

28TH ANNUAL HONOR AWARDS



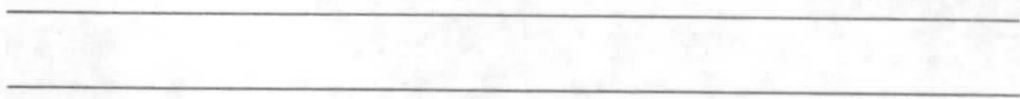
PROGRAM

PROGRAM

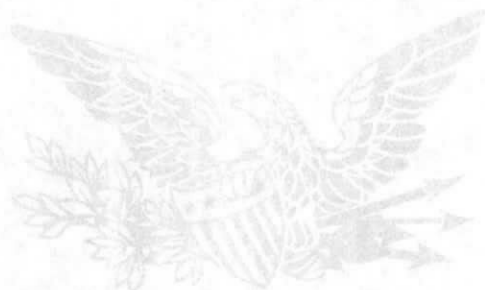
October 27, 1976/3:00 P.M.
Department of Commerce
Auditorium

Fourteenth Street
between E Street and
Constitution Avenue, N.W.
Washington, D.C.

INTRODUCTION	John M. Golden <i>Director of Personnel</i>
PRESENTATION OF COLORS	U.S. Merchant Marine Academy Color Guard
NATIONAL ANTHEM	U.S. Merchant Marine Academy Regimental Band
ADDRESS	Elliot L. Richardson <i>Secretary of Commerce</i>
ANNOUNCEMENT OF AWARDS	Joseph E. Kasputys <i>Assistant Secretary for Administration</i>
PRESENTATION OF SILVER MEDALS	Secretary of Commerce <i>Assisted by Departmental Officials</i>
MUSICAL SELECTION	Band
PRESENTATION OF GOLD MEDALS	Secretary of Commerce <i>Assisted by Departmental Officials</i>
CLOSING REMARKS	Assistant Secretary for Administration



GOLD MEDAL
AWARD
WINNERS



John C. Cullinane

*Regional Director
Bureau of the Census
New York, New York*



Mr. Cullinane is recognized for his continuing outstanding leadership and management of the Census Bureau's New York Regional Office. As Regional Director since 1965, Mr. Cullinane has been responsible for the Bureau's data collection activities in the Nation's largest city. The great mass and density of this population center make it the most difficult area in which to carry out successfully the Bureau's field data-collection programs because of high crime rates, ill-defined living arrangements, inadequate housing, and apathy and antipathy toward the Government. Despite these severely adverse conditions, the New York Region has continually accomplished its mission with high quality response and within budgetary guidelines. He is also recognized for developing continuing strong and beneficial relationships with local public officials and other data users and for his contributions to census planning.

Milton Eisen

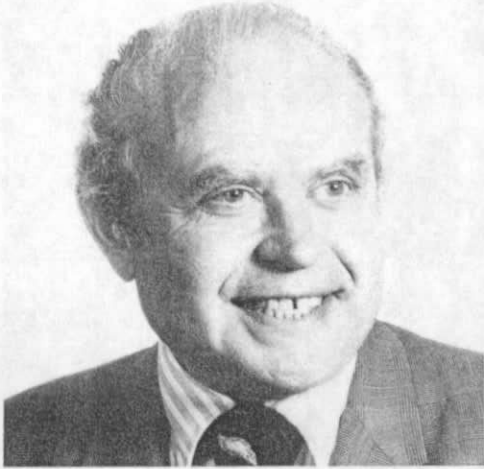
*Chief, Industry Division
Bureau of the Census*



The meeting of new needs of both the private and public sectors of the U.S. economy for timely and reliable data in areas which reflect current economic problems of the Nation has required the development and collection of new economic statistical series. Mr. Eisen has demonstrated outstanding leadership and resourcefulness by his development of new important series in fields such as capacity measurement in manufacturing, pollution abatement and control, and oil and gas revenues and expenditures, where standard collection approaches have not been applicable. Through his ingenuity and capable management, he resolved the many conceptual difficulties inherent in the collection of these data, developed standardized definitions, and devised statistical methodologies which have permitted the effective collection and analysis of such data in public and private policymaking endeavors. He has maintained the highest standards of professional excellence and contributed significantly to the effectiveness of the Federal Government's statistical program and to the usefulness of economic statistics for both government and business.

Daniel Arrill*

*Director, Investment Policy Division
Bureau of International Economic Policy
and Research
Domestic and International
Business Administration*

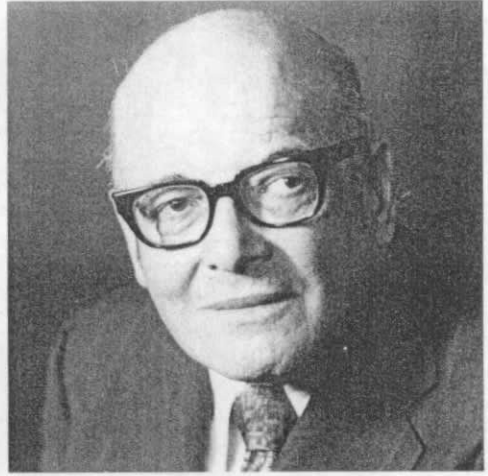


Mr. Arrill has made major contributions to policy formulation and execution in the field of international investment policy through direct participation in the work of the President's Council on International Economic Policy. He has also authored a pioneering study on the multinational corporation which has received wide acclaim in the business, academic, and government communities. As a member of the U.S. Delegation to the Organization for Economic Cooperation and Development, Mr. Arrill played a significant role in the successful negotiation of a code of behavior for multinational corporations and associated intergovernmental instruments which are regarded as major achievements in the preservation of a liberal international investment climate. Mr. Arrill's outstanding professional qualities as an economist and his management skill and leadership abilities have contributed in a major way to the achievement of U.S. goals and interests in the international investment field.

**Employee and function transferred to Office of the Secretary.*

Milton A. Berger*

*Director, Office of
Foreign Investment in the U.S.
Bureau of International Economic Policy
and Research
Domestic and International
Business Administration*



Mr. Berger has made major contributions to the formulation and implementation of U.S. objectives in the area of international investment policy, culminating in 1976 in his selection as first director of the Office of Foreign Investments in the United States. He has been the driving force behind the organization, design, and writing of the Departmental "Foreign Direct Investment Study", mandated by the Foreign Investment Study Act of 1974. Mr. Berger's outstanding leadership, managerial competence, and professional expertise have enabled the Department to assume a leadership role in devising and evaluating governmental strategies in an area of international economic policy which has only recently emerged as an important focus of government concern.

**Employee and function transferred to Office of the Secretary.*

Norris A. Lynch

*Director, Consumer Goods
and Services Division
Bureau of Domestic Commerce
Domestic and International
Business Administration*



Mr. Lynch has continually provided outstanding leadership and initiative in developing and implementing programs to develop domestic policy and promote business growth. He is recognized for his superb contributions in materially improving the performance of the Bureau of Domestic Commerce through his originality and vision in creating new programs and procedures for the formulation of domestic policy recommendations and better services to industry, business, and the consumer. He has distinguished himself in representing the Department on Presidential Commissions and, through his leadership abilities, was able to blend diverse business points of view into acceptable policy recommendations. His consistent performance in recognizing business and industry issues has brought to the Department the praise of industry, the Congress, and other Federal agencies.

Charles A. Waite

*Chief, Government Division
Bureau of Economic Analysis*



Mr. Waite has provided outstanding leadership in improving the scope and quality of the public sector of the national income and product accounts. He has made significant contributions to the analysis of the fiscal impact of the Federal budget in a period of complex legislative changes and a growing role of Government in the economy. He deserves the main credit for the Bureau's outstanding role in fiscal measurement and analysis. His work includes the translation of the official budget estimates into national income and product accounting terms—an essential step for economic policymaking; a major statistical and conceptual overhaul of the public sector accounts as part of the comprehensive Gross National Product revisions published this year; the successful completion of a major report on the measurement of real defense spending and the launching of a complex project to measure price changes of military expenditures; active participation in international efforts to measure public sector activity; preparation of articles, papers, and presentations explaining the outlook for governmental fiscal programs and their broader economic implications.

Allan H. Young

*Chief, National Income
and Wealth Division
Bureau of Economic Analysis*



Mr. Young has made major contributions to improvements in the U.S. national income and product accounts, the principal tool used by government, business, and other private decisionmakers for economic analysis. He has been outstanding in the application of economic and statistical theory to improving the reliability and analytical usefulness of the estimates in the accounts, including new estimates of profits, depreciation, and capital stock. Most recently, he planned and directed the comprehensive revision of the U.S. national income and product accounts for the period 1929 to 1975. This revision incorporated many new and improved definitions and statistical techniques. At the same time, Mr. Young was in charge of preparing the current Gross National Product estimates. These estimates had become more difficult to prepare and more vital to decisionmakers because of the recent period of turbulent national economic conditions.

Russell F. Stryker, Jr.

*Assistant Administrator
for Policy and Administration
Maritime Administration*



Since joining the Maritime Administration in January 1974, Mr. Stryker has continuously made major contributions in support of the Nation's merchant marine program that have been of exceptional value to the Government and the maritime industry. He has played a leading role in identifying, analyzing, and reporting on highly complex issues that have influenced decisions and actions relating to maritime affairs made not only by the Assistant Secretary for Maritime Affairs but also by the President, the Secretary of Commerce, other high Government officials, members of the Congress, and industry management. In addition, through his personal efforts, Mr. Stryker has made major accomplishments in strengthening the relationship between the Maritime Administration and the Department of Defense in the interests of national seapower. Significantly, his many accomplishments have occurred during a period when unusual and highly controversial policy issues and problems have demanded innovative and imaginative approaches and solutions. He is recognized for his high degree of professionalism, expertise, analytic ability, and objectivity.

James Sexton, Jr.

*Deputy Assistant Director
National Programs Division
Office of Minority Business Enterprise*



Mr. Sexton is recognized for advancing the objectives of the Office of Minority Business Enterprise (OMBE). These include (1) proposing the idea of Business Receipts Income as applicable to program planning, performance measurements, and evaluation; (2) field testing the idea in the six OMBE regions and generating seven volumes of useful data on program measurements; (3) developing Evaluability and Measurement Models as a basis of program progress; (4) establishing the first assessment center at Howard University; (5) skillfully making extraordinary inputs to OMBE budget presentations before the Office of Management and Budget and Congress. Through Mr. Sexton's ingenuity, his resourcefulness, and his leadership, he has contributed to the accomplishments of Departmental objectives and has added to the Department's prestige in his field.

Pierre J. Ausloos

*Physical Chemist
Institute for Materials Research
National Bureau of Standards*



Dr. Ausloos is recognized for his pioneering work in the fields of radiation chemistry, ion-molecule reaction kinetics, and vacuum ultraviolet photochemistry. In his quest for a more thorough understanding of the effects of high energy radiation on matter, he has developed a number of experimental techniques which are now widely used not only by radiation chemists but also by others concerned with the generation of vacuum ultraviolet radiation and with quantitative measurements of its effects. His work has had major impact in the areas of nuclear technology, high energy plasmas, polymer science, chemical kinetics, and chemical ionization mass spectrometry and has led to a better understanding of photochemical reactions occurring in the terrestrial and planetary atmospheres. He was first to prove that chlorine atoms are produced from several important halomethane pollutants under stratospheric conditions and to provide quantitative data on the extent of chlorine atom production for use in modeling stratospheric processes.

J. Paul Cali

*Chief, Office of
Standard Reference Materials
Institute for Materials Research
National Bureau of Standards*



Mr. Cali is recognized for his highly effective leadership of the Standard Reference Materials Program and his outstanding contributions to improving the accuracy and compatibility of clinical measurements throughout the world. As a direct result of Mr. Cali's efforts, the Bureau has increased by over 400 the number of SRM's available and broadened the scope of the program into important new areas such as fire safety, forensic applications, and clinical chemistry. Mr. Cali also developed a conceptual systems model for improving measurement compatibility among laboratories. He has been one of the leaders of an international effort to improve the accuracy and compatibility of clinical measurements. He was the leader of the scientific team that developed the first national clinical reference method for calcium in serum in 1972. Under his leadership, the Bureau has issued over 20 new clinical Standard Reference Materials that are used by government regulatory agencies and private sector medical organizations for quality control purposes in clinical and hospital laboratories.

James M. Cassel

*Supervisory Research Chemist
Institute for Materials Research
National Bureau of Standards*



Dr. Cassel is recognized for his outstanding research and management contributions to the fields of dental materials, medical materials, collagen, and leather. He has been a leading worker and manager in the research, standards, and measurements of these materials. Improved standards, scientific concepts, and commercial materials have resulted from his work which is widely recognized by industrial, standards, and scientific organizations. He has demonstrated exceptional ability to transmit the extensive results of his work to the leather, dental materials, and medical materials subsystems of the user community. Dr. Cassel exemplifies the highest levels of scientific achievement and service in the public interest.

Alan J. Goldman

*Chief, Operations Research Section
Institute for Basic Standards
National Bureau of Standards*



Dr. Goldman is recognized for his distinguished contributions to the development of mathematical techniques of operations research of wide application to the mission activities of the National Bureau of Standards and to government operations generally. By his brilliant personal research in the combinatorial aspects of mathematical programming, combined with his inspiring research leadership of associates, he has developed powerful and sophisticated mathematical methods which have been applied with outstanding success to the analysis of problems in government operations and to the mathematical modeling of technical components of public policy issues. His influence has been the vital force responsible for the development at the Bureau of a center of excellence in operations research. These outstanding accomplishments have brought national and international recognition to the National Bureau of Standards and the Department.

Alexander F. Robertson

*Senior Scientist
Center for Fire Research
Institute for Applied Technology
National Bureau of Standards*



Dr. Robertson is recognized for his sustained, significant contributions in advancing and developing national and international fire standards. His unique expertise in this area includes the development of methods for testing the flammability of building materials, building and marine products, and building construction components and assemblies. Dr. Robertson is responsible for developing the Radiant Panel Test, the test method for the American Society for Testing and Materials' (ASTM) Standard E-162, for which he received ASTM's Richard Templin Award; for research in fire resistance and fire loss prevention for which he received ASTM's S. H. Ingberg Award; and for international fire standards work for which he was nominated by the Gypsum Association to receive the 1976 American National Standards Institute's International Standards Medal. Dr. Robertson's consistently high quality of technical work in the evaluation of combustibility, fire growth, smoke generation, and fire test instrumentation has brought credit to the National Bureau of Standards and the Department.

Joan R. Rosenblatt

*Supervisory Mathematician
Institute for Basic Standards
National Bureau of Standards*



Dr. Rosenblatt has shown superb administrative leadership of a diversified group of professional statisticians who have provided outstanding research support and consulting services to physical measurements and standards development programs of the National Bureau of Standards. She has provided inspiring technical leadership for the development of data analysis methods and statistical computing techniques appropriate for the most sophisticated automated experiments in physical measurement research. By her own outstanding individual contributions and through skillful guidance of colleagues, she has developed a solid program in technological sampling, including survey and compliance testing methods needed in the use of physical measurements for regulatory programs. She has consulted widely on the use of statistical methodology throughout the government, and has contributed also as an officer, organizer, editor, and committee member to the work of a large number of professional societies, technical committees, and government prospects. Her exceptional accomplishments have contributed significantly to the high scientific reputation of the National Bureau of Standards.

Glenn F. Engen

Physicist

Cletus A. Hoer

*Physicist
Institute for Basic Standards
National Bureau of Standards
Boulder, Colorado*



Dr. Engen and Mr. Hoer are recognized for their outstanding contributions to microwave theory and measurement techniques which culminated in the invention and reduction to practice of the 6-port principle for making accurate microwave measurements. This principle makes optimum use of modern scattering matrix theory to substitute mathematical manipulation, which can be done with a small computer, for the mechanical perfection of components that has been required by other precise measuring techniques. The principle can be readily adapted to a variety of specialized measuring systems to provide accurate measurements at minimum cost and with minimum need for reference standards. Since it can tolerate very imperfect components, it provides the best foreseeable way to extend the ability to make accurate measurements into the millimeter wave part of the spectrum. Several manufacturers are working on the development of commercial versions that will reduce the dependence of microwave users and manufacturers on elaborate central standards laboratories.

Dayton L. Alverson

*Director, Northwest Fisheries Center
National Marine Fisheries Service
National Oceanic
and Atmospheric Administration
Seattle, Washington*



Dr. Alverson is recognized for major contributions to international fisheries activities and Law of the Sea through his outstanding administrative and scientific achievements as Director of the Northwest Fisheries Center. Dr. Alverson's most notable professional achievements include the publishing of a remarkably large number of substantive papers in the field of fisheries science and his service as an advisor, delegate, or convener of many important national and international meetings and committees, including the Deep Ocean Mining Environment Study Advisory Panel and the Advisory Committee on Marine Resource Research of the U.N. Food and Agriculture Organization. His untiring efforts to inform the concerned public about important aspects of the study and conservation of the ocean's living resources and his impact in these vital areas have been extremely notable and reflect the highest standards of public service.

Lester F. Hubert

*Chief, Synoptic Meteorology Branch
National Environmental Satellite Service
National Oceanic
and Atmospheric Administration*



Since the advent of imagery from geostationary satellites, Mr. Hubert has been at the forefront in developing the use of these highly important observations from space. He has devised a highly imaginative and sound concept for attaining reliable atmospheric winds operationally from cloud motions observed by the new Satellites Synchronous Meteorological-Geostationary Operational Environmental Satellites. He continues to influence improvements to attain a more effective system for operational production of winds in the next several years. These winds, produced operationally from cloud motions, are one of the most useful and important environmental satellite products; and they have been particularly significant in improving forecasts of tropical storms. The wind fields also improve the accuracy of numerical weather forecasts and are utilized directly by jet aircraft flying over areas of the world where observations were sparse prior to the advent of the satellite data. Studies utilizing these data are leading to better diagnosis of climate change which may lead to long-range weather prediction.

Grady F. McKay

*Chief, ADP Services Division
National Climatic Center
Environmental Data Service
National Oceanic
and Atmospheric Administration
Asheville, North Carolina*



Mr. McKay is cited for outstanding leadership, technical ability, and administrative talent in organizing and developing the Automated Data Processing Services Division, Asheville, North Carolina. His leadership resulted in the completion of a highly complex mix of operational and special data processing tasks. Innovative techniques and ideas were introduced in support of U.S. participation in major international environmentally related projects. Serving on international planning groups and teams, Mr. McKay played a leading role in design and maintenance of effective digital archives of national and international meteorological data sets. He served as Rapporteur of the World Meteorological Organization in processing/archiving WMO produced data. He diplomatically and skillfully represented the U.S. in international meetings and in East-West technical-cultural exchanges.

Gaylord R. Miller

*Director, Joint Tsunami Research Effort
Environmental Research Laboratories
National Oceanic
and Atmospheric Administration
Honolulu, Hawaii*



Dr. Miller is one of the world's foremost authorities on tsunamis—the long, often destructive ocean waves caused by Pacific earthquakes. He has been the scientific leader and prime moving force behind the establishment in Honolulu, Hawaii, of the Joint Tsunami Research Effort, of which he is Director, as well as the Tsunami Warning System and the International Tsunami Information Center. His research results and observational methods have yielded a series of definitive publications on long waves which have earned him his reputation and have attracted an outstanding scientific staff. He has been at the forefront in international cooperative programs with the Soviet Union and Japan and in the utilization of deep sea instrumentation to measure tsunami characteristics and bottom seismic activity. Dr. Miller has also been active in educating the public in the hazards of and strategies for avoiding the force of these destructive waves.

Daniel B. Mitchell

*Deputy Director, Center for Experiment
Design and Data Analysis
Environmental Data Service
National Oceanic
and Atmospheric Administration*



Mr. Mitchell, through outstanding program administration, has made major contributions to the Nation's success in fulfilling its commitments and meeting its schedules in the Global Atmospheric Research Program Atlantic Tropical Experiment (GATE) by skillful management of preparations, training, and logistics for data management activities on the U.S. ships and at the U.S. data center at Dakar, Senegal, and by wise and skillful management and coordination of the U.S. National Processing Center for GATE ship and satellite data and the international GATE Convection Sub-program Data Center, operated by the U.S. In addition, he has given the Department a powerful new tool by directly overseeing the design, procurement, and installation of an advanced and versatile interactive graphics computer system for environmental data processing and analysis. Responsible for managing novel and complex programs costing several millions of dollars per year, Mr. Mitchell has displayed both genius and dedication in developing accurate and adequate plans and budgets, then organizing, monitoring, and adjusting the execution of these plans with outstanding skill so as to meet deadlines, budgets, and high standards of product quality.

David H. Wallace

*Associate Administrator
for Ocean Resource Management
Office of the Administrator
National Oceanic
and Atmospheric Administration*



Mr. Wallace has shown outstanding technical leadership in international cooperative fisheries management. The fisheries off the Northeastern U.S. are some of the richest in the world and have been subject to foreign exploitation for hundreds of years. By 1973 the capability of U.S. fishermen to maintain their traditional coastal fisheries was seriously threatened by the activities of foreign fleets. The International Commission for the Northwest Atlantic Fisheries (ICNAF) was formed in 1949 to control the fishing effort, conserve stocks, and protect U.S. interests. It became apparent that a new approach was needed involving an integrated program of detailed scientific research, a comprehensive structure of fishery management measures, and a strong system of enforcement that would insure effectiveness of the measures adopted by the member nations. In the role of U.S. Commissioner, Mr. Wallace was the chief architect and implementer of this new approach. He is the official most responsible for developing U.S. policy, presenting these positions to the other member countries of ICNAF, and achieving acceptance of them in the face of technical and political difficulties. As a result of ICNAF negotiations, foreign and domestic fishing effort has been reduced to levels where most fish stocks are no longer over-exploited.

Joseph F. Nakamura

*Solicitor
Patent and Trademark Office*



Mr. Nakamura's legal interpretations and the policy decisions resulting therefrom have had significant impact on the patent and trademark property rights of American business. His performance as Solicitor has been in the highest tradition of the Department of Commerce. His superior knowledge of the law of patents and trademarks has provided valuable guidance in establishing the Office position in an unprecedented number of instances where serious consideration was given to seeking certiorari in the U.S. Supreme Court. Mr. Nakamura's legal guidance is also requested by the patent bar for the establishment of the standards of practice before the Patent and Trademark Office.

Ethan A. Hurd

Director, Office of Micrographic Systems

Edward J. Forbes

*Scientific Information Retrieval Specialist
Office of Patent Publications
Patent and Trademark Office*



Mr. Hurd spearheaded the efforts of a group which conceived, developed, and implemented a radically new system which revolutionized the process of printing United States patents. Mr. Forbes authored the comprehensive technical specification used in soliciting competitive industry proposals for data conversion and magnetic tape formatting services for the new system. In the 1960's the group, led by Mr. Hurd, began the complex process of modifying and adapting a then newly developing computer composing and printing technology to the stringent and demanding requirements of patent printing. Their efforts, brought to full fruition in 1974, have resulted in an annual savings to the U.S. Government of over \$10 million. In addition, the system they created is building a computerized base of patent information which portends great and beneficial impact on the entire patent examination process and may result in significant enhancement of the benefits of the Patent System to the Nation.

SILVER MEDAL
AWARD
WINNERS



Jerome M. Glynn

*Statistician (Demography)
Population Division
Bureau of the Census*

Mr. Glynn has displayed outstanding skill as a statistician/demographer in applying computer techniques and technology to the field of population estimates and projections. His imaginative and creative applications have permitted the Census Bureau to expand its intercensal demographic estimates program significantly and, in the process, have added considerably to the prestige of the Census Bureau. He has contributed significantly to two key expansions, i.e., the initiation of a Federal-State Cooperative Program for Local Population Estimates and Revenue Sharing/Administrative Records Program. The success of these programs is, in very large measure, attributable to Mr. Glynn's skill in applying computer techniques to population estimation methodology.

Carl A. Walker

*Electronic Engineer
Engineering Division
Bureau of the Census*

Mr. Walker contributed technical and management skills to expand through initial design and modification the Census Bureau's computation ability at an estimated annual savings of \$750,000. Through personal design initiatives, he managed the interfacing of high performance, high density IBM 3420/8 tape drives to the Bureau's UNIVAC computer system. The genesis of his interface subsystem provided a reliable solution never before undertaken in computer configuration design. Department leadership in technological achievements is recognized through Mr. Walker's expertise, evidenced by requests from industry and government for data on the interface design for use in their facilities. Mr. Walker's outstanding ability is recognized for problem solving and training by Interdepartmental Agencies and Statistics Canada.

Bernard Ascher

*Director, Industrial Products Division
Bureau of Resources and Trade Assistance
Domestic and International
Business Administration*

Mr. Ascher's performance has been consistently of a high degree of excellence marked by significant accomplishments in the complex field of trade policy dealing with import-related problems which significantly contributed to Department programs. He is an innovator and a professional economist who is able to effectively supervise highly specialized industrial economic analysts, coordinating their efforts and producing significant important professional papers.

John P. Gleason, Jr.

*Deputy Assistant Secretary
for Field Operations
Domestic and International
Business Administration*

Mr. Gleason has provided exceptional leadership in managing and supervising the Office of Field Operations of the Department of Commerce which greatly improved the operational activities of that office in a short period of time and resulted in material improvement in service to the U.S. business community. This leadership has been of great assistance to the business community, has increased exports, has stimulated domestic industry and has greatly benefited the national economy.

Peter B. Hale

*Director, Commerce Action Group
for the Near East
Bureau of International Commerce
Domestic and International
Business Administration*

Mr. Hale has demonstrated innovative leadership in organizing and administering the major program which was created in response to the dramatically changed economic situation which affected vital U.S. business interests in the Near East. His professional competence and leadership have been significantly instrumental in providing a high level of service to U.S. business. Under his direction, the Department's role in the six Bilateral Joint Commissions in the Near East has been significant, resulting in strengthening of the Bureau's ties to representatives of foreign governments and expanding its influence in support of U.S. business interests.

Thomas J. Jackson

*Manager, General Industrial
Equipment Program
Office of Business Research and Analysis
Bureau of Domestic Commerce
Domestic and International
Business Administration*

Mr. Jackson has demonstrated exceptional technical skills and leadership qualities in furthering major domestic and international programs. His broad range of experience, initiative, and ability to plan have generated significant contributions to Departmental objectives. His recent achievements have resulted in the doubling of textile machinery exports over a four-year period. Additionally, he was instrumental in determining, for the first time, the aggregate U.S. capability for the manufacture of oil drilling rigs.

Robert L. Pritchard

*Director, Domestic Export Programs Division
Bureau of International Commerce
Domestic and International
Business Administration*

Mr. Pritchard is recognized for his outstanding ability in the performance of his duties which has resulted in significant advancement of the Department's program to promote export awareness on the part of the U.S. business community. His outstanding leadership, initiative, and drive have played an important role in the Department's development of programs and policies directly affecting U.S. export growth. Additionally, by obtaining cooperative participation of private industry and national trade associations, he has been able to establish realistic goals in gaining high public visibility and sensitivity to the Nation's Export Expansion Program.

Environmental Affairs Special Project Staff

*Office of Business and Legislative Issues
Bureau of Domestic Commerce
Domestic and International
Business Administration*

Messrs. R. M. Downey, B. K. Haffner, J. L. Kelley, and Dr. R. A. Chiarodo have made outstanding contributions to the field of environmental policy and analysis. Through the polling of scientific, economic, and industrial techniques, the coordinated work of these individuals has been responsible for the development of major Departmental and national policies in the area of significant deterioration of clean air and numerous other aspects of the Clean Air and Clean Water Acts. Specific in-depth studies having policy impact include "Implications of Air Non-Degradation Policies on Clean Air Regions", "Significant Deterioration and the Non-Ferrous Metals Industry", and "Effects of Pollution Abatement on International Trade".

H. Grant Hammon, Jr.

*Region Finance Officer
Western Region
Maritime Administration
San Francisco, California*

Mr. Hammon has provided expert and respected leadership in directing the programs of the Region Finance Office. He has displayed a managerial ability beyond expectation, achieving the optimum performance of the Region Finance Office staff during periods of heavy workload and while testing and implementing new programs. His keen analytical ability and his willingness to understand the industry's problems and to seek a solution have gained industry cooperation.

Wesley L. Hemphill

*Industrial Specialist
Office of Shipbuilding Costs
Maritime Administration*

Mr. Hemphill is recognized for his outstanding contribution to the Maritime Administration in the area of ship financing guarantees. In his distinguished service he has worked for the simplification of procedures and the organization of transmitted documentation required of the numerous applicants desiring government financial guarantees. His continuous liaison with industry representatives, his perceptive management of diverse project requirements, and his timely recommendations pertaining to the administration of the responsibilities delegated to the Office of Shipbuilding Costs have been significantly beneficial to the objectives of the program.

Alvin Jurist

*Deputy Director
Office of Subsidy Administration
Maritime Administration*

Mr. Jurist is recognized for extremely competent performance of his assigned duties and special tasks. By his leadership and effectiveness, his knowledge and familiarity with all phases of this Agency's programs and objectives, Mr. Jurist has made significant contributions to the success of the various maritime aid programs. He has completed extremely complex special tasks, such as the formulation of final regulations governing the capital construction fund program, in a professional manner. His efforts will have a lasting and substantial effect on maritime aid programs.

Burton T. Kyle

*Domestic Shipping Officer
Office of Domestic Shipping
Maritime Administration*

Mr. Kyle's initiation of the Rapid Readiness Reactivation Program to make reserve fleet ships available in five to 10 days and his successful implementation of a U.S. Merchant Ship Locator Program to achieve constant and instantaneous knowledge of U.S. Flag Merchant Ships' positions worldwide have strongly enhanced the national security capability of the U.S. Merchant Marine. In addition, his direction of the Domestic Shipping Program and leadership of the Second National Domestic Shipping Conference have materially strengthened the Agency's mission in this vital area.

Michael S. Someck

*Maritime Attache
Office of International Activities
Maritime Administration
Tokyo, Japan*

Mr. Someck has gained recognition, not only in the Maritime Administration and the State Department, but in the Far Eastern shipping community as a technical and economic expert on major maritime matters. He has contributed valuable advice and information to the Maritime Administrator and other officials of Maritime, as well as to other government departments, international organizations, and private shipping companies. He has been quite influential in the fields of market development, cargo promotion for U.S. ships, and stressing the capabilities of U.S. shipyards.

Marshall D. Abrams

*Electronic Engineer (Data Processing)
Institute for Computer Sciences
and Technology
National Bureau of Standards*

Dr. Abrams has made outstanding technical contributions in his pioneering work in the development of a new approach to computer network performance measurement. He has directed the development of the first viable means for measuring the performance of service delivered through computer networks. The results of this work are improving the effectiveness, efficiency, and economy of the Federal Government's use of computer technology. Especially with regard to his key personal technical contributions, Dr. Abrams has become widely recognized for this achievement. He has strengthened the Department's role in the rapidly growing field of computer technology.

Richard G. Bright

*Senior Research Engineer
Center for Fire Research
Institute for Applied Technology
National Bureau of Standards*

Mr. Bright is recognized for his outstanding contributions in significantly advancing the state of fire protection in the United States. Mr. Bright is recognized as the Nation's leading authority on fire detection devices. He is responsible for making major changes in the quality of smoke detection devices now being marketed and for developing a standard that assures the quality of such devices. Because of his work, the reliability of smoke detectors has improved so significantly that an increasing number of State and local building code authorities are requiring the installation of smoke detectors in all new housing. The Bureau estimates smoke detectors will reduce, by 50 percent, residential fire deaths which account for the majority of the lives lost in fires. Thus, Mr. Bright's work is having a major impact on the Nation's goal of reducing fire losses by one-half in one generation.

Webster Capps

*Physicist (Solid State)
Institute for Materials Research
National Bureau of Standards*

Mr. Capps has made valuable contributions to the science and technology of glass. Through his work he has strengthened the U.S. glass industry, has helped to introduce new industrial and military uses of glass, and was instrumental in establishing standard programs on glass. His work on the viscosity of synthetic coal slags has been an important factor in assessing the viability of coal-fired magnetohydrodynamic electricity generators. He has served as a member of and consultant to numerous committees in and out of government dealing with glass—its properties and their control. Mr. Capps has developed new test methods used by industry and has fostered effective communication between government and the glass industry.

Jacob J. Diamond

*Chief, Law Enforcement Standards
Laboratory
Center for Consumer Product Technology
Institute for Applied Technology
National Bureau of Standards*

Mr. Diamond is recognized for his valuable contribution to the Nation's law enforcement officials by developing equipment performance standards and technical documents to assist in procuring high quality equipment at a reasonable cost. Under Mr. Diamond's direction, the Bureau's Law Enforcement Standards Laboratory has made exemplary use of existing NBS experience and expertise in standards development. He successfully coordinated the many technical disciplines within NBS toward providing technical assistance to local, State, and Federal law enforcement agencies such as the Law Enforcement Assistance Administration, National Highway Traffic Safety Administration, and the Defense Nuclear Agency. The magnitude of the output and high technical quality of the program have brought him national and international recognition from Canada, Germany, Israel, and England.

William H. Evans

*Research Chemist
Institute for Materials Research
National Bureau of Standards*

Dr. Evans has demonstrated exceptional skill in developing computer based information storage and retrieval techniques. Through his innovative development of unique methods for recording and processing complex chemical information, he has contributed to the improved efficiency of operation of data centers in the United States and abroad. Dr. Evans has also made valuable contributions to the art of evaluating data on the energetics of chemical reactions and has worked effectively to provide U.S. industry and technology with reliable tables of thermochemical data for use in standardizing their operations.

J. William Gadzuk

*Physicist
Institute for Basic Standards
National Bureau of Standards*

Dr. Gadzuk has made outstanding creative contributions to surface physics theory. His development of field emission theory stimulated the Bureau's measurements which showed band-structure effects, surface states, and resonance tunneling through adsorbed atoms. Dr. Gadzuk's advances in the theory of the electronic states and photoemission angular distributions for adsorbed species played a key role in the development of ultraviolet photoemission spectroscopy and other major surface science laboratories as a sensitive probe of adsorption and chemical reactions on surfaces. Through distinguished authorship and numerous invited lectures, he has gained international recognition for his work on surface physics theory and for the Bureau's surface physics program.

James E. Hill

*Mechanical Engineer
Center for Building Technology
Institute for Applied Technology
National Bureau of Standards*

Dr. Hill is recognized for his pioneering efforts in solar energy and for his significant national and international contributions to the field. In response to the Solar Heating and Cooling Demonstration Act of 1974, he was instrumental in developing criteria on how solar heating and cooling systems in buildings should perform. Since the manufacture of such systems was in its infancy, verification of their energy conservation features was not available. He developed the first testing procedures and standards for evaluating the efficiency of solar systems. These standards are being considered by the largest heating, refrigerating, and air-conditioning association in the U.S. as national consensus standards for use by industry. The standards are being used by American and foreign industries to evaluate solar collectors and systems and by the Department of Housing and Urban Development and the Energy Research and Development Administration to demonstrate the use of solar energy in buildings.

Frances E. Holberton

*Mathematician
Institute for Computer Science and
Technology
National Bureau of Standards*

Mrs. Holberton is recognized for exceptional dedication and technical contributions to computer programming standards for scientific and analytical purposes. She has participated steadfastly during the arduous revision of the national standard for the FORTRAN computer programming language, personally preparing extensive specifications. She has worked to complete the revised standard expeditiously with the improvement in its scope and precision that is necessary for Federal application. She has been primary developer of test routines that enable computer users to validate quality and compliance of commercial products to the FORTRAN standard. She has advanced awareness of the standard's importance among all users. Her efforts have improved quality and interchangeability of the many computer programs that accomplish complex analyses for Government, commercial, and scientific purposes.

John M. R. Hutchinson

*Physicist (Nuclear Physics)
Center for Radiation Research
Institute for Basic Standards
National Bureau of Standards*

Dr. Hutchinson has shown great originality in solving problems in radioactive metrology by the application of new ideas, often used to enhance the potential of old methods. His most original contributions have been in the development of the Auger-electron tracing method to measure source self-absorption in the assay of electron-capturing nuclides and in proposing the use of mixed gamma-ray standards for the efficiency calibration of germanium-lithium detectors as a function of energy. His leadership of the Bureau's group, producing standards used in monitoring radioactive effluents from nuclear-power reactors, has been outstanding.

Douglas B. Mann

*Mechanical Engineer
Institute for Basic Standards
National Bureau of Standards
Boulder, Colorado*

Mr. Mann is recognized for his distinguished contributions to the coordination and development of an unprecedented cryogenic fluid flow program and the establishment of a national code for cryogenic fluid metering practices where none had existed before. His personal efforts and leadership have resulted in an internationally recognized precision cryogenic flow measurement system, an evaluation of existing measurement techniques that resulted in important improvements in the state-of-the-art of this essential and practical measurement, and a national code that has been accepted and ratified by 38 States. This program made possible transfer standards for use with liquid nitrogen, argon, and oxygen which are presently being used by State regulatory agencies and periodically returned to the Bureau for recertification. The persevering efforts of Mr. Mann to develop and conduct this internationally significant precision metrology program will continue to have daily impact of considerable benefit.

William R. Ott

*Physicist
Institute for Basic Standards
National Bureau of Standards*

Dr. Ott has displayed outstanding technical leadership and has contributed significantly to the field of vacuum ultraviolet radiometry. By developing new primary and transfer source standards for this region of the spectrum, Dr. Ott has made possible accurate calibrations of ultraviolet radiation which are essential to achieve progress in many other technical and scientific fields. The calibrations which are now made possible by his work are for instrumentation on solar and earth satellites (Skylab, Explorer, and Nimbus) and are needed for the analysis of the ozone depletion problem in the earth's atmosphere, occupational health standards for ultraviolet radiation, and biomedical research. Dr. Ott's work has thus greatly strengthened the Bureau's role as the Nation's central laboratory for radiometric calibrations.

Stephen R. Petersen

*Industry Economist
Institute for Applied Technology
National Bureau of Standards*

Mr. Petersen is recognized for his significant contributions to the Nation's energy conservation effort. He is responsible for developing a unique approach for analyzing the cost-effectiveness of various energy conservation improvements in residential buildings and for making the information available to the general public in a form that can be used by the homeowner directly. Based on the technical study he produced for the Federal Energy Administration, Mr. Petersen developed a homeowner's guide to energy improvements in the home. Since June 1975, approximately 200,000 copies of his consumer booklet, "Making the Most of Your Energy Dollars", have been distributed to industry, Government, and the general public. In addition to this work, his economic analyses are providing a basis for energy conservation standards for new buildings to be used on a nationwide basis.

Abraham Schwebel

*Chief, Health Physics Section
Office of the Associate Director
for Administration
National Bureau of Standards*

Dr. Schwebel is recognized for his outstanding technical and administrative leadership in providing the National Bureau of Standards and the Department of Commerce with a radiation safety program which has allowed employees to utilize ionizing and laser radiations safely. He is also recognized for his distinguished contributions to the radioactivity standards program which have enhanced the efforts of the Bureau and Department to provide standards for national and international measurements of ionizing radiations. Dr. Schwebel has authored and co-authored numerous publications, served on several high-level committees and task forces, and is a recognized leader and pioneer in the field of radiation safety.

Edward Escalante

Metallurgist

William F. Gerhold

*Materials Research Engineer
Institute for Materials Research
National Bureau of Standards*

Messrs. Escalante and Gerhold have made extremely relevant contributions to the economic use of alloys in underground and marine environments by producing extensive amounts of corrosion data and by developing new corrosion measurement techniques. They have provided corrosion data on new coating systems for pilings in the sea, new stainless steel alloys in the soil, and new underground telephone cable systems. This new data has answered needs and provided the basis for new uses of metals for a number of applications of great importance to the Nation's economy. Their data and techniques have had significant economic impacts on the building, defense, communications, and pipeline industries.

David L. Blackburn

Electronic Engineer

Frank F. Oettinger

Electronic Engineer

Sherwin Rubin

*Electronic Engineer
Electronic Technology Division
Institute for Applied Technology
National Bureau of Standards*

Messrs. Blackburn, Oettinger, and Rubin are recognized for their outstanding technical contributions in developing and disseminating improved measurement tools to prevent the overheating of semiconductor devices which cause electronic failures. Their research includes the development of new methods for discerning nonuniform heating in power transistors and improved techniques for measuring the thermal resistance of transistors. Their work is used by such companies as Motorola, Delco Electronics, Solitron, and Sperry Flight Systems and also serves as the basis for standards promulgated by the Electronics Industries Association and the Department of Defense. Because of their work, electronic failures can be reduced and a significant contribution made to increasing the reliability of electronic systems that safeguard the Nation's health, safety, and welfare.

I. Lynus Barnes

Supervisory Chemist

John W. Gramlich

Research Chemist

Larry J. Moore

*Research Chemist
Institute for Materials Research
National Bureau of Standards*

Drs. Barnes, Gramlich, and Moore are recognized for their painstaking efforts and exceptional dedication in extending the accuracy to which the atomic weights of the elements are known. The values for several of these constants, which are fundamental in the practice of chemistry and chemical engineering, have been improved by factors of up to 100. The efforts of the atomic weights group are recognized internationally for their excellence. Values for the atomic weights measured at the National Bureau of Standards have been recognized by the International Union of Pure and Applied Chemistry as being acceptable without peer. Because of their efforts, extending the accuracy of other fundamental constants which depend on a knowledge of the atomic weights has been made possible.

Marcus W. Brooks

*Chief, Engineering Branch
Overseas Operations Division
National Weather Service
National Oceanic
and Atmospheric Administration*

Mr. Brooks has made exceptional engineering contributions to the equipment and equipment maintenance of the meteorological stations in the Cooperative Hurricane Observing Network in Mexico, Central America, and the Caribbean. He has managed the engineering installation and maintenance programs of the weather observing and communication facilities provided by the United States to foreign countries under the Voluntary Assistance Program of the World Meteorological Organization. Most of these installations are made in isolated areas of Asia, Africa, and South America under difficult working conditions. Through Mr. Brooks' efforts these projects have been remarkably successful and are monuments of United States ingenuity and enterprise, contributing greatly to meteorological capabilities of lesser developed nations.

Philip A. Calabrese

*Chief, Meteorological Services Division
National Weather Service
National Oceanic
and Atmospheric Administration
Kansas City, Missouri*

Mr. Calabrese, as Chief of the National Weather Service Central Region's Meteorological Services Division, has proven to be an extremely competent manager of field office operations. He has demonstrated unusual initiative and a high degree of leadership ability in all aspects of meteorological operations and users services conducted by the National Weather Service offices throughout the fourteen National Weather Service Central Region States. He has been directly responsible for significant improvements made in public forecast and warning services and services provided to special users such as agriculture, aviation, marine, and forestry through the efficient use of manpower and resources.

Armand J. Desmarais

*Meteorologist
National Meteorological Center
National Weather Service
National Oceanic
and Atmospheric Administration*

Mr. Desmarais played a key role in the Data Systems Test, a United States program which served as a precursor for the First Global Atmospheric Research Program Global Experiment. He skillfully designed and constructed the computer systems which allowed a small staff to conduct a series of real-time simulations of massive data collections, to perform global objective analyses, and to produce numerical weather predictions. Extensive evaluations have provided assessments of problems associated with the use of meteorological satellite data and of the potential impact of satellite data on future operational forecasting. His unique talents and extraordinary high productivity in the area of computer technology for meteorological purposes have also contributed to the major advancement of programs in short-range operational numerical weather prediction.

Edward W. Ferguson

*Supervisory Physical Scientist
National Environmental Satellite Service
National Oceanic
and Atmospheric Administration
Kansas City, Missouri*

Mr. Ferguson is recognized for outstanding contributions in the utilization of satellite derived data in support of severe storm forecasting and warning. His leadership in developing operational techniques for using satellite data to improve the accuracy and timeliness of warnings for severe thunderstorms has been of significant benefit to the country. As a result of the improved warnings, personal injuries and lives lost have been reduced in number. He has been responsible for establishing and managing the Satellite Field Services Station with the National Severe Storms Forecast Center, both located in Kansas City, Missouri. He has demonstrated exceptional personal expertise and creativity in the field of satellite meteorology. He is recognized as a leader in this field and has provided considerable guidance and support to several important severe storm research programs.

William E. Fox

*Supervisory Hydrologist
Southeast River Forecast Center
National Weather Service
National Oceanic
and Atmospheric Administration
Atlanta, Georgia*

Mr. Fox is recognized for building an exemplary river forecasting service for the southeastern part of the Nation. Since 1955, he has constantly expanded hydrologic services from Alabama to the Carolinas, developed highly sophisticated forecast procedures, and trained an extremely competent scientific staff. Recent examples of the effectiveness of his forecast service are two critical major flood forecasts during early 1975. These forecasts saved over \$300,000 damages in Elba, Alabama, and made possible the orderly evacuation of Brewton, 75 percent of which was flooded. Due to his unprecedented leadership this River Forecast Center was the first to produce operational river forecasts on the central computer facility via remote terminal.

Jerry A. Galt

*Physical Oceanographer
Environmental Research Laboratories
National Oceanic
and Atmospheric Administration
Seattle, Washington*

Out of Dr. Galt's personal involvement and initiative grew the circulation and oil spill trajectory program of the National Oceanic and Atmospheric Administration's Alaskan Outer Continental Shelf environmental studies. Through his efforts and insight, the existence of a previously unknown gyre in the region then planned for oil and gas development was documented. He demonstrated that in the event of an oil spill from these tracts the oil could threaten the rich biological populations inhabiting the Cooper River Delta. As a direct result of his findings the Department of Interior withdrew this area from the lease sale.

James G. Georg

*Meteorologist
National Weather Service
National Oceanic
and Atmospheric Administration
Lakeland, Florida*

Mr. Georg is recognized for his exceptional leadership ability and ingenuity by re-designing and modernizing the Agricultural Weather Service Program for Florida. His work has resulted in a significant savings in money, manpower, and equipment while molding a more effective service to the user community. Since 1970, the nearly 400 stations devoted to the collection of micrometeorological observations have been reduced to under 100 through the development of computer regression techniques for estimating minimum temperature from a network of benchmark stations. Other money-saving procedures include arranging for contracted service for sub-station inspection work and for observers from State facilities to perform the agriculture weather observations. His exceptional liaison with Florida State officials, who gave support, both monetary and concept endorsement, to his farsighted plans, is most noteworthy.

Earl E. Gossard

*Chief, Meteorological Radar Program Area
Environmental Research Laboratories
National Oceanic
and Atmospheric Administration
Boulder, Colorado*

Dr. Gossard is recognized for outstanding contributions to atmospheric research through distinguished personal authorship and direction of geoacoustic and meteorological radar research. He revitalized the Wave Propagation Laboratory's Geoacoustics Program and developed the staff into clearly the top research group in the country in this field. As Manager of the 1972 Wave Propagation Laboratory boundary layer field experiment at Haswell, Colorado, he provided stimulating leadership which resulted in an extraordinarily important and successful field experiment. At least nine open literature papers resulted from this brief two-week experiment. In his present position he has successfully organized a series of unique multi-Doppler radar field experiments. These have provided totally new insights into atmospheric three-dimensional velocity fields existing under diverse meteorological and geographical conditions. In addition to acting as senior author of a 456-page book, he has authored, or co-authored, 11 important papers which have appeared in open literature.

Edmund S. Hobson, Jr.

*Fishery Biologist
Southwest Fisheries Center
National Marine Fisheries Service
National Oceanic
and Atmospheric Administration
Tiburon, California*

Dr. Hobson is recognized for outstanding contribution to science by pioneering in-depth studies of the ecology of communities of coastal marine fishes. The problems associated with the effect of reducing or eliminating one or more of a particular species of fish in a community is now better understood as a result of his efforts. These studies are an invaluable tool in predicting the effects of environmental modification or the effects of overfishing and form a basis for a sound theoretical approach to the interactions between species and their impact on the habitat. In addition, his presentation of this research in easily understandable form has helped the general public appreciate the problems associated with unnatural environmental modification.

William T. Hodge

*Meteorologist
National Climatic Center
Environmental Data Service
National Oceanic
and Atmospheric Administration
Asheville, North Carolina*

Mr. Hodge is recognized for his exceptional contributions to national and international programs, including serving as U.S. Data Manager for the International Field Year for the Great Lakes (IFYGL); his preparation of the typhoon data base at the Joint Typhoon Warning Center, Guam; his direction of the assembly of a meteorology data package for Hurricane Eloise; and his initiation of a comprehensive study of weather-disease relationships. Mr. Hodge also has made significant contributions to the better understanding of special weather events through his authorship of a long series of meteorological monographs.

Susumu Kato

*Fishery Biologist
Southwest Fisheries Center
National Marine Fisheries Service
National Oceanic
and Atmospheric Administration
Tiburon, California*

Mr. Kato is recognized for his efforts as the prime mover and catalyst in the development of new and underutilized fisheries in California. Mr. Kato has successfully sought ways to upgrade small fisheries; to identify new or minimally exploited resources; to expand markets for unused species of the California Current and adjacent waters; to determine and to develop market potentials for products and to advise vessel owners and fishermen on catching methods, availability, distribution, and handling. His dedication to the goals of increased earnings for individual fishermen and increased local production of fishery products is in the best tradition of the National Marine Fisheries Service.

Carl F. Kelley*

*Director, National Geodetic Survey
Information Center
National Ocean Survey
National Oceanic
and Atmospheric Administration*

Mr. Kelley, as Director, National Geodetic Survey Information Center, contributed outstanding leadership, management ability, and initiative in providing services to the surveyors of the U.S. and to their professional organization, the American Congress on Surveying and Mapping. He instructed and taught workshops and short courses directed to interpreting the use of geodetic control data. From his personal involvement and energy, the Department of Commerce will be able to provide current geodetic data to users worldwide from a computer-based data dissemination system developed in cooperation with the Economic Development Administration. This project culminated Mr. Kelley's efforts to implement modern technology to meet the ever-increasing demands of the surveying profession for instantaneous availability of geodetic data.

**Awarded posthumously*

Raymond M. Lumpkin

*Chief, Headquarters Personnel Section
Office of Administration, Personnel Division
National Oceanic
and Atmospheric Administration*

Mr. Lumpkin is recognized for developing solid, viable personnel management programs in several National Oceanic and Atmospheric Administration (NOAA) organizations ranging from establishing the first servicing personnel office for the National Environmental Satellite Service, to heading the NOAA RIF Task Force in 1973, and to his present position as Chief of the Headquarters Section, Operations Branch. In his present assignment he has developed and maintained an outstanding operational office for the Office of the Administrator, has provided direct resources in the establishment of the Office of Coastal Zone Management, and has contributed staff assistance to the development of the new Office of Ocean Engineering. In each of his endeavors he has gained the cooperation, confidence, and support of employees and top management.

Bruce J. MacGill

*Program Analysis Officer
Resources Management Staff
Environmental Data Service
National Oceanic
and Atmospheric Administration*

Mr. MacGill is recognized for his outstanding contributions to the advancement of Department programs through his skill in resource management. He has played a key role in Environmental Data Service (EDS) program development during a critical period of change and expansion with minimal new resources. Major new EDS initiatives and reprogramming efforts include the establishment, staffing, and management of a satellite data service, Center for Climatic and Environmental Assessment, and a Deepwater Ports Project Office. In addition, EDS is modernizing its ADP systems. Despite these and other major reprogramming efforts, EDS, with total resources of about \$20 million, enjoys a much less than one percent difference between its planned and actual expenditures.

Walter J. Morawski

*Computer Specialist
National Oceanographic Data Center
Environmental Data Service
National Oceanic
and Atmospheric Administration*

Mr. Morawski is cited for the design, development, and implementation of the Generalized Application System, the comprehensive, highly flexible software system now used to prepare user requested data products. Mr. Morawski's efforts in designing and preparing this system have reduced previous constraints faced by the Center in preparing data products for its customers, while at the same time eliminating redundant, file-oriented programming efforts and creating a continually growing library of product generation capabilities. His skillful address of problems encountered in creating this system has resulted in operational improvements which allow an estimated annual savings of \$36,000. These savings will continue to accrue for as long as the system is used.

Maurice E. Pautz

*Training and Scientific Services
Program Leader
Office of Meteorology and Oceanography
National Weather Service
National Oceanic
and Atmospheric Administration*

Mr. Pautz has demonstrated outstanding skill, perseverance, and capability in the management of the National Weather Service's scientific training program. His accomplishments and achievements cover a wide range of activities that include the successful conduct of initial training for the Graduate Upward Mobility Program; the overall responsibility, supervision, and operation of the Advanced Prediction Course; the production and direction of a new video tape project focused on bringing up-to-date techniques and technologies to all field forecasters; and the aggressively active pursuits of an educational plan for introducing revolutionary new computer and display technology into a field operation presently characterized by manual activities.

Carl A. Posey

*Public Affairs Officer
Environmental Research Laboratories
National Oceanic
and Atmospheric Administration
Boulder, Colorado*

Mr. Posey is recognized for his expertise in interpreting complex scientific projects and programs, making clear their relevance to issues of major public concern. His achievements in bringing to national awareness such vital programs as research in ozone and pollution have been of great value. He has been remarkably skillful in conceiving and executing public affairs programs in the field, notably for the Florida Cumulus Experiment. His leadership in creating original Open House programs in Boulder has been noteworthy. He proposed and is a coordinator of a unique seminar for television weathercasters at the National Severe Storms Laboratory, Oklahoma.

Dale E. Westbrook

*Civil Engineer
Marine Data Systems Project
National Ocean Survey
National Oceanic
and Atmospheric Administration*

Mr. Westbrook is recognized for his outstanding leadership, technical and managerial ability, and major contributions to the Nation's goals in the area of maritime safety in navigable waters of the U.S. A major result of his contributions has been the recognition of nautical chart automation leadership for the Department by industry, foreign nations, and other agencies in the U.S. Government. His superior skills in hydrography, cartography, and automation techniques have led to the development of the National Ocean Survey Automated Information System improving the state-of-the-art in current nautical chart compilation and data storage technology. His innovations have led to improved standardized work effort, cartographic procedures, work flow, and more timely and accurate nautical chart production.

Thomas Winterfeld

*Advisor for International Programs
National Oceanographic Data Center
Environmental Data Service
National Oceanic
and Atmospheric Administration*

For the past 18 years Mr. Winterfeld has been formulating technical and procedural arrangements for international data exchange within the United Nation's Educational, Scientific and Cultural Organization's Intergovernmental Oceanographic Commission (IOC) and the International Council for the Exploration of the Sea (ICES). He currently is serving the IOC as Vice Chairman of the Working Committee on International Oceanographic Data Exchange and chairman of its ad hoc Group on Integrated Global Ocean Station System Data Archiving and Exchange. Mr. Winterfeld has developed operational procedures, logs, specific guidelines, and formats; has prepared manuals, data management schemes and inventories, all of which are in international use. Mr. Winterfeld is effective in having the U.S. views reflected in adopted recommendations and resolutions.

Aaron L. Zimmerman

*Meteorologist-in-Charge
National Weather Service
National Oceanic
and Atmospheric Administration
Seattle, Washington*

Mr. Zimmerman is recognized for his professional ability, both as a manager and meteorologist of one of the National Oceanic and Atmospheric Administration's (NOAA) larger Forecast Offices. His actions during the December 1975 floods in the U.S. Northwest represented unusual leadership, courage, and competence. His performance during and after the flooding episode, his efforts in developing the Northeast Pacific Ocean Services, and his extraordinary talents in dealing with people at all levels give ample evidence of Mr. Zimmerman's managerial ability. Through this ability, significant advancements have been made in NOAA's service programs.

Richard P. Floyd

*Officer-in-Charge
NOAA Launch 1255*

Douglas V. Mason

*Surveying Technician
Atlantic Marine Center
National Ocean Survey
National Oceanic
and Atmospheric Administration
Norfolk, Virginia*

Lt. Floyd and Mr. Mason are recognized for unusual competence in an emergency, resulting in saving the life of a fellow employee who had suffered a severe electrical shock. Lt. Floyd discovered this employee, who had been working alone on NOAA Launch 1257, in an unconscious state, without pulse, heartbeat, or perceptible breath. While summoning and awaiting assistance, Lt. Floyd and Mr. Mason administered heart massage and artificial respiration. They were able to restore intermittent breath and heart action until a rescue squad arrived to take the employee to a hospital for professional assistance. Lt. Floyd and Mr. Mason, through extremely competent performance in a critical emergency, were able to save their fellow employee's life.

Center for Experiment Design and Data Analysis Group

*Environmental Data Service
National Oceanic
and Atmospheric Administration*

Mr. David Saxton, supervisor, and Messrs. Donald Acheson, James Almazan, Robert Dennis, Michael Hudlow, George Saxton, and Ward Seguin, subsystem lead analysts for the processing of data collected on the U.S. ships in the primary array of the Global Atmospheric Research Program Atlantic Tropical Experiment (GATE), have made outstanding scientific and technological contributions to the advancement of national programs by setting new standards of accuracy and timeliness in processing and validating a very large interdisciplinary data set from an environmental field program. This task required the solution of many novel problems. The resulting sets of surface, upper air, tethered balloon, radar and oceanographic data, now available from the World Data Centers, represent a major new resource for the development of improved weather prediction models.

Atmospheric Electricity Group

*Environmental Research Laboratories
National Oceanic
and Atmospheric Administration
Boulder, Colorado*

Miss S. L. Bokan, Messrs. B. R. Caldwell, W. E. Cobb, F. N. Gould, B. Grebence, F. J. Holitza, and Drs. H. W. Kasemir and W. D. Rust have succeeded in suppressing lightning strokes in thunderstorms in Colorado by the application of a strictly physical concept based on their intimate knowledge of thunderstorm electricity. The physical principle called for seeding of the storm with about 10 million chaff fibers, total weight 2 kg, into electrical fields exceeding 50 K volts/meter causing the clouds to be discharged by ions emitted from corona discharge on the chaff fiber. The group developed the theory and the aircraft instrumentation necessary to measure and document the effect of the dispersed chaff. The field program required exceptional stamina, dedication, and courage during many storm penetrations. The results indicated that chaff seeding reduced the number of observed lightnings to about 1/3 of those observed in control storms.

Alfred L. Leavitt

*Patent Examining Group Director
Group 120
Patent and Trademark Office*

Mr. Leavitt is recognized for outstanding performance of duties which has resulted in valuable contributions to, and significant advances in, the programs of the United States Patent and Trademark Office. Mr. Leavitt is cited for his outstanding accomplishments in the management of two separate patent examining groups and his contributions to improved and more efficient procedures in the examination of patent applications.

Joseph O. Potz

*Manager, Systems Standards and Evaluation
Division*

Florence A. Hoffman

Documentation Program Specialist

Carole A. Phillips

*Management Analyst
Patent and Trademark Office*

Mr. Potz, Mrs. Hoffman, and Miss Phillips made outstanding contributions to a group which conceived, developed, and implemented a new system for processing the printing of United States patents. Mr. Potz contributed particularly effective technical liaison among the many parties and analyzed and developed solutions to the highly complex and technical problems involved in encoding information. His innovations contributed to greater system effectiveness. Mrs. Hoffman and Miss Phillips authored the "Reference Manual for the Preparation of Allowed Applications for Data Base System Entry and Patent Printing". This publication provides the first comprehensive, systematic documentation of appearance, style, editorial policy and practice within the annals of the Patent and Trademark Office.

