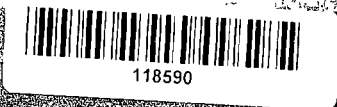


The

GAO



Spring 1982

REVIEW

Can Our Food Supply
Ever Be Completely
Risk-Free?





UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

OFFICE OF GENERAL COUNSEL

B-3368

July 1, 1982

Consolidated List of Persons or Firms Currently
Debarred for Violations of Various Public
Contracts Acts Incorporating Labor Standards Provisions

To Heads of Departments, Independent Establishments and Other Agencies
of the United States, and the District of Columbia

List of Acts

Code

Walsh-Healey Act of June 30, 1936, 41 U.S.C. 35, et seq.

1

The Secretary of Labor has found that the listed persons or firms have breached the agreements and representations required by the Walsh-Healey Act. The Secretary not having recommended otherwise, section 3 thereof directs that no contract shall be awarded to such persons or firms, or to any firm, corporation, partnership, or association in which such persons or firms have a controlling interest until three years have elapsed from the dates on which the Secretary determined that such breaches occurred.

Service Contract Act of 1965, 41 U.S.C. 351, et seq.

2

The Secretary of Labor has found that the listed persons or firms have breached the agreements and representations required by the Service Contract Act of 1965. The Secretary not having recommended otherwise, section 5(a) thereof directs that no contract shall be awarded to such persons or firms, or to any firm, corporation, partnership or association in which such persons or firms have a substantial interest until three years have elapsed from the date of publication of the list containing the name of such persons or firms.

Davis-Bacon Act of August 30, 1935, 40 U.S.C. 276a

3

The Comptroller General of the United States has found that the listed persons or firms have disregarded their obligations to employees and subcontractors within the purview of the Davis-Bacon Act. Section 3(a) thereof directs that no contract shall be awarded to the persons or firms appearing on this list or to any firm, corporation, partnership, or association in which such persons or firms have an interest until three years have elapsed from the dates shown.

CodeExecutive Order No. 11246, September 24, 1965, as amended

4

Pursuant to authority delegated by the Secretary of Labor, the Director, Office of Federal Contract Compliance, has found that the listed persons or firms have failed to satisfy their obligations arising out of a contract incorporating Executive Order No. 11246, the implementing regulations, 41 C.F.R. 60-1.1 et seq., and orders issued in connection therewith. As of the dates shown, the Director has therefore declared such persons or firms ineligible for the award of any contract or subcontract funded in whole or in part with Federal funds from any agency of the United States, or for extensions or other modifications of such existing contracts or subcontracts, until they have satisfied the Secretary of the United States Department of Labor that they have established and will carry out personnel and employment policies in compliance with the provisions of Executive Order 11246, or superseding Executive Orders, and rules, regulations and orders promulgated thereunder.

Other Public Contracts Acts

By virtue of authority granted under Reorganization Plan No. 14 of 1950, and pursuant to the provisions of section 5.6(b) of regulations issued thereunder (29 C.F.R. 5.6(b)), the Secretary of Labor has reported that the contractors or subcontractors listed were found to be in aggravated or willful violation of the prevailing wage or work hours provisions of their contracts. Such regulations direct that (subject to consideration for reinstatement upon a demonstration of current responsibility) such contractors or subcontractors or any firm, corporation, partnership, or association in which such contractors or subcontractors have a substantial interest shall be ineligible, for a period not to exceed three years from the dates shown, to receive any contract for work subject to the labor standards provisions of any statute to which the provisions of Reorganization Plan 14 of 1950 are applicable.

<u>Contract Work Hours and Safety Standards Act, 40 U.S.C. 327, et seq.</u>	5
<u>Copeland Act, (40 U.S.C. 276c)</u>	6
<u>Hospital Survey and Construction Act, as amended by the Hospital and Medical Facilities Amendments of 1964, 41 U.S.C. 291e(a) (5)</u>	7
<u>United States Housing Act of 1937, as amended, 42 U.S.C. 1416</u>	8
<u>National Housing Act, 12 U.S.C. 1715c, as amended</u>	9
<u>Housing Act of 1949, 42 U.S.C. 1459</u>	10

	<u>Code</u>
<u>Housing Act of 1961, 42 U.S.C. 1500c-3</u>	11
<u>Housing and Urban Development Act of 1965, 42 U.S.C. 3107</u>	12
<u>Federal^e-Aid Highway Act of 1956, as amended by the Federal^e-Aid Highway Act of 1968, 23 U.S.C. 113 (a)</u>	13
<u>Federal^e Water Pollution Control Act, as amended Sec. 513, 86 Stat. 894, 33 U.S.C. 1372</u>	14
<u>Postal Reorganization Act, 39 U.S.C. 410 (b) (4) (c)</u>	15
<u>Vocational Education Act of 1963, 20 U.S.C. 35(f)</u>	16
<u>Public Works and Economic Development Act of 1965, 42 U.S.C. 3222</u>	17
<u>State and Local Fiscal Assistance Act of 1972, 31 U.S.C. 1243(a) (6)</u>	18
<u>Public Health Service Act, 42 U.S.C. 291e</u>	19
<u>Housing and Community Development Act of 1974, 42 U.S.C. 1437</u>	20
<u>Local Public Works Capital Development and Investment Act of 1976, 42 U.S.C. 6701, et seq., as amended</u>	21
<u>Health Professions Educational Assistance Act of 1963 (Sec. 2 (a), 77 Stat. 164; 42 U.S.C. 292d(c)(4) and 42 U.S.C. 293a(c)(5), P. L. 88-129)</u>	22
<u>Higher Educational^e Facilities Act of 1963 (Sec. 403, 77 Stat. 379; 20 U.S.C. 753, P. L. 88-204)</u>	23
<u>Appalachian Regional Development Act of 1965, Sec. 402, 79 Stat. 21; 40 U.S.C. App. 402.</u>	24
<u>Urban Mass Transportation Act of 1964, 49 U.S.C. 6109</u>	25

List of Persons or Firms Currently Debarred

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
A-1 Janitorial Services, Inc. Baltimore, Maryland Wilson, Emeal, Sr., Pres. Wilson, Ollie, Vice-Pres.	March 15, 1982	2

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
AAA Excavating Company, Inc. Little Rock, Arkansas Bolding, Glen, Pres.	May 1, 1980	5,13 14,15
A & G Enterprises, Inc.	See ALADDIN SERVICES CENTER	
A & S Cleaning and Maintenance Co. Ashland, Massachusetts Alleyne, Colvin T., Vice Pres.	November 1, 1979	2
A-Allied American, Inc., a.k.a. A-American, Inc. Union City, California Yeager, Dorne, Owner Yeager, Eloise, Owner Yeager, Kenneth, Owner	September 1, 1981	2
A-American, Inc.	See A-ALLIED AMERICAN, INC.	
Aladdin Services Center, The a division of A & G Enterprises, Inc. Los Angeles, California Rojas, Alexander	June 16, 1980	2
Alcorn, John E.	See ART STUDIO, INC., THE	
Allen, M & R, Inc., trading as Victor Rug Company Philadelphia, Pennsylvania Allen, Marvin, Vice-Pres. Allen, Mason, Treas. Allen, Ralph, Pres.-Sec.	December 3, 1979	2
Alleyne, Colvin T.	See A & S CLEANING AND MAINTENANCE	
Aloisio, Vito, d.b.a. Carrier Delivery Service Westchester, Ohio	November 16, 1981	2
AMCO Painting and Drywall Barry, Texas Griffin, Melton	September 15, 1980	3
American Sanitary Sales Willow Grove, Pennsylvania	June 30, 1978	4

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
its officers, subsidiaries and divisions, and any and all purchasers, successors, assignees and/or transferees		
American Waste Removal Company Bernalillo, New Mexico Jarvies, Joseph B., Pres.	December 1, 1981	2
Amtype Corporation Spring Valley, California Dodero, Donald L., Pres. Townsend, John S., Vice-Pres. d.b.a. California-Amtype Co. California-Amtype Co., Inc. Walt's Business Machines	September 1, 1979	2
Anderson, Gerald L.	See J.E.R. ENTERPRISES, INC.	
Andy's Excavating	See JONES, ANDERSON	
Antanosorff, Lubo Council Bluffs, Iowa	June 1, 1981	8,9
Anub, Allen S., d.b.a. Asa Construction and Anub, Allen S., Enterprises Agana, Guam	October 15, 1979 June 16, 1980	2
Appelquist, Gary	See MASTER CRAFT FENCE CO., INC.	
Arace, Joseph, Jr.	See MEDICAL CONSTRUCTION MANAGEMENT	
Arapahoe Merchant Police and Guard Service Englewood, Colorado Hatfield, Peter R.	December 17, 1979	2
Art Studio, Inc., The Alexandria, Virginia Alcorn, John E.	October 30, 1979	1
Asa Construction	See ANUB, ALLEN	
Assurance Services and Pacific Refuse and Disposal Co.	See LEE, WARREN W.	

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Atauciq Enterprises	See MIDDLETON, DAVID, JR.	
Atlantic Electric, Inc. Phoenix, Arizona Spencer, Gene, Pres.	September 2, 1980	3
Atlantic Maintenance Co.	See SMITH, WILLIAM	
Atteberry Paint Co., Inc. Port Neches, Texas Atteberry, Bill, Vice-Pres.	September 15, 1980	9
Auburn Block Hauling Co., Inc. Pleasantville, New Jersey Smokowski, Audrey, Pres.	June 15, 1981	2
Ault, William J., Sr., d.b.a. Star Route Mail Service Toronto, Ohio	November 16, 1981	2
Austin Maintenance, Inc. Santa Monica, California Austin, Gene, a.k.a. Austin, J.G.	June 15, 1981	2
BBL Leasing Co.	See BLUE BELL, INCORPORATED	
B & E Development, Inc. Lavalette, West Virginia Belcher, Jessie, Owner	December 3, 1979	2
B & H Contractors Vallejo, California Bodily, Ruel W. Hagen, Norman	April 15, 1980	3
Barboza, Armando	See FRAULOB, DON	
Barnes, Charles M., d.b.a. Barnes Laundry and Cleaners Panama City, Florida	December 3, 1979	2
Batchelor's Building Maintenance Service Wichita, Kansas Batchelor, Gerald W., Pres.	January 2, 1980	2

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Bator, R.B., Trucking Co. Cheshire, Massachusetts Bator, Richard B., Pres.-Treas.	February 15, 1980	2
Bauman, Roy A., Company, Inc. Elkridge, Maryland Bauman, Leroy A., Owner-Pres.	April 15, 1981	3
Baxley Electric Motor Works, Inc. Baxley, Georgia Nelson, Ronnie L., Pres.	December 17, 1979	3
Beckerman, Bernard	See EDWARDS FURNACE COMPANY, INC.	
Bednar, Robert J.	See RANDEB, INC.	
Belcher, Jessie	See B & E DEVELOPMENT, INC.	
BELCO	See FRAULOB, DON	
Bennett, John W.	See WORLD CONTRACTORS, INC.	
Berry, James	See UNITED SERVICE CORPORATION	
Bibeau, Maurice	See ROSE CITY GLASS CO.	
Bledsoe, Robert B.	See KNIGHT BUILDING MAINTENANCE, INC.	
Blue Bell, Incorporated Greensboro, North Carolina and the following divisions and subsidiaries; and other subsidiaries throughout Europe and all facilities of these divisions and subsidiaries: BBL Leasing Co. Greensboro, North Carolina Blue Bell Boots Nashville, Tennessee Blue Bell Canada, Ltd. Montreal, Canada Blue Bell of Lajas Puerto Rico Blue Bell of Puerto Rico, Inc. Mayaguez, Puerto Rico Blue Bell Services Greensboro, North Carolina	December 16, 1974	4

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Brooks Uniform Division Dallas, Texas		
Eagle Pass Development Co. Eagle Pass, Texas		
Gia Manufactura de Ropa Americana S.A., Mexico		
Hicks-Ponder Division El Paso, Texas		
Jantzen, Inc. Portland, Oregon		
Lady Wrangler Division Greensboro, North Carolina		
Red Kap, Inc. Nashville, Tennessee		
Wrangler, Mr., Division Greensboro, North Carolina		
Wrangler Shops of Puerto Rico, Inc. Mayaguez, Puerto Rico		
Bodily, Ruel W.	See B & H CONTRACTORS	
Bolding, Glen	See AAA EXCAVATING COMPANY, INC.	
Boll, Fred	See PACIFIC HAWAII SERVICES, INC.	
Bonded Security, Inc. Brookline, Massachusetts Walter, Saul, Pres.	December 3, 1979	2
Boulton, Edward	See GREATER PUGET SOUND INSULATION COMPANY	
Boulton, Hille A.	See GREATER PUGET SOUND INSULATION COMPANY	
Bourg, Francis O., Jr. Houma, Louisiana	December 1, 1981	2
Boyd, James Cincinnati, Ohio	April 15, 1981	2
Boyles, Glen H. Gulfport, Mississippi	April 15, 1982	2
Bracey, M. R., Construction Company Ontario, California Bracey, Milton R., Jr., Owner	May 15, 1981	3

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Bradshaw, Jonathan	See HOLLOWAY ENTERPRISES, INC.	
Brewington, Brent Quincy, California	February 1, 1982	2
Bridges, Bill R.	See DISCOUNT BUILDING MAINTENANCE	
Brock, Donald Brock, Kenneth Brock, Ray, d.b.a. Brock, Ray S., Sr. & Sons and Brock, Ray, & Sons Reforestation Callahan, California	June 16, 1980	2
Brooks Uniform Division	See BLUE BELL, INCORPORATED	
Brown, Wayne .	See WABECO OF LOUISIANA	
Bruno, Joseph A., Jr.	See MINUTE MAN TRANSIT, INC.	
California-Amtype Co., Inc.	See AMTYPE CORPORATION	
Campbell, Thomas	See YELLOW COACH LINES, INC.	
Campbell, William	See YELLOW COACH LINES, INC.	
Capital Janitorial Supply Company Richmond, Virginia Montgomery, Elmore H. Jr. Montgomery, Grover W.	July 1, 1980	2
Cardinal Moving and Storage, Inc.	See DIAMOND TRANSFER AND STORAGE, INC.	
Carr, Richard St. Regis, Montana	November 17, 1980	2
Carrier Delivery Service	See ALOISIO, VITO	
Carte, James A., d.b.a. Carte, James A., Trucking Co. Columbus, Ohio	February 15, 1980 April 15, 1982	2
Cary, Floyd E.	See SOUTHEASTERN WAREHOUSING AND DISTRIBUTION CORP.	
Castetter, D. Dee	See G. C. B. ENTERPRISES, INC.	

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Catala, Raul Salas, d.b.a. Puerto Rico Guard Patrol Bureau Bayamon, Puerto Rico	July 16, 1979	2
Cerulli, Joseph, d.b.a. Cerulli Contracting Company West Wyoming, Pennsylvania Justice, West Virginia	November 3, 1980	2
Charter Terminal Transport, Inc.	See POST TRANSPORT, INC.	
Chaschin, Ulian Woodburn, Oregon	April 1, 1981	2
Cherokee Indian Development Corp. Tahlequah, Oklahoma Smith, Quentin, President	April 15, 1982	2
Chibis, Alice Chibis, Louis Akron, Ohio	September 1, 1979	2
Chilcote Construction Company Missoula, Montana Chilcote, Dan, Owner	September 17, 1979	9
Chisler, Bob R. Chisler, David Chisler, Dale Chisler, John, d.b.a. Chisler Brothers General Contractors Pentress, West Virginia	May 17, 1982	2
Clean City Janitor Service, Inc. Dayton, Ohio Daskalakis, Frank Daskalakis, Thomas	June 15, 1981	2
Clean-Rite Company, Inc. Lavalette, West Virginia Edwards, John R., Pres.	February 15, 1980	2
Clean-Rite Maintenance Co. Washington, D.C. Williams, Nathaniel D., Pres.	August 1, 1980	2

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Clegg, John, d.b.a. Clegg Mobile Home Service Victoria, Texas	April 1, 1981	2
Clements, R. Barry	See GARRETT ENTERPRISES, INC.	
Close, Larry	See REDFIELD, JIM, PLUMBING AND HEATING, INC.	
Cogliano, John	See MORNINGSTAR, C., & ASSOCIATES GENERAL CONTRACTORS, INC.	
Color Guard Trucking, Inc. Hickory, North Carolina Dale, Bobby L., Owner	September 1, 1979	2
Combined Maintenance Company	See SERVA FLEX, INC.	
Compact Express Lines	See DOMINGUEZ, ALBERT R.	
Consolidated Construction Company San Francisco, California Dong, John Ishikawa, Takeshi Jung, Calvin Ng, Thomas	March 3, 1980	3
Consolidated Services, Inc. Charleston, South Carolina	March 16, 1981	2
Contract Mail Carriers	See SMITH, GERALD K.	
Cook, Lawrence J., Jr., d.b.a. Cook Building Maintenance Service San Diego, California	April 15, 1982	2
Cooperative Forestry Consultants	See LONG, ROBERT V.	
Copeland, Ronald, d.b.a. Triple R Trophies, and Ron's Mail Hauling Wabash, Indiana	May 1, 1980	2
Corcoran, Hugh T.	See MUNICIPAL SALES COMPANY	
Cornell, Donald	See DON'S DECORATING SERVICE	

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Costas Forming Corporation Miami, Florida Costas, Eusebio, Pres.	February 1, 1980	15
Creer Industrial Corporation Bronx, New York Creer, William, Owner	February 15, 1980	9
Crippen, Larry Vancouver, Washington	March 16, 1981	2
Crowder's Trucking Service, Inc. Suffolk, Virginia Crowder, Kenneth W.	June 16, 1980	2
Crown Roofing, Inc. Jersey City, New Jersey Hess, Al	March 17, 1980	3
Cumberland Bay Leasing and Construction Corporation L. Pugh Contractors, Inc. National/U.S. Constructors, Inc. Plattsburgh, New York Shelbourne, Vermont	December 17, 1979	5,10
Custom Drywall Billings, Montana Shaefer, Richard E.	August 15, 1980	19
D & M Gulf Service	See D'AURIA, JAMES T.	
Dale, Bobby L.	See COLOR GUARD TRUCKING, INC.	
Daskalakis, Frank	See CLEAN CITY JANITOR SERVICE, INC.	
Daskalakis, Thomas	See CLEAN CITY JANITOR SERVICE, INC.	
Daso, Robert R.	See DES MOINES ELECTROCOATING, INC.	
D'Auria, James T., d.b.a. D & M Gulf Service Dover, New Jersey	September 15, 1981	2

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Davis, Leo J. Enid, Oklahoma	November 17, 1980	2
Davis, Norman E.	See DIAL-A-MAID	
DeGuzman, Agnesia and DeGuzman, Gerald, d.b.a. DeGuzman Enterprise Wahiawa, Hawaii	November 1, 1979	2
Del Rosario, Juan Ernesto	See RELIABLE SECURITY SERVICE, INC.	
Des Moines Electrocoating, Inc. Des Moines, Iowa Daso, Robert R.	August 1, 1980	2
Detective Intelligence Service, Inc. Oakland, California	September 17, 1979	2
Dial-A-Maid Tuskegee, Alabama Davis, Norman E.	November 16, 1981	2
Diamond Transfer and Storage, Inc. Cardinal Moving and Storage, Inc. Newport News, Virginia Duval, Philip	August 1, 1980	2
Dibert, Bancroft and Ross Ltd. its principal officers, directors and direct or bene- ficial owners Amite, Louisiana	December 16, 1974	4
Dillon Total Maintenance, Inc. Malvern, Pennsylvania Dillon, John, Pres.	July 15, 1980	2
Dinkins, Carl M. Winston-Salem, North Carolina	August 1, 1980	2
Discount Building Maintenance Portland, Oregon Bridges, Bill R. McCloud, Charles E.	February 15, 1980	2

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Dodero, Donald L.	See AMTYPE CORPORATION	
Dodier, Gerald P.	See LEE'S MASONRY COMPANY, INC.	
Dokken, Nora Tacoma, Washington	May 17, 1982	2
Dominguez, Albert R., d.b.a. Compact Express Lines Rockford, Illinois	June 15, 1982	2
Donahines Investment Company, d.b.a. Donahines Appliance, and Donahines Maintenance Honolulu, Hawaii	March 17, 1980	2
Dong, John	See CONSOLIDATED CONSTRUCTION CO.	
Don's Decorating Service Denver, Colorado · Cornell, Donald, Owner	May 1, 1980	3
Dugger, Royce W., d.b.a. Roots Reforestation Eugene, Oregon	June 2, 1980	2
Dupee, Howard William, d.b.a. H & H Janitorial Service · Clarksville, Tennessee St. Louis, Missouri	November 16, 1981	2
Duval, Philip	See DIAMOND TRANSFER AND STORAGE, INC.	
Eagle Pass Development Co.	See BLUE BELL, INCORPORATED	
Eakin, Harvey Weir, Mississippi	May 3, 1982	2
Eastlawn Services, Inc.	See MARVEL-HANSEN, INC.	
Eatwell Enterprises of Florida, Inc. Hialeah, Florida Schiffman, Adam Schiffman, Monroe Schiffman, Sharon	June 16, 1980	2

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Ebbett, David	See INTERNATIONAL SERVICE CORPORATION	
Ecolodyne Corporation Chattanooga, Tennessee Winters, Stephen H., Pres.	April 1, 1981	2
Economy Insulation Co.	See VICK'S ECONOMY INSULATION CO.	
Edwards Furnace Company, Inc. Edwards Home Improvement and Furnace Company, d.b.a. Edwards Home Improvement Company Cleveland, Ohio Beckerman, Bernard, Pres.	August 1, 1980	3
Edwards, John R.	See CLEAN-RITE COMPANY, INC.	
Eggers, Algie J. Rawfordsville, Indiana	February 2, 1981	2
Ekistics Construction Co., a.k.a. Ekistics Design Group, Inc. Seattle, Washington Webster, George, Pres.	November 3, 1980	3
Emergency Cargo Service	See MODLIN, LLOYD	
Engineering Service System, Inc. San Diego, California Shay, Thomas W., III	February 15, 1980	2
Englert, Henry P., Jr., d.b.a. Englert Trucking Company Lafayette, Indiana	May 17, 1982	2
English, John	See INTERSEC, INC.	
Enviro-Development Company	See MERSEREAU, JOHN D.	
Erilynn Corporation Turnersville, New Jersey Labaczewski, Joseph, Pres.	November 16, 1981	2
Estes, Charley O., d.b.a. Phoenix Reforestation Snohomish, Washington	June 16, 1980	2

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Evans, William I. Sitka, Alaska	February 1, 1982	2
Ever Clean Services, Inc. Everette, Massachusetts Lionette, Robert	July 15, 1980	2
Feature Ring Company, Inc. New York, New York its officers, subsidiaries and divisions, and any and all purchasers, successors, assignees, and/or transferees. <u>"This company has been declared ineligible pursuant to court-approved Consent Order."</u>	December 29, 1978	4
Ferguson Plastering Miami, Florida Ferguson, Walter T., Sr.	July 15, 1981	15
Fesperman, Don, Jr.	See MAPLEWOOD GARDENS	
Fields, Jerry	See NATIONAL INVESTIGATION BUREAU, INC.	
Flanagan, Joseph	See TIFFINY FOOD SERVICES, INC.	
Floorcovering Services	See PRICE, LARRY	
Ford, John H.	See METRO SERVICES, INC.	
Ft. Ord Cleaning Service	See WALTERS, KING	
Four Star Trucking, Inc. Pittsburgh, Pennsylvania Mathias, Robert D., Pres.	July 15, 1980	2
Fowler, Cicero, d.b.a. Fowler's Barber Shop, Fowler's Beauty Salon, P.X. Barber Shops, P.X. Beauty Shops, <u>et al.</u> Fayetteville, North Carolina	August 1, 1980	2
Fox, Walter, Jr., and Fox & Fox Maintenance and Janitorial Services, Inc., d.b.a. Fox and Fox Service, Inc. Gardena, California	October 15, 1979	2

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Frank's Electric Olympia, Washington Warner, Frank J., Owner	April 15, 1980	21
Frascona, Charles	See POST TRANSPORT, INC.	
Frascona, John	See POST TRANSPORT, INC.	
Fraulob, Don, and Barboza, Armando, d.b.a. BELCO Sacramento, California	February 16, 1982	2
Freeman, Anton O.	See WORCESTER COUNTY REFRIGERATION, INC.	
Fullerton, Wray S., d.b.a. McDonald Express & Transfer Co. McDonald, Pennsylvania	June 15, 1981	2
G. C. B. Enterprises, Inc. Encinitas, California Castetter, D. Dee, Pres.	March 16, 1981	2
Garrett Enterprises, Inc. Philadelphia, Pennsylvania Garrett, John A., Pres. Clements, R. Barry, Vice-Pres.	March 1, 1982	2
Generelli, James	See WORCESTER COUNTY REFRIGERATION, INC.	
Genesco International, Inc. Jacksonville, Florida Holley, W. Eugene	August 1, 1980	2
Geyer, Hubert M., a.k.a. H. M. Geyer d.b.a. Riverside Security Patrol and Alarm Service Riverside, California	February 1, 1982	2
Gia Manufactura de Ropa Americana	See BLUE BELL, INCORPORATED	
Glenwood Builders, Inc. Coral Springs, Florida Tamarac, Florida Lorenzo, Anthony, Sec. Tufo, Vincent J., Pres.	August 15, 1979	21

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Global Engineering & Maintenance Service Corp., d.b.a. Global Custom Furniture Tamuning, Guam	August 15, 1979	2
Good, Gary	See GROVE REFORESTERS	
Good, Gary	See TIMBERLINE REFORESTATION, INC.	
Good, John	See GROVE REFORESTERS	
Good, Joyce	See GROVE REFORESTERS	
Gray, John M., d.b.a. Gray Funeral Home and Ambulance Service Raleigh, North Carolina	October 15, 1979	2
Great American Cleaning Co.	See WATSON, EDDIE	
Great American Development Co.	See WATSON, EDDIE	
Greater Puget Sound Insulation Company Seattle, Washington Boulton, Edward Boulton, Hille A.	November 15, 1979	3
Green, William W.	See PROGRESSIVE SECURITY AGENCY, INC.	
Greene, Leslie O. North English, Iowa	October 1, 1980	2
Greenen, Terrance C.	See PACIFIC HAWAII SERVICES, INC.	
Griffin, Melton	See AMCO PAINTING AND DRYWALL	
Griffith, Robert E., d.b.a. Griffith, Robert E., Enterprises Ironton, Ohio	September 15, 1981	2
Grogan Brothers Moving & Storage Company Pittsburgh, Pennsylvania Grogan, DeRoy	May 1, 1980	2
Grove Reforesters Cottage Grove, Oregon	September 15, 1981	2

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Curtin, Oregon Eugene, Oregon Good, Gary Good, John Good, Joyce		
Grucza, Henry J.	See SUPERIOR BUILDING MAINTENANCE	
Guard All of America	See ROBINSON, HAROLD A.	
H & H Janitorial Service	See DUPEE, HOWARD WILLIAM	
H.E.M. Masonry Miami, Florida Smith, Daniel, Owner	August 1, 1979	8
Hafdahl, Kenneth James Hafdahl, Kenneth Jerome Junction City, Oregon	July 15, 1980	2
Hagen, Norman	See B & H CONTRACTORS	
Halasz Electric and Plumbing Company, a.k.a. Halasz Electric and Plumbing Company, Inc. Seattle, Washington Halasz, Imrich	November 15, 1979	3
Handy, Russell H., d.b.a. Russell H. Handy, U.S. Mail Contractor Springfield, Illinois	June 1, 1982	2
Hanson, Howard	See UNITED SERVICES	
Harbour Contracting Marysville, California Harbour, James D. Harbour, Pamela Simeroth	April 15, 1980	2
Harmon, Grace M. Kansas City, Missouri	June 15, 1981	2
Haskins, Douglas A., d.b.a. Haskins Trucking Co. Metairie, Louisiana	July 15, 1980	2

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Hatfield, Peter R.	See ARAPAHOE MERCHANT POLICE AND GUARD SERVICE	
Hattaway Electric Co., Inc. Cullman, Alabama Hattaway, C.E., Pres.	September 2, 1980	21
Hawker Industries, Inc. Ft. Lauderdale, Florida Wentworth, George E., Jr., Pres.	May 15, 1981	5,18
Henderson, Dale Lee Truth or Consequences, New Mexico	June 2, 1980	2
Henderson, John J. J & J Construction Company Corpus Christi, Texas	June 2, 1980	2
Hendrix, Sam	See NATIONAL INVESTIGATION BUREAU, INC.	
Hess, Al	See CROWN ROOFING, INC.	
Hesse Envelope Company Dallas, Texas	September 3, 1974	4
Hick's Guard Service Columbus, Ohio Hicks, Charles L.	February 1, 1980	2
Hicks-Ponder Division	See BLUE BELL, INCORPORATED	
Hofstetter, David G.	See PARKLINE, INC.	
Holley, W. Eugene	See GENESCO INTERNATIONAL, INC.	
Holloway Enterprises, Inc. Atlanta, Georgia Bradshaw, Jonathan	February 15, 1980	2
Howard, Dave	See STAGPARK NURSERY AND LANDSCAPING, INC.	
Hughes, Sandra Marlene Sacramento, California	April 1, 1981	2
Hult, Jonathan Montgomery, California	February 1, 1982	2

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Hutton Construction Co., Inc., also d.b.a., A.E., Recchia, Inc. West Orange, New Jersey Recchia, Anthony E., Pres. and Tres.	July 1, 1982	21
Hydronics, Inc. Grove City, Ohio Pope, Daniel R., Pres.	January 15, 1980	3
Ideal Maintenance Systecon Corporation Pasadena, California Mack, Frederick D.	July 15, 1980	2
Independant Products Services	See LANG, ELIJAH	
Independent Product Services	See LANG, ELIJAH	
Inderkum, George S., Jr. Sacramento, California	September 1, 1979	2
Ingersoll Milling Machine Company Rockford, Illinois and the following divisions and subsidiaries; and all purchasers, successors, assignees, and/or transferees; Ingersoll Manufacturing Consultants, Inc. Rockford, Illinois Ingersoll Manufacturing Consultants, International, S.A., Belgium Ingersoll Maschinen und Werkzeuge GmbH West Germany Waldrich Siegen Werkseigmaschinen GmbH West Germany	August 15, 1977	4
Intercontinental Construction, Inc. Seattle, Washington Krushelnisky, Geraldine, Pres.-Treas. Krushelnisky, Dianne, Vice-Pres. Krushelnisky, Sandra, Sec.	April 15, 1981	3

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
International Drywall Co., Inc. Philadelphia, Pennsylvania Smith, Edward, Pres.	January 15, 1980	3
International Service Corporation Sandpoint, Idaho Ebbett, David, Pres.	October 15, 1979	2
Intersec, Inc. Arlington, Virginia English, John Manousakis, Theodore	May 1, 1980	2
Ishikawa, Takeshi	See CONSOLIDATED CONSTRUCTION CO.	
J & J Construction Co.	See HENDERSON, JOHN J.	
J. E. R. Enterprises, Inc. Charleston, South Carolina Anderson, Gerald L., Pres.	September 1, 1979	2
J. W. Casuals, Inc. Rancho Cucamonga, California Wilson, Dennis, Sec.-Treas.	November 3, 1980	2
Jackson & Jackson Trucking Company, Inc. Detroit, Michigan Jackson, Varner	November 3, 1980	2
Jantzen, Inc.	See BLUE BELL, INC.	
Jarvies, Joseph B.	See AMERICAN WASTE REMOVAL COMPANY	
Jerry Smith Teaming	See SMITH, GERALD K.	
Jim's Stripping and Waxing Service	See TAMP CORPORATION	
Jin's Janitorial Service	See WALTERS, KING	
Johnson, Jimmie L.	See WESTSIDE LANDSCAPING	
Johnson, Larry L., Excavating, Inc. Malta, Ohio Johnson, Larry L., Pres.	July 1, 1982	13,21

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Johnson, Ralph	See LANCE SECURITY PATROL AGENCY, INC.	
Johnson, Robert C., Trucking Co., Inc. Mt. Vernon, New York Johnson, Robert C.	June 1, 1982	2
Jones, Anderson, d.b.a. Andy's Excavating Seattle, Washington	December 17, 1979	2
Jones, Harlen Culver, Oregon Dufur, Oregon	June 16, 1980	2
Jones, J. T. Memphis, Tennessee	September 17, 1979	2
Jones, Larry La Grande, Oregon Ukiah, Oregon	September 1, 1979	2
Jones, Martin O. Rio Linda, California	November 1, 1979	2
Joy Don, Inc. Akron, Ohio Greensboro, North Carolina Waite, D.G. Waite, Randy	December 17, 1979	2
Judd, Charles, d.b.a. QC Services Salinas, California	December 1, 1981	2
Jung, Calvin	See CONSOLIDATED CONSTRUCTION CO.	
Just Rite Cleaners	See SMILEY, EUGENE	
Kennedy Van & Storage Co., Inc. Chantilly, Virginia Riley, Charles, Owner-Pres.	July 15, 1980	2
Knight Building Maintenance, Inc. St. Louis, Missouri Bledsoe, Robert B., Pres.	November 17, 1980	2

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Knotts, Jennings O. Fostoria, Ohio	August 1, 1980	2
Kolt, Steven L. Honolulu, Hawaii	February 15, 1980	2
Kovacs, Elemer, d.b.a. Kovacs Automotive Spokane, Washington	March 1, 1982	2
Krushelnisky, Dianne	See INTERCONTINENTAL CONSTRUCTION, INC.	
Krushelnisky, Geraldine	See INTERCONTINENTAL CONSTRUCTION, INC.	
Krushelnisky, Sandra	See INTERCONTINENTAL CONSTRUCTION, INC.	
Labaczewski, Joseph	See ERILYNN CORPORATION	
Lady Wrangler Division	See BLUE BELL, INCORPORATED	
Lafayette Janitorial Corporation San Francisco, California	May 17, 1982	2
Lafayette Janitorial Services	See SIMS, CHARLES C.	
Lamm, H., Industries, Inc. Fort Lauderdale, Florida Lamm, Helmut, Pres.	May 1, 1981	15
Lance Security Patrol Agency, Inc. Bronx, New York Johnson, Ralph, Pres.	July 1, 1981	2
Lang, Elijah, d.b.a. Independent Product Services and Independant Products Services Anchorage, Alaska	March 1, 1982	2
Lauber, Joseph	See WENDEL AND COMPANY, INC.	
Lauranzano, Enrico G.	See METRO INDUSTRIAL SECURITY AGENCY, INC.	
Lauranzano, Joan F.	See METRO INDUSTRIAL SECURITY AGENCY, INC.	

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Lauranzano, Natale R.	See METRO INDUSTRIAL SECURITY AGENCY, INC.	
Laurelton Construction Corporation Laurelton, New York Scheffler, Michael B., Pres. d.b.a. Laurelton Electric, Inc.	September 17, 1979	15
La Valley, George Mooers, New York	November 15, 1979	2
La Vern Mason and Drywall Construction Company Bronx, New York Stampp, Vernal	March 3, 1980	15
Layman, Donald R.	April 15, 1981	2
Lee, James S., a.k.a. Lee, James Stanley Baton Rouge, Louisiana	June 16, 1980	2
Lee, Warren W., d.b.a. Assurance Services and Pacific Refuse and Disposal Co. Honolulu, Hawaii	June 15, 1981	2
Lee's Masonry Company, Inc. Amherst, New Hampshire Dodier, Gerald P.	February 1, 1980	5
Lemay, Marcel, d.b.a. Pioneer Painting and Janitorial Colchester, Vermont	November 17, 1980	2
Lionette, Robert	See EVER CLEAN SERVICES, INC.	
Long, Robert V., d.b.a. Cooperative Forestry Consultants Carson City, Nevada	February 2, 1981	2
Lorenzo, Anthony	See GLENWOOD BUILDERS, INC.	
L. Pugh Contractors, Inc.	See CUMBERLAND BAY LEASING AND CONSTRUCTION CORPORATION	

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Lum, Henry W. C. and Consolidated Services, Inc.	February 2, 1981	2
Lunsford, Earl, d.b.a. Lunsford Homes	February 2, 1981	2
MCM Corporation	See MEDICAL CONSTRUCTION MANAGEMENT	
M & M Transport Service, Inc.	See MUSGRAVE, GORDON	
M & M Tree Falling and Thinning Beaverton, Oregon Bend, Oregon McCleary, Marvin McCord, Daniel	May 1, 1980	2
Mack, Frederick D.	See IDEAL MAINTENANCE	
Mac's Building Maintenance	See MCNEAL COMPANIES, INC.	
Madison Avenue Builders, Inc. Troy, New York Morgan, John, Pres. Morgan, Everette, Vice-Pres. Wickham, Harry, Sec.-Treas.	May 15, 1981	9
Manning, Marci	See NATIONAL INVESTIGATION BUREAU, INC.	
Manning, Patrick	See NATIONAL INVESTIGATION BUREAU, INC.	
Manning, Paul	See NATIONAL INVESTIGATION BUREAU, INC.	
Manousakis, Theodore	See INTERSEC, INC.	
Maplewood Gardens Springfield, Missouri Fesperman, Don Jr., Owner	July 16, 1979	3
Marble, Phillip, d.b.a. Marble Reforestation Co. Everett, Washington	October 1, 1980	2
Marvel-Hansen, Inc. Eastlawn Services, Inc. Chadds Ford, Pennsylvania Rodenhiser, John A.	February 2, 1981	2

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Master Craft Fence Company, Inc. Davenport, Iowa Appelquist, Gary, Pres.	June 2, 1980	3
Mathias, Robert	See FOUR STAR TRUCKING	
Maxfield, Merrill Salt Lake City, Utah	June 16, 1980	2
McCasland, Inc., formerly McCasland Leasing Corp. Boston, Massachusetts Menands, New York McCasland, Merritt J., Pres.-Dir. McCasland, Merritt J., Jr., Chief Operating Official in Massachusetts	February 1, 1980	2
McCleary, Marvin	See M & M TREE FALLING & THINNING	
McCloud, Charles E.	See DISCOUNT BUILDING MAINTENANCE	
McCord, Daniel	See M & M TREE FALLING & THINNING	
McCurdy, Robert, Sr. and McCurdy, Richard A., d.b.a. McCurdy and McCurdy Cusick, Washington	February 15, 1980	2
McDonald Express & Transfer Co.	See FULLERTON, WRAY S.	
McGee, Hilary	See OFFICE CLEANERS, INC.	
McNeal Companies, Inc., d.b.a. Mac's Building Maintenance Gardena, California	March 16, 1981	2
Medical Construction Management Corporation, a.k.a. MCM Corporation Scottsdale, Arizona Arace, Joseph, Jr., Pres.	January 15, 1980	23
Megonegal's for Trucks, Inc. Philadelphia, Pennsylvania Megonegal, Joseph T. Jr.	July 1, 1980	2

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Menlo Service Corporation Sunnyvale, California Sloan, Daniel	March 2, 1981	2
Mersereau, John D., d.b.a. Enviro-Development Company San Bernardino, California	March 1, 1982	2
Messina, Michael, d.b.a. Messina Painting Company Boise, Idaho	May 17, 1982	8,21
Metro Industrial Security Agency, Inc. Beverly, Massachusetts Lauranzano, Natale R., President Lauranzano, Joan F., Treasurer Lauranzano, Enrico F., Director	April 15, 1982	2
Metro Services, Inc. Clearwater, Florida Ford, John H., Pres.	March 2, 1981	15
Meyers, Robert M., d.b.a. Parkdale Building Maintenance The Dalles, Oregon	November 3, 1980	2
Middleton, David, Jr. d.b.a. Atauciq Enterprises Anchorage, Alaska	February 1, 1982	2
Mike's Forest Improvement	See YASKUS, MICHAEL	
Minute Man Transit, Inc. Dedham, Massachusetts Bruno, Joseph A., Jr.	June 15, 1981	2
Modlin, Lloyd, d.b.a. Emergency Cargo Service Fort Lewis, Washington	December 17, 1979	2
Montgomery, Elmore H., Jr.	See CAPITAL JANITORIAL SUPPLY CO.	
Montgomery, Grover W.	See CAPITAL JANITORIAL SUPPLY CO.	
Morgan, Everette	See MADISON AVENUE BUILDERS, INC.	

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Morgan, John	See MADISON AVENUE BUILDERS, INC.	
Morningstar, C., & Associates General Contractors, Inc. Buffalo, New York Cogliano, John Morningstar, Claude L. Morningstar, Lena	February 1, 1982	2
Morrison, George E., Jr. Dublin, Virginia	August 15, 1979	2
Moser, J. N., Trucking, Inc. Aurora, Illinois Moser, William	April 15, 1981	2
Municipal Sales Company Bethel Park, Pennsylvania Corcoran, Hugh T., Owner	October 1, 1979	10
Musgrave, Gordon, d.b.a. M & M Transport Service, Inc. Denver, Colorado	November 16, 1981	2
Myhre, Harry, Inc. Harrisburg, Pennsylvania	April 15, 1974	4
National Investigation Bureau, Inc. Maywood, Illinois Fields, Jerry Hendrix, Sam Manning, Marci Manning, Patrick Manning, Paul	November 17, 1980	2
National/U.S. Constructors, Inc.	See CUMBERLAND BAY LEASING AND CONSTRUCTION CORPORATION	
Nationwide Building Maintenance Inc. Alexandria, Virginia	May 17, 1982	2
Nelson, Darrald E. Madison, Wisconsin	June 16, 1980	2

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Nelson, James Richard d.b.a. Nelson Digging Service Parker, Arizona	February 1, 1982	2
Nelson, Ronnie L.	See BAXLEY ELECTRIC MOTOR WORKS, INC.	
Ng, Thomas	See CONSOLIDATED CONSTRUCTION CO.	
Noteboom, Ray, Inc. Fort Worth, Texas Noteboom, Cary, Co-Owner Noteboom, Ray, Co-Owner	June 1, 1981	5
Office Cleaners, Inc. Washington, D.C. McGee, Hilary, Pres.	November 16, 1981	2
Ohshita, Francis	See TOYO LANDSCAPING COMPANY	
O'Kelley Enterprises, Inc. Tucson, Arizona O'Kelley, Edward, Pres.	January 15, 1982	5,8
Olympic Services	See WOLBERT, WARREN S.	
Ortiz Construction Company Phoenix, Arizona Ortiz, Ray	May 1, 1980	9
PFG & Sons Builders and Contractors, Inc. Chicago, Illinois	July 1, 1980	4
P.X. Barber Shops	See FOWLER, CICERO	
P.X. Beauty Shops	See FOWLER, CICERO	
Pacific Hawaii Services, Inc. Honolulu, Hawaii Boll, Fred Greenen, Terrance C.	November 16, 1981	2
Painting Corporation of Detroit, Inc. Warren, Michigan	June 30, 1978	4

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
its officers, subsidiaries and divisions, and any and all purchasers, successors, assignees, and/or transferees		
Paone Construction Company, Inc. Woburn, Massachusetts Paone, Anthony K., Sr., Treas.	January 15, 1980	21
Parish, Raymond N., Glendale, Arizona	March 1, 1982	2
Parkdale Building Maintenance	See MEYERS, ROBERT M.	
Parkline, Inc. Winfield, West Virginia Hofstetter, David G., President	April 26, 1982	1
Payton, Clarice Payton, Edward Stonewood, West Virginia	July 1, 1980	2
Perrien, Charles W. Turlock, California	March 1, 1982	2
Phoenix Reforestation	See ESTES, CHARLEY O.	
Picard, Joseph L. • East Hartford, Connecticut	February 2, 1981	2
Pioneer Painting and Janitorial	See LEMAY, MARCEL	
Pope, Daniel R.	See HYDRONICS, INC.	
Post Transport, Inc. Charter Terminal Transport, Inc. Medway, Massachusetts West Hartford Connecticut Cheshire, Connecticut Frascona, Charles Frascona, John Sheehan, Robert	March 1, 1982	2
Powertherm Corporation Philadelphia, Pennsylvania	August 11, 1976	4

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Price, Larry, d.b.a. Floorcovering Services Cleveland Heights, Ohio	November 16, 1981	2
Professional Security Officers Company Asbury Park, New Jersey Ricker, Carl J., Pres. Ricker, John	March 15, 1982	2
Professional Window Cleaning & Services, Inc. Oak Creek, Wisconsin Steel, John	August 1, 1980	2
Progressive Security Agency, Inc. Dedham, Massachusetts Green, William W., Pres.-Treas.	November 17, 1980	2
Puerto Rico Guard Patrol Bureau	See CATALA, RAWL SALAS	
QC Services	See JUDD, CHARLES	
Quarters Cleaning Service	See WALTERS, KING	
Raite, James, Building and Remodeling Syracuse, New York Raite, James M., Owner	June 1, 1981	5,8
Randeb, Inc. Newton Square, Pennsylvania Bednar, Robert J., Pres.	March 7, 1972	4
Rasmussen, Ray L. Kalispell, Montana	September 1, 1981	2
Recchia, A.E., Inc. and Recchia, Anthony E.	See HUTTON CONSTRUCTION COMPANY; INC.	
Red Kap, Inc.	See BLUE BELL, INCORPORATED	
Redfield, Jim, Plumbing and Heating, Inc. Miller Place, New York Close, Larry, Vice-Pres. Redfield, James, Pres.	May 15, 1981	8,9

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Reding, Edward, d.b.a. Reding Land Survey Co. Lakeview, Missouri	March 16, 1981	2
Reeves and Webb Hillcrest Heights, Maryland Reeves, Donald E. Webb, Jesse D., Jr.	October 15, 1979	2
Reliable Security Service, Inc. Rio Piedras, Puerto Rico Del Rosario, Juan Ernesto	June 15, 1981	2
Reyes, Francisco Gold Beach, Oregon	January 15, 1980	2
Rhoades, Orval Sardinia, Ohio	February 1, 1980	2
Richards, Garry Lynn Monmouth, Oregon	June 16, 1980	2
Ricker, Carl J.	See PROFESSIONAL SECURITY OFFICERS COMPANY	
Ricker, John	See PROFESSIONAL SECURITY OFFICERS COMPANY	
Riley, Charles	See KENNEDY VAN & STORAGE CO., INC.	
Riverside Security Patrol and Alarm Service	See GEYER, HUBERT M.	
Roberts, William and Roberts, Charlotte, d.b.a. Statewide Construction Company Franklinville, New Jersey	March 15, 1982	2
Robinson, Harold A., and Robinson, John S., d.b.a. Guard All of America Daytona Beach, Florida	November 3, 1980	2
Rodenhiser, John A.	See MARVEL-HANSEN, INC.	
Rojas, Alexander	See ALADDIN SERVICES CENTER	

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Romanow Building Services, Inc. Saginaw, Michigan Romanow, Harry	April 1, 1981	2
Ron's Mail Hauling	See COPELAND, RONALD	
Roots Reforestation	See DUGGER, ROYCE W.	
Rose City Glass Company Norwich, Connecticut Bibeau, Maurice, Partner	August 17, 1981	20
Rubin, Leonard Los Angeles, California	August 3, 1981	2
Rupp, H. E., d.b.a. Rupp, H. E., Construction Bridgeville, California	April 1, 1981	2
S & H Leasing	See SMITH, GERALD K.	
S.T.C. Construction Co., and its officers, subsidiaries, and divisions, and all purchasers, successors, assignees and transferees Cherry Hill, New Jersey	July 15, 1980	4
San Jose Tree Service	See WALTER, LARRY	
Santos, F., Painting, Inc. Westport, Massachusetts Santos, Frank, Owner	March 15, 1982	8
Savelieff, Timofei Mt. Angel, Oregon	June 15, 1981	2
Scheffler, Michael	See LAURELTON CONSTRUCTION CORPORATION	
Schiffman, Adam	See EATWELL ENTERPRISES OF FLORIDA, INC.	
Schiffman, Monroe	See EATWELL ENTERPRISES OF FLORIDA, INC.	
Schiffman, Sharon	See EATWELL ENTERPRISES OF FLORIDA, INC.	

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Schwebke, Mark Monmouth, Oregon	March 16, 1981	2
Serva Flex, Inc., a.k.a. Serva Flex, Serva Flex, CBM, Serva Flex, Ltd., and Combined Maintenance Fields, Illinois Andover, Minnesota Tolbert, Carl	February 1, 1982	2
Shaefer, Richard E.	See CUSTOM DRYWALL	
Shaw-West, Inc. Dryden, New York Shaw, Robert N., Sec.-Treas. Shaw, Ronald J., Pres. Shaw, Thomas, Vice-Pres.	March 3, 1980	3
Shay, Thomas W., III	See ENGINEERING SERVICE SYSTEM, INC.	
Sheehan, Robert	See POST TRANSPORT, INC.	
Simmons, John A. Barberton, Ohio	June 1, 1982	2
Sims, Charles C., d.b.a. Lafayette Janitorial Services Seaside, California	November 16, 1981	2
Sloan, Daniel	See MENLO SERVICE CORPORATION	
Smiley, Eugene d.b.a. Just Rite Cleaners Anchorage, Alaska	February 1, 1982	2
Smith, Carl K., d.b.a. Smith, C. K., Trucking Claremont, California	February 1, 1980	2
Smith, Daniel	See H.E.M. MASONRY	
Smith, Edward	See INTERNATIONAL DRYWALL COMPANY, INC.	
Smith, Gerald K., d.b.a. Jerry Smith Teaming	August 1, 1980	2

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Contract Mail Carriers S & H Leasing Joliet, Illinois		
Smith, Quentin	See CHEROKEE INDIAN DEVELOPMENT CORP.	
Smith, Waite H., Jr. Brea, California	October 15, 1979	2
Smith, William, d.b.a. Atlantic Maintenance Co. Pleasantville, New Jersey	May 17, 1982	2
Smith, William E. Allen Park, Michigan	May 17, 1982	2
Smokowski, Audrey	See AUBERN BLOCK HAULING CO., INC.	
Smotherman, Glen Winona, Missouri	August 15, 1980	2
Smyth, George W. and Smyth, Wayne, d.b.a. Smyth Trucking Enfield, Connecticut	November 16, 1981	2
Southeastern Warehousing and Distribution Corporation Johnson City, Tennessee Cary, Floyd E., Pres.	March 17, 1980	2
Spencer, Gene	See ATLANTIC ELECTRIC, INC.	
Spivey, William	See TRANSCONTINENTAL CLEANING SERVICE COMPANY, INC.	
Spurrier, Duane L. Mingo Junction, Ohio	May 1, 1980	2
Stagpark Nursery and Landscaping Inc. Burgaw, North Carolina Howard, Dave	February 15, 1980	2
Stampf, Vernal	See LA VERN MASON AND DRYWALL CO.	

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Star Route Mail Service	See AULT, WILLIAM J., SR.	
Statewide Construction Company	See ROBERTS, WILLIAM	
Stearns Tile and Carpet Company, Inc. Holly Hill, Florida Stearns, Robert, Pres.	March 2, 1981	8,9
Steel, John	See PROFESSIONAL WINDOW CLEANING & SERVICES, INC.	
Stewart, Henry D. North Versailles, Pennsylvania	October 15, 1979	2
Sugg Painting and Decorating, a.k.a. Sugg Industries Terre Haute, Indiana Sugg, William E., Owner	October 15, 1980	3
Suggs, David C. Pine Bluff, Arkansas	June 2, 1980	2
Superior Building Maintenance Buffalo, New York Grucza, Henry J.	May 1, 1980	2
Swanco, Inc. Amarillo, Texas Walker, Swany, Pres.-Owner	April 15, 1980	9
Systecon Corporation	See IDEAL MAINTENANCE	
Tallmadge Circle Service	See WALKER, CHARLES	
Tamp Corporation and Torrence, James F., d.b.a. Jim's Stripping and Waxing Service Arlington Heights, Illinois	February 16, 1982	2
Taylor's Tree Service Redding, California Taylor, Bill	May 1, 1980	2
Templeton, Glenn E. Spokane, Washington	February 15, 1980	2

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Thompson Construction Company San Diego, California Thompson, Herman, Owner	December 3, 1979	17
Tiffany Food Services, Inc. Bohemia, New York	March 1, 1982	2
Ronkonkoma, New York Flanagan, Joseph, President	May 17, 1982	2
Timberline Reforestation, Inc. Curtin, Oregon Good, Gary	March 1, 1982	2
Tolbert, Carl	See SERVA FLEX, INC.	
Toll, William E.	See TOP ELECTRIC CO., INC.	
Top Electric Co., Inc. Norwood, Massachusetts Toll, William E., Pres.	June 15, 1981	3
Torrence, James F.	See TAMP CORPORATION	
Townsend, John S.	See AMTYPE CORPORATION	
Toyo Landscaping Company Santa Ana, California Ohshita, Francis	November 16, 1981	2
Transcontinental Cleaning Service Company, Inc., a subsidiary of Transcontinental, Inc. Gurnee, Illinois Spivey, William, Pres.	February 2, 1981	2
Trans-Minority Enterprises, Inc. Florissant, Missouri	February 1, 1982	2
Transway, Inc. Metairie, Louisiana	March 16, 1981	2
Triple R Trophies	See COPELAND, RONALD	
Tufo, Vincent J.	See GLENWOOD BUILDERS, INC.	
Turney, Lynn	See WESTGATE HOMES, INC.	

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Unga Corporation Foster City, California Unga, Willis L., Pres.	April 1, 1981	2
United Investigative Agencies, Inc. Alexandria, Virginia	May 17, 1982	2
United Service Corporation Sand Point, Idaho Dayton, Ohio Berry, James, Pres.	November 1, 1979	2
United Services McConnell Air Force Base, Kansas Hanson, Howard	May 1, 1980	2
Vega Enterprises, Inc., d.b.a. Vega Moving & Storage El Paso, Texas Vega, Joe, Jr.	March 16, 1981	2
Vick's Economy Insulation Co., a.k.a. Economy Insulation Co. Fredericksburg, Virginia Vick, Danny, Pres.	September 15, 1980	3
Victor Rug Company	See ALLEN, M & R, INC.	
W.W. Masonry Amarillo, Texas West, Wayne, Owner	August 1, 1979	9
Wabeco of Louisiana Alexandria, Louisiana Brown, Wayne	January 15, 1980	2
Waite, D. G.	See JOY DON, INC.	
Waite, Randy	See JOY DON, INC.	
Waldrich Slegen Werkseigmaschinen GmbH	See INGERSOLL MILLING MACHINE COMPANY	
Walker, Braxton B., d.b.a. Walker's Express San Diego, California	February 15, 1980 June 16, 1980	2

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Walker, Charles, d.b.a. Tallmadge Circle Service Tallmadge, Ohio	June 16, 1980	2
Walker, Swanny	See SWANCO, INC.	
Walter, Larry, d.b.a. San Jose Tree Service San Jose, California	December 17, 1979	2
Walter, Saul	See BONDED SECURITY, INC.	
Walters, King, d.b.a. Quarters Cleaning Service Jin's Janitorial Service Ft. Ord Cleaning Service Walters Quarters Cleaning Service Marina, California	December 1, 1981	2
Walt's Business Machines	See AMTYPE CORPORATION	
Warner, Frank J.	See FRANK'S ELECTRIC	
Watson, Eddie, d.b.a. Great American Cleaning Company, a.k.a. Great American Development Company Oakland, California	June 16, 1980	2
Wear, H.C., & Associates Columbus, Ohio Wear, Barrett P., Pres.	January 15, 1980	3
Webb, Jesse D., Jr.	See REEVES AND WEBB	
Webster, George	See EKISTICS CONSTRUCTION CO.	
Wendel and Company, Inc. Covington, Ohio Lauber, Joseph, Gen. Mgr.	July 15, 1981	3
Wentworth, George, E., Jr.	See HAWKER INDUSTRIES, INC.	
West, Wayne	See W. W. MASONRY	

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Westgate Homes, Inc. Mingo County, West Virginia Stephenville, Texas Turney, Lynn, Owner	March 15, 1982	2
Westside Landscaping Akron, Ohio Johnson, Jimmie L., Owner	March 15, 1982	5,21
Wheaton, Adam M., as mgr. Batchelor's Building Maintenance Service Wichita, Kansas	January 2, 1980	2
White's Landscaping Service, Inc. Los Angeles, California White, Roger, Pres.	January 2, 1980	2
Wickham, Harry	See MADISON AVENUE BUILDERS, INC.	
Williams, Nathaniel D.	See CLEAN-RITE MAINTENANCE CO.	
Willman, Bernice, d.b.a. Willman, Bernice, Mail Hauling, and as executrix for the estate of Willman, Lawrence G. Erie, Pennsylvania Willman, Lee	April 1, 1981	2
Wilson, Dennis	See J. W. CASUALS, INC.	
Wilson, Emeal, Sr.	See A-1 JANITORIAL SERVICES, INC.	
Wilson, Ollie	See A-1 JANITORIAL SERVICES, INC.	
Winters, Stephen H.	See ECOLODYNE CORPORATION	
Wittren, Ralph E. Olympia, Washington	February 15, 1980	2
Wolbert, Warren S., d.b.a. Olympic Services Chehalis, Washington	February 15, 1980	2
Woolard's Light Hauling Philadelphia, Pennsylvania Woolard, Marvin, Owner	May 1, 1981	8

<u>Contractor, Firm or Individual</u>	<u>Debarment Date</u>	<u>Code</u>
Worcester County Refrigeration, Inc. Worcester, Massachusetts Freeman, Anton O., Treas. Generelli, James, Pres.	September 1, 1981	15
World Contractors, Inc. Valdosta, Georgia Bennett, John W.	May 1, 1980	2
Wrangler, Mr., Division	See BLUE BELL, INCORPORATED	
Wrangler Shops of Puerto Rico, Inc.	See BLUE BELL, INCORPORATED	
Wright, Rusty Alpine, Arizona	November 16, 1981	2
Yaskus, Michael, d.b.a. Mike's Forest Improvement Granite Falls, Washington	July 15, 1980	2
Yeager, Dorne	See A-ALLIED AMERICAN, INC.	
Yeager, Eloise	See A-ALLIED AMERICAN, INC.	
Yeager, Kenneth	See A-ALLIED AMERICAN, INC.	
Yellow Coach Lines, Inc. Bristol, Virginia Campbell, Thomas, President Campbell, William, Vice-President	February 1, 1982	2
Zigler, Ken d.b.a. Zigler Enterprises Toledo, Oregon Eureka, California	February 1, 1982	2

Harry R. Van Cleve
Harry R. Van Cleve
Acting General Counsel

Contents

Volume 17 ■ Issue 2

1 From Our Briefcase

GAO Executive Acclaimed for Good Management Style
Governmental Accounting
Activities for GAO's Over-40 Population
Public Administration Information Sources

3 On Location

U.S. Comptrollers General Figure in National
Contract Management Association Award Program
Bowsher Addresses Budget and Program Analysis Symposium
Sing a Song of Audit Work?

5 Trends in Evaluation 022311

Carl E. Wisler

8 Manager's Corner

10 A Different Perspective: Intergovernmental Auditing and Evaluation 022312

10 Program Evaluation by States and Localities: Overview and Outlook 022313

James T. Campbell and Frank K. Gibson

15 Program Evaluation and the Reagan Administration: The California Years 022314

Richard B. Groskin

19 Can Our Food Supply Ever Be Completely Risk-Free? 022315

Carl Fenstermaker

24 Common Misconceptions About Pension Plans 022316

Benjamin I. Gottlieb

27 Teamwork Triumphs Over Murphy's Law

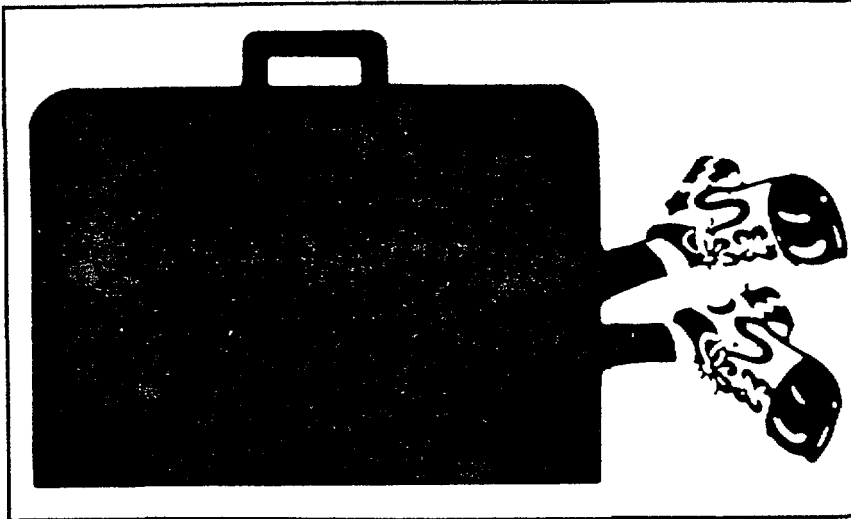
Robert L. Stotts

33 The Case for Programwide Statistical Reviews of Fraud and Abuse 022317

Burma H. Klein

-
- ✓ **37 New Directions in the Policymaking Process in a Decade of Transition** 022318
Kenneth W. Hunter
- ✓ **40 The Standardization of DOD Military Payroll Systems: What Went Wrong?** 022319
Richard P. Dettmar
- 46 The Revised Government Audit Standards**
Mortimer H. Dittenhofer
- ✓ **53 Governmental Audit Standards: Study Design Teams Can Help Meet Auditor Qualification Standards** 022320
William P. Johnston, Jr.
- 58 Training Civil Rights Counselors** 022321
Daphne E. Atkinson
- 61 A Week's Worth**
Patricia K. Moran
- 64 Legislative Developments** 022322
Judith Hatter
- 66 Reflections**
Diane E. Grant
- 67 GAO Staff Changes**
- 70 New Staff Members**
- 72 Professional Activities**

From Our Briefcase



GAO Executive Acclaimed for Good Management Style



"It's hard for most people who know [him] to describe his negative qualities. Though they say he must have some, they really can't think of any." This laudatory assessment of the General Government Division's director Bill Anderson appeared in the December 1981 issue of *Government Executive*. The article spotlights Anderson as an innovative manager whose equal dedication to subject matter and staff makes him exceptional.

Citing praise from colleagues, the article describes Anderson's people-oriented management style. It also reviews his career at GAO and his

many contributions to effective government. The article concludes that "Anderson's style is just downright approachable, whether it be with people or the thoughts people have. He shares all his knowledge and asks his staff to do the same. The game is learning how to trade and compare this knowledge."

The *Government Executive* is available in GAO's technical library.

Governmental Accounting

The final report of the Governmental Accounting Standards Board Organization Committee, as unanimously adopted and submitted to the Financial Accounting Foundation in October 1981, was released to the public in mid-December. Highlights of results include

- a new five-member Governmental Accounting Standards Board (GASB), to function similarly to but separately from the Financial Accounting Standards Board, with both boards under Financial Accounting Foundation oversight;
- additional Foundation trustees, representing governmental groups;
- a new 15-member governmental consulting and review group, interacting with GASB in much the same manner as the present Advisory Council does with the Financial Accounting Standards Board;
- GASB to set financial accounting standards for all State and local

governmental units except those that are similar to corresponding privately owned entities (e.g., hospitals and utilities); GASB and the Financial Accounting Standards Board would jointly issue standards for government entities of the latter type.

The committee's conclusions focus on structural issues, leaving to the Foundation the operating details. Shortly after receiving the report, the Foundation moved to create an advisory implementing committee, of which Comptroller General Bowsher is a member.

Activities for GAO's Over-40 Population

Equal Employment Opportunity and Merit Promotion, two programs covered by GAO orders, provide the basis for GAO's policy regarding employment of persons age 40 and above. From the prohibition of age discrimination in employment and in selection for job vacancies, other policies and practices evolve. For instance, older employees are included in opportunities for training, both in-house and outside the agency, to enhance their effectiveness and opportunities for advancement.

As of October 15, 1981, 1,687 persons age 40 and older (33.2 percent of our work force) were on GAO's rolls. Although employees in this age group participate widely in all our programs, most notably we have three employees age 40 and older in the Upward Mobility Program. (This program usually draws participants from a younger population.)

GAO's Labor Management and Employee Relations (LMER) Branch arranges the Employee Health Maintenance Examination, a comprehensive and professional medical examination available on a 2-year cycle for all employees age 40 and older. LMER also offers individual preretirement counseling to employees nearing retirement age. The Office of Organization and Human Development provides semiannual preretirement seminars for these employees. Our Civil Rights Office can offer information and advice on

complaints of alleged age discrimination.

Since November 1980, GAO has published 31 reports dealing with Federal issues affecting the elderly. As of December 1981, 39 audit surveys and reviews relating to the elderly were in process. For a list of published reports and audits underway, contact Dan Brier of the Human Resources Division at 755-5450.

Public Administration Information Sources

The practice of bureaucratic skills at all levels of government is one in which Americans have

achieved a high degree of competence. Encompassing a large variety of current concerns, the literature of public administration originates from political science, history, psychology, business, management, sociology, social work, and economics. *Public Administration in American Society: A Guide to Information Sources* is an annotated bibliography of some 1,700 publications that will help the college-level student, teacher, and bureaucrat.

Including works from many disciplines, *Public Administration in American Society* is arranged in seven major chapters covering these areas of interest: Federalism

and administrative structure, politics and the administrative process, the discipline and practice of public administration, organizational actions and their effects, public personnel administration, and governmental discrimination and equal employment.

Within each chapter, entries are further subdivided into appropriate topical categories. Locating specific items in the bibliography is helped by three indexes: author, title, and subject. (This review was adapted from the *Public Administration Times*, Vol. 4, No. 1.)



On Location

U.S. Comptrollers General Figure in National Contract Management Association Award Program

Former Comptroller General Elmer B. Staats won the fourth Herbert Roback Memorial Award in November 1981. This honor, bestowed annually by the Washington Chapter of the National Contract Management Association, recognizes a distinguished American who has made a significant contribution to the betterment of public contract management.

The award program's speaker, Comptroller General Charles A. Bowsher, addressed the audience on "Reforms in Procurement: The GAO Perspective." The Comptroller General applauded the Office of Federal Procurement Policy's efforts in developing a proposed comprehensive plan to resolve serious and persistent Federal procurement problems. The plan's key reforms include

- modifying, eliminating, and simplifying procurement laws and regulations,
- improving organization and management systems to enhance accountability and control over the procurement process,
- fostering increased competition and encouraging innovations in satisfying the Government's needs for goods and services, and
- developing a high quality work force.

Comptroller General Bowsher also discussed GAO's views on initiatives to reform the defense acquisition process. He reiterated GAO's support for multiyear contracting and expressed opposition to the Defense Department's recommendation to amend or repeal the cost accounting standard on "depreciation of tangible (capital) assets" without considering other related cost accounting standards. Mr. Bowsher concluded with his assurance that improvements to the Federal procurement system would

be one of GAO's highest priorities during his term of office.

Bowsher Addresses Budget and Program Analysis Symposium

Last November, budget and analysis professionals met at a symposium on "Making Government Management Work Better," held at George Washington University. Convened by the American Association for Budget and Program Analysis (AABPA), the symposium was addressed by Comptroller General Charles Bowsher, Tom Kramer, a senior congressional staff member representing Senator William Roth, and *Washington Post* journalist Mike Causey.

Comptroller General Bowsher's keynote speech discussed the roles and relationships of the budgeting, accounting, program analysis, and auditing disciplines for the 1980's and beyond. Mr. Bowsher noted that the Federal Government can no longer tolerate separate and uncoordinated planning, budgeting, program management, accounting, auditing, and evaluation systems and stated that he would give high priority to GAO work aimed at breaking down the excessive compartmentalization of analysis and control functions in Federal agencies. He also called for establishing a commission or study group on budget concepts and procedures and suggested that the Congress consider shifting the Federal Government to a biennial budget cycle.

Following the Comptroller General's talk, a panel discussed the theme of Mr. Bowsher's address: linkages among disciplines needed for effective Government management and policymaking. The panel was chaired by Kenneth W. Hunter, senior associate director in the Program Analysis Division, and included Raymond Schappach, Deputy Director of the Congressional Budget Office; John Lordan, Chief of the Financial Management Branch of the Office of Management

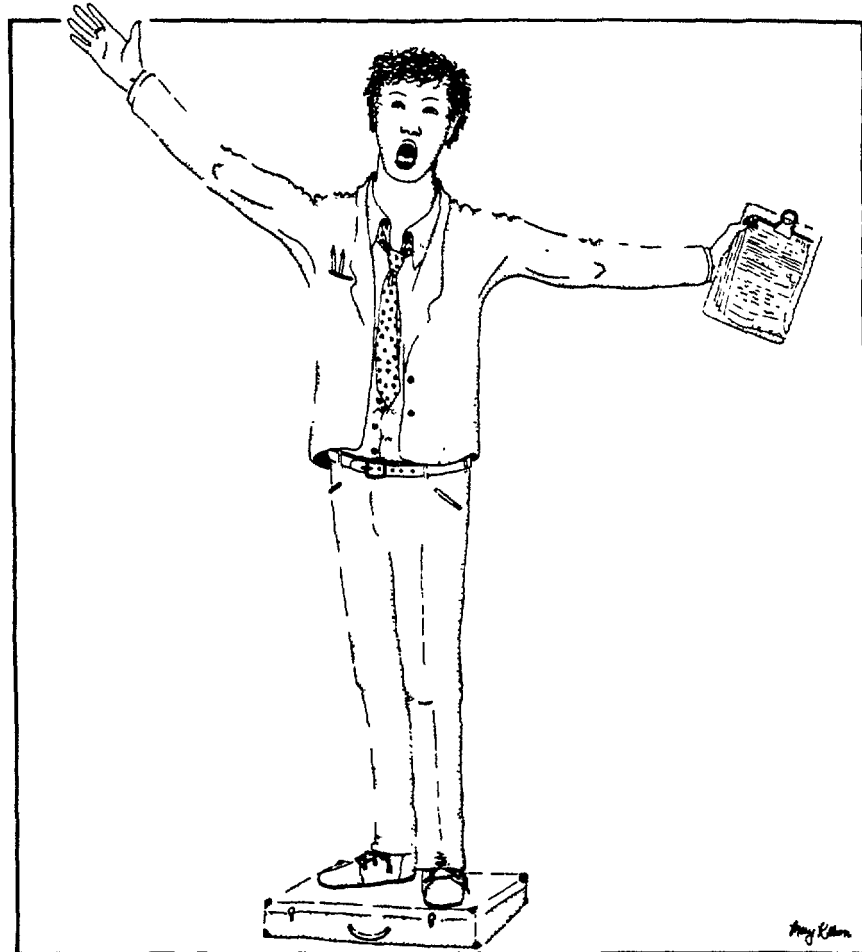
and Budget; Ray Long, Executive Director of the National Association of State Budget Officers; and Eileen Siedman, Assistant Inspector General at the Department of Commerce.

Senator Roth, Chairman of the Senate Committee on Governmental Affairs, was scheduled to deliver the luncheon address, but due to the press of legislative business on the continuing resolution to fund the Federal Government, he was unable to attend. However, his speech was read by Tom Kramer, Director of Policy Planning for the committee. Roth's speech focused on three areas of concern to his committee: (1) establishing a blue ribbon, Hoover-type commission on more effective Government, (2) reforming the processes by which regulations are developed and evaluated, and (3) reforming the congressional budget process.

Mike Causey, who writes the "Federal Diary" column in *The Washington Post*, spoke on the latest developments and rumors of interest to Federal employees, including Federal health insurance, the pay cap on senior executives, and civil service reform.

Five workshops addressed several Government reform measures in detail. GAO staff participated as panel members in three workshops: Harry Havens, in "Micromanagement in the Federal Government," James Kirkman, in "Further Budget Reforms," and Robert Kershaw, in "A Commission for More Effective Government." Workshops were also held on "Regulatory Reform and Analysis" and "Internal Review and Followup."

The AABPA, a professional society of about 900 members, including 20 from GAO, is devoted to improving the quality and usefulness of information and analysis used in public management and policymaking. PAD's senior associate director, Kenneth Hunter, is AABPA's Vice President for Symposia. For more information on AABPA, contact Butch Black or Pat Mullen at 275-3161



Sing a Song of Audit Work?

Appearing in the December 1981 issue of *The Internal Auditor*, this verse seems appropriate to the audit scope of the GAO evaluator as well. Author Lawrence Sawyer composed this under the inspiration of Gilbert and Sullivan.

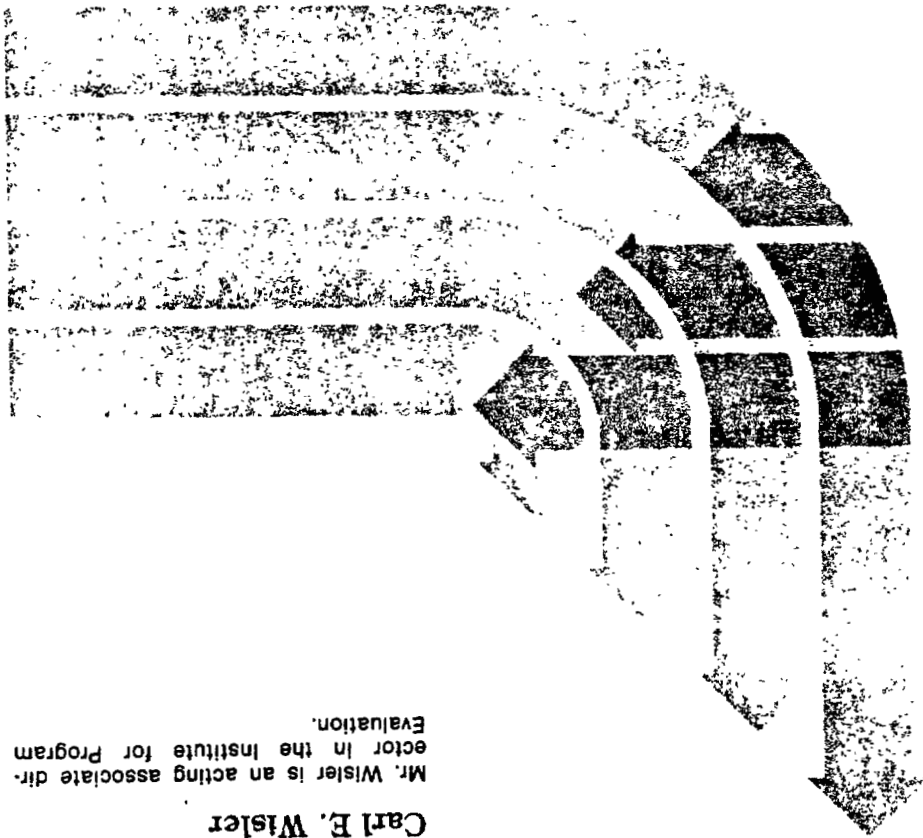
*We test without apology
Both safety and ecology,
And inventories, budgets, and
production.
Checking scrap and sanitation,
Overtime and transportation,
Not forgetting cost accounting and
construction.
We test sales and check insurance;
EDP tries our endurance,
As we audit payrolls, cash, and
simulation.
Study management by objective,
Test controls that are defective,
And evaluate employee
compensation.
We do sampling and regression,*

*And there is a strong impression
We're responsible for catching all
the crooks.
We are really in our element
With research and development,
But, thankfully, we do not keep
the books.
We check aircraft, trucks, and motor
cars,
And rockets that fly to the stars,
And leases, loans, and even
personnel.
We examine engineering,
Even salvage is endearing,
And we check on records
management as well.
There is nothing we can't verify,
There's nothing that escapes our
eye,
Alert to all misconduct and to fraud.
We will go where others fear to
tread,
And, as it has been often said,
We're the eyes and ears of
management and the board.*

Trends in Evaluation —

Carl E. Wisler

Mr. Wisler is an acting associate director in the Institute for Program Evaluation.



No evaluation is perfect. A certain and fully generalizable conclusion is a worthy goal, but it cannot be reached. The goal is impossible to achieve because of very practical limitations in our ability to design evaluations, to acquire information, and to analyze information. Although no empirical inquiry like an evaluation or audit is perfect, some are better than others. A concept used to express this gradation in quality is *validity*. Validity is important for two reasons. First, in planning an evaluation, we usually want the highest quality evaluation we can get subject to cost, time, and administrative constraints. Second, in reviewing an evaluation (either the one we have responsibility for or that of another evaluator), we need a way to judge its quality. Validity provides a systematic frame of reference for planning or critiquing an evaluation. Planning an evaluation means making a number of decisions which

either knowingly or unknowingly have implications for validity, but responsible planning or critiquing requires that these implications be known. Just as the task of planning or critiquing an evaluation is complicated, so is the concept of validity. Evaluators speak of four kinds of validity: construct validity, conclusion validity, internal validity, and external validity. An illustration of each is contained in an evaluation of the Follow Through Program, which was conducted several years ago.

The Follow Through Program was intended to provide compensatory education and supplementary services to poor children in kindergarten through third grade, and it used a variety of educational approaches (called models) in different schools. In the late 1960's, the Federal Government initiated a major evaluation to see which

022311

models were more effective than others.

Although it was a complex and expensive evaluation, the main ideas were fairly simple. A number of sample students from sample schools were tested to measure their verbal and math skills, self-esteem, abstract reasoning, and other skills. The scores were statistically analyzed to determine which educational models were benefiting the students.

Construct Validity

The evaluation was expected to test the theory that some new learning models would raise the educational attainment of poor children. The theory involved three constructs: learning models, educational attainment, and poor children. These constructs are broad and ill-defined. Measurement requires that the constructs be defined, that one or more measuring instruments be developed for each construct, and that the instruments be used to acquire data. Construct validity pertains to how well the information produced by the measurement process corresponds to the constructs we want to know about.

Consider, for example, the educational attainment construct. In the Follow Through evaluation, educational attainment was measured by the Metropolitan Achievement Test, so one aspect of construct validity was the extent to which the MAT represented the theoretical educational attainment construct. From the time the Follow Through evaluation was planned to the time critics appraised the final results, construct validity was an issue. Some reviewers contended that the evaluation was not valid because the skills measured by the MAT were too narrow to embody the educational attainment expected by some of the models. These reviewers held that failure to show gains on MAT scores should not be a basis for presuming ineffectiveness because the models may have positively affected some *unmeasured* indicator of educational attainment. Op-

ponents granted that the MAT did not encompass all possible interpretations of educational attainment, but they maintained that it did measure skills important to young children and that failure to show MAT gains should be regarded as a negative finding about a model. The debate continues on other educational programs and evaluations.

The concept of construct validity also applies to the other two constructs: learning models and poor children. Learning models must be precisely defined so that the approaches can be distinguished from one another and the extent of implementation can be measured. Likewise, the construct of poor children must be operationally defined so that natural variations in the characteristics of children participating in different learning models can be known.

Conclusion Validity

Conclusion validity most often applies to evaluations intended to estimate the effects of a program or activity. There are two possible errors in drawing conclusions about effects: concluding that effects exist when they do not and concluding that effects do not exist when they really do. In the Follow Through evaluation, the MAT was used to compare the verbal and math achievement of children in new learning approaches with children in traditional classrooms. Because of real-world, practical limitations, it cannot be stated with certainty that children in any of the Follow Through models learned more or less than children in traditional classrooms. The conclusions can be stated only in terms of probability. However, if an evaluation has been designed for high conclusion validity, one can be relatively certain whether effects exist. Many evaluators believe that evaluation designs often have insufficient conclusion validity, especially in the designs' ability to detect effects when they really exist. One way of trying to ensure sufficient conclu-

sion validity is to estimate in advance the size of a sample that would be necessary to detect an effect of a given size.

Internal Validity

Conclusion validity pertains to whether there really was an effect; internal validity is concerned with the cause of the effect. When looking for effects, evaluation is useful only if it can connect cause to effect. In the case of Follow Through, if we conclude that children in one of the new learning models perform better in math than do children in traditional, comparison schools, the next logical question is: Can we attribute superior math scores to participation in the Follow Through model? Perhaps there was a tendency for the children in the Follow Through school to be superior even before enrollment in the special program. Or perhaps the air conditioner broke down the day of testing in the control school and students had to take the test under very uncomfortable conditions. The possible alternative explanations for the effects are often numerous, and the evaluator must devise ways to rule out competing causes. To the extent the evaluator is successful, the evaluation is said to have high internal validity.

External Validity

Policymakers frequently want to apply the results of an evaluation beyond the particular people, setting, and time which supplied the information. If some of the Follow Through models are effective, the Congress might consider increasing the program's budget in future years and expanding the program to new schools and students. Should we expect the effects discovered in the evaluation to be repeated with other children in other places? This is the question with which external validity (sometimes called generalizability) deals. The answer depends on how the children and schools in the evaluation were chosen and what

events occurred between the evaluation and the new application of the program. If the new children and schools are quite different and the school climate has changed, the program effects may also be quite different. Thus, external validity centers around the representativeness of the evaluation situation. The conclusions can be extended legitimately to other situations which are similar in important respects. External validity applies not just to program effects but to any information acquired in an evaluation.

Summary

The validity of an evaluation is a matter of degree. Depending on the type of evaluation, validity can have as many as four dimensions. In the planning stages, an evaluator must make many decisions, each of which will cause prospective validity to increase or decrease along one or more of the dimensions. Typically, these decisions involve trade-offs with other factors, such as cost, time, and administrative ease.

Although validity is used to express gradation in quality, it is not quantified. Achieving valid evaluations is somewhat of an art as well as a science. When a design decision is made which affects conclu-

sion validity and internal validity, most evaluators would probably agree on whether the decision will increase or decrease validity. With construct and external validity, a consensus may be less certain. The debate on the Follow Through Program illustrates differing opinions on how well an evaluation measure represents a construct. However, just exposing these differences can be an important aid to a policymaker who wants to use the evaluation results.

External validity can sometimes be disputed because it is based upon the notion of representativeness—a concept that does not have a precise statistical definition. Also, a sample can be regarded as representative of one population but not of another. Again, however, being clear about the why and how of sample selection helps determine the quality of the evaluation results for the particular generalization a policymaker wants to make. A final point is that a design decision which increases validity along one dimension may decrease validity along another dimension. These and other considerations require careful deliberation when planning an evaluation and a catholic viewpoint when critiquing one.

For More Information

The concept of evaluation validity grew out of similar but more limited ideas in psychometrics. Much more detailed discussions of the concepts, problems, and ways for evaluators to cope can be found in

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

Judd, C. M., and Kenny, D. A. *Estimating the Effects of Social Interventions*. Cambridge, Mass.: Cambridge University Press, 1981.

Lindvall, C. M., and Nitko, A. J. "Basic Considerations in Assessing the Validity of Evaluation Designs." *Educational Evaluation and Policy Analysis*, 3, No. 4 (1981), pp. 49-60.

Validity Issues in Evaluative Research. I. E. Bernstein, ed. Beverly Hills, Calif.: Sage Publications, 1976.

C
e
s
n
l
e
i
a
m
g
c
c
T
H
c
t
S
c
a
a
n
c
A
C
D
D
F
G
N
1
GA

Manager's Corner

As part of GAO's Management Development Program, the "Manager's Corner" feature provides a source of information on current management theory and practice. Its purpose is to expand the knowledge and skills of GAO managers by increasing their awareness of management problems and achievements.

"Manager's Corner" presents a general bibliography as well as article abstracts on a particular topic chosen for each issue of the *Review*. The Office of Organization and Human Development provides copies of the articles to members of the Senior Executive Service and to SES candidates. You may request copies of articles from OOH staff at 472-2315. Copies of articles are also available (for use in the library) at the front desk of the GAO Technical Library, OISS. Your advice and comments are appreciated.

General Bibliography

- Arnold, Mark R. "Unleashing Middle Managers." *Management Review*, 70, No. 5 (May 1981), 58-61.
- Calish, Irving G. "How to Overcome Organizational Resistance to Change." *Management Review*, 70, No. 10 (October 1981), 2-28, 50.
- Davidson, Jeff. "Don't Manage Outside the Office." *Supervisory Management*, 26, No. 10 (October 1981), 26-29.
- Davis, Tim R., and Fred Luthans. "Beyond Modeling: Managing Social Learning Processes in Human Resource Training and Development." *Human Resource Management*, 20, No. 2 (Summer 1981), 19-27.
- Fox, J. Ronald. "Breaking the Regulatory Deadlock." *Harvard Business Review*, 59, No. 5 (September-October 1981), 97-105.
- Godet, Michel. "Creative Crisis: New Patterns of Growth and Employment." *Long Range Planning*, 14, No. 5 (October 1981), 12-19.
- Godwin, Phil, and John Needham. "Reforming Reform—Challenging the Assumptions for Improving Public Employees' Performance." *Public Personnel Management*, 10, No. 2 (Summer 1981), 233-243.
- Grimaldi, Joseph, and Bette P. Schnapper. "Managing Employee Stress: Reducing the Costs, Increasing the Benefits." *Management Review*, 70, No. 8 (August 1981), 23-28, 37.
- Levinson, Priscilla L. "Face-Off or Face to Face? The Performance Appraisal Discussion." *Management*, 2, No. 3 (Summer 1981), 12-13.
- Klinger, Donald, and John Nalbandian. "The Politics of Public Personnel Administration: Towards Theoretical Understanding." *Public Administration Review*, 41, No. 5 (September/October 1981), 541-549.
- Ouchi, William. "Going from A to Z: Thirteen Steps to a Z Theory Organization." *Management Review*, 70, No. 6 (May 1981), 9-16.
- Pickhardt, Carl E. "Problem Posed by a Changing Organizational Membership." *Organizational Dynamics*, 10, No. 1 (Summer 1981), 69-80.
- Post, James E., and Lee E. Preston. "Private Management and Public Policy." *California Management Review*, 23, No. 3 (Spring 1981), 56-62.
- Schein, Edgar H. "SMR Forum: Improving Face-to-Face Relationships." *Sloan Management Review*, 22, No. 2 (Winter 1981), 43-52.
- Veiga, John F. "Plateaued Versus Non-Plateaued Managers: Career Patterns, Attitudes, and Path Potential." *Academy of Management Journal*, 24, No. 3 (September 1981), 566-578.
- two of the basic functions of a manager; they demand that managers look to the future, are aware of resources and of organizational environment, and understand systematic processes. In the following articles, organization and planning are discussed in terms of information systems, human resource management, and finance.
- Members of the Senior Executive Service may receive copies of abstracted articles by contacting Kathy Karlson at the Management Development Center, 472-2315.
- Burack, Elmer H., and Edwin L. Miller. "A Model for Personnel Practices and People." *Personnel Administrator*, 24, No. 1 (January 1979), 50-56.
- Suggests that human resource management has a general management perspective, is connected to institutional planning, and supports personnel. Integrating comprehensive human resource planning with overall organization plans makes programs responsive to economic and policy needs of the agency.
- Garson, G. David. "The Institute Model for Public-Sector Management Development." *Public Personnel Management*, 8, No. 4 (July/August 1979), 242-256.
- Describes North Carolina's Government Executives Institute (GEI) based on a productivity-oriented model. Guiding educational principles are based on 1) education rather than training, 2) mutual learning, 3) generalistic content, and 4) applied organizational planning. Participants in the GEI indicated positive effects on confidence levels but did not increase dissatisfaction with superiors, unlike results of similar studies. Racial and sexual bias were absent in the GEI model, but lack of a stable reward system was found to be a major problem.
- Gilmour, Clark, and Gar Sheehan. "The Effect of Crisis on Organizational Planning." *Journal of General Management*, 4, No. 2 (Winter 1976/1977), 50-58.

Organization and Planning

Organization and planning are

Presents a tentative model for the evolution of formal policy planning in the organization. Planning is dependent on changes in the firm and its environment, and major changes, especially adverse ones, cause quantum leaps in the development of the formal planning system.

Gray, George R., and Eugene H. Hunt. "Human Resource Planning for Effective Management." *Management World*, 8, No. 11 (November 1979), 25-26.

Suggests that human resource planning has not always been well received because firms have used it for short-term replacement needs or used fragmented systems when planning. Suggests that human resources planning is a logical, systematic method of analyzing both organizational and job-unit needs. Furthermore, research supports the notion that systematic planning saves time.

Jain, S. L. G. "Organization Planning—Concepts and Implications." *AACE Transactions*, F.I.I.—F.I.4. 1981.

Organizational planning is the process of putting an organization into a systematic and coordinated way of working which has serious implications. Suggests that planning requires considerable preplanning including identification of organizational strengths and weaknesses, that planning depends on constant restructuring and checking, and that it must be supported by the organization's personnel.

Lindsay, William M., and Leslie W. Rue. "Impact of the Organization Environment on the Long-Range Planning Process; A Contingency View." *Academy of Management Journal*, 23, No. 3 (September 1980), 385-404.

Study of the effect of organizational environment on the long-range planning process. Found that firms tended to adopt more complete formal long-range planning processes as the complexity and in-

stability of the business environment increased. Findings were moderated by including the size of the company as an intervening variable.

Neilson, Richard P. "Toward a Method for Building Consensus During Strategic Planning." *Sloan Management Review*, 22, No. 4 (Summer 1981), 29-40.

Discusses consensus building as a way to reach balance between the goals of key groups of people in the organization and the organization itself. The process eases the fears of special interest groups, obtains support when power cannot be used, and makes for quick facilitation of plans. Shows how to use the process of consensus building through discussion groups, advisory boards, etc.

Reid, Thomas J. "The Content of Management Development." *Personnel Journal*, 53, No. 4 (April 1974), 280-287.

Describes the kinds of management development strategy needed depending on the circumstances of the cooperative system or organization. As an organization evolves, the role of management development will change, and its role can be identified if its functions are part of organizational planning.

Wu, Frederick H. "Incrementalism in Financial Strategic Planning." *Academy of Management Review*, 6, No. 1 (January 1981), 133-143.

Suggests that theories in strategic planning can be classified as 1) entrepreneurial, 2) adaptive, and 3) planning. Suggests that incremental analysis can overcome the inherent weaknesses of comprehensive planning since people are restricted in their abilities to assess problems and offer optimum solutions.

Ziehe, Theodore W. "What Management Should Know about IRM." *Computerworld*, 14, No. 42 (October 13, 1980), 9-14.

Defines IRM (information re-

source management) as part of the planning process and as an important support to data management. Suggests that top management must recognize information as a resource, that managers must be asked what information they need, and that managers need to learn what information is appropriate to specific tasks. Shows process for drawing up an IRM plan.

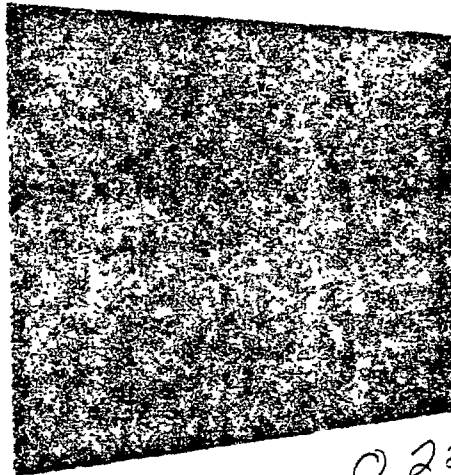
Zemke, Ron. "Integrating Strategic Planning and Manpower Planning." *Training*, 17, No. 10 (October 1980), 31-35.

Suggests that the human resource manager must learn to think in the same future-oriented way as top managers and that human resource development must become part of an agency's strategic planning.

022312

A Different Perspective: Intergovernmental Auditing and Evaluation

In promoting GAO's efforts to seek cooperation among Federal, State, and local auditors and evaluators, the *Review* presents this intergovernmental series. We encourage our State and local colleagues to contribute articles relevant to the intergovernmental audit and evaluation community.



022312



Program Evaluation by States and Localities: Overview and Outlook

Much attention has been focused on program evaluation at the Federal level, perhaps because evaluation studies at that level are a common and frequent occurrence. A recent GAO survey showed, for example, that 164 evaluation units conducted a total of 2,362 evaluations during fiscal year 1980. Far less attention has been given to evaluations at State and local levels.

This article will discuss program evaluation conducted by the State and local governments and highlight some of the problems and the potential benefits of evaluation groups at these levels.

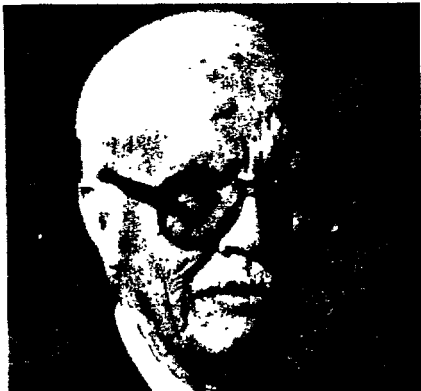
State/Local Evaluations Vary in Size and Organization

Although the exact number of evaluation units at State and local levels and the precise nature of their work are unknown, some enlightening data is available. As part of an effort to test certain communication techniques (see *GAO Review*, Fall 1981, p. 1), GAO's Atlanta staff developed an inventory of evaluation units in the Southeast (Federal Region IV).¹ Through a 50-State survey, units in the Southeast were determined to be representative of



James T. Campbell

Mr. Campbell is currently a supervisory auditor in the Atlanta regional office and has served in the GAO headquarters and European Branch offices. He has a B.S. degree in accounting, an M.S. degree in public administration, and is a CPA (Tennessee).



Frank K. Gibson

Mr. Gibson is professor emeritus of political science at the University of Georgia and currently is associate professor of public service administration at the University of Central Florida. He has also taught at the University of Virginia and at West Virginia University. He has written extensively in the fields of policy analysis and program evaluation, and he currently serves as one of GAO's consultants.

those in the other States.

The State and local governments vary widely in their evaluation activities. At least 19 units in the 8-State Southeast area conduct some form of program evaluation work. However, there appears to be no common organizational setting for the units. Rather, evaluation units can be found in both legislative and executive branches and, within those branches, at various locations. The number of units in each State varies greatly—from 1 to 5 according to GAO's survey—as do the number of employees assigned (from as few as 11 up to 120).

The number of reports issued by the units during the 18 months ended July 1981 ranged from 8 to 166. Atlanta's survey indicated, too, that the units differ markedly in the nature or sophistication of the evaluations performed.

A Growing Enterprise

Evaluation activities may differ in many ways among States and localities, but they all seem to have at least one thing in common: the number of evaluation studies is increasing. An indication of this growth is provided by the Eagleton Institute at Rutgers University, which accumulated abstracts of evaluation reports prepared by State legislative units for more than 10 years. A comparison of data on such abstracts can be seen in figure 1.²

Thrust of State/Local Program Evaluation

Like their size and organizational setting, evaluation units at State and local levels vary also in the nature or thrust of work they perform. Program evaluation by the States is often conducted pursuant to Federal grant provisions, which, in earlier years, were no doubt a driving force behind the advent of State evaluation activities. More recently, State "sunset" laws have often provided the stimulus for program evaluation.

About 35 States now have sunset laws that range from very comprehensive acts, covering all executive departments, to more restricted—and more common—statutes that encompass only regulatory or licensing agencies. Florida's sunset laws, for example, cover regulatory agencies, with most subject to 5-year review cycles, and the Governmental Operations Committee of the State legislature is designated to conduct sunset evaluations in that State. Program evaluation in Florida is also conducted by a recently created Office of Program Evaluation in the executive branch and the State Auditor General's Office.³

Other States have established strong evaluation units without the impetus of sunset laws. For example, while Mississippi does not con-

Figure 1

	Number		Percentage increase
	1970-74	1975-79	
Reports received	130	805	520
Units reporting	21	63	200
States represented	16	39	146

duc
sta
tive
Eva
(PE
son
exis
ove
tect
A
eva
imp
ider
of
serv
exp
offi
met
ing
niqu
tast
aut
way
tals
T
fics
bef
bire
plan
effe
coll
uses
smo
ing
of
out
coun
of a
So
Ev
B
am
grou
tativ
thos
ble
grou
con
con
pars

duct sunset reviews, it has a fully staffed unit called the Joint Legislative Committee on Performance Evaluation and Expenditure Review (PEER). This body, modeled somewhat from GAO, has been in existence since 1973 and has issued over 100 reports in addition to 300 technical letters.

At the local level, the thrust of evaluation is aimed at management improvements, with emphasis on identifying more efficient methods of delivering municipal or county services. Thus, local units carry on experiments with one- versus two-officer patrol cars; with various methods of collecting and disposing of garbage; with varying techniques of handling administrative tasks, such as tax collection and auto tag applications; with different ways of providing physical and mental services—and the like.

To illustrate this emphasis on efficient services, one city uses before-and-after camera shots, combined with a record of citizen complaints, to test the efficiency/effectiveness of new methods of collecting garbage. Another city uses a machine that measures the smoothness of streets in determining which method of street resurfacing is superior. Evaluation studies of this nature are typically carried out by units attached to the city/county manager's office or as part of a budget unit similarly located.

Some State/Local Evaluation Problems

Because of the vast differences among State and local evaluation groups, a succinct and representative statement of the problems those groups face is hardly possible. However, while evaluation groups at those levels generally contend with the same problems confronting their Federal counterparts, their problems are greater in

degree. A few of the more important problems are highlighted here.

Unclear Program Goals*

The results of program evaluations are more likely to be used when at least some program goals are stated to permit some degree of measurement of how well the goals were achieved. Federal laws creating public programs usually specify the goals to be achieved, but the same cannot always be said for State statutes and local ordinances.

Large executive departments in State governments, such as human services, offender rehabilitation, and transportation departments, often prepare bills for legislative consideration that include goal statements. However, most State statutes are either silent on goals or define the goals so broadly as to preclude measurement.

Moreover, the paper trail that permits evaluators to ascertain legislative intent at the Federal level simply does not exist at State/local levels. Unlike the *Congressional Record*, which contains a detailed account of all congressional de-

bates and testimony, proceedings of State legislative bodies are usually limited to digests of speeches and printed roll call votes. At the Federal level, congressional committee proceedings are accurately and completely detailed as to testimony given, questions propounded by legislators, and any evidence or exhibits entered into the record. Committee activities at State and local levels, if recorded at all, are simply digests of proceedings.

At the local level, program goals often can be stated with great precision, but they seldom are. Figure 2, taken from the records of the City of Riverside, California, is unusual in its completeness and illustrates how specific, measurable program goals can be established.

Most local ordinances and program goals are not stated precisely enough to permit measurement. For example, a local law enforcement ordinance might call for making the city's "streets safe for pedestrians" or for simply "reducing crime." The ordinance could, on the other hand, provide for a 10-percent reduction in stranger-to-stranger street crime over a 2-year period. If base figures

Figure 2

GOALS AND OBJECTIVES OF THE STREET SERVICES PROGRAM City of Riverside, CA (1976)

Program goal:	To provide for the safe and efficient movement of vehicles and pedestrians through maintenance and repair of all facilities located within street right-of-way.
Subprogram goal:	To conserve the value of city streets, alleys and sidewalks through an effective maintenance program.
Subprogram objectives:	Maximize the life of streets and alleys through an effective preventive maintenance program.
Operational objectives:	Resurface a total of 620 miles of streets on an average of once every 6 years or 103 miles annually. Refurbish all street painting annually.

on stranger-to-stranger street crimes are available, if all new crimes are reported, and if the recordkeeping system remains unchanged over the program's 2-year life, one could certainly arrive at some tentative conclusions regarding the program's success.

Too Few Evaluation Personnel

In the Atlanta survey mentioned earlier, a rather consistent refrain running through the responses was that of inadequate resources, primarily a lack of trained personnel. Many respondents suggested that the Federal Government could aid immeasurably in training State and local personnel in evaluation techniques.

This response was not unexpected since relatively few schools offer substantial programs in program evaluation. And, as always, a shortage of funds hinders recruiting and hiring evaluators. In some cases, the evaluation function is simply added to an existing function. This practice is almost certain to create a climate for frustration and a dislike of evaluation among the recipients.⁵

Lack of Methodological Know-how

Even when adequate personnel are available, State and local evaluation units face "state-of-the-art" problems in methodology. Respondents to the Atlanta survey wanted coordination among all levels of government. This coordination would help make Federal experience and expertise available to State and local governments and would permit exchanges of information and data.

It seems fair to say that, in many State and local governments, program evaluation is still in its infancy. And among even more ad-

vanced evaluation groups, difficult problems exist in selecting and applying appropriate methodologies. Techniques and methods developed in universities or in staff units may work well in theory, but they fall far short of the mark when tried in the real world. Also, experience has shown that exquisite mathematical models, which make use of great quantities of data and highly sophisticated statistical manipulation, may fail badly in the turmoil of interest group politics.

Political Pressures

Another problem is the ever-present threat of political interference in the State and local evaluation process. Although those at the Federal level often feel, indirectly, the political pressures of evaluations, the pressure is usually strongest and felt most directly by legislators and administrators at the State and local levels. Mention is often made of "sacred cows" and the incipient danger of examining them without prior legislative support. There are many sacred cows at the State and local levels.

Political pressures can also inhibit the use of desirable or even necessary evaluation methodology. This problem is often manifested when attempting to evaluate new programs or treatments in education, public health, or welfare services. Methodological requirements may clearly dictate the random assignment of subjects for treatment and control groups. However, such assignments are almost always politically prohibited.

Data Difficulties

Program evaluation in a Federal agency can be immeasurably easier than at State and local levels because a body of coherent data and information is available to Federal evaluators. State and local evalu-

ators face the problems of incomplete and often inaccurate data, gaps in information because of records gone astray, estimated rather than exact figures, and a lack of baseline statistics. Because of Federal grant provisions, this weakness is being corrected to a degree. However, evaluators often still find it impossible to use a technique, such as time-series analysis, because of inadequate data.

Some Criteria for Success

Despite these seemingly insurmountable problems, program evaluation is considered a success in at least some States. What factors account for the success are not always clear, and surely the factors will vary depending on the particular State or locality. For example, John Turcotte, director of the Mississippi PEER Committee, suggests that, when program evaluation had been most successful in that State, one or more of the following factors were present:⁶

1. The program selected for review had previously generated intense legislative interest, in contrast to isolated or academic interest.
2. The project focused on issues which had been repeatedly addressed informally by the legislature without benefit of sound technical data.
3. If a sacred cow was challenged, legislative support for the challenge was determined in advance.
4. If recommendations were offered for administrative consideration, the program managers and agency heads were management-conscious, creative, and innovative as well as generally receptive to outside recommendations.
5. The project contained recommendations which were useful to appropriations committees in

reallocating resources for greater efficiency, economy, or effectiveness.

6. Oversight staff were directly involved in the implementation process.

Similarly, Dr. Ralph Craft (see footnote 2) has listed factors leading to the success or failure of program evaluation as a tool for legislative oversight.⁷

1. *Attitudes of evaluators and evaluatees*—Oversight frequently falls behind the other activities of the legislators because it can be politically dangerous and produces few political rewards. Thus, topics must be chosen that will get and keep the attention of legislators. Likewise, administrators typically view evaluation with suspicion; they must be made to see that evaluation will offer results in improving their departments' performance. Administrators must also be convinced that the legislature will give serious attention to evaluators' recommendations.
2. *Expectations*—Legislative oversight should start slowly with only very modest expectations.
3. *Linkage*—To have effect, oversight activities must fall in with the way the legislature conducts its business. For example, legislators prefer to work through committees, so the ideal oversight *structure* would probably be a joint appropriations committee staffed with a group of professionals whose only responsibility is oversight.
4. *Process*—Legislators must be involved in the evaluation process from initiation through the final report stage.
5. *Continuity*—This simply means being there year after year to ask the same types of questions and to demonstrate the commitment of the legislature to oversight.

And, finally, Dr. Craft makes this important point: "Oversight should

not be totally divorced from politics." Oversight often takes place in a politically charged environment, and while evaluators should not be politicized, those who manage evaluation units cannot afford to ignore political realities.

In summary, evaluators seem to agree on certain essential conditions for making program evaluation work—at all levels of government. We would emphasize, too, the need for the evaluator to take a longer view. Good evaluation results come slowly. Certainly, administrators and legislators will not always greet the evaluator's recommendations without reservations.

Conclusions

Quite clearly, State and local governments are demonstrating increasing interest in and a stronger commitment to program evaluation. As the public becomes more sensitive to program evaluation and to the concomitant concept of accountability, there likely will be continuing pressure at all levels of government to produce and use evaluation reports.

What's more, the emerging emphasis on block as opposed to categorical grants is bound to focus attention on the evaluation process at State and local levels. While State and local governments may be given wider latitude in the expenditure of Federal grant funds, chances are that managers at those levels will also be held accountable—in a programmatic as well as a fiscal sense—for how they use those funds. Indeed, the indications are that the challenges for both State and local evaluators are just beginning.

¹Another part of that effort is a series of monographs on program evaluation to be published jointly by GAO and the University of Georgia. Throughout this article, reference is made to such monographs which are currently in process.

²Information provided by Dr. Ralph Craft, formerly with the Eagleton Institute, now with the National Conference of State Legislatures, Washington, D.C.

³For further details, see Litz, Ernie, *Legislative Oversight: A Review of Sunset Laws*. This document is included in the publication mentioned in footnote 1.

⁴For an extended discussion of the place and importance of goals, see Rahimi, Maurice and Linda Rahimi, *Guidelines for State and Local Officials on Objective Setting and Data Gathering Techniques for Program Evaluation*. This document is included in the publication mentioned in footnote 1.

⁵For a review of the problems of recruiting and retaining evaluation personnel, see Ronald Hy, *Personnel for Evaluation*, GAO, forthcoming. Refer to the monographs mentioned in footnote 1.

⁶See his paper "Legislative Oversight" presented at the 1981 Annual Meeting of the Southern Public Administration Society, Jackson, Mississippi, October 1981.

⁷*Ibid*

022314

Program Evaluation and the Reagan Administration: The California Years



Richard B. Groskin

Mr. Groskin joined GAO in 1975 and is presently the issue area planner/coordinator for law enforcement and administration of justice in the General Government Division. Prior to joining GAO, Mr. Groskin held positions with the State of California, the National Council on Crime and Delinquency, and the Department of Justice in Pennsylvania. He received a bachelor's degree from the Pennsylvania State University, a master's degree from Lehigh University, and is completing his doctorate in criminology and criminal justice at the University of Maryland. In addition to active participation in such professional organizations as the Evaluation Research Society, Mr. Groskin is an elected executive officer of ASPA's Section on Criminal Justice Administration and a member of the National Policy Committee of the American Society of Criminology.

This article was adapted from a speech prepared for the Annual Meeting of the Evaluation Research Society in Austin, Texas, on October 1, 1981.

It is entirely appropriate to question whether program evaluation will be an important tool for policymaking and management in the Reagan Administration. But before we can resolve this question and any others, we might consider what the Reagan gubernatorial administration expected and received from the evaluative efforts it supported or experienced in California during 1971-1974.

By reviewing my own program evaluation experience in California during this time, we may discover clues to what is in store for program evaluation in this Administration. As my evaluations in California dealt mostly with crime and delinquency prevention and criminal justice programs, the examples in this article will be taken from those areas.

Program evaluation is too broad a concept to discuss in generalities, so let us discuss issues and practices in three basic categories: evaluation policy, management of evaluation functions, and capacity-building for doing and using evaluation.

Although no formal declaration of State governmentwide policy for program evaluation efforts emanated from the Governor's Office, each executive agency was expected to employ appropriate and effective management practices to assure that administration policies were implemented. It is probable that an arrangement similar to the State policy on evaluation will exist between the Reagan presidency and the Cabinet departments.

The last 2 years of the gubernatorial administration saw an effort to expand the scope of program evaluations horizontally across State departments and agencies to ex-

amine the cross-program effects and side effects in different policy and program areas. The Presidential Administration might need evaluation activities of a similar horizontal scope to assist the "Cabinet councils" in formulating Administration policy, since each Cabinet council deals with different policy clusters and many related programs simultaneously.

In California during the early 1970's, program evaluation activities were frequently implemented on a decentralized, intergovernmental basis. State agencies typically were involved in outcome evaluation studies, impact assessment, and data base development activities, while counties, cities, and multiple governmental planning entities focused on process evaluations, management analysis, and various monitoring efforts. In some instances, full-blown formative evaluation studies were also undertaken at both State and local levels of government, but these tended to be fewer in number and were tied to specific research/action-demonstration efforts involving Federal grants. So here we may perceive a parallel to the President's policy on federalism: decentralization or "devolution" of social program decisionmaking responsibilities to State and local governments through consolidated block grants. In fact, future program evaluation responsibilities and policy expectations may tend to reflect a similar depth, or vertical movement, of program evaluation down to State and local policymakers and decisionmakers to accompany the shift in program direction and responsibility. Consequently, there might be less structure and a reduced volume of evaluative activities occurring at the Federal level.

Another indicator of the potential direction of Federal program evaluation policy may be reflected in the

div
eff
pro
clu
so
tio
of
gro
res
ec
jur
vol
co
co
pro
the
ma
the
tio
de:
ter
lev
"c
the
anc
mc
pro
fer
hel
tio
as:
twi
at
to
de
abi
mir
dat
ma
tra
it
Fe
eff
pro
tal
Wh
in
wer
bac
ing
tre
sta

division of labor in California's early efforts to evaluate clusters of like projects (10 to 15 projects per cluster) in criminal justice and more sophisticated program level evaluations. The cluster evaluations were of two types. The first involved groups of counties that pooled their resources to evaluate those projects being implemented in their jurisdictions. The second type involved the State Planning Agency, contract evaluators, and selected counties and cities involved in the projects under evaluation. Although these early cluster evaluations had many problems and mixed benefits, the die was cast for program evaluations that were purposely planned, designed, and implemented as intergovernmental efforts. In program level evaluations of "diversion" and "community-based corrections," the division of labor between State and local governments became even more evident. The State agencies provided a design framework, offered technical assistance, and helped establish common definitions for data comparability to assess effectiveness among and between similar programs.

To the degree that program evaluations are still considered important tools for policy formulation and decisionmaking, such efforts probably will be encouraged by this Administration, but with fewer mandates on State and local governments regarding methods or arbitrary reporting requirements. Where it would make sense for a combined Federal, State, and local evaluation effort, such arrangements would probably be made at the departmental level rather than in OMB or the White House.

In the California period, there were some efforts to tie cost or budgetary data to evaluation findings to determine cost effectiveness, conduct cost-benefit studies, or merely make cost com-

parisons between different public policies and programs. Given the cost-conscious nature of this Administration and the reduction of support for public programs at the State and local levels, cost effectiveness and cost-benefit evaluations will probably be stressed and encouraged.

Meeting Users' Needs

In California in 1972-1973, disenchantment with untimely, irrelevant evaluations motivated a study of evaluation information use. Subsequent changes in State evaluation policies and evaluation planning emphasized both decision-based evaluations and greater attention to identifying the evaluation needs of different user groups. In 1974, evaluation planning activities in the criminal justice policy area adopted a utilization-focused paradigm: **USERS-NEEDS-OBJECTIVES-DESIGN**. This approach was developed to plan and design evaluation studies to meet the information needs of criminal justice policymakers and decisionmakers.

Federal evaluation policy during Reagan's presidency will probably call for evaluations which are *decision-based*. Cabinet heads responsible for policy implementation will have wide latitude in deciding what to evaluate and how, but ultimately, they are accountable to the President and the Congress in achieving the stated policy objectives. Evaluation planning probably will be agency-based and specific to those programs for which each agency is administratively responsible. Consequently, management decisionmaking at the Federal level may tend to use evaluation findings that bear on those critical policy questions confronting the agency.

Synthesis

Just before California's governa-

trial administration change in 1975, several efforts were made to achieve a rational synthesis of evaluation research findings and construct a reference service not unlike UCLA's "Data Bank on Program Evaluation."

In this particular area, it is too early to tell whether Federal evaluation policy will address problems of synthesis and meta-analysis. Clearly, the "Cabinet council" framework and decentralizing much governmental decisionmaking to State and local officials could warrant arguing for Federal action in synthesizing and extending information from past evaluations to aid policymakers at all government levels.

Management

Evaluation functions during the Reagan era in California were highly decentralized. This reflected the basic philosophy that the executive department heads accountable for success in policy implementation should decide how best to organize their respective evaluation functions to meet management decisionmaking needs.

You may recall that many activities in California were carried out intergovernmentally and with a division of labor, which purposely kept the State evaluation bureaucracy rather small compared with those in other States during the same time. In the area of criminal justice, it was a basic premise that local government officials should decide which programs and projects they would adopt and support locally. Consequently, since these officials had a greater need for evaluation information which would aid such decisions, evaluation activities tended to be more numerous and more intensive at the local level than at the State level. However, where the State department head believed there was a legitimate need to pro-

vide an independent evaluation, contractors performed evaluation work under State auspices on specific priority programs, or they addressed policy questions on a very selective basis. As one illustration, the California Specialized Training Institute at San Luis Obispo, California, provided officer survival training to local police agencies across the State, from other States, and even from foreign countries. Since this program had a statewide scope, the State Planning Agency planned the evaluation and supervised its implementation, which was performed by a third party. Evaluation directors, for the most part, were given considerable latitude and sufficient resources to carry out those evaluation responsibilities delegated by the department heads. The same principles of delegated and decentralized management philosophy were evident in many of the evaluation units. If we accept the premise that a decentralized management structure can still be a viable system for organizing evaluation tasks, then the California evaluation scene was in fact a system. Also, it should be noted that the California State legislature had, for its day, a rather sophisticated audit and program review capability in the Office of the Legislative Analyst. As the legislative branch increased its oversight responsibilities, the State cabinet departments beefed up their own evaluation staffs to conduct management studies and program evaluations to improve management in their respective departments.

I would anticipate a similar parallel during the Reagan presidency. OMB will probably continue its role of admonishing the heads of executive departments to improve their management activities through appropriate use of evaluation activities and information, as stated in OMB Circular A-117. Agency heads

will have significant discretion in deciding what evaluation functions they believe are most appropriate and conducive to achieving effective policy implementation. They will then decide how best to organize their program evaluation efforts. There is probably minimal or no chance that an "evaluation czar" will direct Federal evaluation efforts in the Executive Office of the President.

Some oversight of Federal program evaluation activity by OMB and the Congress is very likely, but such oversight will probably test evaluations for legislative compliance and use in management decisionmaking rather than specifically directing how the executive departments should organize and carry out their respective evaluation responsibilities.

What remains to be seen is how the consolidated block grants will influence the types and amounts of program evaluation performed under Federal auspices and what evaluation functions will be delegated to State and local government officials. Obviously, there will be fewer requirements for evaluation in "blocked" programs placed on States and localities. However, "nonblocked" programs may retain a Federal character and warrant different levels of evaluation effort to support management decisionmaking.

On the whole, program evaluation processes and results may become more important to State and local government officials for those programs now consolidated within block grants. Hence, under the decentralization theme of the President's policy on federalism, each State and cognizant local government will decide how best to organize and manage those evaluation activities that will help them make difficult program and resource allocation decisions. Those evaluation efforts and results which

prove to be useful in State and local policy and decisionmaking will have the best chance of continuing.

One significant concern is whether States and localities have the management "muscle" and evaluative capability to do and use program evaluation in ways that will help them distinguish between various policy and program alternatives. The loss of direct Federal presence in program evaluations could result in the same "withdrawal pangs" being felt from Federal budget cuts in domestic programs. Professional evaluators will find they have to convince State and local officials that their evaluation work can and does meet official policymaking and decisionmaking needs. Evaluation will have to compete with other management demands to obtain necessary resources. This requires redefining the evaluation consumers and devoting even more attention to their information needs.

If State and local governments are now expected to decide which programs in a block grant stay and which ones expire, but the governments are not suitably prepared to plan, design, implement, and use evaluation processes and information, shouldn't the Federal Government help them develop the necessary evaluation capability? I believe the answer should be yes. But then we must question what kinds of assistance are needed, what can the Federal Government provide, and who should pay for it.

There is a wealth of experience available among Federal managers. It could be shared with State and local people through technical and management assistance, training seminars and workshops, and federally assisted evaluation capacity-building demonstrations or models. These could be carried out in different State and local jurisdictions on some competitive basis. Suc-

ces
for
ma
ma
oth
ass
por
[
for
cac
app
esp
izer

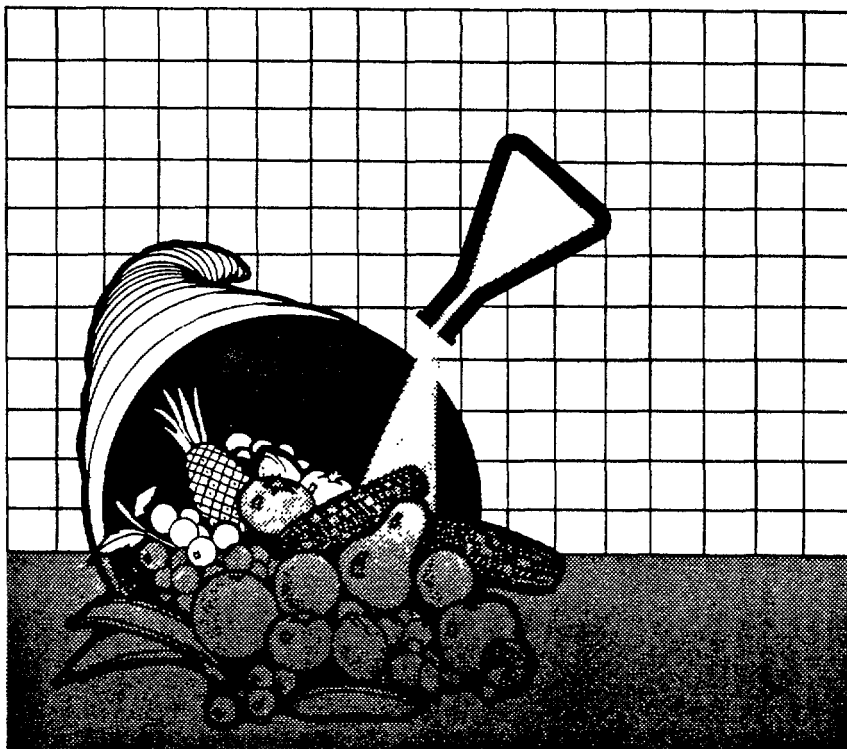
118594 / 020315



Carl Fenstermaker

Mr. Fenstermaker works in the Human Resources Division as the group director in charge of GAO's Food and Drug Administration audits. He joined GAO in 1960 after receiving a B.S./B.A. degree from Muhlenberg College (Pa.). Mr. Fenstermaker has done graduate work at George Washington University and is a CPA (Virginia). He is a member of the American Institute of Certified Public Accountants and the National Association of Accountants. In 1981, Mr. Fenstermaker received Certificates of Merit and Appreciation

Can Our Food Supply Ever Be Completely Risk-Free?¹



Scientists and policymakers today are faced with difficult issues regarding the safety of our food supply. It is generally recognized that we in the United States have perhaps one of the safest food supplies in the world. But is it safe enough? The development of new techniques has enabled scientists to detect potentially harmful substances in the food supply, even when they occur in extremely small amounts. However, techniques to determine the long-term risks from these substances have not kept pace. Federal law prohibits adding to the food supply any substance which causes cancer in man or animals, regardless of the benefits. Since increasing numbers of carcinogens are being found in food in extremely small quantities, policymakers must decide whether they can be effectively eliminated or whether the law should be changed.

In 1906, there were wide abuses in

the U.S. food supply. Meats contained boric acid, sulphurous acid, and saltpeter. Ground coffee was laced with charcoal, bark, and date stones. Cocoa was adulterated with starch, nutshells, sawdust, and ground olive stones.² In response to these problems, the Congress enacted the first food and drug law on February 21, 1906, to regulate interstate commerce in misbranded and adulterated foods, drinks, and drugs.

Since the early 1900's, innovations in the food processing industry have caused significant changes in the concerns about the safety of the food we eat. Technology has transformed the food supply from the relatively simple product of local farming into the output of a multibillion-dollar industry. Modern-day processing has helped to make foods cheaper, more readily available, convenient, and generally free from contamination.

ha
pr
ar
at
he
wl
et
th
fo
lar
us
co
ag
se
thi
ap
qu
ine
log
for
co
av
ab
dit
of

F
F

co
Ja
wh
ca
ple
be
the
qu
pu
ne
sai
mc
the
om
car
app
foc
I
so
foc
sta
sha

With these innovations, however, has come a whole new series of problems. Increasingly, the public and the Congress are concerned about the presence and potentially harmful effect of some substances which are added to foods for a variety of purposes. At the present time, there are more than 2,700 known food additives, of which FDA regulates more than 1,100. These are used for such diverse purposes as coloring, drying, and flavoring agents; nutrient supplements; preservatives; solvents; stabilizers; thickeners; sweeteners; and texturizers. These substances typically appear in foods in extremely small quantities and may be biologically inert, possess desirable pharmacologic properties, or be toxic either for sensitive individuals or when consumed in sufficient quantity.³

It has been estimated that the average American consumes yearly about 139 pounds of these food additives—including about 109 pounds of sugar and 14 pounds of salt.⁴

Federal Regulation of Food Additives

In June 1952, a congressional committee chaired by Congressman James J. Delaney issued a report which surveyed the use of chemicals in food and cited several examples of harmful chemicals that had been used. The report concluded that existing Federal law was inadequate to ensure protection of the public health and recommended new legislation to require premarket safety testing for chemicals. Testimony given by representatives of the National Cancer Institute recommended careful testing for cancer-causing properties prior to approving the use of chemicals in food.

In 1958, the Congress added the so-called "Delaney Clause" to the food and drug law. This clause states very simply that no additive shall be approved for use in food if it

has been found after testing to induce cancer in man or animals. The heart of the Delaney Clause centers on the "zero-risk" concept. Once a food additive has been determined to be a carcinogen, use of the substance must be banned. Despite the fact that this provision of the law has only been invoked twice, it has become the source of considerable controversy, an emotional issue, and a target for change. The major reasons for this center on

- the lack of regulatory options once a food additive has been determined to cause cancer;
- the belief that health, economic, or other benefits resulting from the use of a cancer-causing food additive might in some cases outweigh the risks associated with its use;
- concern about current testing methods and the extent to which they are valid and accurate predictors of the cancer-causing potential of a food additive in humans; and
- recent advances in analytical techniques which can now detect extremely minute quantities of cancer-causing substances in food, something not possible when the Delaney Clause was enacted.

Bacon or Botulism?

The use of nitrite probably best illustrates the potential effect of the "Delaney Clause." About 6.8 billion pounds of pork, 2.6 billion pounds of beef, and substantial quantities of fish containing nitrite are processed annually in the United States. Nitrite is used to inhibit the development of botulism, a deadly toxin responsible for food poisoning. For thousands of years, people have been eating meat cured with salt. Early users did not realize that nitrate, present as a natural impurity in salt, was a key ingredient in the process. Scientists in the early 1900's determined that some of the nitrate in salt was changed to nitrite in the meat and that the nitrite reacted with the meat to produce the desired effects.

Today most curing is done by adding nitrite directly to food products. Nitrite is used extensively in processed meat (e.g., bacon, sausage, canned ham, frankfurters, poultry, fish, imported cheese, and pet food).

Since the late 1960's, scientists have known that both before and after ingestion, nitrite can combine with other chemicals, called amines or amides, to form a family of chemical substances known as nitrosamines, which are among the most potent carcinogens known. Nitrosamines at any level are not permitted to be knowingly added to food. However, FDA and USDA do allow the addition of nitrite to many foods. Since amines capable of combining with nitrite are normal components of food, the combination of nitrite and food amines to form nitrosamines can occur in food before or after ingestion. It is therefore likely that many foods, including cured meats, contain detectable amounts of potentially carcinogenic nitrosamines. Because nitrite was not believed to cause cancer directly, however, FDA was not required to ban it.

In 1979 and 1980, studies conducted at MIT raised serious questions that nitrite by itself might be a carcinogen. Faced with this possibility, FDA had a serious regulatory dilemma—to ban the use of nitrite and face the devastating effect on the meat processing industry, since there is no substitute for nitrite, or to allow the use of a carcinogen in a large portion of the food supply. Critical review of the MIT study determined that it was invalid, and FDA was not forced into making this difficult decision.

Improved Tests Produce Dilemma for Policymakers

Two of the biggest problems facing the FDA are defining zero risk and determining whether zero risk is

attainable. When the Delaney Clause was passed in 1958, scientists were able to detect the presence of substances in the parts-per-million range. Today, scientists can detect substances in the parts-per-billion and even in the parts-per-trillion range.

This increased ability to find miniscule portions of harmful substances in food has created obvious problems for decisionmakers. Considerable debate is taking place over the effect such small amounts of harmful substances can have on the human system. As more and more is learned about cancer and carcinogens, the situation becomes increasingly complicated.

For example, it is now believed that not all carcinogens are of equal potency. Asbestos and aflatoxin, a mold which occurs in peanuts, are considered strong carcinogens while others, such as saccharin, are considered weak. In addition, some scientists believe that certain substances cause cancer directly while others must interact with another substance to produce a carcinogenic response (co-carcinogens), and still others are cancer promoters but do not cause the disease by themselves.

To compound the situation, scientists disagree among themselves on whether consumption of a cancer-causing substance will always trigger a carcinogenic event or whether there exists some level of ingestion or threshold below which no such event will occur. Add to this the variety of potentially harmful substances in the air we breathe and the water we drink, many of which could conceivably interact in some kind of synergistic fashion, and we could easily be influenced into fleeing to some deserted island where we could escape the pollutants produced by our modern-day society.

No Easy Answers

To determine whether food additives cause cancer and to assess

their risk to humans, scientists have developed a variety of tests. None, however, are considered to be totally reliable. Several types of studies or analyses are used only as indicators of a substance's cancer-causing capability.

Information about a substance's cancer-causing ability can be obtained by comparing its chemical structure with related chemicals. Results from these analyses are not regarded as strong indications of either safety or risk.

Short-term screening tests are based on the presumption that cancer is related to changes in cells, which can result in mutations. There are now about 100 different such tests, but none can detect every carcinogen. Many scientists have recommended using a battery of short-term tests to detect substances that cause cancer in humans. However, no generally accepted group of tests exists. The greatest advantage of short-term tests is that they can be conducted in 2 or 3 weeks and are relatively inexpensive.

Animal studies are generally considered the best method available for evaluating a substance's cancer-causing potential. Test animals, usually rodents, are exposed to several dose levels of the test substance over their lifetimes. These animals are compared to a control group which is not exposed to the substance. The ability of a substance to cause cancer is measured by the increased incidence of cancer, if any, in the exposed animals compared to the control animals.

Questions have occurred about the appropriateness of using animals to assess a substance's cancer-causing ability in humans. Critics of animal tests argue that man is not a big rat and that doses of substances to which test animals are exposed (maximum tolerated dose) are too high and not predictive of the effects of human exposure,

- some animals used for testing are so biologically different from humans that results from them have no value, and
- some animals (or organs of test animals) are extremely sensitive to cancer-causing substances.

Positive results from human epidemiological studies (for example, a comparison of cancer incidence between asbestos workers and other groups) are the most convincing evidence of a substance's carcinogenic potential in humans. By their nature, however, these studies are retrospective since intentionally exposing people to a potential carcinogen is unethical. Because it is generally believed that cancer takes a long time to develop, exposure to a cancer-causing substance will usually not show any immediate results. Epidemiological studies can rarely provide timely answers to regulatory problems. Such studies take years to perform.

Human Risk Assessment

In the concept of food safety decisions, human risk assessment is an estimate of the chance that bad health will result from using a food ingredient.⁵ Human risk assessment techniques are, to a great extent, based on the assumption that chemicals which are carcinogenic in test animals are also carcinogenic in humans. The two steps in risk assessment involve

- extrapolating the results of high doses of the test substance in animals to low doses of the test substance in animals, which requires using one of several mathematical models and
- extrapolating from low-dose animal data to corresponding human exposure.

The choice of the mathematical model is crucial to the outcome of low-dose extrapolation. Different models produce widely varying results, which may differ by many

orde
leve
trap
expe
hum
Nati
repo
cluc
Ame
one
for t
0.22
canc

M
Mc
str
ana

Shc
terr
tes

Bio

Epic
olog

Sout

orders of magnitude at low-dose levels. The variances involved in extrapolating from high-dose animal experiments to low-dose risk to humans may be illustrated by the National Academy of Sciences report on saccharin. This report concluded that, if all 220 million Americans alive today consumed one bottle of diet soft drink per day for the rest of their lives, between 0.22 and 1,144,000 cases of bladder cancer could result over the next 70

to 80 years, depending on the mathematical model used. All estimates were derived from the same set of experimental data on rats.⁵

In summary, there are no simple solutions to determine whether a substance causes cancer. Each step in testing a food additive involves uncertainty. Scientific methods and analyses do not always yield a single incontrovertible answer.

The goal of zero risk from cancer caused by food additives, while highly desirable, may not be viable. Minute quantities of carcinogens in the food supply may be impossible to avoid. If the concept of zero risk is to be revised, the Congress will be forced to address difficult policy issues, such as what is an acceptable level of risk, and carefully factor this into future decisionmaking frameworks.

Types of Tests Available to Determine Properties Related to Carcinogenicity

Method	Organism used	Time required	Basis for test	Result	Conclusion, if result is positive
Molecular structure analysis	"Paper chemistry"	Days	Chemicals with like structures interact similarly with DNA	Structure resembles (positive) or does not resemble (negative) structure of known carcinogen	Chemical may be hazardous; that determination requires further testing
	Basic laboratory tests	Weeks			
Short-term tests	Bacteria, yeast, cultured cells, intact animals	Generally few weeks (range 1 day to 8 months)	Chemical interaction with DNA can be measured in biological systems	Chemical causes (positive) or does not cause (negative) a response known to be caused by carcinogens	Chemical is recognized as a potential carcinogen
Bioassay	Intact animals (rats, mice)	2 to 5 years	Chemicals that cause tumors in animals may cause tumors in humans	Chemical causes (positive) or does not cause (negative) increased incidence of tumors	Chemical is recognized as a carcinogen in that species and as a potential human carcinogen
Epidemiologic	Humans	Months to lifetimes	Chemicals that cause cancer can be detected in studies of human population	Chemical is associated (positive) or is not associated (negative) with an increased incidence of cancer	Chemical is recognized as a human carcinogen

Source: Office of Technology Assessment, "Assessment of Technologies for Determining Cancer Risks From the Environment," June 1981, p. 114.

Is the Rat an Ideal Experimental Model for Man?¹

PROS

CONS

Has been widely studied	Lacks gall bladder
Is small in size (housing)	Has multiple breasts for feeding
Produces offspring rapidly	No emetic reflex
Has brief gestation period	Normally bears multiple offspring
Grows rapidly to maturity	Is nocturnal
Has short lifespan	Is cannibalistic
Eats any sort of food	Feeds on dung
Accepts a dry diet	Subject to spontaneous tumors
Involves low initial and maintenance cost	Requires careful handling— temperature, humidity, and noise must be carefully controlled
Is docile	Has certain nutritional requirements for vitamins, minerals, and amino acids which must be met
There is no better alternative	Is fur-bearing

¹"Man Is Not A Big Rat," Dr. Bernard L. Oser, presented to Toxicology Forum, February 16, 1981.

¹On December 11, 1981, GAO issued "Regulation of Cancer-Causing Food Additives—Time For A Change?" (HRD-82-3) Information in this article is drawn, to a large extent, from that report and documentation supporting it

²"Food Safety, Where Are We?"; Senate Committee on Agriculture, Nutrition and Forestry, July 1979, p. 11

³"Risks vs. Benefits. Future of Food Safety," 17th Annual Underwood-Prescott Memorial Symposium

⁴HRD-82-3, Dec 11, 1981, p 3

⁵Principles and Process for Making Food Safety Decisions, Report of the Social and Economic Committee of the Food Safety Council, Dec 13, 1979, p 27

⁶Saccharin. Technical Assessment of Risks and Benefits, Report No 1 National Academy of Sciences, November 1978

successful experiences and practices for organizing evaluation performance and using evaluation information could then be shared with others as part of further technical assistance and training service supported by the Federal Government.

During the Reagan years in California, shared responsibility and capacity-building were considered appropriate roles for the State, especially in light of the decentralized policy and decisionmaking

structure characteristic of that period. With the transfer of program responsibilities from Federal to State and local governments, the need for evaluation technical assistance and training is recognized. Exactly how it will be provided, and who will do it, remains to be determined.

Clearly, the Federal Government—whether it be through OMB, Cabinet agencies, or GAO—will share successful evaluation practices and in-

formation with State and local governments. But it will be up to the evaluation community to convince these State and local policymakers that evaluation is needed, useful, and can be supported out of the savings realized through improved effectiveness and elimination of ineffective publicly supported programs. Program evaluation will have to be able to pay its own way.

Common Misconceptions About Pension Plans



Benjamin I. Gottlieb

Mr. Gottlieb is a principal actuary in the Institute for Program Evaluation. He has been with GAO since 1972 in a technical assistance capacity working on projects involving pensions and insurance. Mr. Gottlieb graduated from Yale University in 1962 with a B.A. in mathematics. He is a Fellow of the Society of Actuaries, a member of the American Academy of Actuaries, and an enrolled actuary.



The General Accounting Office has had an actuarial staff since 1969. Over the years, we have worked on projects involving pension plans and insurance, including the earnings test for Social Security benefits (Human Resources Division), early retirements under the Civil Service Retirement System (Federal Personnel and Compensation Division), the pension cost associated with closing military facilities (the former Logistics and Communications Division), and financial reporting for Federal pension plans (Accounting and Financial Management Division and Federal Personnel and Compensation Division). We have also worked with many Department of Defense and Department of Energy auditors on the pension costs charged to Government contracts. Although I have been impressed with the aggressive way auditors, accountants,

and evaluators have attacked complex pension problems, their persistence in maintaining some misconceptions about pension plans has been frustrating. I hope this article will dispel some of these myths.

Misconception 1

There is a single correct pension cost for a given pension plan for a given year.

This is an important misconception because it fosters others. It implies that there is only one acceptable actuarial method and a single correct set of actuarial assumptions. I sympathize with those who wish the statement above were correct because it would make the auditing of pension cost much easier. Unfortunately, there are a variety of acceptable actuarial

assumptions, several acceptable actuarial methods, and different amortization periods to pay for certain pension liabilities. Also, for most actuarial methods and for most pension plans, cost can be expressed either as an annual dollar cost per participant or as a percentage of payroll. Needless to say, all of the above options can have a substantial effect on pension cost for a given year.

As this misconception is gradually dispelled, it is important not to let the pendulum swing too far the other way. The converse of Misconception 1 is not true. There are incorrect costs for a given pension plan for a given year. Cost Accounting Standards 412 and 413 restrict the range of possible pension costs for Government defense contracts and reflect a compromise between the desire of consulting actuaries employed by the contractors for complete flexibility and the desire of Government auditors for the absolute rigidity of a single correct pension cost.

An analogy can be made between pension costs and depreciation. There are a variety of acceptable depreciation schedules for capital assets. The method of depreciation chosen depends on many factors, such as usage, obsolescence, cost of repairs, and patterns of revenue resulting from the asset. A like number of factors affect the choice of actuarial methods and assumptions.

Misconception 2

The accrued benefit actuarial cost method is the only proper method to determine pension cost for a certain period of time.

This misconception is popular probably because the accrued benefit method is easiest to use. An individual's ability and willingness to understand one actuarial method, however, should not be the criterion by which the method itself is judged. For many pension plans, in

fact, the accrued benefit method is not recommended because the benefit formula makes it difficult to decide what benefit an individual actually accrues in a given year. The truth is that all the generally accepted actuarial methods are good for some situations, and some actuarial methods can be used in any situation.

Under the accrued benefit method, enough money is set aside each year to pay for the benefit that each employee has earned in that year. Other actuarial cost methods involve the more complicated process of projecting each participant's benefit at retirement and then funding toward the cost of the projected benefits of all participants. These methods require equating a stream of benefit (and expense) payments with a stream of employer and employee contributions with allowance for the pension fund itself.

Misconception 3

Changes in actuarial assumptions are a sign that the actuary did not make a good choice of actuarial assumptions originally.

Circumstances change, and actuarial assumptions must be reviewed constantly. This is particularly true of any economic assumptions, those assumptions relating to interest rates, rates of salary increase, and cost-of-living adjustments. An evaluator should be more concerned about costs for a pension plan whose assumptions have not changed for several years than for one whose assumptions change frequently.

Misconception 4

The problem of projecting future experience can always be solved by collecting more and more information about what has happened in the past.

Actuarial projections are based on assumptions about future

events. The assumptions pertain to rates of mortality, disability, termination, retirement, recovery from disability, salary increase, investment earnings, and others. The term *assumption* is a misnomer because actuaries base factors on exhaustive statistics compiled from individual plans and pooled data from many plans. Statistics are the lifeblood of the actuarial profession, and I do not wish to underrate their value. However, neither the lack of sufficient data nor the unavailability of accurate data is a common reason for inaccurate actuarial projections. In doing actuarial work for GAO over the past 9 years, I have seen many projections that did not resemble the ensuing experience. All of the following causes were much more common reasons than insufficient data:

- Too many data on too many different aspects of past experience or, more properly, the inability of the estimator to analyze correctly which aspect of past experience was going to be the most significant determinant of what would happen in the future.
- Outside influences on the projection by a party or parties wanting the estimate to show a desired result.
- Unforeseen events, such as the discovery of penicillin, the oil embargo, strikes, or failures to renew Government contracts.
- Unpredicted and unpredictable variations in experience over time due to statistical fluctuation or other unknown causes. (Actuaries have been known to say, "My projection was good, but the experience was bad.")

Misconception 5

The interest rate assumption used in an actuarial valuation to discount future benefit payments and other cash flows should closely resemble the investment earnings rate of the fund in the last 2 or 3 years.

The interest rate is generally the most important single assumption

in
sic
int
per
as
[
rar
tua
pay
of
int
val
for
mir
pre
ove
jus
T
wou
reco
ma
cos
true
tere
and
be
tuar
F
per
funs
grog
unfa
freq
whit
thei

Mi

Con
tain
cula

Tt
cour
ousl
com
pute
M
to a
at
pute
oper
a ce
amp
annu
tere

in the actuarial valuation of a pension plan. A 1-percent change in the interest assumption can change the pension cost for the current year by as much as 25 percent.

Because a pension plan is a long-range operation, however, an actuarial valuation considers benefit payments to be made over a period of 60 years or more. Therefore, the interest rate used in an actuarial valuation must discount liabilities for a long period of time. In determining the interest rate, actuaries prefer to study economic trends over a long-range period rather than just immediate past history.

The swings in pension cost that would result from monitoring very recent investment experience would make the task of budgeting pension costs chaotic. This is particularly true with the recent volatility of interest rates. Eliminating the peaks and valleys in pension costs must be recognized as a valid goal of actuarial funding.

Frequently, the investment experience of a particular pension fund is less important than the aggregate investment experience of a group of pension funds. Funds with unfavorable investment experience frequently change asset managers, which invalidates, to a great extent, their own individual experience.

Misconception 6

Computers make it possible to obtain the results of any actuarial calculation almost instantaneously.

The misleading words here, of course, are "any" and "instantaneously." Although it is a constant companion of the actuary, the computer does have its limitations.

Many of the approaches we take to our work would be impossible, or at least impractical, without computers. They are very valuable in operations which involve repeating a certain type of calculation (for example, calculating the value of an annuity with several different interest rates) and in solving problems

which lend themselves to solutions by existing programs.

Computers are less helpful, however, for solving new problems. After all, a computer can do only those things for which a human being programs it. A computer is not much use, for example, when a job entails scanning reams of data, none of which is exactly suitable to the problem at hand.

Misconception 7

Every pension plan participant has an account in the pension fund, and a certain portion of the assets are allocated just for the individual participant.

Almost all pension plans, particularly the large ones, have pension funds whose assets are unallocated. This is true whether or not the plan is contributory. When employees leave their jobs and receive a termination benefit, they are not withdrawing something from their own account. They are instead receiving a benefit under pension plan provisions which specify what withdrawals employees are entitled to.

★ ★ ★

Some of you reading the seven deadly misconceptions about pension plans will recognize yourselves. Be assured that you are not unique victims of these misconceptions. You are probably in the minority of the general population who have given any thought at all to this subject. I am afraid the popularity of these misconceptions tells us something about the ability and willingness of actuaries to communicate what they have learned in the specialized field of pension funding.

Happily, the situation is changing. More articles on the subject of pensions are being written by actuaries and others with an understanding of pensions instead of self-styled pension experts whose

inaccurate and misleading statements have caused the problems. Actuaries are communicating more about what they do and why they do it.

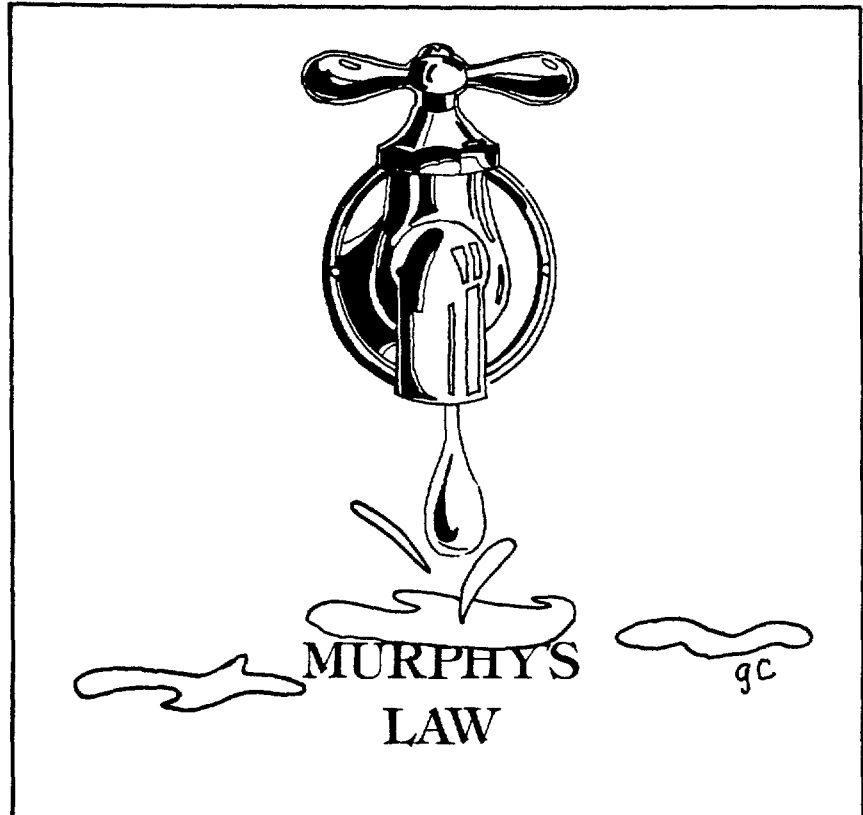
The GAO Actuarial Staff stands ready to discuss pension problems with auditors/evaluators/accountants. We respect the determination, energy, and aggressiveness with which you approach your work, and we are willing to confront the stubborn streak that so frequently accompanies these attributes.



Robert L. Stotts

Mr. Stotts is a senior GAO evaluator in the Los Angeles regional office. He joined GAO in 1962 after graduating from Arizona State University with a B.S. degree in accounting. He is a certified internal auditor and a member of the Association of Government Accountants. Mr. Stotts served as president of the Los Angeles chapter.

Teamwork Triumphs Over Murphy's Law



Murphy's law warns us that if anything can go wrong, it will. Recently, a GAO-led interagency team effort demonstrated that teamwork, while it will not stop Murphy's law from working, can overcome its effects.

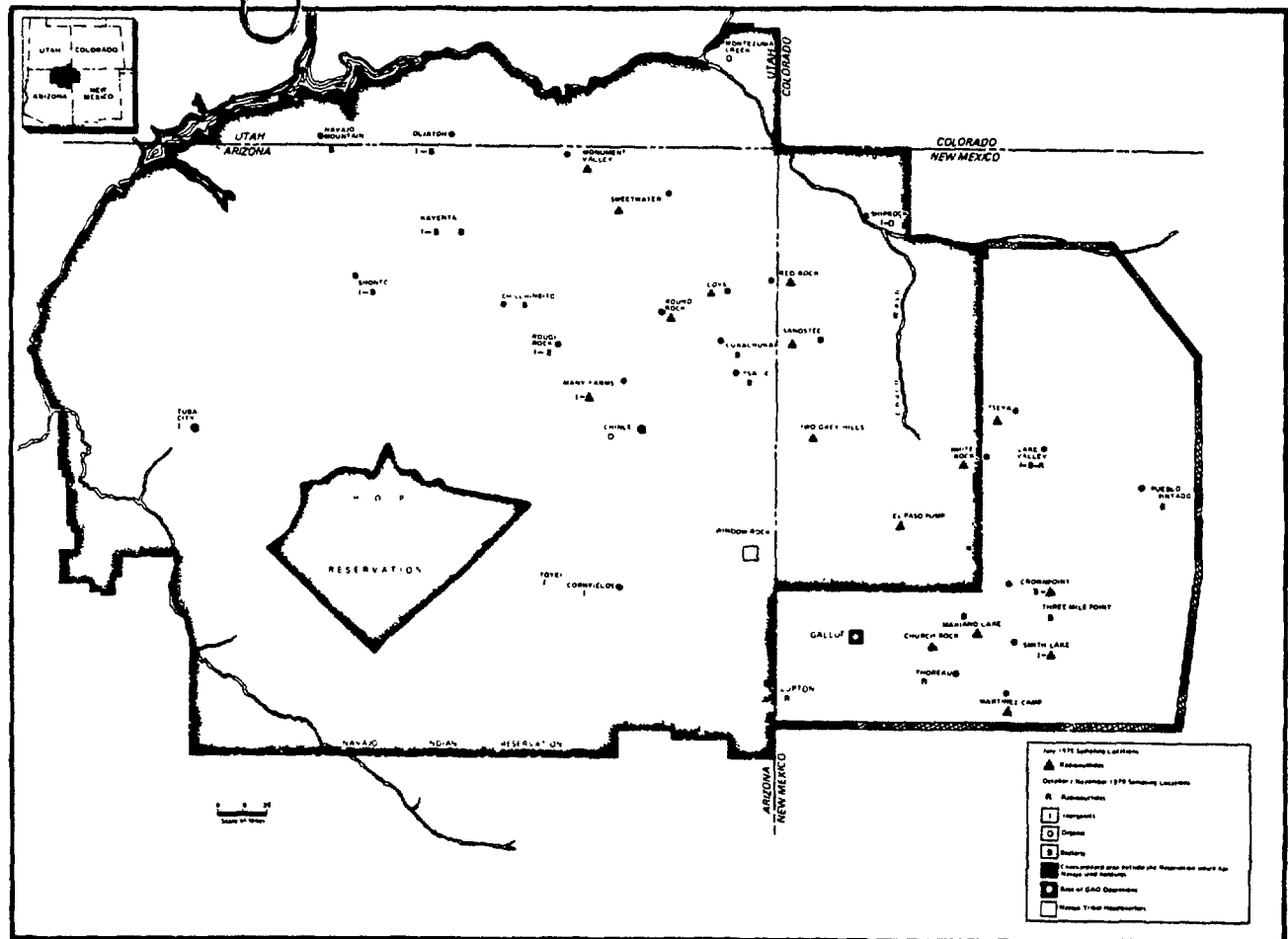
The team's assignment was to evaluate the implementation of the Safe Drinking Water Act and test certain "key wells" on the Navajo Indian Reservation for harmful contamination. The three congressional committees that requested the evaluation were particularly concerned about possible radionuclide contamination in a number of the tribe's drinking water wells. Because of this concern, they put a high priority on the request and wanted a report in 6 weeks.

Already the assignment's request and reporting requirements indicated that we could expect more than the usual types of problems and challenges in doing the job. For

one thing, we needed expert technical assistance, and secondly, the deadline was impossible. In addition, since the Navajo Indian Reservation is the largest reservation, it posed transportation and logistics problems; it covers about 25,000 square miles in Arizona, New Mexico, and Utah (about the size of West Virginia—see map). The 155,000 Navajo people are scattered all around the reservation, with many located in remote areas miles from established communities. Similarly, the water supplies are at remote locations all around the reservation.

Teamwork began when, in coordination with the requesting committees, we developed a reporting plan and arranged for needed technical support. The committees agreed to a two-phased review that would first look at their key concern over radionuclide contamination and report the results in 6 weeks,

LOCATION OF PUBLIC WATER SUPPLIES AND WELLS GAO SAMPLED ON THE NAVAJO INDIAN RESERVATION



tech-
the
addi-
ser-
on, it
sticks
5,000
Mex-
West
5,000
all
many
from
larly,
note
ation.
coor-
porting
tech-
tees
that
scern
ation
eks,

and then evaluate the overall drinking water program and test supplies for other possible contaminants. To support our effort, the committees arranged for technical support from the Environmental Protection Agency (EPA), the U.S. Geological Survey (USGS) and the Department of Energy (DOE). In addition, since the only possible way to cover the reservation in the time allowed for the first phase was to use helicopters, the committees arranged for the Bureau of Indian Affairs (BIA) to provide two helicopters to support the taking of water samples.

We fully realized that even with the cooperation and assistance of the committees, problems and challenges would be ever-present on this effort. And, while it is not practical to review in this article each such instance that occurred, the following are instances in the two phases of the review where teamwork was par-

ticularly useful in minimizing the effects of Murphy's law.

Phase I

This phase, which was during the summer, was to sample wells at 16 locations for possible radionuclide contamination.

Lining Up Laboratories

The first Murphy's law problem developed when we were lining up three laboratories to analyze the first phase water samples for radionuclide contamination. One of the commercial laboratories we wanted had previously analyzed water samples from the reservation. We asked the Federal agency that had a contract with this laboratory to arrange for it to process a set of our samples. Some agency officials, however, did not want to provide the

support because they could not control our use of the results. This problem with the agency, along with the fact that we did not have time to contract directly with the laboratory for its services, was brought to the attention of the committees. They interceded and arranged for the agency to provide the needed support to process the samples.

Murphy's law struck again when the arrangements with the labs were being completed. We learned that all the laboratories could do by our July 31 deadline was a "screening" analysis, which would only determine the gross radioactivity of the samples. Full analyses to identify the specific radioactive contaminants would have required another 2 months to complete. This extra time was needed due to the large number of samples involved (about 75 for each laboratory). When informed of the problem, the committees under-



stood and agreed to accept only the screening results by the July 31 date, but they still wanted the detailed analyses as soon as these were available.

Obtaining Containers

We needed containers for the water samples. The containers had to be new, plastic 1-gallon containers acceptable to the labs for radionuclide sampling of drinking water.

The USGS water technician said USGS would furnish the containers, shipping cartons, equipment, and supplies for phase I sampling. The preferred containers were to be shipped to Denver from Washington, D.C., and the technician was to bring them with him to the reservation. Because of a nationwide trucking strike, we were concerned about the shipment and availability of the containers and followed up to be sure the containers would arrive on time. The USGS water technician was confident that the containers would arrive on time because they were being shipped by airfreight. In addition, he indicated that acceptable but less durable containers were available in Denver, if the planned containers did not arrive.

On Friday afternoon, 3 days before the sampling was to start, Murphy's law struck. The USGS technician called from Denver with the bad news that the containers had been held up; he said they were sent by airfreight but were misrouted to Chicago. As a result, they would not be available until 2 days after the sampling was to begin. He suggested delaying sampling for a week, but this wasn't practical because the rest of the sampling team had already left for the reservation and our deadline would not accommodate a delay.

To cope with the situation, we asked the technician to bring the backup supply of containers that was supposed to be in Denver. Murphy's law struck again when, in ordering the 250 containers (includ-

ing 10 percent spares), the technician was able to get only 125 and no shipping cartons.

We learned that another technician, working for DOE, had a supply of containers at his laboratory, and knowing that he had not yet left for the reservation, we called him to see if DOE could supply some containers. He said that DOE could provide 100 containers, also without shipping cartons. He promised to bring 50 initially and the other 50 when he returned to take the first 2 days' samples to the DOE lab for processing. In total, 225 containers were lined up, just enough for the sampling effort with no spares.

The next day, courtesy of Murphy's law, the DOE technician called to say that he had the 100 containers but no lids—meaning that we were back to only 125 usable containers. He said that he would continue looking for the lids, but suggested that we look for some, too, if we still wanted DOE's containers. We said that the containers were needed and agreed to look for some lids. We notified the USGS technician about the lid problem, and he said that he would coordinate with the DOE technicians since they were in the best position to solve the problem. He said that somehow they would get the needed lids. The USGS and DOE technicians both worked to find lids, and when they arrived on the reservation, they each brought a supply of lids—we had a double supply of lids.

Rounding Up Shipping Cartons

The problem caused by misrouting the containers also resulted in a lack of shipping cartons. Out on the Navajo reservation there was no commercial source for shipping cartons. We discussed the problem with the tribe and BIA representatives that were supporting the team, and both offered to try to locate some cartons. The BIA representative took the lead and said he would see if BIA might have the needed

cartons in a nearby warehouse. He obtained a requisition form from his office and went to the warehouse with a GAO team member, where they found that suitable cartons were in stock but committed for another use. The BIA representative explained the priority of our need to the warehouse supervisor and even agreed to get someone from his department to do some needed maintenance at the warehouse, if they would give us the cartons.

Making Shipping Arrangements

We knew that there might be problems in shipping the samples from the reservation to the laboratories and addressed them before starting the sampling. Because of the remoteness of the Navajo reservation, our base of operations was 200 miles from one laboratory and more than 800 miles from the other two. In addition, the nearest location from which the samples could be shipped on an expedited basis was Albuquerque, New Mexico, 150 miles from our base of operation. In addition, as Murphy's law would have it, the fact that a small amount of acid was used to preserve some samples caused a problem in finding a permissible mode of transportation.

We discussed the transportation problem with EPA, USGS, DOE, technicians, the laboratories, the Department of Transportation (DOT), and various airlines and freight companies. The DOE technician said he would transport some samples to the DOE laboratory (200 miles) for us. This meant we needed only to make arrangements for shipping the other samples to the other two laboratories.

In researching the matter to determine the legalities of shipping the acidified samples to the other two laboratories, we got more confusion than clarification. We did learn that EPA had an agreement with DOT that

a
s
s
a
r
w
a
E
to
a
s
F
le

S
S

w
to
ag
cc
w
ag
sc
sc
te
sa

ta
sa
se
th
mi
ba
sa
sa
ap
de
tar
res

T
ma
ne
sit
Th
be
we
GA
the
rie
ats
the
an
sar

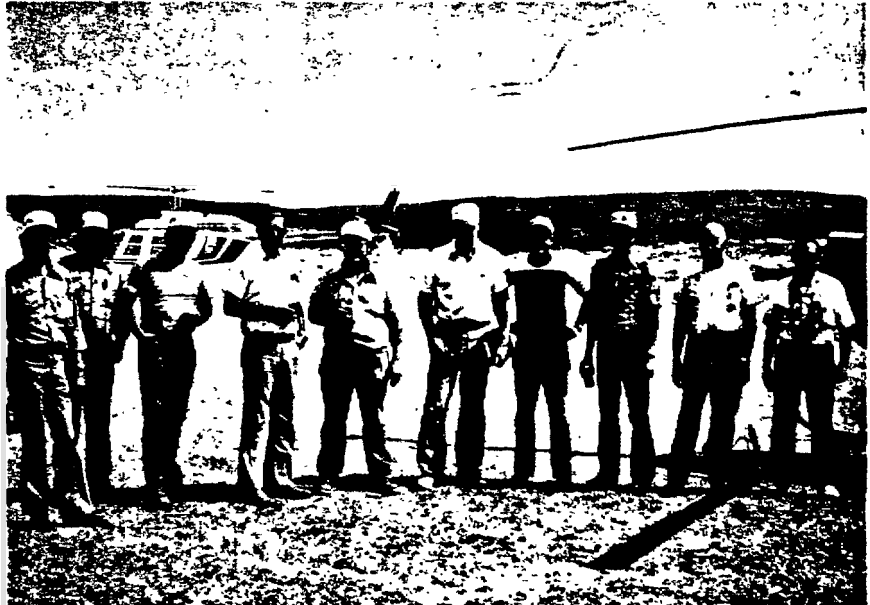
allowed EPA to airship similarly preserved samples, but we were not sure if we could work under this agreement. EPA said that we could refer to its agreement with DOT when trying to make shipping arrangements. By referencing the EPA/DOT agreement, we were able to complete arrangements with an airfreight company and airship the samples from Albuquerque to San Francisco, where the other two laboratories were located.

Selecting Wells To Be Sampled

We made a tentative selection of wells for sampling and sent the list to the tribe and the responsible agencies ahead of time, so they could arrange for us to sample the wells. However, Murphy's law struck again: the committees got word that someone may have tampered with some of the wells on the list in an attempt to distort the results of our sampling.

To reduce the effects of any tampering, we agreed to alter the sampling plan. We amended our selection and added some wells that would be disclosed with a minimum of advance notice. Also, based on a consultant's advice, our sampling plan was already set up to sample each well twice (2 days apart). By sampling twice, we could detect unusual changes in the contamination levels that would likely result from any tampering.

The possible tampering problem made the team more alert to the need for good controls, both in the site selection and over the samples. The samples were randomly numbered from a control log, and they were kept in the possession of a GAO team member at all times until they were shipped to the laboratories. The sampling technicians were also concerned and worked with the GAO team members to control and assure the integrity of the samples.



The team that beat Murphy's law, at Church Rock, New Mexico.

Coordinating Helicopter Support

The only way to cover the large reservation in the short time was to use helicopters provided to us by BIA. However, as Murphy's law would have it, two competing helicopter contractors were not overly friendly toward each other. We were concerned because we needed teamwork, particularly since only one operator was furnishing a fuel truck and both aircraft needed fuel support away from our base of operations. With the use of a little SPCD,¹ we were able to get the two pilots to work together as a team to provide the needed fuel support for both helicopters. In fact, during the project the mechanic/fuel truck driver voluntarily pitched in to help with some of the maintenance on the other contractor's helicopter.

The helicopters did not solve all our transportation problems. In figuring the weight of the water samples (about 10 pounds each), the elevation of the well sites, and the fuel ranges of the two helicopters, we realized that in addition

to having to be refueled in the field, the helicopters could not carry a full day's samples. As a result, we arranged a sampling schedule for each day so that the helicopters could meet the fuel truck and a team member with a van to refuel and drop off the samples. Without refueling and off-loading the samples in the field, much time would have been lost returning to the airport at the base of operations to refuel and to drop off the samples. This would have greatly limited the total sampling effort.

On one occasion, because of the heat and altitude, one helicopter with three team members and a heavy load of water samples had difficulty getting off the ground. At the next location, with an even higher elevation and with more samples, we were concerned about the prospects of getting off the ground. A water system representative who met us at this well, however, pitched in to help us reduce the weight by driving one of the team members to the next location, where another team member with the van was waiting to pick up the samples.



Team members preparing to ship water samples to the laboratories.

At another landing spot, both helicopters were surrounded by about 25 Indians after the team leader and tribe representative went to locate the well. The pilots and four other team members, who remained with the helicopters, became a little nervous as the crowd grew, since they knew the people in the area had not been told about our activities. The apparent leader of the group would only say, "we watch, we wait" when the team tried to talk to them. Upon returning to the helicopters, the tribal representative satisfied the crowds' concerns by explaining our activities to them in Navajo. In addition, the tribal representative greatly assisted us by obtaining information, explaining the reservation's water supplies, and gaining the cooperation of local authorities.

Collecting the Water Samples

Murphy's law met our sampling technicians at one well head-on, when a waterline broke and soaked them with water. They didn't let the soaking stop them; they collected the sample and spent the rest of the day drying out. Luckily, the day was hot and the dampness was even a little refreshing. They said it felt like taking a shower in their clothes, since the water was naturally warm.

At a few wells, Murphy's law complicated things by the fact that taps

were not available to take the samples. Where there were no taps, the technicians collected the samples from the nearest taps on the distribution system even though the results were not considered as valid. After discussing the problem with tribe officials, they arranged to have taps installed on all the wells for the second round of sampling.

Phase II

This phase, which was conducted

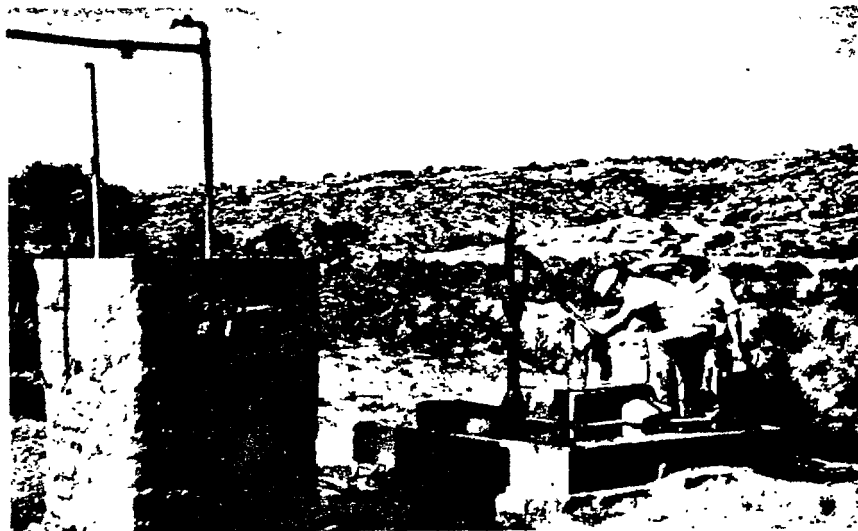
during the fall, entailed evaluating (1) the implementation of the Safe Drinking Water Act on the reservation and (2) sampling selected water supplies for bacterial, inorganic, and organic contaminants. The problems experienced were similar to those in phase I.

Lining Up Laboratory Support

As with phase I, we lined up appropriate laboratories to analyze

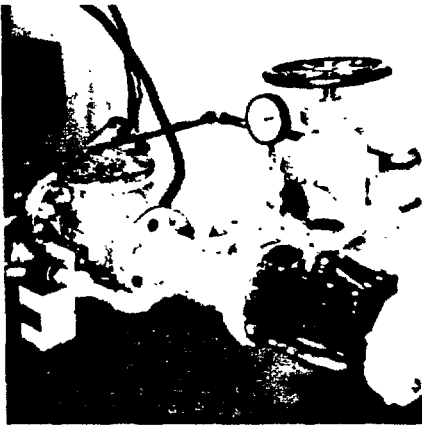


Collecting water from one of the wells.



A well at Monument Valley, Arizona.

A
W
O
N
S
A
T
C
J
C
T
S
T
S
T
E
S
T
E
O
T
F
W
R
A
W
A
A
O
O
S
I
V
E
A
R
W
M
N
S
U
P
P
L
I
N
G
T
R
A
P
P
E



A modern pump used in the sampling.

water samples (three for each type of contaminant). On Friday afternoon, 3 days before we were to start sampling, Murphy's law struck again. One of the labs called to say that it could not run our samples because its only qualified chemist had just resigned. It was too late to change our sampling schedule, and the samples for that lab were to be collected on Monday and delivered Tuesday. This meant that, if the samples were to be analyzed, a team member would have to arrange for another laboratory and make shipping arrangements while the samples were being collected. The team member, with the cooperation of USGS and BIA, arranged to send the samples to a USGS lab in Denver for analysis and for BIA to assist with the necessary shipping arrangements. Making the alternate arrangements on such short notice was easier because we established and maintained contacts with USGS and BIA earlier in the assignment.

Obtaining Supplies and Other Support

For this phase we ordered the supplies for the sampling far in advance from commercial sources, and we were assured that they would be delivered on time. With Murphy's law hindering us, we were not surprised when only part of the supplies arrived on time. As with the phase I effort, we had to find alternative supplies. Since the Navajo Tribal Utility Authority's lab was already providing laboratory support for this phase, they came to our rescue and provided substitute sup-



This site shows the muddy conditions.

plies when the ordered supplies arrived a few days late.

The Tribal Utility Authority's lab was an important part of the team during phase II. In addition to assisting with the containers, the laboratory helped with preparations for sampling (including control samples) provided technical assistance, and furnished miscellaneous supplies, such as acids for preserving the water samples, special shipping cartons which could not be purchased in time for the effort, and a pH meter for measuring the acidity of the water. The laboratory even accepted as a natural result the pH meter's becoming a casualty of Murphy's law: after a couple of days of working fine, the cold and/or vibrations in the four-wheel drive vehicle got to the pH meter, and it started faltering and finally died on the last day of sampling.

Handling the Weather Problems

Since the season was fall, we had snow, rain, and cold weather to contend with. At sampling sites, the conditions were often muddy and wet, and collecting the samples at a few sites meant standing in slippery mud and, on one occasion, in ankle-deep cold water. In spite of the con-

ditions, the team worked together to complete the sampling as quickly and efficiently as possible. The tribal representative who supported us in both phases was right in there doing his part to assist—he drove the four-wheel drive vehicle, located the selected sampling sites, helped with the quality control of the samples, carried samples and other materials, and operated well equipment where necessary.

Overview Assessment

Interagency teamwork worked well for this review of drinking water on the Navajo Indian Reservation. It was the key to our success in meeting the committees' request and beating Murphy's law. Many of the team members put in long hours and all coordinated well to get the job done. As indicated earlier, the team included the committees, too, whose exceptional cooperation and assistance helped pull together the laboratories, supporting agencies, and the Navajo Tribe—they were all essential components of the team effort.

¹ A GAO training course designed to improve communications, entitled "Skills for Performance and Career Development."

022317



Burma H. Klein

Mrs. Klein is a GAO evaluator in the Institute for Program Evaluation. Prior to joining GAO in 1980, Mrs. Klein worked in the Evaluation Unit of the Department of Education and was the project officer for the study described in this article. Mrs. Klein holds a B.S. degree in mathematics from Brooklyn College. She received an M.A. degree in counseling psychology and her Ph.D. in education from the University of California, Berkeley. Mrs. Klein is a member of the Evaluation Research Society.

The Case for Programwide Statistical Reviews of Fraud and Abuse

Reviews of fraud and abuse are typically sparked by the suspicions and intuitions of knowledgeable evaluators. If the evaluator's intuitions are borne out in a small number of exploratory sites, the review effort is often expanded to additional sites likely to evidence the suspected problem. This is particularly true where the primary goal of the review is to expose deficiencies and deter future infractions of the law. One of the pitfalls of this approach, however, is the danger of extrapolating the results of a small-scale review to the program as a whole. If one of the objectives is to be able to say how widespread the fraud or abuse is, then a probability sample is required. Such a sample will represent a cross-section of program sites and participants and will include those that are likely to evidence the fraud or abuse and those for which there are no expectations prior to data collection.

It is often more cost effective to have a large-scale statistical review of the programwide incidence of fraud and abuse before devoting resources to smaller-scale audits on a site-by-site basis. As a case in point, this article will discuss a Migrant Education Program evaluation¹ sponsored by the Department of Education.

As reducing fraud and abuse in Federal programs receives greater emphasis, evaluators must consider the appropriate scope and objectives of such efforts. Three objectives are

- analyzing a program's vulnerability to fraud and abuse,
- identifying specific incidents of fraud and abuse at selected sites, and
- determining the programwide incidence of particular types of fraud and abuse.

For some programs, analyzing the areas of vulnerability to fraud and abuse is a necessary precursor to

more focused work.² Programs which have expanded rapidly and have not been able to examine program operations for fraud and abuse are prime candidates for this objective. An audit of program operations at selected sites is often appropriate where enforcement and deterrence are the main goals of the review. In some cases, however, the crux of the problem is the magnitude of the programwide incidence of fraud and abuse; a review based on a probability sample of sites and participants is appropriate in these cases.

Focus on Specific Incidents of Fraud and Abuse

Because of cost and staff constraints, reviews often focus on specific incidents of fraud and abuse at a judgment sample of program sites. In such cases, the planning phase of the study has typically given the evaluator good reason to believe that such incidents will be easy to find and document. This strategy is particularly appealing in cases where the fraud and abuse is believed to be blatant. Program planners (agency and congressional) find reviews of specific incidents useful because they provide information on the fraud and abuse typical of the program and on the operating constraints that could limit prevention and detection. If similar incidents are found across a diverse set of sample sites, the evaluator can put forth a strong hypothesis (or tentative generalization) that these types of incidents are common across the set of all program sites.³ Armed with this information, program officials can then design and implement safeguards against continued fraud and abuse in the identified areas.

The decision to look for specific

inci
sma
just
resu
anti
late
in F
tivel
grar
requ
tent
and
curr
ly. P
ticu
atta
cide
revie
spec
popl
vide
prac
prac
spec
misc
be tr
auth

Focus on Specific Incidents

If,
gest:
smal
abus
gram
costl
The
scale
evalu
of fra
as a
answ
ing w
to co
carry
sible
legisla

incidents of fraud and abuse at a small number of sites is easy to justify for several reasons. First, the results of the review can often be anticipated. Second, locating isolated examples of fraud and abuse in Federal programs is often relatively easy. The complexity of program regulations and eligibility requirements makes identifying potential sources of fraud or abuse and specific examples of their occurrence at program sites fairly likely. Newspapers may highlight particularly sensational cases. Third, attaching dollar figures to these incidents makes the small-scale review especially attractive; one can speculate that if X percent of the population of clients, service providers, sites, etc., engages in the practice, \$X could be saved if the practice were stopped. Finally, in a specific-incident review, evidence of misconduct or illegal behavior can be turned over to law enforcement authorities for prosecution.

Focus on Programwide Incidence of Fraud and Abuse

If, as the preceding section suggests, there are many advantages to small-scale reviews of fraud and abuse, then why should we do programwide reviews that are more costly and take longer to complete? The simple answer is that large-scale statistical reviews allow the evaluator to estimate the magnitude of fraud and abuse in the program as a whole and thereby provide the answer to the \$64,000 question, how much of the taxpayers' money is being wasted? This information is vital to congressional decisionmakers in carrying out their oversight responsibilities and considering possible legislative changes.

Unless the overall magnitude of fraud and abuse is measured, evaluators run the risk of wasting scarce resources on small-scale reviews of programs with an overall low level of fraud and abuse (although possibly rich in blatant examples of fraud and abuse in selected geographical areas) and ignoring other programs that have a higher incidence of fraud and abuse.

An estimate of the magnitude of fraud and abuse helps the evaluator develop recommendations for bringing the fraud problem under control. If the incidence of fraud and abuse is large, the evaluator can recommend that sophisticated (and costly) monitoring systems be designed and developed. If the incidence is low, the evaluator may recommend less costly monitoring systems, such as better staff training, increased technical assistance for headquarters and field staff, and spot checks by third-party evaluators.

Large-scale statistical reviews overcome some of the basic weaknesses of smaller scale audits at a judgment sample of sites. They eliminate the temptation to speculate about the magnitude of fraud and abuse in a program based on limited data. As many of us have experienced, the desire to generalize the findings of a small-scale review to the program as a whole is irresistible. After the field work is completed and dollar figures are attached to identified sources of fraud and abuse, it suddenly seems perfectly reasonable to conclude that \$X would actually be saved if the identified practices were stopped at all program sites. Unfortunately, such a conclusion often cannot be supported by the sample and the data used for the review. Large-scale reviews compensate for the inability of most small-scale reviews to differentiate among programs

with relatively high and low levels of fraud and abuse.

An Example: Funding the Migrant Education Program

A Migrant Education Program evaluation⁴ illustrates the value of large-scale statistical reviews in assessing the nature and extent of fraud and abuse in government programs. In this case, the problem concerned the counting of ineligible students which thereby fraudulently increased the level of program funding which was based on those counts. Migrant Education Program officials in Washington, D.C., and in State departments of education indicated an awareness of the potential for fraud and abuse and sought to address the problem through technical assistance to sites. If pressed, they could probably name localities where the problem was particularly severe. Migrant program staff also contended, however, that large numbers of eligible students were excluded from the counts because some State and local officials did not put a high priority on identifying and enrolling eligible students. On the other side, some policymakers and officials in other education programs claimed that the counting of ineligibles was rampant, and major accountability efforts were called for.

Here was a case where a review in a judgment sample of program sites would not have settled the claims made on either side of the issue. Undoubtedly, audit work at a judgment sample of sites would reveal instances where ineligibles were improperly enrolled on the computer system as well as instances where eligible children were improperly excluded. In the absence of a statistical sample, however, the findings of the audit work could not be general-

ized to the population as a whole. Given the controversy surrounding the inclusion of ineligible, even a tentative conclusion based on a judgment sample of sites would be very risky since advocates on either side of the issue could bring in counterexamples of their own.

As described below, results of a large-scale statistically based evaluation of the Migrant Education Program indicated that fraud and abuse (i.e., counting ineligible students and thereby increasing program funding) was relatively low. Of equal importance, the study indicated that the overcount of students due to the inclusion of ineligible was offset by an undercount of eligible children. The undercount occurred as a result of the program's failure to (a) count identified migrant children for their full eligibility period and (b) identify all eligible children. Although not fraud or abuse, these two factors served to decrease program funding, thereby offsetting the increase that resulted from including ineligible students.

Scope and Objectives

The Migrant Education Program (authorized under Title I of Public Law 89-10, the Elementary and Secondary Education Act of 1965, as amended) allocates its funds (some \$245 million for fiscal year 1980) to State departments of education on the basis of estimates of the full-time equivalent (FTE) number of eligible migrant children residing in the State during the calendar year. By enrolling eligible children on a centralized computer system—called the Migrant Student Record Transfer System (MSRTS)—a State accrues FTE credit for each day, up to 365 days, the child is enrolled from that State on the system. Typically, enrollments on the system coincide with enroll-

ments in migrant-funded schools.

As with many Federal programs, eligibility criteria for the program are complex and difficult to administer. Eligibility depends upon the occupation and movement patterns of the child's parents or guardians and the movement pattern of the child. In addition, eligibility for inclusion in the funding counts requires that the child be between the ages of 5 and 17.

Using calendar year 1977 as the base year, two objectives were selected for the study of the Migrant Education Program funding counts:

- Objective 1—to assess the accuracy of the information in the MSRTS used for determining the 1977 FTE counts.
- Objective 2—to assess the completeness of the MSRTS data in terms of coverage of the eligible migrant population during 1977.

The focus on both the accuracy and completeness of the funding counts reflected that a narrower focus on the number of ineligible would not have given decisionmakers all the information they needed to design cost-effective safeguards against fraud and abuse and ensure that program-funding levels were based on good estimates of the target population size. Focusing solely on the number of ineligible would have left decisionmakers with only half the information required to estimate the overall accuracy of the funding counts. To appreciate the problem fully, decisionmakers also needed information on the extent of the undercount of eligible migrant children.

Methodology

In brief, each study objective for the Migrant Education Program evaluation constituted a separate substudy. To validate the accuracy of the information in the MSRTS, a probability sample was chosen of

some 9,000 children whose enrollments on the MSRTS contributed to the FTE count for calendar year 1977. These were the counts on which program allocations for fiscal year 1979 were based. For each student, the following data were collected during site visits and through mail questionnaires: (1) date of birth, (2) evidence of the child's eligibility with respect to movement and parental occupation, and (3) school enrollment and residence information affecting 1977 counts. The sample and data collection were designed to answer the following questions:

- How do national and regional FTEs based upon school enrollment and residence histories developed from field data compare to the national and regional FTE counts based upon 1977 MSRTS data?
- How accurate and complete was the 1977 MSRTS information used for funding?
- How many (if any) of the students included in the MSRTS counts did not meet the eligibility requirements for generating funds?

Because of the enormous cost required to estimate the number of eligible children not included in the 1977 FTE counts, less rigorous methods were used to meet this objective. A probability sample of children in some 2,500 classrooms was screened to determine their eligibility for the Migrant Education Program. Efforts were then made to determine whether eligible children were enrolled on the MSRTS and included in the 1977 counts. Estimates of eligible migrant children who were not enrolled in school and not included in the 1977 funding counts were obtained from questionnaire items asking school officials to estimate the number of such children who resided in their county. It was not possible to verify whether such children had been included in the FTE counts from some

of
co
"g
qu
•
da
th
ch
sc
•
da
th
ch
sc

S

fra
th
re
lit
ln
to
fai
da
im
we
fai
pa
qu
the
mig
of
C
fur
197
tio
del
cor
nur
dat
FTI
chik
MS
of a
fair
gra
stui
unc
con
For
Sec

other county. The sample and data collection strategy permitted very "soft" answers to the following questions:

- How complete were 1977 MSRTS data in terms of their coverage of the population of eligible migrant children who were enrolled in school?
- How complete were 1977 MSRTS data in terms of their coverage of the population of eligible migrant children who were not enrolled in school?

Summary of Findings

Data analysis indicated that fraudulent inclusion of ineligible children in the funding counts for 1977 was relatively low. Birth date errors had little effect on the 1977 FTE count. Inclusion of children outside the 5 to 17 age range was balanced by failure to include those whose birth dates fell in the age range. Approximately 2 percent of the 1977 FTEs were generated by children who failed to meet the movement and parental occupation eligibility requirements. Another 2 percent of the FTEs were accrued by eligible migrant children while they were out of the country.

Other findings relevant to the funding counts indicated that the 1977 FTE counts (both for the Nation as a whole and for the regions defined for the study) represented a conservative estimate of the total number of migrant children. Survey data indicated an undercount of FTEs accrued by eligible migrant children who were enrolled on the MSRTS during 1977. The undercount of approximately 12 percent held fairly uniformly across the 5 geographic regions defined for the study. The major reason for the undercount appeared to be the incompleteness of enrollment data. For example, a student enrolled in September and not re-enrolled the

following September would not accrue FTE credit during the period from September through the end of December.

Soft data on the number of eligible students who accrued no FTE credit in 1977 indicated that some 15 to 20 percent of the population of eligible children who were in school in early 1978 were not enrolled on the MSRTS in 1977 and therefore did not accrue FTE credit. School officials estimated that the number of out-of-school migrants in 1977 was relatively small, and their contribution to the undercount was therefore likely to have been minimal.

Conclusion

Fraud and abuse reviews can be designed to meet any one of a number of objectives, depending upon the purpose of the review. In cases

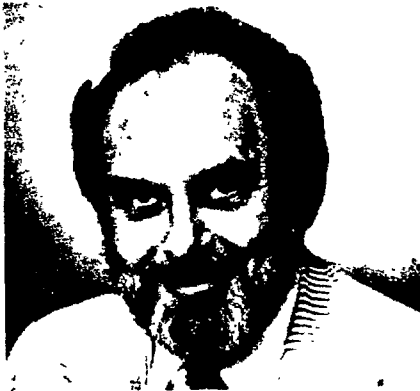
where the fraud and abuse is believed to be blatant, it may be appropriate to conduct an audit of program operations at a judgment sample of sites for enforcement and deterrence. Where there is some question as to the magnitude of the fraud or abuse programwide, it may be more cost effective to conduct a large-scale statistical evaluation to determine the degree of fraud and abuse before devoting scarce resources to audits on a site-by-site basis. In return for the time and expense of conducting a large-scale statistical review, the evaluator is able to determine the magnitude of the fraud and abuse in the program and use that estimate as the basis for recommending the appropriate type of control mechanisms, be they sophisticated monitoring systems or less costly training, technical assistance, and spot checks.

¹Ben Cameron, *Validation of Student Counts Used To Allocate Funds for the ESEA Title I Migrant Education Program*, nontechnical report (Research Triangle Institute November 1980).

²Eleanor Chelmsky, "Reducing Fraud and Abuse in Entitlement Programs: An Evaluation Perspective," *GAO Review*, Summer 1981, pp 29-33.

³Mary M. Kennedy, "Generalizing from Single Case Studies," *Evaluation Quarterly*, 3 (November 1979), pp. 661-678.

⁴C. Andrew Clayton, *Validation of Student Counts Used To Allocate Funds for the ESEA Title I Migrant Education Program* (Research Triangle Institute November 1980).



Kenneth W. Hunter

Mr. Hunter, who has been with GAO since 1959, is a senior associate director in the Program Analysis Division. He has a B.B.A. degree in accounting/economics from Golden Gate University. He is president of the National Council of Associations for Policy Sciences and vice president of the American Association for Budget and Program Analysis. He is a CPA (California). Mr. Hunter received the Distinguished Service Award in October 1981. In February 1982, he received the Meritorious Executive Award.

New Directions in the Policymaking Process in a Decade of Transition

This article, adapted from an address given by Mr. Hunter at a November 1981 symposium for the Washington Operation's Research/Management Science Council, discusses Mr. Hunter's views on the new directions in the policymaking process.

Introduction

New directions in the policymaking process will incorporate a long-range perspective, rather than the current 1- or 2-year approach. The new process will require multidisciplinary analyses to support decisionmaking on major policy issues. This article outlines the main features of the old process, discusses the recent procedures used to develop the Reagan Economic Recovery Plan, and predicts how some of the elements in this process will change during this decade.

Senator Roth's Committee on Governmental Affairs and Representative Gills Long's subcommittee of the House Committee on Rules are currently investigating the changes needed in the congressional budget, legislative, and oversight activities. In addition to these committees, a newly formed private Committee For A Responsible Federal Budget is also developing recommendations for improvements.

GAO Encourages Reform

GAO's recommendations for improving the policymaking process are summarized in two reports entitled "Observations on Oversight Reform" (PAD-81-117, 1981), and "Federal Budget Concepts and Procedures Can Be Further Strengthened" (PAD-81-36, March 3, 1981). The GAO observes that changes in procedures do not guarantee a successful administrative reform.

GAO's report, "Observations on

Oversight Reform," states on page 1 that

Success will depend upon the commitment of the leaders and participants to the goals of the reform. New laws can only create mechanisms and procedures which will permit this commitment to be effectively translated into action. The Congress, the Executive, and ultimately the nation must:

- 1) *think, debate, and act with a long-range perspective because the full implication of policies often is not felt for several years or decades;*
- 2) *focus more of their analyses, debates, and actions on broad policies and groups of interrelated programs;*
- 3) *try harder to analyze the probable effects of policy changes before they are implemented;*
- 4) *be more specific and realistic when setting goals and expectations for policies, programs, and administrative reforms;*
- 5) *grant administrators the authority and resources needed to render congressional goals and expectations plausible, or to revise them to fit available resources;*
- 6) *establish evaluating and reporting procedures that compel administrators to produce clear statements about the performance of the programs and activities for which they are accountable;*
- 7) *structure iterative management processes to ensure that decisionmakers will consider evaluation results in their planning and direction of programs; and*
- 8) *act promptly to make changes when needed.*

To promote these objectives, GAO has strongly supported oversight reform and suggested that another Hoover-type commission be estab-

lished. GAO has also supported further changes in the budget process and suggested that another commission on budget concepts be created.

The Old Federal Process

The old Federal process operated during the annual budget cycle and the 2-year congressional cycle. General "top down" guidance was given to each agency, which formulated its own budgetary proposals with a "bottom up" effect. There was a considerable amount of control over elements in programs. With legislative vetoes, limitations on appropriations, and clearance requirements by the executive branch, each program was examined carefully. Formal accountability was principally financial accountability. However, there was a basic weakness in this approach. Evaluation and multidisciplinary analyses were talked about, but they were not part of the basic policymaking process. In the upcoming decade, complicated social issues will require new multidisciplinary analyses to improve policymaking.

Direction of Changes in Policymaking

Some scholars describe the 1980's as a decade of transition. The transition will involve social values, the roles and relationships of domestic and international institutions, the technologies that support our economy, and the goods and services available to us. I share their view.

To deal effectively with the policy issues of the 1980's transitional decade, we need more innovative, multidisciplinary analyses and evaluations to support decision-making. For example, the issues created by aging and the "baby

boom" on the society and economy should not be addressed from one or even a few perspectives. The "baby boom" group has moved through our schools, and now we have excess schools and teachers. As this group ages, it will put extra demands on many of our institutions, including prisons, housing, and eventually health care and pension systems.

Many issues, like the example above, can also cause the same kind of demands on our society. Some of these issues are

- economic and military vulnerability,
- later retirement,
- family choice regarding work, responsibilities, and life styles,
- new communications and computer services,
- rediscovered concern for quality, and
- biogenetics.

These issues have been emerging for many years. Our society is changing, and these issues are appearing on public policy agendas frequently. Individuals are changing our society by making decisions on these issues every day. Americans are choosing to retire later. Computers have become a household word and device. There are many examples of how our society is changing. These changes will soon have to be acknowledged by our decision-makers, and eventually the decision-makers will have to deal with these changes in public policy. When decisionmakers deal with these issues, they will have to consider the multiple facets of each complicated issue. To consider each facet properly, decisionmakers need to use multidisciplinary analyses and evaluations.

Current Developments

Today, the politicians are concen-

trating on economic recovery and military vulnerability in their decisionmaking. These are critically important issues for our Nation at this time. The Reagan Administration's approach resembles the strategic planning approach used in private industry. However, the Administration must use the old Federal process to implement their new plan. The Administration developed a set of quantitative goals that they are seeking to achieve. Much of the debate over policy is now focusing on attaining these goals, as well as the means being advocated by the Reagan Administration to achieve them.

The intentions of the Reagan Administration are to

- strengthen defense;
- preserve the social safety net;
- revise entitlements to eliminate unintended benefits;
- reduce subsidies to middle- and upper-income groups;
- impose fiscal restraints on other national interest programs;
- recover costs that can be clearly allocated to users;
- stretch out and retarget public sector capital investment programs;
- reduce overhead and personnel costs of the Federal Government;
- apply sound economic criteria to subsidy programs; and
- consolidate categorical grant programs into block grants.

Essentially, the Administration's approach includes

- 4-year goals used rather than the old 1- or 2-year goals;
- clear policy choices based on explicit Administration criteria;
- control focused on aggregate budget and economic figures instead of the individual elements of programs; and
- accountability focused on implementing the Administration's policies.

Forecast for the Future

Considering what we know about the old Federal process and what we have learned from our recent experiences, I predict the following six changes will occur.

First, the process will likely shift to using multiple-year periods. This could include a change to a biennial fiscal period, with 4 to 8 years covered by many of the supporting analyses and planning.

Second, the Federal Government will increasingly use centralized, strategic-type policymaking and direction to address the major policy issues. But this change could be accompanied by an increase in flexibility to program managers regarding operations.

Third, where tough decisions are needed, we may see clear policy choices on issues, such as social security and major capital investments. But incremental change is likely to continue to be the norm for most policy areas.

Fourth, the Congress and the executive branch are likely to retain tight controls over the aggregate

budget levels, individual programs, and program elements. In a protracted period of social and economic change, uncertainty, shifting responsibilities, and constrained resources, no one in the policymaking process is likely to give up any degree of control, and most people will be seeking more control.

Fifth, formal accountability is likely to be extended beyond existing financial accountability to include some regular analysis and explanation of variances from the financial and operating plans. Program evaluation, performance monitoring, auditing, inspection, etc., may all be used to help identify the causes of variations, but there is not likely to be any demand or need for a large, centralized system approach.

Sixth, leadership styles and methods may also undergo some change. Daniel Yankelovich says that the mix of social values emerging in the next decade will include a rediscovery of concern for the future, a strong interest in having choices, increased concern for whole institutions, and increased cooperation among institutions. I believe that leadership styles and

methods are also likely to shift toward these social values and therefore become more proactive. How and when such changes may occur are among the most speculative—and most important—aspects of the new directions in policymaking. Policies, such as the cap on executive salaries, add to the uncertainty about the quality of government leadership during this important decade.

Conclusion

Social values and the nature of our economy are changing. Also, the public policy issues are becoming more interrelated and complex to address. Public policy institutions and the policymaking process need to be strengthened to ensure they have the capacity to provide effective leadership. I have described several changes in policymaking that I believe will strengthen its capacity in the next decade. GAO has strongly supported the Congress in identifying problems and searching for improvements.

I
M
a
C
fr
v
n
S
M
a
s
a
a
tr
U
ir
s
fi
F
g
fr
d
fr
ar
dt
is
er
S
A
th
fic



Richard P. Dettmar

Mr. Dettmar joined GAO's Accounting and Financial Management Division in October 1977 following his retirement from the U.S. Army with 26 years of service in a variety of key financial management positions. These included membership on the Department of Defense Military Pay and Allowance Committee as the Department of the Army representative and serving as project manager for the design, development, test, and implementation of the Army's centralized military pay system. The Joint Uniform Military Pay System Since joining GAO, Mr. Dettmar has worked in several specialized fields relating to financial management systems at the Federal, State, and local levels of government. He has a B.B.A. degree from Pace University, New York, an M.S. degree in government administration from the George Washington University, and is a 1976 honors graduate of the Industrial College of the Armed Forces. He is a member of the Association of Government Accountants, the American Society of Military Comptrollers, the Association of the Industrial College of the Armed Forces, and the Retired Officers Association.

The Standardization of DOD Military Payroll Systems: What Went Wrong?

PREFACE

It is axiomatic in today's world that when seemingly limitless funds are made available to a Federal agency, cost saving opportunities frequently become lost in the frantic rush to spend and spend so that all concerned will view the funds as needed and justified. Unfortunately, in this climate, unless areas of potential cost savings are identified and widely publicized, they do not receive the high-level attention that is necessary to ensure exploring the possibility of reduced expenditures.

This article points out one such area of potential cost savings in the Department of Defense that the author feels warrants high-level attention. While the article has been written as a fictional dialogue between two persons, the information presented is factual. It reflects both the author's close association with the events described and his own provocative views as to what can and should be done.

It's early December. At the Pentagon, during the Joint OSD-OMB review of the military service budget estimates, an OMB analyst has requested a briefing on the Department of Defense Military Payroll Systems. The request stems from growing OMB and congressional concern about recent GAO reports on problems in many of these systems. In one report, GAO stated, "During the past 12 years, the Navy has spent over \$150 million to develop and operate a central automated military pay system for its military personnel. But the centralized system is so unreliable that, as a check, local disbursing officers calculate pay amounts manually. Each payday, over 50 percent of the centrally computed pay amounts are changed to agree with amounts computed locally."¹

Another GAO report stated, "The Marine Corps Joint Uniform Military Pay System/Manpower Management System was authorized in 1966 and implemented in 1973. Although millions of dollars have been spent on the system, as a central system to compute Marine Corps members' pay accurately and on time, it is still unreliable and inefficient. The Marine Corps plans to spend additional millions of dollars to replace the current system with a more sophisticated one in the 1985-90 time frame. But unless the current system is improved and Department of Defense monitoring of the Marine Corps system development is improved, many deficiencies in the current system will be carried over to the new one."²

And in still another report, GAO reported that the Department of the Army's Joint Uniform Military Pay System—Reserve Components, used to pay Army Reserve and National Guard personnel, did not have adequate controls. As a result, millions of dollars in erroneous payments were being made.³

In view of the all-out efforts being made by the Administration and the Congress to rectify a deteriorated military manpower base, deficiencies in the payroll systems are counterproductive because they affect the morale and welfare of all military personnel and their families. DOD's plans to eliminate these deficiencies will be closely scrutinized during the OMB and congressional budget review process.

The briefing is arranged. A senior Defense official representing the Office of the Deputy Assistant Secretary (Management Systems), part of the Office of the Assistant Secretary of Defense (Comptroller), meets with the OMB analyst. The following dialogue takes place:

DOD: Good morning. The purpose of this briefing is to provide you with

information on Department of Defense Military Payroll Systems. As you know, military pay is big business in the Department of Defense. Approximately \$50 billion of our fiscal year 1981 budget⁴ went to pay our military personnel. Every year we spend well over \$100 million on the operation and maintenance of our computerized military pay systems while additional millions are spent on redesigning one or more of the 18 different systems used to pay our military personnel. The first slide lists these systems by service. (Slide 1 shown)

As you can see, the 18 systems are used to pay active duty, reserve component, retired, and military academy cadet personnel.⁵

OMB: Why do the Air Force and Navy list ROTC Cadet Pay Systems in their inventories while the Army and Marines do not?

DOD: Frankly, I didn't catch that. It is possible our inventory is incomplete. I believe the Marines do have one ROTC pay system, and I seem to recall the Army pays its ROTC cadets out of four finance offices on a regional basis. To the best of my knowledge, these are individually designed and operated systems. I guess we should add at least five more systems to the inventory, making it a total of 23 systems. I'll confirm the actual number of Marine and Army ROTC cadet pay systems.

OMB: You know, I've never really understood why it takes 18 or 23 systems to pay military personnel. Aren't all military pay policies and entitlements established by law, and don't they apply across the board to all military personnel, regardless of branch of service? Doesn't the DOD Military Pay and Allowances Entitlement Manual⁶ provide the statutory provisions for entitlements, deductions, and col-

SLIDE 1

Department of the Army

- Joint Uniform Military Pay System—Active Army
- Joint Uniform Military Pay System—Reserve Components
- Military Retired Pay
- Military Pay—Academy Cadets

Department of the Air Force

- Joint Uniform Military Pay System—Active Forces
- Air Reserve Pay and Allowance System
- Cadet Pay—AFROTC
- Air Force Retiree/Annuitant Pay System
- Cadet Pay—Academy

Department of the Navy

- Joint Uniform Military Pay System—Active Forces
- Navy Reserve Personnel Drill Pay
- Navy Reserve Personnel—Armed Forces Health Professions Scholarship
- Navy Personnel—NROTC
- Navy Retired Personnel
- Midshipmen Pay

Marine Corps

- Joint Uniform Military Pay System—Active Duty
- Marine Corps Reserve Personnel
- Marine Corps Retired Pay

lections, and establish Department of Defense policy on the pay and allowances of all military personnel? Don't these provisions apply to all Department of Defense activities? Isn't it the responsibility of the DOD Military Pay and Allowance Committee and the DOD Committee on Military Pay Procedures to assure uniformity of the services' pay regulations? If what I've asked is true, it would seem that all of these systems are logical candidates for single system standardization. Why, for instance, does each service have to have its own individual pay system to pay its active forces if the policies and entitlements for all services are basically the same? Why can't there be one DOD system for the payment of all active forces personnel?

DOD: Your point is well taken, and, in fact, the Department has made efforts in the past to do just as you have suggested. I think if we return to the briefing now, I can trace these efforts, and their results, for you. We'll begin with the Department's effort to standardize the systems for our active forces.

In the late 1950's and early 1960's,

the Department of Defense encountered serious problems in managing its military personnel appropriations. Appropriation deficits requiring supplemental funding by the Congress in one year would be followed by surpluses in the succeeding year. In response to repeated presidential and congressional criticisms, the Department conducted a study in 1961 to determine the cause(s) of the problem. The study's result was DOD Directive 7040.3, "Program for Improved Management of Military Personnel Appropriations and Related Personnel Programs of the Active Forces," published on October 2, 1962. A major system change prescribed by the directive required that obligations for the military pay and allowance segment of the military personnel appropriation, which comprise roughly 86 percent of the appropriation total, be accounted for monthly on the basis of earned (accrued) entitlements recorded in individual pay accounts and that obligations and disbursements be reported in classifications designed to assist in appropriation management. At this time, while each military service operated essentially manual, fully

decentralized military pay systems, appropriation control was exercised at the service's departmental level. Thus, it would have taken several months for actual monthly obligation data to reach the level at which appropriation control was maintained. To meet the accrual accounting and revised reporting requirements, each military service began developing mechanized (PCM) military pay and reporting systems. In general, these developments were limited to mechanizing the recordkeeping and reporting within the existing decentralized pay systems.

Concerned with this approach and the continuing problems encountered in managing the military personnel appropriations for active forces, the Comptroller General of the United States, in a letter sent to the Secretary of Defense on May 14, 1963, stated in part that:

In previous reports to the Congress and to the Department of Defense, this Office has pointed out weaknesses, inefficiencies, and lack of uniformity in the services' administration of many aspects of military pay and allowances. The basic legislation governing pay and allowances of military personnel applies, with a few exceptions, uniformly to members of all services. The establishment of a uniform military pay system, in our opinion, could be expected to simplify and improve materially the administration of military pay and allowances in many ways, including elimination of the multiplicity of individual service regulations.⁷

OMB: Yes, I remember that letter. It seemed to make a lot of sense at the time.

DOD: Well, that letter, plus added pressure to improve management of the DOD military personnel appro-

priations from what was then the Bureau of the Budget, resulted in DOD's establishing a study group in July 1963. Its stated objective was

... [t]o consider appropriate DOD systems and procedures for the accrual of military pay entitlements and the payment of military personnel in active service so as to carry out the objectives, policies and principles set forth in DOD Directive 7040.3 with the maximum practicable uniformity in the pertinent documentation, processing, record-keeping and reporting procedures.

The group reviewed the administrative practices, environmental limitations, problems being encountered in the decentralized pay systems of each military service, and the plans being considered for mechanizing the pay systems. Based on its findings, the group considered recommending the development of a single, standard DOD military pay system. Strong objections from the services, as well as the finding of approximately 200 pay and procedural differences between the services (35 of which were statutory), forced the group to seek a solution that would be acceptable to all parties and still meet the spirit of the objectives. The group completed its study in January 1966 and recommended to the Secretary of Defense that each service be required to develop a centralized pay system using a computer at a single site.

OMB: What were the services' objections to having a single standard DOD pay system? Were they ever fully evaluated?

DOD: I'm sorry, I don't have that information. To continue, as a result of the study group's recommendation, DOD Directive 7330.3, "Program for Development, Test, Evaluation and Installation of the Joint Uniform

Military Pay System," was issued in November 1966, directing the military services to develop comparable military pay systems. The systems were to be known as the Joint Uniform Military Pay System (JUMPS).

The DOD directive established four primary objectives for the new pay system: (1) adequate pay service to the military member, (2) uniformity among the services to the extent possible, (3) one master military pay account for each active duty member on a computer at a single operating site, and (4) production of comprehensive, accurate, and timely accounting reports for the military personnel appropriation director.

By placing all pay accounts on a computer and eliminating most manual computations of pay, DOD hoped to reduce overpayments substantially, and by centralizing the accounting and reporting function at a single site, DOD believed more timely and accurate data and a substantially increased budgeting capability would result, thus resolving the two primary problem areas causing appropriation deficits.

OMB: You know, what you just said would apply equally to a single, standard DOD system.

DOD: That's true, but the decision was to go with individual service systems having these capabilities.

OMB: You say the directive to develop these systems was issued in 1966. When were they actually completed?

DOD: While not prescribed in the directive, based on the study team recommendations, the services were given targets of completing operational tests of their systems by June 30, 1968, with full implementation of JUMPS by June 30, 1969.

Unfortunately, for a variety of reasons, these targets were never met. Army was the first to field their version of JUMPS, beginning their worldwide conversion in June 1971 and completing it in December 1971, when all soldiers, including those serving in combat in Vietnam, were paid from the Army Finance Center at Fort Benjamin Harrison, Indiana. It was not until August 1973 that the Marine Corps began to field their version of JUMPS. This is one of the systems that has encountered severe problems since its implementation, and the Corps is planning to replace this version with a more sophisticated one in the 1985-90 timeframe. Finally, in November 1974, the Air Force fielded its JUMPS, and in January 1977, the Navy completed its system. As you are aware, this is another system that has been in trouble since its implementation and will require a major redesign effort.

This concludes the portion of the briefing on the status of active forces military pay systems.

Before moving on to the status of our Reserve Component, Retired, and Military Cadet pay systems, do you have any questions on what we have just covered?

OMB: Yes, I do. I still have a problem understanding why each service must operate and maintain its own system to pay its military personnel if the only significant difference in the functional requirements of the system is the difference in some pay entitlements. It would seem a single computer table could accommodate these differences. And if this is true, I can't understand why these systems cannot be standardized into a single DOD system. It would seem that the savings, in terms of personnel and those costs associated with operating, maintaining, and redesigning all these current systems, would be substan-

tial, not to mention the potential for improving servicemen's morale by eliminating some of the problem systems. Does DOD have any plans to go with a single DOD-wide system in the future?

DOD: I am not aware of any plans to do this at the present time.

OMB: Well, since DOD has allowed each service to develop its own version of JUMPS, in the event, say, that the Army Finance Center goes out of business due to a disaster, can one of the other services pick up and pay the Army people? Can any of the services provide backup for one another?

DOD: The answer to your question is no. The systems, procedures, records, reports, forms, and even the computer hardware and/or hardware configurations are so different that no capability exists to provide cross-service support in case of an emergency.

OMB: Then since the other services could not pay the Army people if the system at the Finance Center went down, I presume the Army has plans to meet this contingency?

DOD: Depending on the severity of the situation—.

OMB: Let's take a worst case scenario: the Army Finance Center burns down.

DOD: In that case, Army would be in serious trouble. Because of funding limitations, back-up computers at alternate sites do not exist. Alternate files are maintained, but these are only good if you have sympathetic computers. Currently, these do not exist outside of the Army Finance Center. In short, Army would be forced to pay its soldiers by manually computed local pay-

ments at field sites throughout the world for an extended period of time until new facilities and hardware became available. There would be serious problems in not only paying soldiers what they are due, but also in paying their allotments to families, banks, and so on.

OMB: I find that rather frightening. The impact on soldier morale would be devastating, especially if this were to occur in a wartime situation. I suppose this is the price to be paid by putting all your eggs in one basket and then providing no back-up capability.

DOD: It's a calculated risk, but in over 10 years of operation, the Army's system has never missed a payday. Are there any other questions?

OMB: Just one more. What if it were necessary to mobilize our reserves? Could these systems handle substantial increases in the number of records to be maintained and people to be paid?

DOD: I'm sorry, I don't have the answer to that question. I'm not sure if the present hardware and telecommunications used by the services' systems could handle a sudden and substantial increase.

OMB: Well, then, will these systems work if we were to go to war? It seems to me this is a vital factor. And if they won't work, just what are the Defense plans for paying our servicemen and their families?

DOD: The only system which has been tested and proved in a semiwar environment is the Army's. As I indicated earlier, it was actually used to pay soldiers in Vietnam beginning in 1971. I can't tell you if the other services' systems will work, but they are supposed to have that capability.

C
tl
n
s
G
h
S
p
s

D
is
fc
tr

O

D
b

O
si
sy
S
th
th
cc
In
ic
re
w
gc

D
ra
De
ta
tie
sy
De
te
mi
mi
we
cu
ca
tic
th
Pa
pa
tic
of
de

OMB: Yes, but it would seem that if they are having trouble making payments in peacetime, with its fairly stable operating environment, as GAO found, they certainly would have much more trouble in wartime. So, I repeat, what are the Defense plans for paying servicemen if these systems do not work?

DOD: The only answer I can give you is that each service is responsible for having contingency plans to meet this situation.

OMB: Do they?

DOD: I can't answer that question, but I will get the information for you.

OMB: Thank you. I guess my confusion comes from your calling these systems Joint Uniform Military Pay Systems. From what you've told me, the only thing joint or uniform about them is that they each must use a computer at a single operating site. Insofar as uniformity among the services in procedures and other system requirements, it does not exist. Can we move on now to the other categories of military pay systems?

DOD: In a December 14, 1973, memorandum, the Assistant Secretary of Defense tasked the Assistant Secretary of Defense (Comptroller) to initiate a program for management systems standardization within the Department. A "Management Systems Standardization Steering Committee," comprised of DOD and military service representatives, was established to review then-current systems and recommend candidate systems for standardization. Among those reviewed were the Reserve Component, Retired Pay, and Military Academy Cadet pay systems. Based on the objections of the services, consideration of those systems as candidates was deferred and subsequently dropped.

Some of the objections raised were valid. For instance, the Army cited its plans to link its Reserve Component and Retired Pay systems with its version of the Joint Uniform Military Pay System for active forces. By this linkage, in one system the Army would be able to compute and make payments to its soldiers from the time of their entry into service until their departure or death. By linking Reserve Components pay to JUMPS, the ability to transfer a soldier from one status to another (reserve to active forces) in the event of mobilization would be significantly enhanced. The Army plans did not include linkage of cadet pay with JUMPS; however, three of the four systems would be consolidated into a single system.

OMB: That's very interesting and certainly makes a lot of sense. Did the Army, or any of the other services, ever follow through with these plans?

DOD: No. Each service continues to operate separate systems with no linkage between them. In the Army's case, I believe the problem was a lack of computer capacity.

OMB: So, as with the active forces systems, there is no DOD-wide standardization of these systems, either. Out of curiosity, do you know which, if any, systems the task force did recommend for standardization?

DOD: I believe there were two or three. I do know the Civilian Personnel systems within Defense were recommended for standardization.

If there are no other questions, this concludes my presentation.

OMB: Thank you, it's been most informative. Let me see if I can summarize what I think I've heard.

First, in point of fact, there is no uniformity or standardization of

military payroll systems today within the Department of Defense. From what you've told me, this goes back to the 1966 DOD policy decision that allowed the services to develop their own versions of JUMPS for paying their active forces. In retrospect, this decision could be characterized as illogical and shortsighted because the original goal of achieving a single standard DOD military pay system for all the services was, and always has been, attainable. The rationale concerning pay entitlement differences was neither then, nor is now, a valid justification for allowing the services to go their own ways. The decision was probably more a reflection of DOD's inability to control the services' rivalries.

Since the time of that decision, hundreds of millions of dollars have been spent on designing, operating, maintaining, and redesigning some 23 different service systems, each operating at varying degrees of efficiency and effectiveness. While there are four basic categories of systems within the services—active, reserve, retired, and cadet—which provide for logical systems linkages, none currently have this capability, and all 23 systems operate independently. Because of the lack of uniformity between the services in the systems, procedures, records, reports, forms, and even the computer hardware and/or configurations of hardware, no one service can be called upon to backup another in the event of a system failure by one or more of the services. Whether these systems would even work in wartime is subject to question.

Based upon current DOD plans, it would appear no change is to be made to the basic 1966 policy. Each of the services will be allowed to redesign their current JUMPS, and from what you've said, such efforts are already underway. As a result,

duplications in the Reserve Component, Retired, and Military Cadet pay systems will be allowed to continue.

Personally, I believe you are going to have a hard time defending this policy. I am going to recommend this matter be raised before the joint review committee, and I will further recommend that funding requests for the JUMPS and other redesigns of military pay systems be dropped from service budget estimates, pending a full reevaluation of DOD systems standardization policies.

Frankly, this has been so helpful, I would appreciate a similar briefing on the status of standardizing the DOD civilian payroll systems you mentioned earlier.

DOD: Okay, I'll get you the date, time, and room number in a day or two.

★ ★ ★

While the OMB analyst's "recommendations" in the fictional dialogue would appear to be logical

and justified, based on the facts presented, the question remains: Will they ever be made in the context of today's funding of the Department of Defense? Will the frantic rush to spend result in more funds being poured into the quicksand of individual service systems, to the detriment of a single, uniform DOD military pay system that is effective, efficient, and far less costly? Only time will tell, but the odds are that savings will once again be sacrificed on the altar of spending.

¹U.S. General Accounting Office. "The Navy's Computerized Pay System Is Unreliable and Inefficient—What Went Wrong?" (FGMSD-80-71, Sept 26, 1980).

²U.S. General Accounting Office. "The Marine Corps Military Pay System: Too Many Errors and Inefficiencies" (FGMSD-80-49, June 10, 1980).

³U.S. General Accounting Office. "Army Guard and Reserve Pay and Personnel Systems Are Unreliable and Susceptible to Waste and Abuse" (FGMSD-80-30, Jan. 28, 1980)

⁴U.S. Government Printing Office "The Budget of the United States Government, Fiscal Year 1981."

⁵U.S. General Accounting Office. "Status, Progress, and Problems In Federal Agency Accounting During Fiscal 1980" (AFMD-81-58, June 25, 1981)

⁶U.S. Department of Defense "Department of Defense Military Pay and Allowances Entitlement Manual," Nov 2, 1966

⁷U.S. General Accounting Office "Status of Development of the Joint Uniform Military Pay System" (B-159797, Aug 17, 1970)



Mortimer H. Dittenhofer

Dr. Dittenhofer retired from Government service in 1976 after serving with several Federal agencies in responsible financial management positions. Following a year on the faculty at American University, he served as executive vice president of the Association of Government Accountants from 1977 to 1980. He currently is on the faculty at Georgetown University. Dr. Dittenhofer holds a Ph.D. from American University. He is a member of the Institute of Internal Auditors and of the Association of Government Accountants, Montgomery-Prince Georges Chapter.

The Revised Government Audit Standards

This article, slightly adapted, appeared in the Fall 1981 issue of the *Government Accountants Journal*.

A milestone in the field of Government auditing was reached in 1972, when the Comptroller General of the United States issued the *Standards for Audit of Governmental Organizations, Programs, Activities, and Functions*. The standards were the result of a series of discussions between GAO staff, the Comptroller General, and representatives of State audit organizations. The publishing followed about 2½ years of effort on the part of a work group that included primarily Federal audit specialists, but it was assisted materially by a team of consultants from State and local governments, from academia, and from public accounting.

The standards, during the period 1972 to the present time, have been accepted by audit organizations of State and local governments and by the public accounting profession. Many States incorporated the standard into their internal audit operations, following suit of the Federal Office of Management and Budget that required their use by Federal agency internal auditors.

The standards brought to the field of government auditing an expanded scope: the addition of reviews into areas of management and performance. The standards crystallized progressive methodologies used by some of the more advanced audit staffs, and they promoted new audit techniques that showed promise toward achieving better audit operations.

The Revised Standards

During the late spring of 1981, GAO released a second revision of the original audit standards issued in June 1972. The first revision, in 1974, contained two small but important language changes. The 1981 revision was more substantial. From 1970 to 1972, the original standards went through eleven drafts, including two exposure drafts, and the

standards, when they were published, were substantially like the second exposure draft. The 1981 standards were released for exposure only once, and the final release was considerably different from the exposure draft in arrangement and implied philosophy.

The 1972 standards were general in nature and applied equally to the three segments of auditing considered in the "full-scope" concept: (1) audits of financial and compliance aspects, (2) audits of efficiency and economy aspects, and (3) audits of program review (effectiveness) aspects. The present body of standards, with the exception of four general standards, are divided into two parts: (1) applications to financial and compliance auditing and (2) applications to economy, efficiency, and effectiveness (program review) auditing. This arrangement is a material change from the arrangement in the 1972 standards (as well as the arrangement in the one exposure draft of this 1981 revision of the standards).

There is another rather substantial change in the Examination and Evaluation and Reporting section applying to Financial and Compliance Audits (Section C). This change is the predominance of the AICPA Statements on Auditing Standards. There is, however, some augmentation of this body of CPA standards. This augmentation consists of four subordinate GAO standards that are described as being added to "satisfy the unique needs of government."

The 1981 revision contains many needed changes, augmentations, and new ideas. The work done by GAO in revising the standards should be appreciated as adding to the audit progress started when the original standards were issued in 1972.

Steps Leading to the Revision

When the original government audit standards were being developed during 1970 to 1972, the work

group that was developing them believed that a series of implementing activities would assist to keep the standards current and up-to-date. Several of these planned activities were

- presenting a series of orientation seminars throughout the Nation for Federal personnel, State and local government personnel, and public accountants;
- developing a procedure for publishing implementations, interpretations, and explanations;
- publishing a series of audit standard supplements; and
- establishing a plan for periodic conferences to discuss the standards and to recommend improvements.

All of the above activities did take place. It is believed that they helped increase use of the standards during the past 9 years. The last activity, the periodic conferences, was merged with the Intergovernmental Audit Forums, developed and supported by the Comptroller General through the General Accounting Office early in 1973. These forums, the National Forum and the 10 Regional Forums had as some of their objectives the implementation, interpretation, and improvement of the audit standards. The forums have developed innovative implementation of the standards, such as methodologies for the conduct of efficiency and economy audits, of program results audits, and of fraud and abuse audits. Also, the forums have made periodic suggestions for changes to the standards.

The American Institute of CPAs has also suggested, both formally and informally, changes in the standards. The 1974 modification came from this source. The various associations of State and local auditors have also been active in suggesting changes for the standards. Finally, in 1979, the Comptroller General determined that the standards should be revised.

Under the direction of the late GAO chief accountant, Donald L. Scantlebury, and group leader

William A. Broadus, a project was developed that incorporated most of the suggested changes from the last few years. An exposure draft was released late in 1980, and a large number of comments were received. Many called for making the standards for financial and compliance auditing more realistic and practical, relating them directly to the AICPA audit standards, and divorcing this type of auditing from the management (economy and efficiency) and program results auditing. The standards were revised, to the degree possible, to incorporate most of the suggestions.

The standards were signed by Elmer Staats, the Comptroller General, during the last week before his retirement on March 3, 1981. The standards are indeed a monument to his foresightedness and recognition that a body of standards was the necessary ingredient for improved auditing and through improved auditing, hopefully, for improved governmental management.

The Intent of the New Standard

In an article for American Accounting Association's *Public Sector Sections Newsletter*, Mr. Broadus stated that the standards had been revised to

- expand the explanations of some standards in response to questions about them;
- separate the standards for financial and compliance audits from those for economy and efficiency audits and program results audits;
- incorporate standards relating to audits in which automatic data processing systems are used by the entity;
- add a standard to make more specific the auditor's responsibility for detecting fraud, abuse, and illegal acts in government programs and operations;
- clearly incorporate the AICPA's Statements on Auditing Standards for field work and reporting into the examination and evaluation and

reporting standards for government financial and compliance audits;

- add additional standards and requirements for government financial and compliance audits;
- clarify the meaning of compliance auditing and clarify when expanded scope auditing should be performed; and
- discuss the handling of future of AICPA pronouncements and the issuance of future pronouncements by GAO.

Following is brief descriptive material dealing with each of the standards so as to provide an overview of the entire body of revised government audit standards.

The Expansion of Scope

The first standard, relating to the scope of the audit, is probably one of the most important of all the standards. It is because of this importance that the standard was given the status of a separate classification. The standard establishes the parameters of the audit. It provides that audits will be expanded beyond pure fiscal aspects into broader areas of management. However, along with the fiscal or financial element of the audit, there is included an examination to determine compliance with laws and regulations because noncompliance can, in many cases, have a financial impact on the organization. This compliance, in the revision, is described as being of more consequence in that it also applies to efficiency and economy audits as well as program results (or effectiveness) audits. These noncompliant activities may also have financial aspects on the auditee organization.

The review of efficiency and economy should determine whether the organization and its officials are carrying out their responsibilities while at the same time conserving resources and providing for a minimum expenditure of effort.

Where there are uneconomical or inefficient practices disclosed, the

au
th
or
de
te
nc
sh
si
pr
tiv
mi
its
th
tir
tiv
en
po
Th
be
pa
of
T
S
T
cla
ste
me
du
im
fou
T
Wh
the
art
we
Ho
are
of
pa
par
spe
suit
law
scie
IT
tion
ing
reg
and
gov
and
son
hae

auditor should determine whether they were caused by the absence of or invalidity of performance standards or by not using control systems to maintain efficient and economical operations. The auditor should report findings and conclusions and should recommend improvements where appropriate.

The expansion of scope into effectiveness areas is intended to determine if the organization is achieving its objectives and goals.

In the end, the auditor must realize that all audits will not require this entire expanded spectrum of audit activity. The audit should be broad enough to meet the needs of all potential users of the audit reports. The point to be considered is that the benefits to be achieved must compare favorably with the potential cost of the audit effort.

The General Standards

The four general standards in this classification are (1) qualifications of staff, (2) independence of the staff members and of the organization, (3) due professional care, (4) and scope impairments. Descriptions of the four standards follow:

The Qualifications of the Staff—With the expansion of the scope of the audit into areas of management and operations, skills that heretofore were unnecessary are now required. However, because all of these skills are infrequently found as attributes of a single auditor, it is necessary to plan to have the skills available as a part of a pool of diversely talented specialists or through the use of consultants for such areas as statistics, law, engineering, and actuarial science.

The skills must include, in addition to basic accounting and auditing, a good knowledge of the laws, regulations, policies, procedures, and directives within which the government organization operates and with which it must comply. Personnel must also be available who have a knowledge of management

functions, such as planning, organization, staffing, directing, and controlling; also a knowledge of communications, computer operations, management information systems, and decision analysis. Finally, the auditor should be able to evaluate the control processes that the organization should be using to monitor its own effectiveness.

Technical competence should be maintained through continuing education.

Independence of the Organization and the Audit Staff—The intent of this standard is to produce an environment wherein the audit organization and audit staff, whether governmental or public, can provide impartial opinions, conclusions, and judgments. The auditor must be completely free from three types of impairments: personal, external, and organizational, and must maintain an appearance of independence to the degree that others cannot question his objectivity and attitude. Public accountants must be independent, as defined in the AICPA Code of Professional Ethics.

The standard also discusses the position of governmental internal auditors and recommends, in addition to the organization's high placement, that the staff be free of political pressures and under a protective civil-service type of employment. Internal audit work can then be accepted after adequate testing evidences the validity of the work being relied upon. However, internal auditors may not be considered independent of their employing entity by third parties, though their work after testing and evaluation may be accepted.

Finally, the standards presume an auditor's independence of a parent government organization when the auditor

- is elected,
- is appointed by an executive head of the government and approved by and reports to a legislature, or
- is legislatively appointed, when auditing segments of the political organization and reporting to the legislative body.

Also, independence is presumed if the auditor is of

- a level of government other than that being audited,
- a different branch of the same government, or
- a different agency or department of the same branch of government.

Due Professional Care—This standard relates to the manner in which the audit is performed. It considers all of the other standards that are applicable, such as planning, supervision, examination, and reporting. The standard does not imply unlimited responsibility for disclosure of irregularities, inefficiencies, diseconomies, or ineffectiveness, nor does it imply that the audit organization or the auditor is infallible. The auditor is not expected to give absolute assurance that no material impropriety exists. However, the auditor must be alert for situations or transactions that could be indicative of (1) fraud, (2) abuse, (3) illegal expenditures or acts, (4) inefficiencies, or (5) ineffectiveness. The standard does require professional performance of a quality commensurate with the importance of the audit work being performed.

Auditing is not a substitute for an internal control system. These controls and associated procedures to provide protection against irregularities and improprieties are a management responsibility.

The auditor is expected to use good judgment in testing, and in reporting and the quality of audit work, the level is expected to be appropriately high.

Followup on findings from previous audits as to corrective action is also an essential part of this standard.

Scope Impairments

The auditor should attempt to neutralize factors external to the audit organization that interfere with the ability of the audit staff or the auditor to maintain independence and objectivity. Examples are

- limitation or modification of the

scope or type of audit,

- interference with the selection or application of audit procedures or transactions to be audited,
- denial of access to sources of information or to officials, or
- unreasonable restrictions on time.

Failing an attempt to neutralize these factors, the auditor should report the limitation.

Examination and Evaluation and Reporting Standards for Financial and Compliance Audits

During the intervening period between the issuance of the original standards in 1972 and the present time, financial and compliance audits assumed greater importance. During this interval, public accountants became aware of the government audit standards and earnestly attempted to comply with them in their audits of government. There were many new areas of governmental audit of a financial and compliance nature as the growth of federally assisted programs continued. Generally, the congressional legislation creating (or modifying) these programs called for audits in compliance with the standards. There seemed to be general confusion as to the degree of compliance with the audit standards that was intended. It appeared that most of these audits were of a financial and compliance nature and public accountants felt uneasy in their omission of efficiency, economy, and effectiveness aspects, even though the original standards stated that their inclusion was not a universal requirement.

The result of this above condition was a certain amount of pressure from the profession to clarify the situation with a set of examination and evaluation standards that more specifically described the requirements for the usual financial and compliance audits performed generally by public accountants. It must

be assumed, in the absence of negative explanatory remarks, that this new section also applies to audits of financial and compliance aspects by government auditors.

There are three specific major parts of this section: (1) the requirement that the AICPA standards are a substantial part of the section, (2) a series of four augmenting standards relating to examination and evaluation and comprising parts of the original examination and evaluation standards, and (3) a major modification of the original reporting standards that will apply to the financial and compliance audits. These standards are described in a bit more detail following:

Inclusion of the AICPA Standards—The auditor is referred to the most recent codifications and individual issuances of the Statements on Auditing Standards published by the AICPA.

Planning—This standard emphasizes the single audit concept and provides that auditors plan the audits so as to serve the needs of all government users. The planning should also consider the stewardship responsibilities of the government that exceeds the impact on financial statements. This single sentence could bring into the financial and compliance audit appropriate aspects of management stewardship (economy and efficiency) and program stewardship (effectiveness). In effect, the financial and compliance auditor continues to be responsible for these aspects of the audit when and if they are material to the operation being audited.

Legal and Regulatory Requirements—This standard describes the compliance aspect of the audit. Because of the importance of statutes, regulations, and ordinances in the operation of governmental units, the auditor is required to consider this aspect. Also, because of the financial impact of noncompliance, the auditors are to satisfy themselves that there are no failures to comply that would materially affect financial statements. Additional assurance is required to determine

that there was proper cost distribution to grant programs.

It would appear from the language of the standard that there is no requirement for determining if there was noncompliance with statutory requirements that have nonfinancial impact.

Working Papers—This standard covers much of the material that it must be assumed was contained in sections of the AICPA standards incorporated by reference. It does add a stipulation on the exchange of workpapers between government units so as to eliminate duplication of work. It also provides for exchange of or use of workpapers between public accountants and government auditors. A series of four qualitative requirements as to content, completeness, legibility, and materiality is also included.

Fraud, Abuse, and Illegal Acts—Auditors auditing financial and compliance aspects shall be alert to the possibility of fraud, abuse, and illegal acts and, if necessary, extend audit procedures to identify the effect on financial statements. The standard repeats the usual disclaimer as to an audit guaranteeing that no improprieties exist or the subsequent discovery of such improprieties implying that audit work was inadequate.

Distribution of Audit Reports—Reports are to be distributed to interested officials as well as to appropriate officials of client organizations and to those officials responsible for taking action. Copies should also be made available for public use. Engagement letters for external auditors and the organization's policies for internal auditors should provide for this distribution.

Statement on Auditing Standards Followed—A statement should be in every audit report as to the standards followed in the audit. This statement should refer to the government audit standards, the AICPA audit standards, or both.

Statement on Compliance and Fraud, Abuse, or Illegal Acts—The auditor's report should contain statements of positive assurance on

t
e
l
s
a

f
N
n
t
C
a
s
p

te
a
re
e
a
re
o
n.
m
ac
pr
m
lic
cc

in
ar
di
in
th
m
Re

•
cc
•
•
ar
•

cc
m

ch
fir
sh
re

m
th
ftc
of
irt

GA

the items tested and negative assurance on the items not tested. It should also identify material instances of noncompliance, fraud, abuse, and illegal acts.

Positive assurance implies conformance to laws and regulations. Negative assurance implies that nothing came to the auditor's attention to indicate noncompliance. Only items of material noncompliance should be considered and the statement should be put in proper perspective.

The discovery by government external auditors of evidence of fraud, abuse, or illegal acts should be reported to top management, government law enforcement officials, and officials of agencies providing resources. Public accountants need only notify the client agency. Internal auditors should notify the top management officials of the auditee agency. Separate reports should be prepared for these findings whether material or not. Release to the public should be made only with legal concurrence.

Statements on Internal Accounting Control—Financial and compliance audits will not require any additional audit effort for the review of internal accounting controls other than that required as a part of a normal financial and accounting audit. Reports will identify

- significant internal accounting controls,
- controls that were evaluated,
- controls that were not evaluated, and
- material weaknesses disclosed.

The study of internal accounting controls should follow the requirements in the AICPA Standards.

Other Reporting—Material deficiencies not disclosed in reports on financial and compliance audits should be covered in separate reports.

Privileged and Confidential Information—The report should describe the nature of information omitted from the report and the requirements of law or regulation that preclude its inclusion.

The Examination and Evaluation Standards for Economy and Efficiency Audits and Program Results Audits

The standards related to the conduct of the field work audits specified are included in this classification. There are seven standards, including the two new standards mentioned earlier:

Planning—Planning is a basic management function, and it applies to audit as it does to other functions of the organization. Students of management agree that most any operation must be planned to be efficiently and effectively conducted. One of the reasons for planning is the necessary coordination so that audit steps performed by various parts of the audit team can be properly articulated and so that the audit objectives can be met. Also, the broad-scope audit requires more planning than purely financial audits because of the complexity of the operation audited and the audit process itself.

Planning applies to coordination with other audit staffs, to the personnel to be used, the work to be performed, and the form and content of the report. Planning for work to be performed includes the development of audit guides and audit programs to serve as controls of the audit process.

Finally, the planning should consider the potential uses and users of the audit information. The audit work and the report should be responsive to all.

The planning should provide for the use of the work of other auditors after assuring the credibility of the other auditors and the quality of their work. Additionally, as auditors are working together to a greater degree, access to working papers is taking greater importance. This too must be planned.

Supervision—This standard is essential to all audits so as to pro-

vide that personnel are being properly used in the correct skill mixes and that they are properly performing essential work. Supervision should ensure that

- there is conformance to the audit standards,
- the audit program is being followed,
- workpapers adequately support findings and conclusions,
- workpapers contain adequate information for report writing, and
- the audit objective will be achieved.

Legal and Regulatory Requirements—The standards contain the provision that the governmental auditor should examine and evaluate operation so as to determine compliance to statute and regulation. All organizations must respond and be compliant to not only the statutes and regulations of the governments within which they exist and operate, but also to organizational policy, procedures, directives, and to controls, such as budgets.

The auditor must test the operations to determine that there are no material deviations from the particular restrictions, and if there are, the deviations must be identified, together with descriptions of its effect.

Internal Control—The internal auditor in both the public and the private sectors is interested in the internal controls established for operational poses (covered in the preceding section). In operational auditing, however, the auditor is interested in how well the controls provide for efficient and economical operations, ensure compliance with procedures, and how well the controls affect the achievements of results that are stated or implied by charter, by directives, or by other means. Governments have a continuing need for effective internal control systems because of the lack of administrative continuity caused by changes in elected legislative bodies and appointed administrative organizations.

The auditor reviews the organization operations to assure that the appropriate control elements are present and properly functioning.

External auditors should consider internal audit operation and attention to other internal controls in performing their reviews. Internal audit is an essential element of the internal control system. Thus, internal audit work can be used to provide assurance that the control system is effective. The auditor is also interested in determining whether information provided from the controls is being utilized in decisionmaking and in taking corrective action.

Although the auditor should be a specialist in control systems, it is not intended that an examination of all control systems be the objective of the audit. The important thing is to concentrate on those controls that are necessary to the accomplishment of the organization's objective or on those controls that are or should be active in operations that give evidence of deficiencies. In the latter case, the auditor is interested in why the controls have broken down to allow the deficient condition to exist.

Auditing Computer-Based Systems—This standard provides that auditors shall participate in the design and development of new data processing systems and significant applications and modifications. Auditors shall also review general controls to determine that they comply with management direction and legal requirements and that the controls are operating effectively as to reliability and security. Finally, auditors shall review application controls to assess their reliability in processing data.

Where systems are audited that did not have audit review during development, the auditors should audit sufficiently to assure the integrity of the system. The standard also requires that auditors alert management to the potential disadvantages of not having audit review during the development phases, specifically as to controls, audit trails, and compliance with good accounting practice.

Evidence—Evidence (physical, testimonial, documentary, and ana-

lytical) should be sufficient, competent, and relevant. Sufficiency is the presence of enough factual, adequate, and convincing information to lead a prudent knowledgeable person to the same conclusion as the auditor. Competent evidence should be reliable and the best attainable through reasonable audit methods. The auditor should keep in mind that independent sources are the best source of reliability, that direct evidence obtained through personal observation is better than indirect evidence, and that original data are better than copies.

Relevance refers to the direct relationship to the issue being examined.

Evidence placed in working papers is the link between the auditor's investigation, evaluation, and report. It thus assumes great importance. The working papers should be complete, accurate, clear, understandable, legible, neat, and relevant.

Evidence should be safeguarded and retained for such periods as are necessary to assure that all legal and management requirements have been met.

Fraud, Abuse, and Illegal Acts—This standard holds that the auditor will be alert to situations, transactions, or actions that could indicate the presence of fraud, abuse, or illegal or improper activities. The auditor should plan his audit to disclose such acts and resulting illegal or wasteful expenditures. If indications of such malfeasance are evident, the auditor will expand the testing and investigation procedures to the extent necessary to identify the effect on the operation or the entity.

Much of the required activity is called for under other standards. This standard is important because of the objectives of the standard and the sensitive substance of the object of the audit.

The standard is clear in its language that audit will not guarantee the absence of improper or illegal acts, nor will subsequent discovery of such acts indicate improper or ineffective auditing.

Reporting Standards for Economy and Efficiency Audits and Program Results Audits

There are four standards in the report classification. These four standards cover (1) the form of the report (written), (2) the distribution of the report to appropriate officials as described in the prior section on financial and compliance audits, (3) the timeliness of the report, and (4) the content of reports as to characteristics.

With the progress of the audit into areas of management and operations, along with the interest of managers in efficiency and economy and in achieving program results, the audit report assumes more significance. It is not just a documentation of the work accomplished; it also serves as an analytical document explaining a number of important points, such as

- the criteria used and their sources,
- the background of the operations,
- the conditions that were found,
- the extent of the deviations from the criteria or standards,
- the causes of the deviations, both surface causes and underlying causes, such as policy problems,
- the impact or significance of the deviations, and
- suggestions and recommendations for resolving the problems found.

A report so structured serves as a management tool to early pinpoint those areas needing corrective action.

Form—Written reports are to be used because they serve as a permanent record of the audit, they are less susceptible to misunderstandings, and they provide the same basic information to all readers.

Distribution—The reports are to be submitted to appropriate officials of auditee organizations, to client officials, to those who will take action on findings, and those for whom the audit will provide sub-

stantive useful information.

Timeliness—Reports, to be effective, should be issued as soon as possible after the completion of the examination and evaluation work. Late publication resulting from the desire to achieve precision in the report should be avoided. Consideration should be given to the trade-offs of precision and accuracy in favor of timeliness. Interim reports should be used when there is an immediate need for the early reporting of material findings.

Report Contents—Reports of audits of economy and effectiveness and of program results shall include:

- An adequate description of the scope and objectives of the audit to give the reader proper perspective.
- A statement that the audit was conducted in compliance with generally accepted audit standards.
- A description of material weaknesses in internal controls.
- Positive and negative assurances as to compliance with applicable laws, regulations, and statutes as described in the earlier section on reporting for financial and compliance audits. Minor procedural non-compliance items, not illegal, need not be reported.
- Reporting on fraud, abuse, and illegal acts should be described in the earlier section on reporting for financial and compliance audits.
- Audit reports should contain recommendations whenever significant improvements in audited entities is possible. Recommendations should be constructive in tone and relate to operational and compliance aspects. Auditors, in subsequent audits, should disclose the status of recommendations for which management has directed action.
- The report should contain the views of responsible officials of the audited entity. The views should include the officials' reaction to the audit findings and their plans for implementing the findings. Auditors should express their basis for rejecting opposing opinions when appropriate. Promises of corrective action should not be justification for dropping a significant finding.

- A description of significant accomplishments should be provided, especially where they can be used elsewhere.

- Issues needing further study should be identified.

- Privileged or confidential information that has been omitted should be identified along with the reasons for such omission.

Report Presentation—All reports shall:

- Present factual, supported data accurately and fairly. Broad conclusions shall be supported by adequate examples of deficiencies.

- Present findings and conclusions in a convincing manner.

- Present findings objectively including sufficient information to provide proper perspective.

- Be written in language as clear and simple as the subject matter permits. Technical terms should be clearly defined. Reports should be properly organized and illustrated.

- Be concise but complete enough to be understood.

- Be complete so as to provide adequate information, including background, for management decisions. Conclusions should be specific, not implied.

- Place emphasis on improvement, rather than criticism of the past. There should be a constructiveness of tone throughout the report. Language that generates defensiveness or opposition should be avoided.



William P. Johnston, Jr.

Mr. Johnston is a group director in the General Government Division. He has a B.S. degree in accounting, an M.B.A. in applied economics, and is currently a DPA candidate at George Mason University. He is a member of the Association for Program and Budget Analysis, the Washington Operations Research Council, and the Society of Government Economists. Mr. Johnston is a frequent contributor to the *GAO Review*.

Governmental Audit Standards: Study Design Teams Can Help Meet Auditor Qualification Standards

A previous *GAO Review* article, "Governmental Audit Standards: Effect on Evidence Collection and Analysis," Winter 1982, discussed the evidence collection and analysis implications of the standards for auditors and audit organizations. The article suggested that if auditors and audit organizations expanded their work to include broad-scope efforts, such as economy and efficiency and program results audits, both the individuals and organizations would have to develop increased knowledge of sampling and other statistical techniques, new data collection techniques, and computer analysis of data collected during the audit. The article concluded "that the organization and individuals in the auditing profession will have to undergo a reorientation in professional development if the objectives of the . . . standards are to be achieved."

This article continues the discussion begun in the previous article by focusing on a mechanism—the study design team—that can help assure auditing organizations that they are using the most appropriate skills and knowledge in their audits. The information presented here is based on the General Government Division's experience with study design teams during a 6-month period starting July 1, 1981. This article discusses the design team concept in terms of (1) purpose, (2) composition, (3) function, (4) the methodology needs assessment checklist, and (5) early results of design team use.

Purpose of the Study Design Team

The following passage from the standards makes clear the evolving nature of expanded scope audits

and their requirements for new knowledge and skills:

The audit standards are more than the mere modification of current practices, tailored to existing audit capabilities. They include concepts and areas of audit coverage which are still evolving and are vital to the accountability objectives sought in auditing governments and their programs.

The responsibility for assuring that auditing under the standards does not mean "business as usual" is placed on both the auditor and the auditing organization. For example, the first general standard states: *Qualifications: The auditors assigned to perform the audit must collectively possess adequate professional proficiency for the task required.* A further elaboration makes the auditing organization's role even clearer:

The qualifications maintained here-in should apply to the skills of the audit organization as a whole and not necessarily to individual auditors. If an organization possesses personnel, or hires outside consultants, with acceptable skills. . . each individual member need not possess all these skills.

Possession of or access to these skills by the auditing organizations will not, however, assure their use. Experience has shown that many auditors will not take advantage of the quality-enhancement or cost-reduction potential of these skills, even when readily available, either due to their failure to recognize situations where the skills are useful or because of a reluctance to work in unfamiliar environments. When this occurs, auditing organizations

ought to recognize and correct the situation.

The major purpose, then, of the study design team concept is to provide an implementing mechanism for the audit qualifications standard. As such, the approach aids management in

- assuring that audits use the most appropriate methodologies and other skills;
- assuring that each audit considers the feasibility of using data processing and statistical techniques to reduce cost and staff requirements;
- determining which skills and methods have the greatest applicability to the audit organization's work, the frequency with which each is used, and, if necessary, the reasons for shortfalls between applicability and use;
- alerting the assigned staff, as early as possible in the audit, to the potential benefits of using skills and methods they may not possess, allowing time for other resources to be obtained to meet assignment needs;
- documenting the use of the various skills and methods for the purpose of making resource allocations and determining staff development requirements; and
- determining the extent of any methodology-related limitations which would require disclosure in the resulting audit report.

Composition of the Study Design Team

The composition of GGD's study design teams generally has been determined by both the type of audit being done and by the audit objectives. Thus, an audit of conditions in the savings and loan industry re-

quired a study design team member with skills in economic analysis and specialized knowledge of financial markets. However, experience shows that most design teams are able to accomplish their objectives with individuals having the following mix of skills:

- subject matter or programmatic expertise;
- legal expertise;
- methodological expertise, which could be any mix of skills, although usually the requirement can be met by an individual trained in quantitative methods and who has knowledge of computerized data retrieval and analysis; and
- auditing expertise, supplied by the staff having responsibility for conducting the audit.

In some cases, as more information is developed about an audit's objectives, certain skills and some design team members are found to be unnecessary to the job. In other cases, new team members with new skills are added to meet an audit's requirements. The key point here is that the design team, complete with its members' atypical and typical auditing skills, can make a formal methodology review on each assignment and identify the particular skills needed to conduct the audit. Thus, decisions relating to the work itself and the methods to be used are made only after receiving input from individuals possessing a broad range of differentiated skills.

How the Design Team Concept Functions

Under the study design team concept, meetings take place before the auditors request approval to go into full-scale implementation. Division practice has been to provide design

team members with information on the proposed scope and audit objectives prior to the initial design team meeting. This information, together with the team's discussions, helps determine whether the assignment would benefit from "nontraditional" auditing skills. Design meetings held early enough in the assignment allow staff to consider the input by the other team members and, when necessary, to adjust the proposed approach accordingly.

Additionally, holding the meetings early in the process provides the time required to work out a way to obtain the necessary skills. For example, staff on one assignment decided a mail survey was the best way to collect required data, and this need was identified early enough to obtain the services of an individual trained in designing questionnaires. On another assignment, the early meetings provided time to identify and meet the need for a computer simulation model. In both of these cases, the needs may not have been recognized or met if the study design team mechanism had not been in place.

The length and frequency of the study design team meetings have been kept to a minimum. For some small audits, usually those with simple objectives, individual team members have been telephoned to get their reaction to the assignment. Typically, however, at least one formal design team session is held, and, based on the results of this meeting, subsequent meetings are held with only those team members whose skills or knowledge warrant more extensive discussions. For example, on an audit requiring a complex statistical sampling plan, the initial meeting involved all design team members. The subsequent meetings were limited to the as-

signed staff and those members of the design team with sampling expertise. Such an approach has held to a minimum the amount of time spent developing the methodology for each assignment, while at the same time allowing all team members an active role in determining the most appropriate methodology for each of the division's audits.

Methodology Needs Assessment Checklist

A major part of the study design team concept, and its only written record, is the methodology needs assessment checklist. The division director and other division officials use the checklist information as an aid in deciding whether an audit should be approved for implementation. Additionally, completed checklists, when analyzed, provide information about (1) the skills and techniques used on the various assignments, (2) the frequency with which new skills and techniques could have been used and were not, (3) why the newer methods were not used, and (4) report qualifications necessitated by the audit methodology.

The checklist is organized into two major sections. The first contains general information about the audit, such as the job code, the title, and the estimated required staff days. Other information collected under the general section, such as the number of locations to be visited during the audit, whether the audit requires interviews or questionnaires from 25 or more people, and whether the audit will require obtaining the same data from 50 or more case files, provides a first indication as to whether the assignment might benefit from sampling,

computer, or statistical analysis techniques. The second section, under four major headings, details the proposed methodology and the results of the design team assessment. The four headings are (1) sampling, (2) standardized data collection, (3) computer sciences, and (4) analytical resources. For each of these areas, the team member knowledgeable in quantitative techniques can use the form to develop information about whether the assignment would benefit from their use. If there are indications that the assignment would benefit, information is then recorded about how the skills could be applied to the audit. For example, if an audit has a sampling application, information is collected about whether

- the locations should be randomly selected,
- the cases/individuals (units of analysis) should be randomly selected,
- a simple sample is required, or
- a complex sample is required.

After establishing that an audit would benefit from using one or more of these skills, and after recording specifics on how the skills apply, the checklist can be used to record information about whether the skills will be used in the audit. In those instances where the skills are applicable but the audit does not incorporate them, the team member can record information on the checklist about why the skills are not being used. Some reasons would include the lack of auditor resources, time constraints, and/or decisions to reduce the scope of the audit.

The final type of information recorded on the checklist relates to report qualifications or potential problems resulting from the proposed methodology. For example, in

many instances, deciding not to randomly select locations has brought warnings to division management that the audit results will apply only to the locations actually visited. The same decision has also brought observations that the assignment could not benefit from other statistical techniques since a random sample is a necessary condition for their use.

As previously indicated, checklist preparation is the responsibility of the division's methodology unit, although it can be prepared by any individual with quantitative and evaluation training and experience. The form, once completed, becomes a permanent record of the audit's methodology considerations. (Sample excerpts from the checklist appear at the end of this article.)

Some Tentative Results

As of December 1981, 10 assignments have passed through GGD's entire design team process and are in the implementation phase. Another 10 have progressed to the point where some input has been received from study design team members. Initial results of the study design team approach indicate that the auditors responsible for the assignments spend more time considering the methodology aspects of jobs than in the past. Also, the methodology considerations surface earlier in the assignments. Because the design team concept is seen as evidence of increased emphasis by division management on the importance of methodology in assuring audit quality, interest in knowing about and working with the newer skills has increased. For ex-

ample, the following are some observations on the design team concept from auditors who participated in the process:

The [design team] meeting proved quite useful in surfacing and addressing various concerns, reservations, and potential problems. In particular, several issues were raised on the assignment's scope and methodology... As a result of these concerns, the planning phase was extended one month to firm up our program selection, grantee visits, and implementation time frame in terms of both staff and calendar days.

* * *

Overall, the design team concept is an excellent approach to scoping and planning our assignments. For this particular assignment, the design team was instrumental in developing issues and then eliminating those that were not attainable because of our inability to collect the needed evidence to support our positions. Thus we eliminated issues that... we may have expended a great deal of time on before we found they were impractical to pursue... Also, we have saved a great deal of time on this assignment by using a data collection instrument and the computer to analyze our data.

* * *

The [design team meeting] affirmed that the conceptual design and methodology [were] appropriate to the issues we were asked to address. However, it became evident that improvements needed to be made in presenting the analytical framework

in a form that better demonstrates how it addresses the issues contained in the legislation... In addition, the [process] pointed up the need to emphasize the potential budgetary impact of changing the matching rate structure. It was generally felt that this issue needed to be given more prominence even though the primary issue is concerned with the matching rate structure itself.

There were also some negative comments on the process. Auditors on one assignment felt that the design team members spent too much time arguing among themselves over matters irrelevant to the audit. The same group of auditors also suggested that some staff time was wasted because design team members were tied up in long meetings when they were needed only for an hour or so. The auditors suggested that smaller, more individualized meetings would alleviate both of these problems, concluding that "the design team concept has merit and should be continued."

Auditors on another assignment raised what will probably be the most frequently occurring problem in introducing new techniques into auditing organizations—that of placing responsibility for how an audit should be done. While recognizing that the "design team is an excellent approach to scoping and planning" assignments, the auditors observed: "The only drawback is that the design team members must realize that their role is to only provide advice and that the final decisions on an [assignment's] direction lie with the evaluator-in-charge and the group director." This problem likely will be resolved through more experience with the

design team concept, when auditors develop more familiarity with the newer techniques, or perhaps through more intervention by higher levels of division management.

Preliminary statistics on the applicability of the new skills to the division's work are also becoming available. They show that 4 of the 10 audits could benefit from using sampling techniques, 5 from structured instruments, 6 from computer science skills, and 5 from applying analytical resources. The statistics also indicate the extent to which considerations of methodology require qualifying the audit findings. For example, 2 of the 10 approved assignments will produce results not applicable to other situations. The other eight assignments will result in reports where the audit findings apply only to the locations visited, not to the agency or program as a whole. With more experience and information, the division will be better able to determine if new statistical or data collection techniques could be used to obtain broader audit coverage.

Observations and Conclusions

Governmental Audit Standards recognize that new skills and methods will be needed by auditors and audit organizations to do expanded scope audits. However, these nontraditional skills and methods probably will not be used unless auditing organizations develop mechanisms like the study design team which assure that each assignment is evaluated in terms of skill and method applicability.

Excerpts from the Checklist

STANDARDIZED DATA COLLECTION

Yes = 1 No = 2

Would the assignment benefit from the use of standardized data collection methodologies? If yes, continue.

1/64

Type:

- Mail questionnaires
- Structured interviews
- Phone survey instruments
- Computer assisted telephone interviews
- Other phone interviews
- DCI's (pro forma workpapers)
- Agency computer systems
- Other _____

1/65

1/66

1/67

1/68

1/69

1/70

1/71

1/72

Use of standardized collection techniques on the assignment

Yes = 1 No = 2

Will standardized techniques be used?

1/73

If not, why?

- Design staff not available
- Field resources not available
- Time not available
- Objective downscoped (decision to do work that is less than equivalent to that obtainable using standardized techniques)
- Computer staff not available
- Other _____

1/74

1/75

1/76

1/77

1/78

COMPUTER SCIENCES

Would the job benefit from the application of computer sciences?

2/10

If yes, continue.

- Requires extensive data manipulation (producing schedules, summaries, etc.)
- Requires data availability at several GAO locations (utilize switching capability)
- Requires output of raw data for computing sampling errors
- Requires capability to obtain data from agency computer systems
- Requires all data to be weighted due to complexity of sample
- Requires an evaluation of reliability of agency data systems output
- Requires an evaluation of proposed procurements of computer systems or equipment
- Requires an evaluation of agency (or other) studies, including feasibility studies, of computer system needs
- Requires an evaluation of the efficiency of existing or proposed computer software systems (i.e., report generators, payroll, etc.)

2/11

2/12

2/13

2/14

2/15

2/16

2/17

2/18

2/19

] N y a t v h p n

C22321



Training Civil Rights Counselors

Daphne E. Atkinson

Ms. Atkinson joined GAO in 1981 after 4 years in the publishing industry and a year as a freelance publicist. She received a bachelor's degree in English from Yale University and a master's degree in English literature from Columbia University. Ms. Atkinson is currently a writer-editor in the New York regional office.

The EEO counselor's role and title have changed, and the change is more than cosmetic. Civil rights counselors, as they are now known, have been charged with expanding their roles in the work place. By keeping regional management informed of office developments, counselors can identify potential problems and help find solutions. If a counselor can intervene early enough, problems can be forestalled or resolved with minimal disruption of the office routine. This represents a radical departure from the counselor's traditional role of dealing with problems as they arise. With this basic philosophy, it's not surprising that the Civil Rights Office's 2-day training course emphasized that civil rights counselors can make a difference.

To begin to make that difference, the trainers, the Civil Rights Office director, and the participants had to define both the counselor's traditional and expanded roles. To do that, participants had to answer the following questions:

- What is discrimination?
- How does discrimination differ from reverse discrimination?
- What is meant by the "perception of discrimination?"
- Why is it difficult to separate perceived discrimination from real discrimination?
- What legal mandates exist to combat discrimination?
- What is the difference between EEO and affirmative action?
- What are the complainant's rights?
- How do you protect the rights of the alleged discriminating official?
- How do you maintain objectivity in an emotionally charged situation?
- What are the steps in conducting an inquiry?
- How does handling an individual complaint differ from processing a class action complaint?

Mandated By Law

An overview of legislation dealing with discrimination—including seven legal mandates, two executive orders, and two agency orders—answers some of these questions and is summarized in table 1.

Virtually every president since Truman has placed an antidiscrimination mandate on the books. The Equal Employment Opportunity Commission was established under the Civil Rights Act of 1964, Title VII, by President Johnson. Although EEO and affirmative action are often linked, the Affirmative Action Program was initially instituted for the Government by Executive Order 11478, under President Nixon.

It is important to understand that since the EEO Act of 1972, development of affirmative action plans is also mandated by law. An affirmative action plan, however, is not a *quota*. Its sole purpose is to correct underrepresentation of any group. Rectifying underrepresentation does not mean hiring unqualified people; merit is still the first consideration. The actual difference between EEO and affirmative action is largely semantic because, as one trainer put it, "affirmative action exists to make EEO real."

Defining Discrimination

Supplied with the necessary legal background, participants discussed definitions. How is discrimination defined? What forms can it take? In its broadest sense, discrimination refers to unfair treatment. Legally, discrimination is defined as unfair treatment based on race, sex, national origin, color, handicap, age, or religion. Six forms of discrimination were identified:

**Table 1
PROHIBITED DISCRIMINATION**

<i>Legislation</i>	<i>Based On</i>	<i>Importance</i>
Civil Rights Act of 1866	Race	Implementation of 13th Amendment
Civil Rights Act of 1871	Race, sex (class-based)	Discrimination in employment
Civil Rights Act of 1964, Title VII	Race, sex, national origin, color	Broad antidiscrimination act; EEOC established
Age Discrimination Act of 1967	Age (40-65)	Age not covered under previous acts
Vocational Rehabilitation Act	Physical and mental handicaps	Recognized handicap discrimination
Civil Rights Act of 1968	Race, religion, national origin, color	Criminal penalties for employment interference
Equal Pay Act of 1963	Sex	Recognized sex discrimination in pay
Executive Order 11478	All major forms	Affirmative Action Program authorized
Executive Order 11246	All major forms	EEO for employers and Government contractors
GAO Personnel Act of 1980	All major forms	Established an independent personnel system for GAO. Provided employee safeguards against major forms of discrimination. Est. GAO Personnel Appeals Board
GAO Order 2713.2	Race, color, religion, sex, national origin, handicapping condition, age	Procedures for complaints and rights of employees in GAO clearly established

- Conventional (treatment) discrimination
Unfair treatment based on race, sex, national origin, color, religion, or handicap
- Impact discrimination
Equal treatment with different effects due to background differences
- Related activity discrimination
Unfair treatment based on self-chosen activities related to title VII status
- Discrimination based on innate characteristics
Title VII discrimination based on race or sex
- Discrimination based on characteristics imposed by nature

Handicap is a major example

- Discrimination based on characteristics imposed by society

Lack of education is a primary example

Conventional discrimination can be detected by studying patterns in ratings, hiring, promotion requirements, assignments, training, and awards. Impact discrimination can include a hiring test, awards requiring a minimum grade level, or a job assignment based solely on height. The primary characteristic of impact discrimination is that it is exclusionary. Conventional discrimination and impact discrimination can both be encouraged by organizational systems, so the systems must be reviewed and adjusted

periodically to prevent exclusion.

Conventional and impact discrimination can perpetuate underrepresentation. Another related form of discrimination—systemic discrimination—also accounts for underrepresentation. For example, a high school diploma is mandatory for most jobs, which implies a minimum standard of proficiency. It is a cut-off point for those who can do certain jobs and those who cannot. On the other hand, the average person in the United States reads at the fifth-grade level. Although the high school diploma serves to exclude some people, does that minimum requirement guarantee a level of proficiency? Given the statistics, it does not.

How is underrepresentation

determined? Here, numbers become all-important. It is not only possible, but also at times desirable, to manipulate figures. Statistics can be used to make almost any point, and decisions (such as which statistical data base to use in determining underrepresentation) can make a significant difference in the work force profile. Those bases, in descending order of female and minority representation, are (1) the general population, (2) the civilian labor force, and (3) the relevant labor force.

Participants at the EEO counselor's meeting also laid to rest a popular misconception about reverse discrimination. Reverse discrimination has made attention-grabbing headlines in the last few years. Some groups have been encouraged to think that affirmative action has substantially reduced their opportunities for jobs and promotions. The Equal Employment Opportunity Commission is committed to equality but not at the expense of merit. A uniform guideline for computing adverse impact is used to prevent affirmative action from creating its own inequities. For example, if one group's selection rate is above 80 percent for any reason, the affirmative action plan must be changed to compensate for the other group's shortage. As the course participants checked their figures against the formula, they could not find any evidence of adverse impact for white males in GAO. This is why it becomes essential to distinguish perceived discrimination from real discrimination.

Counseling Approaches

As part of the training, participants watched two videotaped dramatizations of sexual harassment and sex discrimination. Aware of subtle discriminatory behavior, participants

moved on to role playing, in which each acted as counselor and complainant. Role playing allowed them to understand why certain counseling techniques work.

There are essentially two approaches to counseling: directive and nondirective. The best approach is determined by the information the counselor needs. The directive approach helps obtain specific information, such as who, what, when, where, and how. Overall, the most effective counseling approach is the nondirective approach. It reminds the counselor that the complainant has the problem and the counselor is there to help find a solution. The nondirective approach emphasizes listening, asking questions or interrupting only for clarification, focusing on the person, making extensive eye contact, and maintaining a relaxed body position. Since a large part of our communication tends to be nonverbal, the importance of using these techniques in counseling situations cannot be overlooked.

On the last day of the course, participants staged their own drama. Everyone played a role, from counselor to alleged discriminating officer. They provided them with an opportunity to synthesize the course material. Did the complainant have a legitimate complaint? Was the counselor's information accurate? Was the complainant advised of his rights? Did the counselor adequately protect the rights of the alleged discriminating officer? As a counselor, was it possible to settle the complaint informally?

In my debut as a counselor, I faced a tough complainant. He had substantial time in grade and thought he had been overlooked for a promotion. He felt that the employee who got the promotion was not qualified and was personally involved with the manager who made the selection. After interviewing coworkers and other supervisors

and reviewing the selection certificate, I concluded that the complainant did not have as strong a case as he stated. The most qualified person had been promoted. Although I could not guarantee the complainant the promotion he wanted, I did secure a promise from his supervisor to provide the necessary coaching and career development to make him more competitive. However, the complainant was still dissatisfied and decided to file a formal complaint.

A course's effectiveness can be judged by the subtle ways in which it changes your life. Although I don't believe that empathy or understanding can be heightened in a couple of hours, I do believe that their development can be encouraged by expert guidance. This is precisely the kind of exposure that the civil rights training course provided.

Its structure was based on three sound assumptions: we all wanted to be counselors; we were generally interested in people; we were committed to solving problems. By providing us with a good mixture of learning experiences, the trainers progressively broadened our understanding, not just of the complaint process, but of the frustrations and disappointments of modern life as well.

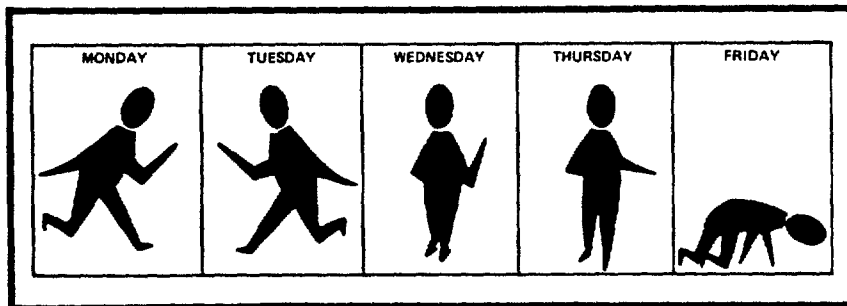
The problems that exist in the office are not simply a product of that environment; if that were the case, the environment could be controlled to eliminate specific problems. But because each individual brings unique perceptions and problems to the work place, counselors have to be willing to listen and help find solutions as well as to anticipate and prevent potential problems. I believe that the ultimate value of the counseling process lies in its potential to create understanding.



Patricia K. Moran

Mrs. Moran is currently GAO's Information Officer. She is a graduate of Marymount College and has a master's degree from Catholic University. Prior to joining GAO, Mrs. Moran was a communications consultant for several organizations. Mrs. Moran is the recipient of several awards for excellence in design, production, and editorial content of corporate literature, promotional literature, audiovisual aids, and educational materials.

A Week's Worth



Monday

Would that I had the good sense to consult the astrology chart or maybe even the tea leaves before coming into the office this morning. I would probably have made other plans. After a very nice Thanksgiving weekend—and a wonderful party marking my second son's 21st birthday—I was in a positive mood. A story on the agency in last Saturday's *New York Times* took care of that. In disbelief, I read my name (a definite no-no for public affairs people, whose names are *never* mentioned) and an incomplete quote which raised more questions than it answered. I fire off a phone call to the reporter who confirms my suspicion that a copy editor did, in fact, cut the story at a point most definitely not to my liking. I don't feel any better having told the reporter what I think of that kind of arbitrary copy editing. I am not an advocate of writing letters to the editor. They never catch up with the people who have read the article in question. Still I feel compelled to complain about this one, and a letter seems an appropriate way to deal with my frustration. I'll think it over and decide tomorrow.

I have a brief meeting with Mr. Bowsher and Elaine Orr on his speech for the American Society for Public Administration. Elaine, who is the director of GAO's Office of Foreign Visitors and the executive director of ASPA's National Capital Area Chapter, had some valuable suggestions for the lead which are more relevant to that audience than what I had proposed. We agreed to reorder the points made in the speech and devote more time to

comments on the budget process. Phone messages are stacking up by noon. Most of them are inquiries from reporters on our report on congressional reporting requirements. By the end of the afternoon, I've gotten in touch with all of them, answered their questions or put them in touch with the person in the agency who could. Dictate a few letters for Mr. Bowsher's signature accepting invitations for future speeches and ordered additional photographs of his swearing in that he had asked for. I'm *still* angry about that story! Best therapy might be a little Christmas shopping. I remember that stores are open late downtown. Actually I just want to distract myself from a blue Monday. I'm pleased to find a special present for my daughter that I've been looking for. I arrive home to discover the dishwasher is leaking—a lot. The end of a perfect day! The only sensible option is to go to bed. I do.

Tuesday

Before leaving home, I telephone Mr. Higgins, who says the dishwasher is probably not a major problem. He will come over this evening. Top of the priority list today is reaching Monika Jensen, a producer for *60 Minutes* who is working on a segment for the program on the Tunnels and Reservoirs Project, particularly the completion of the Chicago tunnel that has raised much controversy. She would like to include an interview with Dan White on the GAO position on the project. I finally track her down, and she tells me that the segment is on schedule. She will set a definite time for the

V
E
S
C
F
I
E
v
a
t
n
A
K
E
k
c
s

pr
m
ra
K.
fi
fo
lf
St
ec
w
sc
fit
ra
pe
be
ch
pl
ha
ch
fri
Dr

i
in-
th-
of
Br
Gr
ex
an
sti
of-
vir
um
fo
gin
nee
wit
to
F
da
tie

White interview sometime in December. Brooks Jackson from the *Wall Street Journal* wants a briefing on our Department of Defense Task Force. He's particularly interested in new information on waste on DOD programs. I set up a meeting with Werner Grosshans for this afternoon at 3 p.m. I draft a letter to the *New York Times*. I review the material for this week's issue of *Management News* with Laura Kopelson. We agree that Mr. Bowsher's ASPA speech will be the lead, particularly the portion that calls for the creation of a commission to review the budget process.

The weather is dreadful, which prompts Karen Lukinson and me to meet in the GAO cafeteria for lunch rather than brave the rainy day. Karen, a film consultant, has just finished a secretary recruiting film for GAO, and I'm anxious to find out if she's pleased with the product. She says there is still considerable editing to do but she feels it will work out well. We discuss a new script for a general GAO orientation film. She's looking for the right narrator. We talk about a number of people. I think commentator Elizabeth Drew would be an excellent choice. Karen is interested in exploring her availability, and I'll be happy to do that for her. Gives me a chance to catch up with an old friend, Kathy Glover, who is now on Drew's staff.

In the early afternoon I get to the in-box. Spend an hour or so sorting through that material. The balance of the day is spent with reporter Brooks Jackson and PLRD's Werner Grosshans and Jim Morris. It's an excellent briefing—good questions and straightforward answers. I'm still astonished at the sheer volume of material that this agency can provide for journalists. Reporters who understand how to use GAO have found the proverbial gold mine. Higgins calls to say the dishwasher needs one new part which he has with him. That's fixed. No big hurry to get home this evening. Daughter Fran has an evening class and daughter Mimi has swim team practice. Looks like a pick-up dinner.

Wednesday

Elaine has revised Mr. Bowsher's speech for ASPA and has gotten some additional language from Milt Socolar. The text reads well, and Mr. Bowsher is satisfied. Our secretary Shirley Graham is typing his reading copy, which I must get to him by noon. Pat Tyson of our office reminds me that a report on Potomac River pollution hazards is about to go to printing. She's working on a release. Mort Mintz from *The Washington Post* calls to tell me that he's starting work on what he hopes will be a major weapons system story. He needs certain unclassified reports and would like to schedule a meeting with Walt Sheley. I'll make arrangements for that when Walt returns to the office on Friday. I return a call to Wendy Wheat at the Peace Corps. As an avocation, Wendy is heavily involved in the issue of world hunger. She's beginning to organize a benefit concert at the Kennedy Center in April. She hopes I can help out on the publicity committee. I explain that my free time is in short supply, but we will meet for lunch one day next week and see what we might work out. She's getting some interesting people together. Also, I return a call from Nikki Burr, who reminds me that my birthday is fast approaching, and we make a lunch date to mark the grand event. Her Bureaucrat doll is selling like crazy and she's gotten marvelous press coverage for it. She said she would save the specifics on that for lunch.

Mr. Bowsher's speech is finished reasonably close to deadline. I deliver the text and call FPCD associate director Roz Kleeman to make arrangements to meet her at the ASPA luncheon to hear Mr. Bowsher. The summaries and digests of three reports which Laura and Pat have edited are waiting for me to review. I put aside some phone messages to take care of that. One title is troublesome—too wordy and complex. The auditor and I talk it over and compromise. It's a better one than the original although not as direct as I would like it to be. I'm

running late for a lunch meeting with an old friend at the Capitol Hill Club. But a cab comes along right away so I'm not very late. I should have postponed lunch to another, less busy time. I'm relieved that my luncheon companion has an early afternoon appointment. Back in the office, I telephone Mike Causey to discuss Mr. Bowsher's speech. There's some good material in it on GAO support for raising executive pay. Mike assures me he will do his best to cover the speech, but I'm not overly optimistic. He's just back from vacation.

I spend some time with Laura going over a special issue of *Management News* on the GAO budget for 1982. There's been some confusion in the agency on just where we stand moneywise and how our people might be affected by the dollar cut-backs. This information must be clearly and carefully presented. Laura checks it out with controller Dick Brown and Milt Socolar, and it appears we are on target.

I call to verify my son Patrick's plane reservations from Denver to Washington on December 19. Everything's in order except the price of the ticket, which has gone up. I could have used that extra \$100! I'm getting excited about having Patrick come home. It's been almost a year since I've seen him. Spent the balance of the afternoon on reports.

I meet Jeanne Young at the Press Club for dinner. We talk at length about the demise of the National Association of Educational Broadcasters where I worked very happily for a number of years. I'm very sad about that organization going under. I met some of the brightest, most dedicated people I've ever known through NAEB, and I'm sorry I've lost touch with so many of them.

Thursday

The morning is routine. I get through the in-box and catch up on some magazine reading I've put aside. I clear up one point for Mr. Bowsher that he raised about one part of his speech. I meet Roz Kleeman at the ASPA registration desk

at 12:30 p.m. to pick up my luncheon ticket. The luncheon crowd numbers about 300, and they give Mr. Bowsher a warm reception. As a speaker, he has one major asset. He likes to do it, and that comes through. He also has a good sense of humor and uses it. I'm a stranger to this group but meet and chat with a number of people. Among them is ASPA president Chet Newland, who asks for a copy of Bowsher's text for partial publication in *The Public Administration Times*.

I've kept notes on my activities this week to prepare this piece for the *GAO Review*. When I return to the office, I begin to put it together. As usual, it takes longer than I anticipate. Writing always does. By the end of the day, I'm still not quite finished, but there is tomorrow morning to complete it and still make Hannah Fein's *GAO Review* deadline. I stop to do some grocery shopping on the way home. Mimi and Fran decide it's a good night for a movie. We go to see *Reds*. Very fine film which we all enjoy.

Friday

I make reservations for a Washington Women's Network luncheon on December 17 to hear Nancy Reynolds from Bendix Corp. and Antoinette Ford from AID. WWN runs good programs. Membership in that organization is very worthwhile. I also arrange to attend a Marymount alumni reception at the school in Arlington on December 14. I'm really out of touch with that group, but with my daughter's recent interest in the college, I will go to the alumni functions when I can. She would like to go, too.

I talk again with Mike Causey. I think he will probably carry something on Bowsher's speech. Reporter Mort Mintz calls to discuss the specifics of his meeting with Walt Sheley next week. I stress that discussing anything that borders on classified information is out, and he agrees. Regrettably, Elizabeth Drew doesn't feel comfortable with the narration idea; she feels it could be seen as a conflict of interest but

says she's flattered that we inquired. I have lunch with Roger Sperry, who brings me up to date on his new project on administrative management across Government. He's enthusiastic about its potential in GAO, and I think he has good reason to be. He also volunteers to contribute to Bowsher's speech drafts—particularly when public administration and management are the themes. There's an opportunity for this involvement in a speech Mr. Bowsher will give at a meeting of the Federal Executive Institute alumni group in February.

After lunch I get transportation details worked out for the weekend. I'm going away with some very old and dear friends. They will pick me up at 6 p.m. I finish the draft for the *GAO Review* which I hope will meet Hannah's requirements. (The only people I know who don't mind being edited are editors!) I decide not to mail my letter to the *New York Times* and head for home.

C. 22



Judith Hatter



Legislative Developments

The Role of GAO

Missouri Senator Thomas Eagleton had the following comments about GAO and the role of the Comptroller General during Senate debate on the nomination of Charles A. Bowsher to be Comptroller General of the United States:

...few positions in the Federal Government carry more responsibility, authority, and potential for valuable public service than the position of Comptroller General of the United States. As head of the General Accounting Office, the 'congressional watchdog,' the Comptroller General represents our main vehicle for conducting oversight of the far-ranging activities of the Federal Government. If the responsibilities for legislative oversight were limited to the committees of Congress, the result would be woefully inadequate.

Congress simply lacks the time and resources to handle its oversight responsibilities alone. Over the years, the professional and impartial GAO reports have saved the taxpayers countless billions of dollars, and if Congress and executive agencies had followed GAO's advice in a timely way, I expect billions more could have been saved.

Title 31 Revision

On October 19, 1981, a bill of significance to GAO was introduced by Congressman Peter Rodino. H.R. 4774 would revise, codify, and enact laws relating to money and finance, as Title 31, United States Code, "Money and Finance." This title contains legislation relating to GAO's functions and jurisdiction.

Program Fraud Civil Penalties Act of 1981

On October 27, Senator William V. Roth, Jr., introduced, for himself and others, S. 1780, the Program

Fraud Civil Penalties Act of 1981. The legislation is "****designed to create an administrative mechanism that will allow the affected agency to impose a monetary penalty for fraud."****² It results from recommendations contained in a May 7, 1981, GAO report entitled, "Fraud in Government Programs—How Expensive Is It—How Can It Be Controlled?".

Department of Defense Authorization Act, 1982

The conferees on the Department of Defense Authorization Act, 1982, agreed to a provision requiring two reports to Congress by the Secretary of Defense recommending improvements in management efficiency and elimination of waste, fraud, abuse, and mismanagement in the operations of the Department of Defense.

The Secretary of Defense must set forth in these reports each recommendation by the Comptroller General on the subject.

Federal Reserve Amendments of 1981

Florida Senator Paula Hawkins introduced S. 1691, the Federal Reserve Amendments of 1981, to subject the Federal Reserve System to the annual congressional authorization and appropriation process. It would also restructure the Federal Reserve Board and require the Comptroller General to make at least one annual audit of the Federal Reserve Board, all Federal Reserve banks, and their branches and facilities.

Senator Hawkins states, "****It is only reasonable that our central bank, which has so much power over the economy, be reviewed at least once a year."****³

CAB Deregulation

On November 23, California Congressman Norman Y. Mineta introduced H.R. 5103, to "accelerate both the transition of the airline industry toward economic deregulation and the sunset of the Civil Aeronautics Board." In commenting on the legislation, Congressman Mineta indicated that industry performance has been monitored through numerous hearings and through periodic studies by GAO. "****Looking at this industry's total costs over the first 3 years of deregulation (1978 through 1980), GAO found that the above factors (external economic conditions,

economic recession, and high interest rates) pushed total airline costs up an incredible 60 percent, yet under the beginnings of deregulation air fares were held to an average increase of only 37 percent.****"

National Bridge Improvement Act of 1981

The National Bridge Improvement Act of 1981, S. 1649, would improve the Federal program for bridge repair and replacement. According to its sponsor, Tennessee Senator Jim Sasser, the legislation is based

on a recently released GAO study which reviewed the national bridge inspection and highway bridge rehabilitation programs for their effectiveness.

In discussing the legislation, Senator Sasser stated: "The GAO report concludes that current information about bridge conditions is inadequate, and that current procedures and standards necessary to allocate funds to those bridges most in need of attention do not exist. The GAO report stressed the importance of bringing about full compliance with bridge inspection standards and timetables.****"

¹*Cong. Rec.*, Vol. 127 (Sept. 29, 1981), p S10669-70.

²*Cong. Rec.*, Vol. 127 (Oct. 27, 1981), p. S12227.

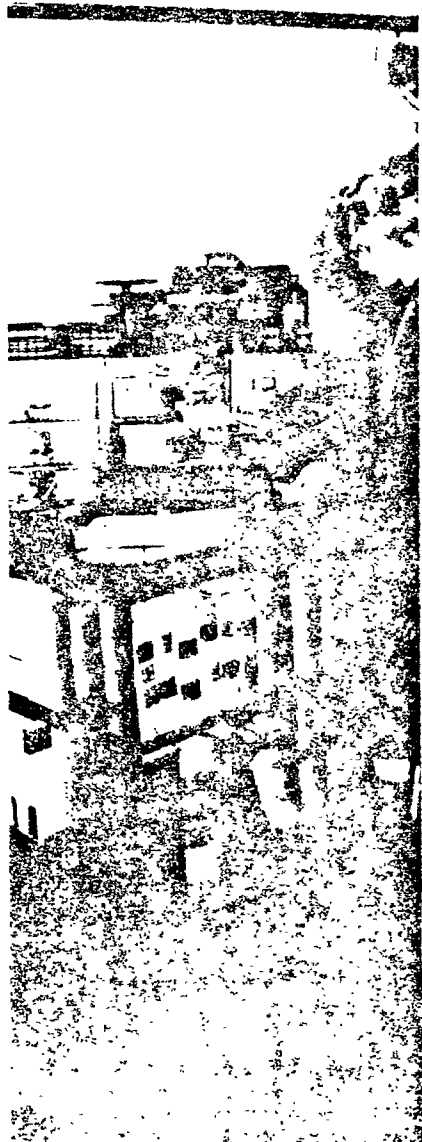
³*Cong. Rec.*, Vol. 127 (Oct. 1, 1981), p. S10994.

⁴*Cong. Rec.*, Vol. 127 (Nov. 23, 1981), p. E5547.

⁵*Cong. Rec.*, Vol. 127 (Sept. 22, 1981), p S10262.



Diane E. Grant



Reflections

Since the *Staff Bulletin* stopped appearing in March 1960 and the *GAO Review* was not published until the winter of 1966, here are several interesting items taken from the 1962 spring issues of the *Watchdog*. Twenty years ago:

- The annual CPA dinner was held on May 23 at the U.S. Naval Weapons Plant honoring the successful GAO candidates in the May and November 1961 CPA examination. Among those honored were Elliott H. Bushlow, Stephen S. Langley, III, Fred D. Layton, Ronald R. Lee, Christopher H. Loesch, Jr., Ronald H. Miller, Hubert A. Neely, John F. Simonette, Morton L. Solomon, James N. Stafford, Jr., Robertson E. Sullins, Donald B. Sutton, Sidney Wolin, and Richard J. Woods.

- The first GS-7 Training Program for 1962 was given by the Office of Staff Management in Washington, April 2 through 13. Among the attendees were Robert F. Hughes, Bill W. Thurman, Morton A. Myers, Raymond E. Hiel, Bert H. Rosen, E. R. Wichmann, William J. Anderson, John L. Anderson, and Richard A. Sheldon.

Ten years ago, in the spring 1972 issue of the *GAO Review* and spring editions of the *Watchdog* you will find that:

- Legislation enacted: Public Law 92-316, June 22, 1972, 86 Stat. 227, amended the Rail Passenger Service Act of 1970 to provide financial assistance to the National Railroad Passenger Corporation. To audit the financial transactions of the Corporation, the Comptroller General was provided access to the records of any railroad with which the Corporation had entered into a contract for the performance of intercity rail passenger service if the records pertained to the railroad's financial transactions and were necessary to facilitate the audit. The Comptroller General's representatives were to be afforded full facilities for verifying transactions with the balances or securities held by depositories, fiscal agents, or custodians.

- The Federal Election Campaign Act of 1971 was signed into law by President Nixon on February 7, 1972,

and became effective on April 7, 1972. It required GAO to prescribe regulations for implementing title I, which provided spending limitations for the use of communications media by or on behalf of candidates for Federal elective office. "Communications media" was defined as meaning broadcasting stations, newspapers, magazines, outdoor advertising facilities, and certain uses of telephones. The act also required GAO to serve as a national clearinghouse for information on the administration of elections, including the award of contracts for special studies. Title III of the act was concerned with disclosure of Federal campaign funds.

- Frank C. Conahan, director, International Division, was designated an associate director of that division on April 3.

GAO Staff Changes



Susan B. Burtner

Susan B. Burtner was selected for the position of deputy director, General Services and Controller.

Ms. Burtner joined GAO in 1973 as chief of the Reference Section in the former Office of Librarian, where she was promoted to director. In 1980, she was promoted to director, Office of Information Systems and Services. Since March 1981, Ms. Burtner has served in the Office of the Director, General Services and Controller, managing information systems development. Prior to joining GAO, she was employed at the Department of Commerce, the Department of the Air Force, and the former Department of Health, Education, and Welfare.

Ms. Burtner received a B.A. degree from Purdue University in 1964, an M.S. degree in library and information science from the University of Illinois in 1967, and an M.A. degree in social and organizational behavior from George Washington University in 1979. She is a member of the American Society for Information Science and Special Library Association. Ms. Burtner received a Division Director's Award in 1977.



Johnny C. Finch

Johnny C. Finch was selected for the position of associate director in the General Government Division. He is responsible for directing and managing GAO functions in the tax administration issue area.

Since 1975, Mr. Finch has served in the General Government Division as a supervisory GAO auditor and supervisory GAO evaluator. His most recent assignment was as senior group director of the IRS audit site.

As a magna cum laude graduate of Florence State College in 1966, Mr. Finch received a B.S. degree in accounting. He was also a member of the Honor Society, an honorary member of the Alpha Chi accounting fraternity, and is a member of Phi Kappa Phi, the National Honor Society. In 1977, Mr. Finch received an M.S. degree in governmental administration from George Washington University.

In addition to a Superior Performance Award in 1968, Mr. Finch received a Career Development Award in 1973 and a Certificate of Merit in 1978. In 1973, he was designated a certified internal auditor by the Institute of Internal Auditors. Mr. Finch is a member of the Association of Government Accountants, the American Accounting Association, the Midwestern Business Administration Association, and the Institute of Internal Auditors.



Richard W. Gutmann

Richard W. Gutmann, director, Defense Programs Planning and Analysis Staff, retired from GAO on October 16, 1981.

Mr. Gutmann had spent about 4 years in banking, 3 years in the Navy, and about 4 years in public accounting before joining GAO in 1954. Most of his work in GAO has been on activities of the Department of Defense in various foreign countries as well as in many major cities and military installations in the continental United States.

Mr. Gutmann attended the Harvard Advanced Management Program and various courses offered by the Civil Service Commission. During his 27-year career with GAO, he received numerous awards for his outstanding performance.



Clerio P. Pin

Clerio P. Pin, Assistant Comptroller General for Administration, left GAO in February 1982 to take the post of controller at the United States Synthetic Fuels Corporation.

Mr. Pin first joined the GAO staff in 1951. In 1968, he accepted a position with the Atomic Energy Commission but returned to GAO in 1971 as director of the Organization and Management Planning Staff. Mr. Pin also served as director, Office of Administrative Planning and Services; Deputy Assistant Comptroller General for Management Services; director, Management Services; and Assistant to the Comptroller General.

Mr. Pin served with the Navy during World War II. He received a B.S. degree in accounting from the University of Scranton in 1951 and completed the Advanced Management Program at the Harvard Business School in 1965. Mr. Pin received GAO's Meritorious Service emblem, letters of commendation, the Distinguished Service Award, and a Comptroller General's Group Award during his years at GAO.



Daniel C. White

Daniel C. White has been selected for the position of associate director in the Energy and Minerals Division with responsibility for matters relating to the nuclear energy, electric power, and DOE management and administration issue area.

Mr. White began his career with GAO in 1961 as an accountant in the Dallas regional office. In 1974, he was promoted to assistant regional manager in the Chicago regional office. He joined the Community and Economic Development in Washington, D.C., as a supervisory GAO evaluator in 1979. Mr. White was recently selected to participate in GAO's Executive Candidate Development Program.

Mr. White received a B.S.B.A. from the University of Arkansas in 1961 and was a member of Beta Alpha Psi, an honorary accounting fraternity. He is a CPA and a member of the American Institute of Certified Public Accountants and the Texas Society of CPAs. He received a Career Development Award in 1973, Certificates of Merit in 1977 and 1979, and Division Director's and Distinguished Service Awards in 1981.

Other Staff Changes

NEW DIRECTOR

Office of Administrative and Publishing Services
Julius S. Brown

NEW FINANCIAL MANAGEMENT ADVISOR

Joint Financial Improvement Program
Kenneth M. Winne

NEW SENIOR ATTORNEY-ADVISER

Office of General Counsel
Alan Belkin
Douglas A. Faulkner
Victor B. Goddard

REASSIGNMENTS

Field Operations Division
David Gray

RETIREMENTS

Bush, Meriam	Personnel Clerk	Accounting and Financial Management Division
Condore, Maureen S.	Secretary	Energy and Minerals Division
Hadley, Eleanor M.	Supervisory Evaluator	International Division
Higgins, S. Geneva	Secretary	Accounting and Financial Management Division
Hillsinger, Irene B.	Secretary	International Division
Shovlin, James	Evaluator	Human Resources Division
Stillway, Norma	Administrative Officer	FOD-San Francisco
Tayman, Joseph W.	Computer Specialist	Accounting and Financial Management Division
Thompson, H. Carroll, Jr.	Evaluator	Procurement, Logistics and Readiness Division
Tucker, Richard	Supervisory Evaluator	Procurement, Logistics and Readiness Division

In the Winter issue (Vol. 17, Issue 1), Mr. John Kingery should have been listed as retiring from FOD-Los Angeles, not San Francisco. We apologize for the error.

New Staff Members

The following new staff members reported for work during the period September 21, 1981, through December 13, 1981.

Office of the Comptroller General	Bowsher, Charles A. Horvat, Helene B. Smoot, Debra A.	Arthur Andersen & Co. Arthur Andersen & Co. National Credit Union Administration
Office of the General Counsel	Apperson, Norman M., Jr. Ham, Brenda F. Joseph, Barbara Markland, Brenda W. Morrow, Charles Powell, Linda A. Ward, Tanya D. Woods, William T.	Dept. of Treasury Dept. of Treasury Massachusetts Superior Court Navy Medical Research Institute Howard University Hastings College Dept. of Interior Legum, Cochran, Chartrand & Wyatt, P.A.
Office of Security & Safety	Cornelius, William	U.S. Army Criminal Investigation Command
Energy and Minerals Division	Harris, Sandra A.	Dept. of Interior
Federal Personnel and Compensation Division	Burt, Ernestine B. Garrison, Howard H.	Community Services Administration U.S. Commission on Civil Rights
Field Operations Division	White, Clara G.	General Electric Co.
General Govern- ment Division	Grimes, Aundrea A. Harper, Joyce Williams, Betty J.	Dept. of Commerce U.S. Park Police Associated Minority Contractors of America
Institute for Program Evaluation	Alley, Patricia	Dept. of Education
International Division	Hancock, Gwendolyn L. Tynan, Carol M.	Bonneville Power Administration Goldstein, Edwards & Betz
REGIONAL OFFICES		
Chicago	Ellis, Shirley Karls, Kristi L.	Dept. of Energy Health Care Service Corp.

	Linden, Gregory S. Moore, Teri A.	Richard D. Jaffe & Associates Social Security Administration
Dallas	Robinson, Gertrude	Office of Personnel Management
Los Angeles	Cossu, Sandra A. Deraimondo, John B. Dolak, Mirko J. Edwards, Barry L. Garbett, John M. Hagerty, Mary R. Jacobs-Robinson, Debbra L. Kiely, Sharon Miller, John M. Roberts, Allan Roitz, Jean M. Schneider, Nancy F. Seidman, Julie R. Tiscareno, Roman J.	Equal Employment Opportunity Commission Office of Auditor General, Illinois Mathematica Policy Research, Inc. Alcohol, Tobacco & Firearms Office of Presidential Personnel Nash & Co. National Credit Union Administration IRS IRS Hedberg Mfg. and Chemical Co. City of Beverly Hills State Board of Equalization City of Los Angeles U.S. District Court
New York	Freeling, Harvey	GSA
Norfolk	Komuves, Joan M. Ross, Joyce D.	Defense Investigative Service Equal Employment Opportunity Center
Philadelphia	Caufield, Faith Trice, Marsha A.	Cardiac Data Corp., Inc. Community Services Administration
St. Louis	Zurliene, Karen A.	Headquarters, Military Airlift Command
Washington	Eskew, Cheryl-Anne	Dept. of Commerce

Professional Activities

Office of the Comptroller General

Since taking office in October 1981, Comptroller General **Charles A. Bowsher** has addressed the following groups:

Association of Government Accountants, "Raising Financial Management Standards," Washington, Nov. 5.

National Contract Management Association East Coast National Symposium, "Reforms in Federal Procurement: The GAO Perspective," Washington, Nov. 5.

"American Association of Budget and Program Analysts' Fall Symposium, "Budgeting, Accounting, Program Analysis and Auditing: Roles and Relationships for the 1980's and Beyond," Washington, Nov. 20.

American Society for Public Administration, National Capital Area Chapter, "Federal Management Issues and the GAO," Washington, Dec. 3.

Federal Executive Institute Alumni Association, "The Challenge of Change for Public Management," Washington, Feb. 25.

Joint Meeting of the National Association of Accountants and the Association of Government Accountants, "Promoting Sound Financial Management in the Federal Government," Roanoke, VA, Mar. 17.

American Society of Military Comptrollers, Washington, Mar. 22.

National Association of State Comptrollers, Washington, Mar. 30.

Harry S. Havens, Assistant Comptroller General for Program Evaluation:

Participated in the American Association for Budget & Pro-

gram Analysis' Fall Symposium, "Making Government Management Work Better." His workshop topic was "Micromanagement in the Federal Government." Washington, Nov. 20.

Spoke at the Third Annual Senior Financial Management Seminar, U.S. Department of Agriculture Graduate School, on "Oversight," Washington, Nov. 23.

Office of the General Counsel

Harry R. Van Cleve, acting general counsel, spoke on "Opinions of the Comptroller General" before a seminar of all new Reagan Administration general counsels, in Reston, VA, Oct. 29.

Rollee H. Efos, associate general counsel, spoke on "Funding of Federal Government Activities: Overview of Appropriations Process" to participants in a Federal Bar Association continuing legal education course on Federal Government practice, Dec. 2.

Ronald Berger, assistant general counsel, spoke on "Bid Protests and ADP Procurements" before the Federal Computer Conference, Sept. 23.

Ronald Wartow, deputy assistant general counsel, addressed the American Bar Association Public Contract Law Section Seminar on "Subcontracting Under a Government Contract," in Fort Lauderdale, Nov. 7.

Michael J. Boyle, senior attorney, spoke before a seminar on "Contracting with the Government: Recent Initiatives and Current Problems," sponsored by Coopers and Lybrand, in Boston, Oct. 26.

Richard Cambosos, senior attorney, participated in the Conference on Interagency Task Force Indemnification, sponsored by the Office of Management and Budget, Nov. 23.

Stanley G. Feinstein, senior attorney:

Participated in the Conference on "Ground Water in the 80's," in Chicago, Nov. 11-13.

Participated in the Seminar Workshop on "Intergovernmental Administration and Grants Management," Nov. 16-20.

James H. Roberts, III, attorney-adviser, spoke before the Defense Advanced Procurement Management Course on "Problems in Formal Advertising," Fort Lee, VA, Sept. 23.

Personnel

Patricia A. Moore, deputy director for operations, will serve as a member of the International Personnel Management Association's 1982 Awards Committee. The Awards Committee has a charge to solicit and evaluate the nominations for Honorary Life Membership and the Warner W. Stockberger Achievement Award.

Nancy E. Weiss, personnel management specialist, was elected secretary for the Washington, D.C., chapter of the International Personnel Management Association for 1981-1982. She also serves as chair of the chapter's Program Committee.

Accounting and Financial Management Division

Wilbur D. Campbell, acting director, participated in a seminar on governmental auditing, sponsored by the Mexican Government, Mexico City, Oct. 4-8.

Walter L. Anderson, senior associate director, organized and chaired a panel on Resources Accounting at the Federal Computer Conference, in Washington, Sept. 23.

George L. Egan, associate director:

Spoke on the "Role in Inspector General Legislation" before the Inspector General—State Department, in Washington, Sept. 8.

Spoke on "The Present and the Future in Government" before a meeting with the Western Intergovernmental Audit Forum and the Association of Government Accountants, in Honolulu, Sept. 23-24.

Participated in the International Seminar on Governmental Auditing, in Mexico City, Oct. 4-9.

Attended the Interagency Auditor Training Programs meeting at the Graduate School, U.S. Department of Agriculture, in Washington, Nov. 6.

Spoke on "Internal Auditing and Fraud Prevention" before the Mountain and Plains Intergovernmental Audit Forum, at Colorado Springs, Nov. 12-13.

Spoke on "How Much Control Is Adequate?" at the Vulnerability Study and Risk Analysis Workshop sponsored by the Federal Audit Executive Council and the Joint Financial Management Improvement Program, in Washington, Nov. 19.

Ronald J. Points, associate director:

Spoke on "GAO's Audit Standards—The 'Yellow Book'" at the 94th Annual Meeting of the American Institute of Certified Public Accountants, Chicago, Oct. 6.

Spoke on "The Governmental Accounting Standards Board" at the Pittsburgh AGA Chapter, in Pittsburgh, Oct. 28.

Virginia B. Robinson, associate director, spoke on "What Have Automated Financial Management Information Systems Done to Our Managers, What Have Our Managers Done to Automated Financial Management Information Systems?" at the National Institute of Manage-

ment Research Conference, Washington, Dec. 10.

Brian L. Uslaner, associate director:

Spoke on "Can Quality Circles Be Useful on the Public Sector?" to a top management group in the D.C. Government, Sept. 17.

Spoke on "Prospects in Productivity Sharing in the Public Sector" at the American Institute of Industrial Engineers Conference, Philadelphia, Oct. 14.

John F. Simonette, associate director:

Spoke on "Debt Collection and Internal Controls" at the Second Annual Conference of the Financial Council of the Department of Agriculture on Financial Management Improvement, Fort Myer, VA, Sept. 23. He also participated, along with **Jeff Steinhoff**, senior group director, and **Jerry F. Wilburn**, credit and collection systems analyst, in a workshop on debt collection.

Participated in a workshop at the National Intergovernmental Audit Forum on Debt Collection, Washington, Nov. 5.

Spoke before the Detroit Chapter of the Institute of Internal Auditors—November Seminar, on GAO's work in assessing the impact of the Foreign Corrupt Practices Act on U.S. business, Nov. 10.

Joseph L. Boyd, senior group director, spoke on "Internal Controls in Computer-Based Systems" before a meeting of Minnesota legislative auditors in St. Paul, Sept. 21.

Joseph J. Donlon, senior group director:

Spoke on "GAO Accounting System Approval Process" at the Department of Agriculture's Graduate School Seminar on Financial

Management, Washington, Nov. 4.

Spoke on "Accounting Systems, Internal Controls, and the Internal Auditor" at the First Army Comptrollers' Conference, Fort Meade, MD, Nov. 8.

Ken Pollock, group director:

Addressed the National Capital Area Chapter of the EDP Auditors Association on GAO's recent report, "Federal Agencies Still Need To Develop Greater Computer Audit Capabilities" (AFMD-82-7, Oct. 16, 1982), in Washington, Oct. 20.

Spoke at the 8th Annual Conference on Computer Security on GAO's report on computer disaster planning in the Federal Government, in New York City, Nov. 10.

Was invited to the Canadian Institute of Chartered Accountants' Symposium on Computers and Auditing, in Toronto, Nov. 15-18.

Carl R. Palmer, group director:

Chaired a panel on "Change at DOD Life Cycle Management And Planning" at the Federal Computer Conference in Washington, Sept. 22.

Spoke on "Misuse of SBA's 8(a) Program Increased Cost for Many ADP Equipment Acquisitions," along with GSA and SBA representatives, at the Interagency Committee on ADP, in Washington, Oct. 13.

Chaired the 1981 Conference of the Computer Performance Evaluation Users Group and its keynote panel on "Increasing Organizational Productivity" in San Antonio, Nov. 16-19.

Jerry F. Wilburn, credit and collection systems analyst, spoke at an Office of Management and Budget private-sector collection agency symposium, in Washington, Nov. 20.

I
a
j
s

C
n
I

n
F
c
V
h
e
S

a

a
p
U
F
a
D
S
A
H

p
" "
T
S
i
f
ir

c
p
P
te

J. Chris Farley, management analyst, discussed pending legislation affecting debt collection, before a joint military debt collection workshop in Indianapolis, Sept. 22.

Michael O. Baskin, acting chief, Debt Branch, participated in a joint military debt collection workshop in Indianapolis, Sept. 22.

Darrell L. Heim, ADP assignment manager, spoke on "Computer Fraud Prevention and Safeguards" during a seminar on Management of White Collar Crime Investigations, hosted by the Association of Federal Investigators, in Rosslyn, VA, Sept. 22.

Joseph Comtols, senior evaluator:

Spoke before the State Department Inspector General regarding "Standards for Audit of Governmental Organizations, Programs, Activities, and Functions," Sept. 8.

Participated in discussion with the Associated Accounting Firms International on the "Single Audit Concept," in Washington, Nov. 12.

David A. Dore, supervisory evaluator, spoke on "Non-Federal Computer Acquisition Practices Provide Useful Information for Streamlining Federal Methods" before the Inter-agency Committee on Automatic Data Processing, in Washington, Sept. 8; and at a DOD Tri-Services ADP Acquisition Conference at Hanscom AFB, MA, Nov. 18.

Morey J. Chick, evaluator, made a presentation on the significance of "The Paperwork Reduction Act of 1980 (P.L. 96-511)" at a conference sponsored by the National Institute for Management Research, Washington, Nov. 19.

Theodore Gonter, group director, chaired individual sessions of a panel on "Increasing Organizational Productivity" at the 1981 Conference of the Computer Perfor-

mance Evaluation Users Group, in San Antonio, Nov. 16-19.

Dennis Shaw, evaluator, chaired individual sessions of a panel on "Increasing Organizational Productivity" at the 1981 CPEUG Conference in San Antonio, Nov. 16-19.

George Sotos, group director, spoke on "Risk Assessment—An Essential Part of Planning" at the Federal Computer Conference, in Washington, Sept. 22.

Joint Financial Management Improvement Program

Susumu Uyeda, executive director:

Gave a presentation on "The new Initiatives of the Central Financial Management Agencies" at the DOD Information Exchange Program Commanders Conference in Denver, Oct. 26.

Gave a presentation of JFMIP at the Financial Managers Conference of the Federal Prison Industries, Leesburg, VA, Oct. 26.

Doris Chew, assistant executive director, sponsored with the Federal Executive Board a workshop on Improving Productivity in Accounting and Finance Operations and gave a presentation on the Productivity Measurement System at the Department of Commerce, in Atlanta, Sept. 25.

Ken Winne, senior project director, spoke to the Mountain and Plains Intergovernmental Audit Forum on "The Federal Assistance Award Data System Study," in Colorado Springs, Nov. 12-13.

Community and Economic Development Division

Roy Kirk, group director, was interviewed by Jeff Lubar of Susquehanna Broadcasting on Federal

land acquisitions in the Cuyahoga Valley Recreation Area, for broadcast in northeast Ohio. The interview was based on GAO's report, "Federal Land Acquisition and Management Practices" (CED-81-135, Sept. 11, 1981).

Skip Jenkins, evaluator, discussed GAO's report, "More Can be Done To Protect Depositors at Federally Examined Grain Warehouses" (CED-81-112, June 19, 1981) before the Association of American Warehouse Control Officials, in St. Louis, Sept. 22.

Margaret Goodman and **Walter Hess**, evaluators, discussed "Assessing Personnel needs in the Agricultural Sciences" before the National Research Council of the National Academy of Sciences, Sept. 22.

Dennis Parker and **Ken Goodmiller**, evaluators, discussed GAO's 1980 studies on highway safety programs at the annual conference of the National Association of Governors' Highway Safety Representatives, Hershey, PA, Oct. 14.

Walter Hess, evaluator, spoke on "The Cooperative Extension Service: A GAO Overview" before the State Agriculture and Natural Resources Program Leaders in Washington, Oct. 20.

Manohar Singh, evaluator, has written the following articles:

"Why Not Use Fischer-Troph?" in *Hydrocarbon Processing*, June 1981.

"Major Technical Risks of Solvent Refined Coal-I and -II Demonstration Projects" in *Proceedings of the Synfuel First Worldwide Symposium*, Brussels, Belgium, Oct. 1981.

Roy Kirk, group director, and **Bill Dunahay**, evaluator, discussed GAO's reports on Indian programs at a symposium for Indian educators, in Washington, Oct. 29.

Federal Personnel and Compensation Division

Kenneth J. Coffey, associate director, spoke before the following groups:

Defense Systems Management College on "GAO's Perspective of DOD Manpower Management," Sept. 17.

Local Regional Conference of the American Society of Personnel Administration on "The Future of U.S. National Defense Strategy: Manpower versus Technology," Oct. 5.

Joseph J. Kline, group director, spoke before the Third Annual Conference of Training Directors at the University of Maryland on "GAO's Work in Training: Current Status and Future Directions," Oct. 26.

Energy and Minerals Division

Don Forcier, senior group director, under the sponsorship of the Brookings Institution, spent several weeks in Europe meeting with representatives of government and industry on energy policy and national security. Mr. Forcier met with officials in London, Brussels, Paris, Bonn, and Vienna, in December.

General Government Division

William J. Anderson, director, and **Willis Elmore**, group director, participated in a panel discussion on the performance of the U.S. Postal Service, at the National Academy of Public Administration, Nov. 23.

Richard B. Groskin, issue area planner for the law enforcement and administration of justice issue area:

Was elected to the Executive Board of the American Society for Public Administration—SCJA, Apr. 1981.

Was appointed to the Executive

Council on National Policy for Justice Administration, American Society of Criminology, June 1981.

Larry Harrell, senior evaluator, and **Jeff Bernstein**, evaluator, discussed detention and separation practices in State and Federal agencies before the National Coordinating Council on Juvenile Justice and Delinquency Prevention, Washington, Sept. 30.

Arthur Goldbeck, associate director, and **Robert Hart**, group director, discussed GAO's reports "The Federal Structure for Examining Financial Institutions Can Be Improved" and "Federal Examinations of Financial Institutions: Issues That need To Be Resolved" before the Associated Accounting firms International, in Washington, Sept. 22.

Linda L. Harmon, evaluator:

Was elected to a 2-year term as a National Director of the Montgomery-Prince Georges chapter of the National Association of Accountants.

Was recently elected the Principal of the Potomac & Chesapeake Council, National Association of Accountants.

Paul Posner, supervisory evaluator:

Was appointed to the Board of Directors, National Assistance Management Association, September.

Spoke at the annual meeting of the National Emergency Management Association on GAO's review of emergency management grant consolidation, in Nashville, Sept. 24.

Delivered a paper, "Separating Money From Administration in Intergovernmental Programs" to the annual conference of the American Association for Public Policy Analysis and Management, Oct. 24.

Human Resources Division

Pete McGough, associate director, discussed GAO's role in identifying Social Security policy changes set forth in the Omnibus Budget Reconciliation Act of 1981, before the American Association for Budget and Program Analysis, Washington, Nov. 12.

Bill Gadsby, group director, discussed GAO's role in evaluating health personnel programs, before the American Hospital Association's meeting on "Health Manpower Issues of the 80's," Oct. 21.

Wendy Tupper and **Ted Zeunges**, evaluators, discussed GAO's review of Federal, State, and local efforts to combat the problems of teenage prostitution and child pornography, at the first annual Eastern States Vice Investigator's Conference, in Springfield, VA, Nov. 20.

John W. Lainhart, group director:

Was elected Treasurer of the EDP Auditor's Association, Inc., for 1981-1982.

Spoke on "ADP System Development Life Cycle—Post Implementation Audits" at the 9th International EDP Auditors Association Conference, Washington, June 24.

Institute for Program Evaluation

Eleanor Chelimsky, director, delivered the president's address, "Designing Backward from the End-Use" at the Evaluation Research Society's annual meeting in Austin, TX, Oct. 1-3.

Wallace M. Cohen, group director:

Was the program chair for the annual meeting of the Evaluation Research Society in Austin, Oct. 1-3.

Chaired a panel on Federal evaluation perspectives at the national meeting of the Operations Research Society and the Institute of Management Sciences in Houston, Oct. 12.

Laurie Ekstrand, statistician, presented a paper entitled, "Improving Survey Design: Focus Group Interviewing Randomized Response" at the annual meeting of the Southern Political Science Association in Memphis, Nov. 5-7.

Terry E. Hedrick, evaluator:

Chaired a symposium honoring four evaluators new to the evaluation research profession, at the annual meeting of the Evaluation Research Society, Austin, Oct. 1-3.

Spoke before faculty and graduate students of the Social Psychology Research Group, University of Maryland, on "Roles for Social Scientists in Program Evaluation," Oct. 26.

Wilfred B. Holloway, social science analyst, wrote an article entitled, "Youth Employment/Education Programs: Where Are We Headed?" for the November 1981 issue of *Education and Urban Society*.

Liselott Lisle, actuary, spoke on "Financial Reports for Federal Retirement Systems" at a panel on public pension plans, before the Conference of Actuaries in Public Practice, Phoenix, Oct. 1.

Irene T. Mann, social science analyst, presented a paper entitled, "Policy Implications for Nursing Home Utilization, Reimbursement, and Bed Supply," written by **Janet Shikles** and **Susan Van Gelder** of IPE, at the annual meeting of the Gerontological Society of America and Canadian Association on Gerontology, Toronto, Nov. 9.

Keith E. Marvin, former associate director, as Chairman of the Standards Committee of the Evaluation Research Society, obtained ap-

proval for publication of new evaluation standards. He was also cochairman of a panel on evaluation standards and participated in a panel discussion on "Evaluating the Evaluators" at the annual meeting of the Evaluation Research Society, Austin, Oct. 1-3.

Garry L. McDaniels, deputy director, delivered a keynote address entitled "Needs and Priorities—A Forecast" before the Faculty College on Trends and Issues in Educational Research, at the University of Maryland, Nov. 12.

Ray C. Rist, supervisory evaluator:

Edited a section on "Youth Education and Employment Training: Policy Issues and Options" and wrote an article on "Walking Through a House of Mirrors: Youth Education and Employment Training" for the November 1981 issue of *Education and Urban Society*.

Published a new book entitled *Earning and Learning: Youth Employment Policies and Programs*, Sage Publications, Inc., 1981.

Published an article entitled "Education and Marginality: The Guestworkers in Germany," in *Interchange on Educational Policy*, Vol. 12, No. 2, 1981.

Susan Van Gelder, management analyst, participated in a panel discussion on long-term health care, at Catholic University's Graduate School of Social Welfare, Washington, Oct. 26.

Carlotta Young, psychologist, organized and chaired a panel on "The Role of Social Psychology in the Policy Process" before the Capital Area Social Psychological Association, College Park, MD, Oct. 17.

International Division

Harry Finley, associate director,

discussed "The GAO Assessment—Arms Transfer and Foreign Military Sales Problems/Changes" at the American Institute of Aeronautics and Astronautics' Conference on International Arms and Technology Transfer, Washington, Nov. 5, and Boston, Nov. 12.

Stephen Hachten, **William Slot**, and **Allan Hovey**, supervisory evaluators, conducted a class session of the Mid-Level Officers Professional Development Program at the State Department's Foreign Service Institute, Nov. 12, on ID's report to the Congress, "U.S. Consular Services to Innocents—and Others—Abroad: A Good Job Could Be Better With a Few Changes." Also, Mr. Hovey addressed a class in public diplomacy at the American University School of International Service, Dec. 3, on GAO's work in international communication programs. GAO's 1979 report, "The Public Diplomacy of Other Countries: Implications for the United States," was required reading for the course.

Mission Analysis and Systems Acquisition Division

Walton H. Sheley, Jr., director, spoke before the National Institute for Management Research Conference on "Systems Acquisition and Management," Washington, Dec. 7.

Donald E. Day, senior associate director, spoke before the following groups:

Defense Systems Management College Executive Refresher Course on "GAO's Perspectives on the DOD Acquisition Process," Fort Belvoir, VA, Sept. 28 and Nov. 16.

16th Annual Department of Defense Cost Analysis Symposium on "Cost Growth and Containment," Washington, Oct. 5.

Navy Systems Acquisition Management School on "GAO Activities on Major Weapon System Work," Washington, Oct. 30.

Warren G. Reed, senior associate director, received the Defense Department's Meritorious Civilian Service Medal for his "... extraordinary contributions while serving in critical leadership positions in Defense from October 28, 1963 to May 1, 1981" in Washington, Nov. 20.

Lester C. Farrington, Jr., group director, and **David G. Sapp**, senior evaluator, spoke before the Defense Systems Management College on "GAO's Role in Test and Evaluation," Fort Belvoir, VA, Oct. 29.

Stanley LaVallee, operations research analyst, participated in a panel discussion on "Analytical Needs for the Eighties" at the 48th Military Operations Research Society Symposium in Monterey, CA, Dec. 3.

John L. Anderson, senior evaluator, has been elected Secretary of the Northern Virginia Chapter of the National Association of Accountants.

Suzanne Macfarlane, evaluator, was a principal writer for volumes III and IV of the *Dictionary of American Naval Fighting Ships*, published in August by the Navy's Naval Historical Center.

Office of Information Systems and Services

Phyllis Christenson, chief, law library services, conducted a workshop on "Legislative Librarianship" for the Federal Interagency Field Librarians' Workshop, Seattle, Nov. 19.

Program Analysis Division

Donna Heivillin, supervisory evaluator, discussed GAO's reviews of capital budgeting practices, at the National Association of State Budget Officers' Capital Budgeting Workshop, Kansas City, Oct. 7.

Howard J. Gobstein, science policy analyst, chaired, and **Carl T. Grafton**, science policy analyst, participated in a panel discussion on

research instrumentation for universities at the sixth annual meeting of the Society for Social Studies of Science, Atlanta, Nov. 6.

Kenneth P. Ruscio, evaluator, participated in a panel on organizational setting for research at the sixth annual meeting of the Society for Social Studies of Science, Atlanta, Nov. 6.

Charles Bausell, economist, participated in a panel discussion on "Environmental Policy" at the third annual conference of the Association for Public Policy Analysis and Management, Washington, Oct. 23.

Gwendolyn B. Moore, social science policy analyst, addressed the Innovation Study Group of the Smaller Business Association of New England on "Consistent Criteria Are Needed To Assess Small Business Innovation Initiatives" (PAD-81-15, July 7, 1981), Boston, Dec. 3.

Natwar M. Gandhi, evaluator, addressed the plenary session of the third annual Institute on Insurance Taxation on "Life Insurance Company Income Tax Act of 1959: Analysis and Recommendations for Change" at the University of Hartford, Oct. 5.

Arthur J. Corazzini, deputy director, spoke before the Government Patent Lawyer's Association on the implementation of Public Law 96-517, Washington, Oct. 22.

Kenneth W. Hunter, senior associate director:

Spoke on "New Directions in the Policymaking Process in a Decade of Transition" at the Washington Operation Research/Management Science Symposium, Nov. 2.

Chaired the Association for Budget and Program Analysis' fall symposium and moderated a panel discussion responding to Comptroller General Bowsher's keynote address on "Budgeting, Accounting, Program Analysis, and Auditing: Roles and Relationships for the 1980's and Beyond" on Nov. 20.

Procurement, Logistics and Readiness Division

Bob Gilroy, senior associate director, spoke on "GAO Perspectives on Government Procurement" at the Federal Bar Association's Western Briefing Conference, Oct. 27.

John Rinko, group director:

Was interviewed by Morley Safer of CBS' *60 Minutes* on Julie Research Laboratory's attempts to obtain Army contracts for calibration equipment, Nov. 6.

Spoke on audit and investigative techniques in uncovering procurement fraud, at the FBI Academy, Quantico, VA, Dec. 2.

Ron King, senior evaluator:

Was appointed to the National Academy of Sciences' Advisory Board on the Built Environment, Committee on the International Conference on Computers in Building and Construction.

Participated on a review board for the Massachusetts Institute of Technology to develop an Architectural Science Consistent System (a computer-aided design system), Washington, Oct. 7.

Ken Brubaker, senior evaluator, spoke on "The General Accounting Office's Interest in Transportation" before the Defense Advanced Traffic Management Course, Fort Eustis, VA, Sept. 16.

Jim Wiggins, evaluator, discussed "Procurement Auditing" before the Pacific Northwest Inter-governmental Audit Forum, Portland, OR, Oct. 15.

Field Operations Division

Atlanta

Marvin Colbs, regional manager,

spoke on "Carrying Out Oversight Function—How GAO Interfaces with DOD" to the controller's course of the Air University, Maxwell AFB, AL, Nov. 10.

Pat Patterson, assistant regional manager, spoke on "Using the Computer as an Audit Tool" to the Institute of Internal Auditors, Huntsville, Nov. 17.

Boston

Bob Sayers, senior evaluator, was a member of a panel discussion on current and proposed government regulations, at the annual convention of the Association of Independent Medical Equipment Suppliers, Washington, Oct. 17.

Fred Cross, senior evaluator, spoke on "EDP Reliability Assessment" at the 1981 EDP Audit Symposium sponsored by the Touche, Ross Aid to Education Foundation, held at the University of Massachusetts, Amherst, Oct. 20.

Nick Carbone, assistant regional manager:

Together with **Don Benson**, evaluator, was a member of a panel discussion on GAO's report "Costly Wastewater Treatment Plants Fail to Perform as Expected," (CED-81-9, Nov. 14, 1980), at the annual meeting of the New England Water Pollution Control Association, Whitefield, NH.

Spoke on "Using Preliminary Surveys to Develop Audit Programs" at the Greater Boston Chapter, Institute of Internal Auditors seminar on "The Performance of Audit Work," Nov. 11.

Cincinnati

Vernon Nieporte, evaluator, spoke to the University of Dayton, Delta Sigma Pi Professional Business Fraternity, on "GAO's Role in Government Operations," Nov. 13.

Michael Curro, evaluator, prepared an article on "The New Block Grants: An Initial Post-Mortem" for the November issue of the *Public Administration Newsletter* of Xavier University.

Arthur Foreman, evaluator, spoke on "How To Implement the Internal EDP Audit Function" to the Dayton Chapter of the Institute of Internal Auditors, Dayton, Nov. 23.

Ken Libbey, evaluator, organized and moderated a panel discussion on the subject "Merit Pay in the Public Sector—Is it Working?" for the Cincinnati Chapter of the American Society for Public Administration, Nov. 17.

Dallas

Francis Langlinals, senior evaluator:

In his role as Regional Vice-President of the Association of Government Accountants, Southwestern Region, spoke on annual Association activities before the Houston and Austin chapters, Sept. 24 and Oct. 13, respectively. He spoke before the San Antonio chapter on the topic, "What To Expect From an ADP Auditor," Oct. 20.

Participated in an item writer's conference for the EDP Auditor's Association, where questions for the Certified Information Systems Auditor Exam were written and evaluated.

Denver

Arley R. Whitself, assistant regional manager, spoke before the Englewood Lions Club on "The History and Functions of GAO," Englewood, CO, Dec. 8.

John Russo, evaluator:

Presented GAO's training course "Conducting Program Results Reviews" to GSA and DOE auditors and analysts, Denver, Nov. 4-6.

Along with **James K. Meissner**,

evaluator, presented a program session entitled "Water, Water Everywhere, But No One Wants To Drink (Case Study: Operational Auditing)" at Emerging Issues Conference sponsored by the Denver Chapter of the Association of Government Accountants and the Colorado Fiscal Managers' Association, Denver, Nov. 19.

Clifford B. Neuroth and **Robert L. Thames**, evaluators, participated in a discussion of indirect costs on research grants, at an Intermountain University Research Administrators' meeting, Logan, UT, Nov. 19.

Phillip D. Sykora, evaluator, participated in a review of the quality control system for the California Office of the Auditor General, conducted under the auspices of the National Intergovernmental Audit Forum and the National State Auditors' Association, Sacramento, Sept. 13-25.

Glen L. Baughman, evaluator:

Is a consultant to the independent Commission of Fiscal Accountability of the Nation's Energy Resources, established on July 20, 1981, by Secretary of the Interior James G. Watt and the Reagan Administration, to investigate and report on the alleged underpayments of oil and gas royalties due to the Federal Government and Indian tribes, and theft of oil from their lands. Commission members include **Elmer B. Staats**, former Comptroller General.

Accompanied **John F. Simonette**, associate director, AFMD, in presenting testimony and participating in a panel discussion during hearings on the Commission on Fiscal Accountability of the Nation's Energy Resources, Denver, Nov. 20. Also accompanying Simonette were **Jeff Steinhoff**, group director, AFMD; **Darby Smith**, senior accountant, AFMD; and **Ben Ritt**, evaluator, WRO.

Detroit

William F. Laurie, evaluator, pre-

sent a paper entitled "Nutrition of Older People—A National Perspective" at the International Gerontological Society Meeting of America, Toronto, Nov. 10.

Kansas City

Larry Van Sickle, evaluator, spoke on the background and methodology of our recently issued warehouse report "More Can Be Done To Protect Depositors at Federally Examined Grain Warehouses" (CED-81-112, June 19, 1981), before the American Association of Warehouse Control officials, St. Louis, Sept. 22.

Margarita Ellis, writer/editor, gave a poetry reading with themes about the Hispanic woman at the 1981 Cultural Awareness Training Seminar, Kansas City, Sept. 17.

Los Angeles

Vic Ell, senior evaluator, spoke on:

"Auditing Government Health Programs" before GAO's International Fellows (16 persons from developing countries who were selected to learn about GAO auditing techniques by their governments), Washington, Oct. 1.

"Use of Statistical Sampling Techniques and Computer Applications in GAO Audits" before the CSU Los Angeles faculty at their annual accounting department retreat, Los Angeles, Oct. 10.

"The Work of the GAO" to a group of international students in a USC graduate class on theory and practice of public administration, Los Angeles, Nov. 20. Also addressing the group were **Jim Hall**, regional manager, and **Nick Ruggiero** and **Jerry Dorris**, assistant regional managers.

"Career Opportunities with the GAO" before the Beta Alpha Psi Accounting Honor Society at CSU, Los Angeles, Nov. 24.

Fred Gallegos, evaluator:

Was elected a trustee of the EDP Auditors Foundation for education and research, in October.

Taught an EDP Auditing course at California State Polytechnic University, Pomona, during the Fall 1981 quarter.

Had his presentation on "Training the ADP Auditor" published in the Fall issue of the *EDP Auditors Journal*.

Was named project leader and developer of the CIS-13, EDP Auditing course in DPMA's 1980 collegiate model curriculum for information systems.

Helped organize an Information Systems Alumni Association at California State Polytechnic University, Pomona.

Bob Leshinski, evaluator, was selected as an "Outstanding Young Man of America for 1981" in recognition of his outstanding professional achievement, superior leadership ability, and exceptional service to the community.

Norfolk

Don Ingram, senior evaluator, spoke on behalf of the Association of Government Accountants at a regional convention of the Naval Audit Service, Sept. 23.

Tom Stevenson, senior evaluator, recently addressed a gathering sponsored by Beta Alpha Psi at the University of North Carolina's School of Business Administration. His talk, "Careers in Government Accounting," was part of a series of seminars at Chapel Hill on accounting careers.

Paul Latta, evaluator, gave a speech on "An Overview of GAO" to the Chesapeake Rotary Club, Chesapeake, VA, Nov. 4.

Philadelphia

Frederick P. German, evaluator,

spoke on "Careers with GAO" before the National Association of Accountants, Delaware County, Pennsylvania, Chapter, Oct. 15.

William F. Schmanke, technical assistant group coordinator, completed his term as President of the Mid-Atlantic Government Information Council—MAGIC, and was elected to serve as 1982 Delegate to the National Federation of ADP Sharing Councils. **Thomas N. Bloom**, evaluator, was elected Treasurer of MAGIC for 1982.

San Francisco

Tim McCormick, regional manager:

Participated in a conference for business executives on Federal Government operations at the Brookings Institution, Washington, June 29.

Participated in a forum on Federal Productivity and the Quality of Working Life, sponsored by the Office of Personnel Management, McClellan AFB, Oct. 29-30.

Along with **Hal D'Ambrogia**, assistant regional manager, **Dave Peltier** and **Jack Birkholz**, senior evaluators, participated in a meeting of the Western Intergovernmental Audit Forum in Carson City, NV, Nov. 19-20.

Jim Mansheim, assistant regional manager, and **John Moran**, senior evaluator, made a presentation on office automation to the Office Automation Research Forum, San Francisco, Dec. 2.

Charlie Vincent, assistant regional manager, gave a presentation on Operational Auditing at the Regional AGA Seminar, Seattle, Oct. 29.

Hal D'Ambrogia, assistant regional manager:

Presented a session at the AGA emerging issues conference, Honolulu, Sept. 23.

Received an award for exemplary service and dedication, from the Western Intergovernmental Audit Forum, Nov. 19.

Elliott Smith, senior evaluator:

Gave a presentation to the accounting students on job opportunities with GAO, at the Canada College, Redwood City, CA, Nov. 3.

Spoke on the subject of GAO's function in the Federal Government and on career opportunities at GAO, to the Delta Sigma Psi Business Fraternity, San Francisco State University, Nov. 5.

Jeff Eichner, senior evaluator, spoke on "Careers in the Federal Government" at the Career Forum at the Business School of the University of California, Berkeley, Nov. 18.

Seattle

David V. Uberuaga, evaluator, discussed opportunities in GAO's co-op program with officials of the Seattle University accounting department, Mar. 24.

Paul E. Staley, Jr., senior evaluator, coauthored a paper on "Changes in Seafood Processing Technology," which was presented at the summer meeting of the American Society of Agricultural Engineers, Orlando, FL, June 21-24.

Charles D. Mosher, senior evaluator:

Discussed two GAO reports, "Billions Could Be Saved Through Waivers for Coastal Waste Water Treatment Plants" and "EPA Should Help Small Communities Cope with Federal Pollution Control Requirements," at the 17th American Water Resources Association Conference on Waste Impact on Water, Atlanta, Oct. 6-7.

Presented a paper on "Getting Better Data for Decisions—A Challenge to the Role of GAO in

Program Analysis," at the American Water Resource Association's Symposium on Unified River Basin Management, Atlanta, Oct. 8.

Served as cochairman and moderator of the American Water Resource Association, Washington Section, conference on "Water Resource Implications of Small Hydro Power Generation," Seattle, Nov. 16.

Was elected 1982 president of the Washington Section, American Water Resources Association, Nov. 16.

Stephen J. Jue, technical assistance group manager, and **Sherry A. Davis**, management assistant trainee, spoke on "GAO and the Cooperative Education Program" at a meeting of the Association of Black Business Students, University of Washington, Seattle, Oct. 15.

Walter R. Eichner, evaluator, gave a presentation on statistical auditing, at a meeting of the Pacific Northwest Intergovernmental Audit Forum, Portland, Oct. 16.

Janet L. George and **Brent L. Hutchison**, evaluators, spoke on GAO experiences and career options, from the co-op employee's perspective, at a meeting of the Portland State University Chapter, Beta Alpha Psi, Nov. 10.

Julie A. Rachiele, technical information specialist, participated in a workshop and conducted tours of facilities in Victoria, British Columbia, and the Pacific Northwest, as part of the annual conference of the Federal Interagency Field Librarians, Seattle, Nov. 16-20.

Washington

James E. Bonnell, senior evaluator, authored an article entitled "Transit's Growing Financial Crisis," which appeared in the October 1981 issue of *Traffic Quarterly*.

Eric Feldman, evaluator, spoke on

"The Positive Experiences of Cooperative Education" at a National Capital Association for Cooperative Education seminar at George Washington University, Washington, June 1981.

George Gearino, assistant regional manager, participated in the Mid-Atlantic Intergovernmental Audit Forum and presented a draft position paper on quality control policies, practices, and procedures, Baltimore, Nov. 4-5.

Elizabeth Nyang, technical information specialist:

Conducted a presentation on legislative data bases at the Federal Interagency Field Librarians' Workshop, Seattle, Nov. 19.

Authored a book entitled "The African Newspaper Index" which selectively indexes articles from four African newspapers.

Ben Ritt, evaluator, spoke on "The Adequacy of Computer Auditing by Federal Internal Auditors" at the Northern Virginia Chapter Association of Government Accountants seminar, Springfield, VA, Apr. 21.

Annual Awards for Articles Published in The GAO Review

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

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

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

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

Statement of Editorial Policy

This publication is prepared primarily for use by the staff of the General Accounting Office. Except where otherwise indicated, the articles and other submissions generally express the views of the authors and not an official position of the General Accounting Office.

Proposals for articles should be submitted to the Editor. Staff should concurrently submit a copy of their proposal letters to liaison staff who are responsible for representing their divisions and offices in encouraging contributions to this publication.

Articles should be typed (double-spaced) and generally not exceed 14 pages. Three copies of the final version should be submitted to the Editor. Article subject matter is not restricted but should be determined on the basis of presumed interest to GAO staff. Articles may be on technical or general subjects.

U.S. GOVERNMENT PRINTING OFFICE: 1980-311-741/002

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20410—Price \$4 (single copy). Subscription price \$11 per year, \$13.75 for foreign mailing.