Governmental Auditing."

Also addressed the seminar on the audit standards, January 21.

Addressed a symposium on "Accountability in Government" on January 29, in Columbus, Ohio, sponsored by the four Ohio chapters of the Institute of Internal Auditors. Also served on a panel with Ohio State Senator Michael J. Maloney and Robert B. Brown, CPA.

M. Thomas Hagenstad, supervisory management analyst:

Spoke on "The Congressional Budget Act of 1974" on November 17 at the National Association for State Information Systems Southern Regional Meeting in Columbia, S.C.

Described "Legislative Information Services" at the Seminar on Modern Information Technology and State Legislatures, on December 12-13, Tallahassee, Fla.

Gave a talk on "Administrative Support for the Congress" at the January 27-31 Congressional Operations Seminar for Managers, conducted by the Civil Service Commission, Washington, D.C.

Joint Financial Management Improvement Program

Donald C. Kull, executive director, addressed the following groups:

National Capital Area chapter of the American Society for Public Administration's Annual Conference on "Report on Federal Productivity," November 15.

Graduate class in fiscal administration at the University of Dayton, in Ohio, on "Financial Management and Productivity in the Federal Government," December 4.

Public administration interns from the University of Dayton, Wright State University, and Central State University at Dayton, Ohio, on "Financial Management in the Federal Government," December 5.

Productivity Symposium in Williamsburg, Va., on "Report on Federal Productivity," December 9.

Federal Executive Board's Productivity Seminar in Atlanta, Ga., on "Productivity Analysis," December 16.

The fourth Financial Management Conference held at the Sheraton Park Hotel in Washington, D.C., on January 20.

General Government Division

Victor L. Lowe, director:

Spoke October 17 on "Revenue Sharing and You, and Its Accountability" at a conference sponsored by the Cleveland chapters of the National Association of Accountants, the Ohio Society of CPAs, FGAA, and Regional III of the State of Ohio Intergovernmental Personnel Act Program.

Spoke November 14 on "Progress and Problems in Federal Assistance" before FGAA at its monthly meeting in Washington, D.C.

William J. Anderson, assistant director, and the Comptroller General, *Elmer B. Staats*, discussed various aspects of Postal Service operations with the staff of the NBC TV "Today" program. Parts of that discussion were aired on the January 31st program.

John Ols, audit manager, completed the requirements for a master of science in administration degree at The George Washington University.

Ronald Stouffer received his M.B.A. degree with emphasis in operations research from The George Washington University.

O. Gene Abston, assistant director, gave the keynote address at a symposium, November 6, sponsored by the Department of the Treasury auditors. His topic was the role of GAO—its purpose and function and how internal auditors can interrelate and benefit from GAO's activities. *Barry Reed*, *Fred Herr*, and *Paul Murray*, GGD audit managers, accompanied Mr. Abston and also addressed the group.

International Division

Frank C. Conahan (second from right), director, European Branch, is greeted by Dr. Ephraim Katzir, President of Israel (on the left), while participating in the 2d Jerusalem Conference on Accountancy which was held from October 28-31, 1974. To Mr. Conahan's left is Dr. I. E. Nebenzahl, State Comptroller of Israel, and to his right is Senor Servando Fernandez-Victorio y Camps, President of the Court of Accounts of Spain and Chairman of the Governing Board of the International Organization of Supreme Audit Institutions.

Logistics and Communications Division

Fred J. Shafer, director, spoke on "Computer Aided Design/Computer Aided Manufacturing—Here We Are, Where Can We Go," to the Society of Manufacturing Engineers at their conference and exposition held during February 10-13, 1975. *Fred Haynes*, assistant director, also participated in this conference as a panel member for one of the seminars.

Carmen Smarrelli, assistant director, attended a course at the Brookings Institute in Williamsburg, Va., on public policy issues during December.

C. O. Smith, assistant director, and *Dr. Harold Podell*, audit manager, were elected Vice Chairman and Treasurer, respectively, of the Capital Area chapter of the Society for Management Information Systems, a national organization dedicated to the development of information systems. *Donald Eirich*, associate director, was appointed Chairman of the Nominating Committee.

Mr. Eirich has accepted a request to serve as a referee for selection of award-winning papers to be submitted at the 25th Annual National Computer Conference in New York City, June 1976.

Manpower and Welfare Division

Gregory J. Ahart, director:

Addressed the Executive Seminar on Public Program Management, Executive Seminar Center, Kings Point, N.Y., on November 13. Subject: "Evaluating Public Program Outcomes."

Participated in the Public Policy Conference for Senior Government Executives sponsored by The Brookings Institute, Advanced Study Programs, Williamsburg, Va., January 19-31.

Dean K. Crowther, deputy director, participated as a member of a panel during several sessions of the American Institute of Certified Public Accountants Legislative Workshop held on December 20, 1974, in Hunt Valley, Md. Mr. Crowther is a member of AICPA's State Legislation Committee.

Morton A. Myers, assistant director, acted as technical chairman and introduced the Honorable Virginia H. Knauer, Special Assistant to the President for Consumer Affairs and Director of the Office of Consumer Affairs, at the meeting of the Washington chapter of the National Association of Accountants on December 11. Mrs. Knauer discussed consumerism and the effect it has had on Government and industry decisionmaking. Following her presentation, Mr. Myers chaired a question and answer session for the membership.

William A. Gerkens, supervisory auditor, made a presentation before the Maryland Education Committee for Equal Opportunity in Baltimore, Md., on the GAO report entitled "Problems of the Upward Bound Program in Preparing Disadvantaged Students for a Postsecondary Education" (B-164031 (1), Mar. 4, 1974).

Procurement and Systems Acquisition Division

Leslie L. Megyeri, supervisory contract specialist, participated in a panel discussion and spoke on "Contractors' Claims Against the Government—Sound Procedure or Bottleneck?" at the meeting of the Washington chapter of the National Contract Management Association on January 15.

R. Stanley LaVallee, operations research analyst, was presented with the David Rist cash award at the 34th Military Operations Research Society meeting at Fort Eustis, Va., in December for the best paper given at the previous meeting of that society in San Juan, Puerto Rico, in October. (See *The GAO Review*, Winter 1975)

John J. D'Esopo, operations research analyst, in addition to presenting the paper reported in the Winter 1975 issue, acted as chairman for the general session on "An Assessment of Studies and Analyses As Used By Review Agencies in the Defense Decision Process" at the December meeting of the Military Operations Research Society.

Resources and Economic Development Division

Herbert Rochen, general engineer, participated in a council meeting to plan future activities of the American

Institute of Aeronautics and Astronautics, October 12.

Francis P. Degnan, supervisory auditor, addressed the LaSalle College Accounting Association, evening division, on "Career Opportunities for Accountants in the Federal Government," October 18.

Field Operations Division

Marvin Colbs, regional manager, Atlanta, spoke on "GAO's Role in Budget Control" at the Civil Service Commission Financial Management Seminar in Jacksonville, Fla., on September 6. Mr. Colbs also spoke on "The Role of GAO in Federal Government" at a meeting of the Society for the Advancement of Management at Western Carolina University on October 10. At a meeting of the Accounting Club at the University of Alabama in Birmingham, Mr. Colbs spoke on "The Role and Function of GAO" on October 16; he also spoke on "The Role of GAO in Federal Management" at a meeting of the Beta Alpha Psi Fraternity at the University of Georgia on November 4.

Joseph Eder, regional manager, Boston, made a presentation to the Federal Management Workshop on Federal grants at the Statler Hilton, Boston, on November 19. On the same date he also made a presentation to the NAA chapter, Bridgeport, Conn., on "Accounting Trends in GAO."

Stewart M. Herman, audit manager, Chicago, spoke before a student group at DePaul University on November 12 concerning the "Role of GAO."

Clement F. Preiwisch, audit manager, Chicago, participated in a Financial Management Workshop on Federal grant programs conducted in Chicago on November 26. He spoke on the GAO audit standards and the establishment of the Intergovernmental Audit Forums.

Daniel L. McCafferty and *John R. Dial*, audit managers, Cincinnati, are serving as president and president-elect, respectively, of the Cincinnati chapter of FGAA. *Arthur D. Foreman*, supervisory auditor, is serving as vice-president of the Cincinnati chapter of the EDP Auditors Association.

Four Cincinnati staff members, *Gregory Booth*, *John Brown*, *George Buerger*, and *Norbert Trapp* are advisors in the Junior Achievement program in Covington, Ky. This program provides practical business education and experience for high school students. (See p. 61.)

Michael J. Ross, supervisory auditor, Detroit, spoke to students at the Lawrence Institute of Technology in Southfield, Mich., on the "Role of GAO," November 12.

William F. Laurie, audit manager, Detroit, spoke to the Beta Alpha Psi fraternity and accounting faculty at Michigan State University, Lansing, Mich., on "Social Measurement as an Evaluation Tool," November 19.

Francis L. Reynolds, audit manager, Detroit, addressed the Bay County Michigan Economic Club on "How the GAO Saves the Taxpayer Money," January 28.

Frank Greenwald, supervisory auditor, Kansas City (retired December 1974), was honored at a reception held for him by officials of the Defense Commercial Communications Office and the Military Airlift Command, on December 19, at Scott Air Force Base, Ill. Communications officials expressed appreciation for Frank's professional attitude, his efforts in learning the communications system, and the assistance provided the agencies by his audit work from 1964 to 1974. He was presented with a plaque from the Airlift Command.

Kenneth F. Luecke, assistant regional manager, Kansas City, was a panel member at the University of Kansas Accounting Student's Management Seminar on November 6. The seminar was sponsored by the National Association of Accountants, and Mr. Luecke spoke on "Opportunities for Employment in The General Accounting Office."

Walter H. Henson, regional manager, Norfolk, was the guest speaker at the January 1975 meeting of the Virginia Peninsula chapter, Federal Government Accountants Association. He spoke on GAO's participation in Government-wide efforts to achieve productivity gains in the Federal sector.

Everett O. Pace, supervisory auditor, Norfolk, addressed the accounting class at Kee's Business College, Norfolk. He discussed the roles and functions of the General Accounting Office and conducted a workshop on the audit of costs in commercial-type auditing.

Evan L. Stoll and *E. Dennis Gutknecht,* supervisory auditors, Seattle, presented a case study on management auditing to an accounting class at the University of Oregon, November 12.

Marvin F. Case, Stephen J. Jue, Jack L. Strayer, and *Donald A. Praast,* supervisory auditors, Seattle, participated in the Federal Government Accountants Association's second annual symposium at Portland, Ore., February 14. They conducted a 3-hour workshop at both the morning and afternoon sessions. The workshop dealt with performance auditing stressing EDP systems, natural resource programs, and law enforcement programs.

New GAO Attorneys Recently Admitted to the Bar

Marc A. Boman	Ohio
Ellie G. Harris	District of Columbia
George A. Kielman	Pennsylvania
Louis J. Kozlakowski, Jr.	Maryland
Larry H. Mitchell	Maryland
Michael R. Volpe	Virginia
	District of Columbia

The following new professional staff members reported for work during the period November 16, 1974, through February 15, 1975.

Financial and General Management Studies Division	Frazier, Franklin	Small Business Administration
	George, Kenneth J.	Department of the Army
	Gonter, Theodore F.	Department of the Army
	Jaxel, Robert A.	Department of Commerce
	Litowsky, Kenneth C.	Department of Commerce
	Mc Leod, Stanley J.	Department of the Army
	Miller, Norman D.	Executive Office of the President
	Moortgat, Maurice J.	Department of the Army
	Mueller, Pamela A.	Group Hospitalization, Inc.
	Murphy, John A.	Prince George's Community College
	Russ, Frank L.	California State University
	Smith, Darby W.	Department of the Army
Manpower and Welfare Division	Codori, Carol A.	The National Institute of Education
	Hathcock, Arthur L., Jr.	University of Delaware
Federal Personnel and Compensation Division	Austin, James S.	Civil Service Commission
Office of the General Counsel	Hirsch, Michael B.	Chalkin and Karp
	Kepplinger, Gary L.	De Paul University College of Law
	Lewin, Martin J.	Interstate Commerce Commission
	Sasso, Theodore S.	Boston College Law School
Resources and Economic Development Division	Eberhart, Paul P.	Ohio State University
	Hatcher, James E.	McDowell County Board of Education
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Readings of Interest

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A TIME TO CHOOSE: AMERICA'S ENERGY FUTURE

The Final Report of the Energy Policy Project of the Ford Foundation

Ballinger Publishing Co., Cambridge, Massachusetts, 1974; 511 pp.

In December 1971, when the trustees of the Ford Foundation authorized the organization of an Energy Policy Project, only the experts were seriously concerned about energy problems. After all, the United States had all the energy it needed and at low prices, too.

Less than 2 years later, the Nation was rocked by the Arab oil embargo and every citizen became acutely aware of the importance of energy. The Ford Foundation did not foresee an oil embargo, but it did understand the problems inherent in the United States' having 6 percent of the world's population but using over 35 percent of the world's energy.

Because of the foundation's foresight, we have something unusual—a comprehensive study of a complex subject available precisely at the time it is needed. The study was made by an interdisciplinary team supported by an advisory board drawn from academia, business, and citizens' groups. To further support its work, the team commissioned some two dozen in-depth studies of various energy questions.

According to the study, the United States still has time to make intelligent choices regarding its energy future. The study clearly demonstrates the broad range of options which remain open, while showing that time will continue to narrow the options.

In the authors' view, the principal conclusion of the study's final report is that a slower rate of growth in energy demand will be necessary if the Nation is to balance its energy budget, safeguard the environment, and protect the independence of its foreign policy.

This conclusion is reached through detailed discussion of the problems of maintaining historical energy growth; the actions which can be taken, using existing technology, to curb energy growth; and the implications of choices made now for the Nation's energy future. As a framework for presenting its findings, the report postulates three alternative energy futures or "scenarios"—historical growth, technical fix, and zero energy growth. The key variable in each of the scenarios is energy demand.

The historical growth scenario assumes that energy use to the end of the century would continue to grow at about 3.4 percent annually—the average for the years 1950 to 1970. No attempt would be made to alter habitual patterns of energy use. Every effort would be made to enlarge energy supplies to keep pace with an ever-increasing demand for energy. By the year 2000 energy use would rise to about 187 quadrillion Btus, as compared to the 1973 energy demand of 75 quadrillion Btus.

Under the technical fix scenario, the annual growth rate in energy demand would be reduced to 1.9 percent by applying practical, economical energy-saving technology already available. Through a series of conservation actions and improved energy efficiency, energy demand by the year 2000 would rise to about 124 quadrillion Btus, or one-third less than the demand under historical growth. A key finding of the report is that the rate of economic growth through the year 2000 would not be affected in any significant way by reduced energy growth as a result of applying "technical fixes." In words of the report, "technical fix is leaner and trimmer, but basically on the same track as historical growth."

The zero energy growth scenario provides for an ever-declining rate of energy growth, slowing to zero around 1990. Total energy use would remain level at about 100 quadrillion Btus a year. The achievement of zero energy growth without adverse effects on economic growth would require some basic changes in lifestyle and the economy. Essentially, a portion of economic growth must be redirected away from energy-intensive industries toward economic activities requiring less energy.

The scenario analysis is the heart of the Energy Policy Project's final report. Continued historical growth, while possible, is considered improbable because of the extraordinary commitment to developing the energy supply required to maintain a high energy growth rate. The technical fix, with its mix of conservation and energy efficiency measures, is clearly favored for the next decade because of the time and flexibility it would buy in deciding upon the Nation's energy supply mix for the future. For the longer term, the report suggests that zero energy growth as a national energy policy goal should receive serious consideration.

The report is much more, however, than scenarios of alternative energy futures. It treats in detail a wide range of important energy questions, including energy research and development, energy-environmental issues, the development of energy resources on Federal lands, and the relationship between energy and economic growth.

The assumptions and data base underlying quantitative information in the report are contained in about 80 pages of appendices.

For those who want to know what is wrong with the report, it contains over 60 pages of comments by advisory board members critical in varying degrees of parts of the report. And, as if that's not enough, the Energy Policy Project is in the process of publishing a 20-volume series of special energy reports which detail the results of the research which the project commissioned and which formed much of the basis for its final report.

In my view, the report is at its best in stating the case for energy conservation. It convincingly details the opportunities for energy conservation in the transportation, industrial, and housing and residential sectors of the economy. The report makes four basic policy recommendations designed to slow energy growth:

—Adopt minimum performance standards for new cars to achieve an average fuel economy of 20 miles per gallon by 1985.

—Encourage more efficient space heating and cooling.

—Shape Government programs toward energy conservation technology.

—Set prices to recover full costs of energy production.

Surprisingly, the case for energy conservation is also made by the detailed discussion of the Nation's options for increasing energy supply. Such options are plagued by environmental, health, and safety issues; high capital costs; and long leadtimes for development.

For the serious student of energy policy and for those casual readers interested in a better understanding of one of the important issues of our time, "A Time to Choose: America's Energy Future" is must reading. The use of scenario analysis to describe alternative energy futures enhances the reader's understanding of the choices which our national leaders face and the need for a consistent, integrated national energy policy becomes apparent. As long as energy policy remains a national concern, the final report of the Energy Policy Project will be a key reference work.

J. Dexter Peach
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