



## 25TH ANNUAL HONOR AWARDS

**PROGRAM**

October 25, 1973/3:00 P.M.  
 DEPARTMENT OF COMMERCE AUDITORIUM  
 Fourteenth Street between E Street  
 and Constitution Avenue, N.W.  
 Washington, D. C.

MUSIC	U.S. Merchant Marine Academy Regimental Band
INTRODUCTION	John Will Director of Personnel
PRESENTATION OF COLORS	U.S. Merchant Marine Academy Color Guard
NATIONAL ANTHEM	Band
ADDRESS	Frederick B. Dent Secretary of Commerce
PRESENTATION OF AWARDS	Secretary of Commerce Assisted by Departmental Officials
ANNOUNCEMENT OF AWARDS	Henry B. Turner Assistant Secretary for Administration
ORDER OF PROGRAM:	
Presentation of Silver Medals	
Musical Selection by Band	
25th Anniversary Special Presentation—	
Gold Medal Winners of 1949	
Presentation of Gold Medals	
CLOSING REMARKS	Assistant Secretary for Administration

# GOLD MEDAL AWARD WINNERS



**William M. Gaines**

*Assistant Division Chief  
Engineering Division  
Bureau of the Census*

Mr. William M. Gaines is recognized for having consistently demonstrated his outstanding effectiveness in the development and direction of the engineering and technical services required to maintain the Bureau's large complex of computers and related peripheral equipment and to advance the Bureau's utilization of modern equipment technology. He directs with great skill and dedication the maintenance activities for one of the most sophisticated and heavily utilized electronic data processing equipment systems which operates on a full round-the-clock basis. His technical competence is held in the highest esteem by his staff, other Bureau data processing managers, and computer and computer component suppliers. This has been a major contributing factor to the excellent progress made in the Bureau's computer equipment development efforts and to the high level of performance attained on the Bureau's various electronic computer systems, especially during the many major Bureau census programs.



**Robert H. Hanson**

*Assistant Chief for Programs  
Statistical Methods Division  
Bureau of the Census*

Mr. Robert H. Hanson has had a major role in developing and directing sampling methods and other mathematical statistical techniques for population and housing surveys and censuses for over twenty-five years. His competence in these techniques, his accomplishments in adapting mathematical and statistical theory to practical census and survey problems, and his ability to communicate these methods to other statisticians have contributed to the Bureau's being considered a model for such activities by statistical organizations throughout the world. His ingenuity and sustained professional excellence have permitted a rapid expansion of the Bureau of the Census' programs in household surveys when the needs have arisen. Simultaneously, he has trained a large staff of professionals to an extraordinary degree so that the Bureau now has a cadre of young mathematical statisticians capable of continuing the high quality work required of the Bureau. Mr. Hanson is a recognized authority in the field of household sampling, and his advice has been utilized by statisticians throughout the Federal service.



**Paul R. Squires**

*Associate Director for Data  
Collection and Processing  
Bureau of the Census*

Mr. Paul R. Squires demonstrated outstanding competence in developing the Community Services Program for field operations which effectively reduced the undercount of the 1970 Decennial Census. The Program's most significant impact was in the reduction of the undercount among minority groups in the inner city. He also evidenced exceptional administrative skills in recruiting nearly 200,000 temporary employees to serve in the field offices throughout the Nation. Utilizing a wide range of techniques, he accomplished this complex and demanding project in record time. Through his efforts, this veritable army was rapidly deactivated with evident cost-benefit results. His contribution to the success of the largest and most complete Census in the history of this Nation reflect the highest credit upon himself, the Bureau, and the Department of Commerce.



**Ralph S. Woodruff**

*Assistant Division Chief for  
Research and Methodology  
Business Division  
Bureau of the Census*

Mr. Ralph S. Woodruff has played a key pioneering role over the past twenty years in developing comprehensive and reliable statistics for the distribution and service sectors of the economy. He has demonstrated ingenuity and sustained professional excellence in overcoming problems inherent in deriving valid statistics for these hard-to-measure industries. The creativity shown by Mr. Woodruff over the extended period of his work in this area and his extraordinary accomplishments in respect to the design of samples, survey methodology, estimating procedures, and control of the quality of operations have far exceeded what would normally be expected and are clearly worthy of very special recognition. Several of his innovations have been so novel and of such general interest and value as to merit publication in professional journals and have attracted worldwide attention.



**David N. Cohen**

*Supervisory Statistician  
(Economics)  
Bureau of Competitive Assessment  
and Business Policy*

Mr. David N. Cohen is recognized for outstanding leadership in organizing and developing within the Bureau of Competitive Assessment and Business Policy an analytical capability which has been utilized frequently to support Presidential efforts to achieve economic growth and price stability, as well as to estimate the impact on U.S. industry of currency devaluation, threatened labor disputes, and enlarged European Economic Community. Mr. Cohen's foresight and initiative in exploring industrial and economic statistical resources and creatively adapting them for ready application to national economic problems have saved the Department large sums of money and countless man-hours of work. Throughout his career as a civil servant, Mr. Cohen's spirit of cooperation, constant striving to perform at the highest levels, and unstinting sharing of his knowledge and skills have been an inspiration to his co-workers.



**James M. Owens**

*Director, Materials Division  
Bureau of Competitive Assessment  
and Business Policy*

Over a period of more than twenty years, Mr. James M. Owens has consistently exemplified the highest qualities of a leader in the field of materials. His imaginative approach to the multitude of problems faced by the various industries under his jurisdiction and his tenacity in seeking solutions to those problems have been prime factors in the Department's response to the needs of economic viability and growth. His work on the complex problems of solid waste recycling has gained him recognition in Government and industry. His outstanding work as a member of the staff of the National Commission on Materials Policy, representing the Department through numerous, effective contacts with industry and other government agencies has been an important factor in the successful completion of the Commission's work.



**Lora S. Collins**

*Associate Director for National  
Economic Analysis  
Bureau of Economic Analysis*

Dr. Lora S. Collins, Associate Director for National Economic Analysis of the Bureau of Economic Analysis, has made major contributions to the understanding of the functioning of the American economy through distinguished editorship of the Bureau's monthly publication, the *Survey of Current Business*. In addition she has made a basic, pervasive, and sustained contribution to the entire analytical work program of the Bureau.



**David T. Devlin**

*Associate Director for  
International Economic Analysis  
Bureau of Economic Analysis*

Dr. David T. Devlin has provided outstanding leadership in measuring and analyzing the balance of payments position of the United States. As Chief of BEA's Balance of Payments Division of the Bureau of Economic Analysis and later as BEA's Associate Director for International Economic Analysis, he deserves the main credit for directing a major expansion of BEA's work in this field. This expansion includes the successful completion of the 1966 Census of U.S. Direct Investment Abroad despite formidable problems, a new presentation of the official U.S. balance of payments accounts that has facilitated the analysis of international developments, new bilateral balance of payments accounts between the United States and foreign countries, and development of new information on the economic impact of multinational corporations.



**Edward J. Krause**

*Director, Office of International  
Marketing  
Bureau of International Commerce*

Mr. Edward J. Krause has displayed unusual acumen, proven administrative competence, exceedingly good judgment and ability to grasp the essentials of any problem. His creative and inspired contribution in organizing and directing the varied programs of the Office of International Marketing has given the Department and the U.S. Government a vital channel for serving the growing and critical needs of international traders. The Trade Center, Trade Fairs, Trade Missions, and other major export expansion programs have achieved notable effectiveness under his direction and have increased sales of U.S. products throughout the world.



### **Catharin B. Pfeffer**

*Chief, Fleet Disposal Branch  
Office of the Assistant Administrator  
for Operations  
Maritime Administration*

Miss Catharin B. Pfeffer is recognized for extraordinary competence in the management of the Maritime Administration's surplus ship disposal program. Through judicious and determined application of her comprehensive knowledge of ship disposal, Government contracting procedures, and the principles of good business, Miss Pfeffer has met and significantly exceeded all Maritime's objectives. This timely disposal of surplus ships contributed directly and materially to the disestablishment of three Reserve Fleet facilities and, in each instance, produced urgently needed savings in manpower and operating expenses. The sale of ships which made these closings possible produced revenue for the U.S. Treasury in the amount of some forty million dollars. In the achievement of these exceptional results Miss Pfeffer's performance was characterized by a manner of strict ethics and diplomatic cooperation for which she is respected by all. She has performed a distinct and distinguished service to the Government of the United States.



### **Robert B. Abel**

*Director, National Sea Grant  
Program  
National Oceanic and Atmospheric  
Administration*

Dr. Robert B. Abel is recognized for outstanding creative administration of the National Sea Grant Program. In its six short years of existence, the Sea Grant Program has developed under Dr. Abel's direction into a major national resource for the development and wise utilization of the Nation's marine resources and its coastal zone. Policies and procedures established by Dr. Abel have resulted in new administrative and program techniques in the Nation's major marine-oriented universities, in establishment of consortia of universities with state agencies and industries, in renewed understanding of the national importance of the marine environment, and in new methods for its use and conservation. A network of Sea Grant Colleges and institutions has been created which contributes research results, skilled manpower, and advisory services both nationally and locally, resulting in new and improved marine business and a more informed basis for public management of marine resources and the coastal zone.





## **Elbert H. Ahlstrom**

*Senior Scientist,  
Southwest Fisheries Center  
National Marine Fisheries Service  
National Oceanic and Atmospheric  
Administration  
La Jolla, California*

Dr. Elbert H. Ahlstrom has played the major role in developing an entire scientific technology—fish stock assessment by means of systematic surveys of eggs and the larvae of such fishes in the plankton. Through his vision and scientific leadership, methods for sampling, identifying, and analyzing the patterns of abundance and distribution of larval pelagic fishes have been developed into a precise science. The results have not only provided the major understanding of California's fishery resources but also constitute a highly significant and fundamental innovation in the appraisal and understanding of the potential fisheries of the world's oceans. Nationally and internationally his work has attracted wide attention since his methods and techniques are applicable in any area where it is important to evaluate the potential of fishery resources. As man looks to the sea as a source of food for the world's growing and hungry population, Dr. Ahlstrom's contribution is providing a practicable method for the rapid surveying and assessment of underutilized fish stocks in the oceans of the world.



## **Eugene J. Aubert**

*Director, U.S. Project Office  
Environmental Monitoring and  
Prediction  
National Oceanic and Atmospheric  
Administration*

Dr. Eugene J. Aubert is recognized for outstanding initiative and leadership in the planning and implementation of the U.S. effort in the International Field Year for the Great Lakes (IFYGL). This joint Canadian-U.S. program of environmental and water resources research in Lake Ontario and the Ontario Basin for the purpose of developing a scientific basis for water resource management on the Great Lakes is the most intensive investigation ever attempted for a large lake. Dr. Aubert demonstrated extraordinary creativity and foresight in organizing and directing the field data acquisition phase of IFYGL which was successfully completed on March 31, 1973. In his relationship with his Canadian counterparts, with representatives of participating U. S. Federal agencies, and with university scientists, Dr. Aubert produced a spirit of complete cooperation in the conduct of this complex endeavor. The results of this effort will have a lasting impact on the Nation's capability to preserve and enhance the quality of its lakes.



## J. Virginia Lincoln

*Supervisory Physicist  
National Geophysical and  
Solar-Terrestrial Data Center  
Environmental Data Service  
National Oceanic and Atmospheric  
Administration  
Boulder, Colorado*

Miss J. Virginia Lincoln is recognized for her sustained, outstanding leadership and accomplishments in the development and administration of scientific data management programs of major benefit to both the national and the international scientific community. Miss Lincoln was the developer and leader of the former Aeronomy and Space Data Center and of related international activities associated with the Center's parallel role as World Data Center A, subcenter for solar-terrestrial physics. She has long been an active and effective participant in the work of numerous international organizations in the field of solar-terrestrial physics. Through these international activities, she has been able to increase substantially the effectiveness and relevance of the data service programs she manages, thus contributing directly and substantially to the support and development of other NOAA, Department, national, and international programs in these and related scientific disciplines. Her contributions include the development of several major scientific data publication series which have received repeated and enthusiastic commendation from both the national and international scientific communities.



## James D. McQuigg

*Meteorologist  
Environmental Data Service  
National Oceanic and Atmospheric  
Administration  
Columbia, Missouri*

Dr. James D. McQuigg has been a leader in the use of computer simulation of the environment to depict the range and intensity of future atmospheric events so as to anticipate and plan for their impact upon economic systems. In cooperation with University of Missouri colleagues in the fields of engineering, economics, agriculture, health, and statistical methods, Dr. McQuigg translated climatic data into useful parameters for economic decision making. His work has contributed significantly to the formulation of effective design and operating strategies for large interconnected electric power systems, optimum strategies for constructing large buildings and the cost effectiveness of artificially cooling dairy barns and the relations of weather to human disease. He and his colleagues have made a major breakthrough in developing a method for projecting weather/electric power load relationships into future years so as to predict the probability of future power failures. Dr. McQuigg serves on many local, national, and international advisory groups concerned with the relationship of weather to social and economic development and has made significant contributions to the technical literature in this field.



**J. Murray Mitchell, Jr.**

*Project Scientist  
Environmental Data Service  
National Oceanic and Atmospheric  
Administration*

Dr. J. Murray Mitchell, Jr. is recognized for his sustained, outstanding leadership and accomplishments in developing climatic change programs of major benefit to the Nation and the international scientific community. Dr. Mitchell has pursued almost every aspect of the climatic change problem, ranging from methods of measuring it to achieving a better understanding of its worldwide pattern and behavior and appraising increasing human capacity for activating new climatic trends. He developed a new statistical method for distinguishing real climatic change from the effects of station relocations, local urban effects, and other disturbing influences. Dr. Mitchell was the first to demonstrate a worldwide cooling trend which began in the 1940's and continues today. He has focused attention on important gaps in knowledge that preclude definitive conclusions about future climate by defining useful limits within which future climate is likely to vary from both natural and man-made causes. Dr. Mitchell has provided scientific advice to the highest levels of science and national government. Internationally, he has been a key figure in conferences and working groups concerned with climate and its relation to food and energy problems.



**Kenneth M. Nagler**

*Supervisory Meteorologist  
National Weather Service  
National Oceanic and Atmospheric  
Administration*

The unbroken series of successes of the United States' manned flights to the moon became possible because of many support programs, each operating at the peak of human performance. Among them is the weather support program of NOAA, organized and directed by Mr. Kenneth M. Nagler. He effectively organized support units at pivotal points of the space operations. He directed with distinction the operations analysis studies relating to environmental effects. The system which he designed for providing weather forecasts, so crucial for optimal scheduling of launch and recovery, has proved very effective by drawing upon the resources of the forecast centers of the National Weather Service.



### **William L. Smith**

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

Dr. William L. Smith is recognized for exceptional contributions to the methodology of obtaining soundings of the atmosphere from satellite measurements. These soundings are essential for the improvement of numerical weather forecasts for the United States. They are already minimizing the impact on forecast accuracy of the discontinuance of expensive upper air observations in the Arctic aboard Coast Guard vessels. He has conceived major concepts to obtain satellite soundings in the presence of clouds, making possible world-wide observations from the NOAA satellite. In addition, he has led in the design and development of advanced satellite instruments which have demonstrated the validity of these important concepts. Dr. Smith has exhibited outstanding leadership of a dedicated and capable group of scientists in achieving these important results in remote sounding of the atmosphere.



### **William M. Terry\***

*Director, Office of International  
Affairs  
Office of the Administrator  
National Oceanic and Atmospheric  
Administration*

Mr. William M. Terry demonstrated outstanding ability and leadership in the area of International Fisheries. He led the international community toward acceptance of more effective and sophisticated concepts of international marine resource management off the east coast of the United States, particularly during the last two and a half years of his life when he served as U.S. Commissioner on the International Commission for the Northwest Atlantic Fisheries. His initiative and guidance were behind the Commission's institution of catch quotas for fish stocks in this area and the subsequent expansion and refinement of this technique by means of assigning specific catch quotas to individual nations—marking the first use of such a technique in an international fisheries management body. At the time of his death, Mr. Terry was leading an intensive U.S. effort to win international approval for further new and innovative changes he viewed as necessary to achieve the sound management of fisheries resources in the Northwest Atlantic. Mr. Terry served as U.S. Commissioner to the Inter-American Tropical Tuna Commission and was the principal U.S. negotiator and spokesman as well as the head of the U.S. delegation.

\*Awarded posthumously



## River Forecast Center

*National Weather Service  
National Oceanic and Atmospheric  
Administration  
Harrisburg, Pennsylvania*

The River Forecast Center in Harrisburg was the focal point of National Weather Service flood warning operations during Hurricane Agnes. The rains caused devastating, record breaking floods, particularly in Pennsylvania, New York, Virginia, and Maryland. For a storm in which damage reached \$3.5 billion, the death toll of 118 was very light. Surveys and testimony indicate that large numbers of lives were saved as a result of forecasts and warnings emanating from the RFC. Because of timely warnings, emergency crews were able to evacuate more than 100,000 persons from Wilkes Barre alone before the dikes were topped. Operations at the RFC were carried on under the most trying conditions. Messrs. Ola D. White, Donald J. Close, Lars O. Feese, Myron W. Gwinner, Michael C. Mark, Nicholas R. Pavick, Bruce A. Whyte, Paul A. Marin performed extraordinarily under intense emotional stress aggravated by simultaneous record breaking flooding from southern Virginia to southern New York, despite loss of electric power which turned off the lights and made elevators and computers inoperative and without gauging stations which were destroyed.



## Don D. Andrews

*Examiner-in-Chief  
Board of Appeals  
Patent Office*

Mr. Don D. Andrews was appointed to the Board of Appeals almost simultaneously with the arrival there of the first cases presenting the question of the patentability of computer programs. Bringing his experience in design and implementation of computers to bear on the question, he shaped Patent Office legal policy in this most complex of fields. Although only one of more than half a dozen Examiners-in-Chief available to address this problem, Patent Office records show that more than half of the contributions to the preparation of software decisions were by Mr. Andrews. He was the principal architect in the Patent Office policy that software is unpatentable. This policy, unpopular with many groups in the computer field and controversial as to the entire industry, was reversed by the Court of Customs and Patent Appeals but ultimately was vindicated by the United States Supreme Court, thus establishing by the highest legal authority the policy urged and practiced by Mr. Andrews so many years earlier.



**Guy W. Chamberlin, Jr.**

*Deputy Assistant Secretary for Administration  
Office of the Assistant Secretary for Administration*

Mr. Guy W. Chamberlin, Jr. is recognized for his outstanding contribution as Acting Assistant Secretary for Administration from July 1972 through February 1973. Mr. Chamberlin was able to discharge the Assistant Secretary's functions effectively and efficiently. During this period Mr. Chamberlin capably advised two Secretaries on the discharge of the administrative aspects of their duties. His decisive leadership and high competence were recognized by both Secretaries and also by a former Under Secretary.



**David M. Harrington**

*Chief, Compensation Division  
Office of Personnel  
Office of the Assistant Secretary for Administration*

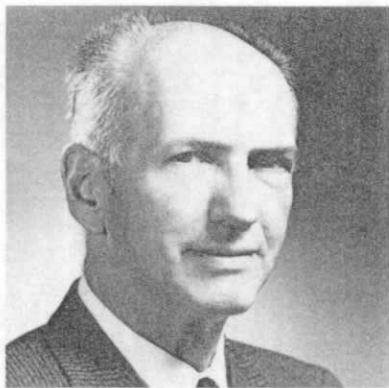
Mr. David M. Harrington has demonstrated rare incisiveness, superb technical competence, and outstanding leadership in formulating and administering the position classification and compensation system of the Department of Commerce. Through his outstanding leadership, Mr. Harrington has contributed to improved effectiveness and efficiency in formulating and directing the Department's Executive Assignment System. In addition, he has performed an outstanding job in negotiations with major unions on a wide range of working conditions, compensation, and pay matters.



**Wolfgang K. Haller**

*Chief, Inorganic Glass Section  
National Bureau of Standards*

Dr. Wolfgang K. Haller has made valuable contributions to the science and technology of glass and has fostered effective communication between Government and the glass industry. He has led a section of scientists making noteworthy contributions to understanding the structure of glass and the influence that this has on its manufacture, properties, and uses. His own work has led to an understanding of phase separated glasses and new uses based upon this understanding. He and his section have produced currently useful glass standard reference materials which are widely used for control of manufacturing and for accurate calibration during the measurement of properties. New test methods have been developed. As a consequence of Dr. Haller's leadership, the Inorganic Glass Section is one of the most outstanding groups active in this country in the science and technology of glass.



**David M. Kerns**

*Senior Research Physicist  
National Bureau of Standards  
Boulder, Colorado*

Dr. David M. Kerns made various outstanding contributions to electromagnetic theory, especially a planewave scattering matrix theory of antenna-antenna interaction and a probe compensation method. These advances are basic to two new, very important methods for accurately measuring antenna pattern and gain. The latter are two essential antenna performance criteria that directly relate to system performance, cost, spectrum occupancy and electromagnetic pollution. Also, without his creative participation and leadership, one of the methods, the near-field scanning method, would not have been developed by NBS. These methods make possible certain measurements (1) at higher accuracy levels than previously, (2) in the atmosphere rather than in a vacuum (outer space), (3) at distances within a meter, or (4) with smaller, less costly antenna ranges. They now form the basis for all NBS microwave antenna standards and measurements and are being used by others for critical measurements on aircraft phased arrays, millimeter wave antennas, satellite communication antennas and standard gain horns.



**John I. Lauritzen**

*Physicist  
National Bureau of Standards*

Dr. John I. Lauritzen is recognized for his major research contributions to the science of polymer crystallization and for his distinguished record of scientific publications in the areas of polymer crystallization, dielectric relaxation in molecular compounds, and specialized areas in statistical mechanics. Dr. Lauritzen's research constantly has been at the forefront of polymer science and of the highest excellence. Most of his research publications are considered to be classics in their field and have established him as a leading figure in the scientific community. His work has directed recognition to the Department of Commerce in that it has provided major insights into the mechanical, electrical, and melting behavior of materials such as polyethylene, nylon, and other crystalline polymers found in commerce.



**John Mandel**

*Mathematical Statistician  
National Bureau of Standards*

Dr. John Mandel is recognized for his contributions of major significance in developing unique statistical designs for experiments in chemistry, physics, and engineering and for his pioneering work on the analysis of complex experimental data. Dr. Mandel has been the author or co-author of numerous scientific papers covering both theoretical and applied statistical methodology, and many of his publications are scientific landmarks. In addition, Dr. Mandel is the author of a widely acclaimed book, "The Statistical Analysis of Experimental Data", which has proved to be an extremely reliable text for scientists and engineers in assisting them in the proper design of experiments so that the maximum amount of information and data is obtained. His breadth of knowledge, originality, and competence have made him a leader of his field and, in turn, have established the National Bureau of Standards as a pre-eminent center of excellence for statistical design and analysis.





## Hideo Okabe

*Research Chemist  
National Bureau of Standards*

Dr. Hideo Okabe's research activities have led to the publication of about thirty-five outstanding papers and reviews in the field of ultraviolet photochemistry with particular emphasis on the fluorescence of the photodissociated fragments. This distinguished research led him to examine the possibility of using the fluorescence observed in the photolysis of sulfur dioxide as a means for its monitoring and control. This air pollutant is ubiquitous in most fossil fuel combustion. Dr. Okabe was able to develop a detector which has a linear response for sulfur dioxide from 20 ppb to 1600 ppm. This achievement has been recognized by the Environmental Protection Agency, and a number of industrial instrument companies are actively developing this device for commercial application. There is little doubt that Dr. Okabe's detector will have an important impact on the Federal Government's Pollution Control Programs because of its capability of monitoring and controlling sulfur dioxide emissions from power plant smoke stacks.

# 25th COMMEMORATIVE AWARD

to recipients of the Department's  
First Gold Medal Awards

*February 14, 1949  
"For Outstanding Contribution to  
the Public Service, the Nation, or  
Humanity"*

Mr. Dudley P. Barnette, Jr.

Dr. Lyman J. Briggs

Dr. Eugene C. Crittenden

Dr. J. Howard Dellinger

Mr. Harry Diamond

Mr. P. J. Federico

Dr. Robert Dewitt Huntoon

Dr. Walter D. Lambert

Dr. Harold Lyons

Mr. Harry A. Marmer

Dr. William F. Meggers

Mr. Jacob Rabinow

Dr. Chester Snow

Dr. Lauriston S. Taylor

Mr. Mark Taylor

Dr. Louis B. Tuckerman

# SILVER MEDAL AWARD WINNERS

## Roger H. Bugenhagen

*Supervisory Survey Statistician  
Bureau of the Census*

Mr. Roger H. Bugenhagen was primarily responsible for the successful completion of the Census Bureau's survey of multiunit company organizations (precanvass) in preparation for the 1972 Economic Census. His excellent planning and organization of the utilization of the Bureau's personnel and computer facilities for that program led directly to the expeditious and timely processing of the compilation of the most complete classified mailing list of multiunit companies and establishments ever achieved for an economic census and contributed immeasurably to the completeness of the census statistics.

## Walter F. Buhl

*Assistant Chief of Transportation  
Division  
Bureau of the Census*

In the development of the Census of Transportation, Mr. Walter F. Buhl had full responsibility for testing data collection methods and questionnaire design. His efforts and ability to achieve acceptance and cooperation from industry and government for the Census of Transportation were a major and crucial factor in establishing the Census. His dedication, knowledge, and skill in managing the operation of the Census contributed significantly to achieving exceptionally high levels of response and quality of data. He has made significant contributions to improved methods to reduce costs with concurrent improvements in scope, content, and design to meet users needs in the 1972 Census of Transportation.

## **Percy R. Millard**

*Field Director  
Dallas Data Collection Center  
Bureau of the Census  
Dallas, Texas*

Mr. Percy R. Millard has demonstrated outstanding leadership and management ability in meeting the responsibilities inherent in the continuing data collection activities of the Dallas Data Collection Center. Although the recent DCC boundary realignment and sample redesign and introduction of several large scale data collection programs have placed severe demands upon his staff, Mr. Millard distinguished himself by providing the knowledge and leadership which are so vital in dealing with the challenges of maintaining high quality while developing and administering efficient operational procedures. He has exhibited unusual skill and judgment during his years as Director of the Dallas DCC in his relationships with leaders throughout the South and Southwest, thereby enhancing the Census Bureau's standing in the area.

## **James P. Corbett**

*Mathematical Statistician  
Statistical Research Division*

## **George L. Farnsworth**

*Statistician (General)  
Data User Services Office  
Bureau of the Census*

Mr. James P. Corbett and Mr. George L. Farnsworth are recognized for their outstanding contribution to the development of an automated geographic referencing system. This system has significantly enhanced the usefulness and versatility of census data, especially for local users of small area statistics. Their skill; creativity; resourcefulness; and vision in originating, developing, and applying the DIME (Dual Independent Map Encoding) system have

for the first time made it practicable to associate neighboring geographic areas, to relate geographic coordinates to census data, and to integrate local data with census data. This system has revolutionized geographic base systems in the Census Bureau, throughout the Nation, and in leading nations abroad.

## **Norris A. Lynch**

*Director, Consumer Goods and  
Services Division  
Bureau of Competitive Assessment  
and Business Policy*

Mr. Norris A. Lynch has performed in outstanding fashion. Through his constant program innovations and superior leadership and accomplishments on behalf of the Department's goals, he has displayed managerial performance above and beyond expectations of duty. His innovations in the field of franchising and other service sectors have provided an insight into these areas not previously available. The impact of Mr. Lynch's activities upon other government agencies and the business community has contributed toward the success of the Department's role in promoting economic growth.

## Abner Fein

*International Trade Specialist  
Office of Field Operations  
Domestic and International  
Business Administration  
New York, New York*

Mr. Abner Fein is recognized for his years of outstanding service as Chief of the Export Control Section and currently Chief of the International Business Promotion Division in the furtherance of the export expansion program of the Department. Mr. Fein has consistently improved the high professional standards and has contributed to the excellent ratings and reputation of the New York Office and its record of accomplishments. He has taken the initiative in management improvement practices and has devoted himself to training and upgrading the skills of employees and motivating them to meet challenges. Through Mr. Fein's foresight, planning, training, and leadership, the New York Office has consistently achieved an extremely high level of accomplishment in the Department's export expansion program.

## Margaret A. Patrick

*International Trade Specialist  
Office of Field Operations  
Domestic and International  
Business Administration  
Charleston, South Carolina*

Mrs. Margaret A. Patrick is recognized for exceptional leadership in planning and administering the export programs of the Department of Commerce which have been of great benefit to the state of South Carolina and the United States. Mrs. Patrick conducted her work with great energy and with a high degree of initiative and effectiveness which brought great credit to the Department and which has been an inspiration to other District employees.

## Gayle C. Shelton, Jr.

*Director, Birmingham District  
Office  
Office of Field Operations  
Domestic and International  
Business Administration  
Birmingham, Alabama*

Mr. Gayle C. Shelton, Jr. is recognized for exceptional leadership in planning and administering Departmental programs which have been of great benefit to the state of Alabama and the United States. Mr. Shelton's exceptional direction of the Birmingham District Office has made that office one of the best of the forty-three District Offices. In addition, he assisted the Office of Field Operations in planning operational programs which resulted in greatly improving the quality and quantity of the work of the District Offices. Mr. Shelton conducted his work with great energy, with a high degree of initiative and effectiveness which has brought great credit to the Department of Commerce. In accomplishing these assignments, he has been an inspiration to his fellow employees at all times.

## **William M. Ware**

*General Services Specialist  
Office of Administrative Services  
Domestic and International  
Business Administration*

Mr. William M. Ware is recognized for his outstanding leadership in the administrative services field resulting in improved administration and program advancement within DIBA. During FY-73, the Facilities Branch under Mr. Ware's supervision was responsible for space management required to establish the Domestic and International Business Administration. This activity consisted of 200 moves and affected 450 employees. His overall dedication, resourcefulness, and initiative have significantly contributed to the advancement of operating programs in the Domestic and International Business Administration.

## **Hertha W. Heiss**

*Director, U.S.S.R. Affairs Division  
Bureau of East-West Trade*

Mrs. Hertha W. Heiss has consistently performed her duties in an outstanding manner and made significant contributions to the improvement of United States-Soviet trade relations. As an international economist, she has concentrated her skills and energy on the development of United States trade policy toward the USSR. She has also made valuable contributions to the preparation for and participated in many meetings between U.S. Government and Soviet trade officials.

## **Evelyn Parrish Lederer**

*Supervisory Economist  
Bureau of Economic Analysis*

Mrs. Evelyn Parrish Lederer, Assistant Chief of the Balance of Payments Division of the Bureau of Economic Analysis, has made major contributions to the statistical quality of the United States balance of payments accounts and to the improvement of the concepts underlying these accounts. She has also made a substantial contribution to the methodology of forecasting U.S. merchandise imports and exports.

## **Eunice P. James**

*Statistical Assistant*

## **Hazel E. Turner**

*Statistical Assistant*

*Bureau of Economic Analysis*

Mrs. Eunice P. James and Mrs. Hazel E. Turner are recognized for continuing outstanding work in the maintenance, improvement, and operation of a regional economic information system. This system provides personal income and employment data by county and Standard Metropolitan Statistical Areas for use by Federal, state, local, and private analysts working in the fields of regional economics, market analysis, and urban and rural planning.

## Kenneth E. Latcholia

*Deputy Regional Director  
Economic Development  
Administration  
Seattle, Washington*

Mr. Kenneth E. Latcholia made an unusually valuable contribution to revitalize the declining economy of the region. His assistance included working with local officials and private citizens to develop an approach to the area's problems. In addition, he communicated the area's needs to EDA decision makers, who subsequently approved projects expected to create over 2,000 direct jobs and many more related employment opportunities. Since Mr. Latcholia began concentrating on the area, the unemployment rate for the Seattle Standard Metropolitan Statistical Area has dropped from approximately 15% to the current 8% level.

## John J. McCracken, Jr.

*Special Assistant to the Deputy  
Assistant Secretary for Operations  
Economic Development  
Administration*

Mr. John J. McCracken, Jr. made an unusually valuable contribution to the administration of the Department's Economic Development program between March and July 1973. During this period, he acted in the capacity of Deputy Assistant Secretary for Economic Development Operations responsible for overseeing all EDA public works, business loans, and technical assistance projects to insure maximum resource coordination. Under his outstanding leadership, the EDA's program offices were able to meet tight deadlines in processing an exceptionally large number of projects with high development potential.

## Daniel Arrill

*Director, Investment Policy  
Division  
Office of International Finance  
and Investment  
Bureau of International  
Commerce*

Mr. Daniel Arrill is recognized for important contributions to U.S. objectives in the field of international investment including the fulfillment of the need for sharply-focused and continuing analysis of multinational corporation activities and their impact on trade, employment, the balance of payments, and the transfer of technology, resulting in the publication of major studies. In addition, he is recognized for major participation in the development and implementation of policies respecting foreign government expropriation and nationalization actions and U.S. Government treatment of outward and inward foreign investment and representation of the United States economic interest in the deliberations of international bodies such as the Organization for Economic Cooperation and Development, the International Labor Organization, and the United Nations Industrial Development Organization on multinational corporations and foreign investment policy.

## Charles J. Barrett

*Regional Marketing Director,  
Northern Europe  
Office of International Marketing  
Bureau of International  
Commerce*

Mr. Charles J. Barrett is cited for his more than twenty-seven years of exceptional service in advancing the economic and commercial interests of the United States in the European area. As an International Economist, Manager of Trade Information and Promotion Programs, and as a Commercial

Attache in the Foreign Service, he has provided invaluable counseling and assistance to the U.S. business community in its trading and investment activities in Europe. He is an able administrator of staff and program and a foremost authority in a field of great national importance.

### **John M. Bataller**

*Director, Overseas Commercial  
Representation Staff  
Bureau of International Commerce*

Mr. John M. Bataller is recognized for a sustained record of flexibility and adaptability to a variety of assignments in both administrative and substantive fields undertaken in the interests of the Bureau of International Commerce and the Department of Commerce. The outstanding services rendered during a period of change contributed importantly to the successful adjustment of the Bureau and the Department to new responsibilities and goals. In budget and administrative activities he demonstrated special ability to use established procedures to support rather than circumscribe operating managers; and in substantive assignments he applied the variety of his experiences to break new ground in the field of State-Commerce relationships for program coordination, information dissemination, and training program development.

### **Peter H. Dahmlow**

*Deputy Director Paris Trade  
Center  
Office of International Marketing  
Bureau of International  
Commerce*

Since joining the Department in 1964, Mr. Peter H. Dahmlow has consistently displayed the highest degree of versatility combined with sustained excellence in performing vital assignments. As an Exhibits Manager for major shows and as Deputy Director of the Paris Trade Center, he has repeatedly demonstrated his resourcefulness and excellent judgment as well as his superior management and executive abilities. His successful efforts to introduce many firms to the international marketplace through commercial exhibitions have made a singular contribution to the Department's export expansion program.

### **Jerome Forrest**

*Assistant Director  
Office of International Trade  
Policy  
Bureau of International Commerce*

Mr. Jerome Forrest is recognized for his important contributions to U.S. objectives in the field of international trade policy, including valuable inputs to the Administration's trade bill and preparations for new multilateral trade negotiations. In addition, he is also recognized for a highly developed professional expertise which has had a significant impact both within and outside the Department of Commerce on a number of important trade policy issues and thereby has enhanced the Department's role in the formulation of U.S. trade policy.



## **Richard Garnitz**

*Deputy Director  
Office of International Marketing  
Bureau of International  
Commerce*

Mr. Richard Garnitz has played a key role in the Department's trade promotion activities over the past ten years, both in senior management positions in the Department and overseas. As Director of the U.S. Trade Centers in Tokyo and Stockholm, he set new records of achievement. In addition, as Director of Overseas Operations and Deputy Director of the Office of International Marketing, he has consistently demonstrated unique creativity, versatility, competence, and dedication to national export expansion objectives.

## **Strauss S. Leon**

*International Trade Specialist  
Bureau of International  
Commerce*

Mr. Strauss S. Leon is recognized for his important contributions to the national objective of increasing U.S. export sales by assisting firms on major international business transactions where special government assistance is required to ensure the sales. He has had an important role in the development of this program in assuring recognition of the U.S. commercial interest in the formulation of policies and decisions affecting potential major U.S. export sales and in mobilizing inter-agency support for U.S. industry efforts to compete for these sales.

## **Claudette P. Sarsfield**

*Program Officer  
Office of Export Development  
Bureau of International  
Commerce*

Miss Claudette P. Sarsfield is recognized for her outstanding contributions in the field of export expansion in administering The President's "E" Award Program. Her outstanding devotion to duty and her ingenuity and creativity in initiating numerous innovations ensure expeditious processing of Award applications thereby stimulating a greater interest among members of the business community and government agencies in this important national effort.

## **Frank W. Sheaffer**

*Director, Investment Services  
Division  
Office of International Finance  
and Investment  
Bureau of International  
Commerce*

Mr. Frank W. Sheaffer has made important contributions to U.S. objectives in the fields of international investment and economic defense including the initiation and development of the United States Government's program to encourage foreign direct industrial investment in the United States. He is recognized specifically for his direction of the Department of Commerce's export control activities and for devising and implementing techniques to develop foreign awareness and interest in establishing manufacturing operations in the United States, including close collaboration with the National Association of State Development Agencies, the establishment of Industrial Development Attache offices abroad, the support of investment missions, and the conducting of Invest in U.S.A. Conferences in Europe and Japan.

## Samuel W. Galstan

*Deputy Western Region Director  
Maritime Administration  
San Francisco, California*

Captain Samuel W. Galstan has provided expert leadership in projecting Maritime programs to all segments of the Maritime industry in the Western Region. He combines outstanding ship operation background with perceptive management and analytical ability to achieve the optimum performance of the Region staff, while eliciting genuine cooperation and participation of the industry in Maritime and Department proposals. He commands the continuing respect of maritime labor, enabling Maritime to conduct its industry affairs in an atmosphere of trust and good faith and to assure meaningful labor-management relations within recognized units. His breadth of skills, knowledge, and abilities enables him to respond to all of the multi-faceted requirements of a Region operation in an outstanding manner.

## John J. Nachtsheim

*Chief, Office of Ship Construction  
Maritime Administration*

Mr. John J. Nachtsheim is recognized for his outstanding contribution to the Maritime Administration in the area of research and development. In his distinguished service, he has worked perseveringly toward the formulation of Maritime's programs responsive to national needs which promise significant benefits to the Nation through the development of a technologically advanced, more competitive United States merchant fleet.

## Ronald C. Rasmus

*Special Assistant to the Deputy  
Assistant Secretary for Maritime  
Affairs  
Maritime Administration*

Mr. Ronald C. Rasmus played an important role in effectuating the major maritime agreement between the United States and the Soviet Union and subsequently has assumed major responsibility for implementation of the agreement, maintaining constant liaison with Soviet representatives and all other interested parties to effect resolution of operating problems pertaining to calls by Soviet-flag vessels in American ports. He also participated very effectively in the actual negotiation sessions with Soviet representatives and made a major contribution toward the establishment of freight rates and charter terms highly favorable to U.S. flag operators. His Maritime career has been marked by consistently outstanding performance and devotion to the best interests of the Department and the Federal Service.

## Felix Favorite

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

Dr. Felix Favorite is recognized for his major contributions to fishery and oceanographic science as evidenced by the results of the observations and analysis taken under his program. The program, as it relates to the Alaskan Stream, provided a rational basis for explaining the relationship between fish and their environment in the North Pacific Ocean and in the Bering Sea. His leadership in integrating biological and environmental observations as demonstrated in the North Pacific Salmon-Environment program and his extensive and highly distinguished record of publication are outstanding.

## James G. Howcroft

*Research Meteorologist  
National Weather Service  
National Oceanic and Atmospheric  
Administration*

Mr. James G. Howcroft played the leading role in the development, testing, and implementation of a numerical forecast model now used routinely at the National Meteorological Center. He has been responsible for virtually all of the improvements in this system since its implementation in September 1971. This computer model now serves as the basic guidance for today's weather forecast for use by the National Weather Service forecasters serving the many meteorological needs of the Nation and has been reflected in benefits to the Nation through more accurate weather forecasts and warnings.

## James C. Hunter

*Meteorologist, Leading Forecaster  
National Weather Service  
National Oceanic and Atmospheric  
Administration*

Mr. James C. Hunter is recognized for his exemplary forecasting skill over a period exceeding twenty-five years. He has during this period initiated numerous forecast warnings that have resulted in diminishing the weather related discomforts and hazards to property and life. The influence of these warnings has had an impact beyond his area of immediate concern serving as guidance to forecasters in adjacent areas. His overall superior performance has furthered the implementation of National Weather Service programs through immediate application and utilization of new techniques and developments.

## Robert S. Ingram

*Meteorologist in Charge  
National Weather Service  
National Oceanic and Atmospheric  
Administration  
Phoenix, Arizona*

Mr. Robert S. Ingram is recognized for outstanding accomplishments in the management of a major National Weather Service facility which is responsible for weather and river forecasts and warnings for the state of Arizona. Timely weather and river warnings as well as accurate routine forecasts consistently emanate from the Phoenix Weather Service Forecast Office under Mr. Ingram's direction and are most effectively communicated to the general public and others especially concerned. Mr. Ingram's concern for the products of his office begins with the individual staff member responsible and persists to the final stage of dissemination to the public. His dedication to the mission of his office has been exceptionally fruitful with many instances of timely, accurate, and effective advisories to the people of Arizona.

## **Jerry E. Randall**

*Chief Boatswain  
National Ocean Survey  
National Oceanic and Atmospheric  
Administration*

Chief Boatswain Jerry E. Randall is recognized for his ingenuity in the development of new systems and methods for shipboard handling and deployment of research and deep sea instruments and equipment which have been adopted by many NOAA ships. The complete success of numerous research programs has been dependent upon the advanced shipboard handling procedures developed and proven by Chief Boatswain Randall for deploying a wide variety of types and styles of oceanographic data gathering equipment used by scientists.

## **Eugene M. Rasmusson**

*Supervisory Physical Scientist  
Environmental Data Service  
National Oceanic and Atmospheric  
Administration*

As a participant in the Barbados Oceanographic and Meteorological Analysis Project (BOMAP), Dr. Eugene M. Rasmusson developed innovative analysis techniques to determine quantitative values for atmospheric budgets of mass, water vapor, heat, momentum, and kinetic energy. As a direct result of his work, highly significant variations in these properties have been discovered for tropical ocean areas. In the International Field Year for the Great Lakes program (IFYGL) and the Global Atmospheric Research Program—Atlantic Tropical Experiment (GATE), Dr. Rasmusson has made significant contributions to the development of even more advanced analysis techniques needed to analyze data gathered by the complex observational arrays of these programs.

In addition, Dr. Rasmusson organized and has given outstanding scientific and managerial leadership to the development of the Center for Experiment Design and Data Analysis Research Division, significantly strengthening NOAA's ability to plan and execute large-scale field experiments such as the Barbados Oceanographic and Meteorological Experiment (BOMEX), IFYGL, and GATE.

## **Wanda E. Ross**

*Supervisory Analog-Digital  
Specialist  
Environmental Data Service  
National Oceanic and Atmospheric  
Administration  
Asheville, North Carolina*

Miss Wanda E. Ross has been the prime mover in the development and advancement of the National Climatic Center's scientific data digitization programs. Her technical skill, broad experience, meticulous planning, and efficient management have made possible the accomplishment of many complex, large-volume digitization projects for NOAA and other government agencies, including the current million-dollar project to digitize 27 million data points contained on National Ocean Survey hydrographic survey charts. For this task, Miss Ross' unit had to double both its manpower and machinery. Miss Ross was also heavily involved in determining technical specifications for the project and in selecting, procuring, modifying, and testing the sophisticated new digitization equipment needed to meet the National Ocean Survey's exacting technical standards—all without disrupting the everyday heavy work flow of her unit.

## George H. Schielein

*Leading Forecaster  
National Weather Service  
National Oceanic and Atmospheric  
Administration  
Albany, New York*

Mr. George H. Schielein's quick assessment of a dangerous situation in a strange environment and his perfect response to the problem required both initiative and fortitude. He, a meteorologist, had been dispatched to Rochester from his home station in Albany. Immediately upon his arrival in Rochester, he was faced with a reservoir release problem upstream on the Genesee River. Although he was not familiar with the reservoir or the river, he perceived the disastrous consequences of planned reservoir releases. His prompt notification of the reservoir operator and subsequent coordination averted a catastrophic flood in the Rochester area.

## Walter A. Schulz, Jr.

*Meteorological Technician  
National Weather Service  
National Oceanic and Atmospheric  
Administration  
Jackson, Mississippi*

Mr. Walter A. Schulz, Jr. has made outstanding contributions to the technology of severe weather warnings. His creativity led to the development of an extremely effective voluntary tornado warning system in Mississippi. This system is based on

rapid exchange of information between the National Weather Service and the electric power company dispatchers regarding power line breaks and results in timely life-saving tornado warnings to the public as well as accurate information for the power company on the location of the power line breaks. Mr. Schulz's system will be introduced NWS-wide wherever possible. Its limited use to date has demonstrated a potential for large-scale savings of life. Mr. Schulz continues to use innovative approaches in his studies of past storms and tornadoes, seeking improved techniques and procedures for warning the public.

## R. Lawrence Swanson

*Commander  
Office of the Administrator  
National Oceanic and Atmospheric  
Administration*

Commander R. Lawrence Swanson, through distinguished leadership and outstanding science administration as Chief of the Oceanographic Division, conceived and established innovative oceanographic programs of direct national need. In broadening the traditional tide and current activities of the National Ocean Survey, he created a viable estuarine and coastal oceanographic survey concept, exemplified by the Boston Harbor and Cook Inlet Surveys. Through Commander Swanson's national coordination efforts, the Boston Harbor Survey has become the prototype of future cooperative attacks on the diverse complexities of the estuarine environment. His foresight in expanding and enhancing the Division's datum plane activity has enabled NOAA to respond to the accelerated demands of the coastal states.

## George Taft

*Attorney*

*Office of the Administrator  
National Oceanic and Atmospheric  
Administration*

Mr. George Taft has represented the National Oceanic and Atmospheric Administration and the Department of Commerce in an exemplary manner in domestic interagency and international law of the sea negotiations. His ability to reflect the reconciliation of diverse views and negotiating positions favorably to Departmental and National views before groups of senior agency and international representatives has significantly enhanced the Department's position in law of the sea matters.

## Charles K. Townsend

*Captain*

*Office of the Administrator  
National Oceanic and Atmospheric  
Administration*

Captain Charles K. Townsend has demonstrated unusual initiative, resourcefulness, and leadership in fulfilling the special tasks assigned to him. Representing the Department on a Task Force to examine in detail the Nation's mapping, charting, and geodetic services and requirements, Captain Townsend displayed his ingenuity and superior analytical capabilities. Captain Townsend's outstanding efforts in this special assignment have resulted in a major contribution to the conduct and management of vital mapping, charting, and geodesy efforts of the Nation.

## Julius Badner

*Chief*

## William A. Rammer

*Deputy Chief*

*Aviation Weather Forecast Branch  
National Weather Service  
National Oceanic and Atmospheric  
Administration*

Messrs. Julius Badner and William A. Rammer have demonstrated outstanding management and technical expertise in administering the Aviation Weather Forecast Branch over the period of the last three and one-half years. During this period they have successfully absorbed an international aviation weather service workload involving thirty seven positions from five field offices while expanding the quality and quantity of services available to domestic aviation and air pollution interests. This was accomplished with a modest increase in professional staff.

## Burton D. Goldenberg

*Chief, Rawinsonde Section*

## LeRoy S. Nordahl

*Meteorologist*

*National Weather Service  
National Oceanic and Atmospheric  
Administration*

Messrs. Burton D. Goldenberg and LeRoy S. Nordahl are recognized for skill demonstrated in the planning and execution of a complex program for automation of the data reduction process employed in radiosonde observations. The automation was accomplished first by means of time-share computer facilities and later made feasible for extension to the entire network of nearly 100 stations by application of the mini-computer. As a result, network operations are conducted with greater economy, reduced manpower, and substantially higher accuracy.

## **Robert H. Hanson**

*Cartographer*

## **Chester C. Slama**

*Cartographer*

*National Ocean Survey  
National Oceanic and Atmospheric  
Administration*

Messrs. Robert H. Hanson and Chester C. Slama are recognized for extraordinary contributions through outstanding capabilities in the field of complex geodetic operations, especially in the world-wide geometric satellite triangulation program of the National Geodetic Survey. The awareness of recent technological advances in computer techniques and the ingenuity to incorporate continuously project-oriented experiences provided an optimum solution, not only from the theoretical but from the economical standpoint. Their self-education and successful application of modern concepts of data handling enhanced considerably the level of competence in the Geodetic Research and Development Laboratory and the National Geodetic Survey. The excellent cooperative spirit has in no small manner contributed to the high performance level of a team of geodesists in the GRDL and has decisively helped to establish a level of competence on which future work can be based.

## **Meteorology Work Group**

*Environmental Research  
Laboratories  
National Oceanic and Atmospheric  
Administration*

The Meteorology Work Group, under the leadership of Dr. Isaac Van der Hoven, made outstanding contributions to the Southwest Energy Study. This group, comprised of Dr. Isaac Van der Hoven and Messrs. Gilbert J. Ferber, Jerome L. Heffter, George C. Holzworth, Paul A. Humphrey, Ralph F. Quiring, developed new methods for evaluating the impact of airborne effluents over large areas. The development of these new methods represents a major contribution to scientific research in the fields of meteorology and ecology. The study began almost two years ago to evaluate the environmental problems associated with coal-fired electric generating plants in the southwestern United States. This group made a major contribution to the study and to science as creators of both a methodology and of the specific quantitative evaluations. The report provided basic data to the Environmental Protection Agency for national air quality standards in the Four Corners Region of the Southwest United States.

## **Laurence M. Goodridge**

*Patent Examiner  
Patent Office*

Mr. Laurence M. Goodridge is recognized for his exceptionally competent performance and the demonstration of outstanding skill and ability in effectively carrying out the goals of management which have resulted in advancement of the Patent Office program of reducing the pendency of patent applications.

## Arthur P. Kent

*Group Director  
Patent Office*

Mr. Arthur P. Kent is cited for his leadership role in the development of a plan for the reinstatement and updating of the United States Manual System for the classification of patents. He prepared a complete plan for manual reclassification which defined revised procedures, budget requirements, and staffing over a five-year period. This plan is currently operational and on target after the expiration of a year.

## Edwin R. Mackert

*Supervisory Patent Classifier  
Office of Patent Classification  
Patent Office*

Mr. Edwin R. Mackert has made unusually valuable contributions to the science and technology programs of the Department. His outstanding skill in the performance of his duties and his innovative abilities have led to many changes and new systems in the Service Branch of the Office of Patent Classification. As a result of these changes and new systems, a backlog of three years has been virtually eliminated, and last year's production in the Service Branch was double the highest previous yearly production. Mr. Mackert also made valuable contributions to the Department in his role as "Project Manager" for the establishment of a System Planning and Applications Division in the Office of Patent Classification.

## Karin I. Pankowski

*Secretary  
Patent Office*

Mrs. Karin I. Pankowski made a significant contribution to the Department which enabled a timely response to a court order requiring her office to index for public inspection all decisions on employee invention rights which raised unique legal problems under the Freedom of Information Act. Without supervision, she conducted a complete legal research of the Act and prepared a legal memorandum relating the results of the search to the unique problems posed. When professional assistance was unavailable, she undertook the review and indexing of decisions herself. Both tasks demonstrated her outstanding knowledge of legal and technical matters of her office far in excess of secretarial abilities.

## Louis Strickman

*Trademark Examiner  
Office of Trademark Examining  
Patent Office*

Mr. Louis Strickman's initiative in the field of trademark matters has played an important role in accelerating the preparation and typing of first action office letters and in increasing uniformity in the application of the Trademark Statute and the Rules of Practice by Trademark Examiners. His contribution has brought recognition to the Department of Commerce by reason of the fact that the Public Advisory Committee for Trademark Affairs has requested that the forms be made available to the public.



## Lawrence H. Wheeler

*Special Projects Technician  
Patent Office*

Mr. Lawrence H. Wheeler has demonstrated a high degree of knowledge, leadership, and initiative toward the improvement of public services offered by the Patent Office. His important role in mechanizing patent ordering systems and making patent reproductions through microform systems has been significant toward meeting the ever increasing demands of the public.

## Arthur Garel

*Director, Office of Textiles  
Bureau of Resources and  
Trade Assistance*

Mr. Arthur Garel has demonstrated outstanding administrative skills in his position as Director, Office of Textiles, in promoting the Administration's textile program. He has served with distinction on the Organization for Economic Cooperation and Development Textile Committee and participated in the negotiation of some thirty-three textile agreements. Mr. Garel has a vital role in carrying out the Administration's announced goal of securing a multifiber multilateral textile agreement under the auspices of the General Agreement on Tariffs and Trade. Particularly noteworthy during the past year, Mr. Garel represented Commerce on the U.S. Delegation that successfully concluded a multifiber agreement with Macao.

## Lena I. Tibbs

*Secretary  
Office of Textiles  
Bureau of Resources and Trade  
Assistance*

Mrs. Lena I. Tibbs has demonstrated outstanding administrative and secretarial skills in her position as Secretary to the Director, Office of Textiles. She manages the Office in a highly professional manner bringing great credit to both the Office and her supervisor. Her intelligence and pleasing personality are important assets in her business relationships with high level United States as well as international industry visitors who are in frequent contact with this Office on significant and important textile matters.

## Francis X. Seymour

*Chief, Operations Division  
Office of Personnel  
Office of the Assistant Secretary  
for Administration*

Mr. Francis X. Seymour is recognized for the development of a number of creative and very successful Equal Employment Opportunity Programs. One such program, which is especially praiseworthy, is the Federal Junior Fellowship Program, a direct result of his untiring efforts. Since its inception, this program has materially assisted more than 1000 disadvantaged youths. It was through his foresight and managerial skill that the Office of Minority Business Enterprise sponsored the Business Management Fellowship Program and involved a large number of business concerns in providing employment for disadvantaged youths. Other notable achievements are the Junior Technician Program and the Forecast System. For many years, he has served with distinction a long series of secretarial officers and key officials.

## Donald L. Fay

*Supervisory Labor-Management  
and Employee Relations Specialist  
Social and Economic Statistics  
Administration*

Mr. Donald L. Fay is recognized for exceptional and outstanding contributions to the Social and Economic Statistics Administration and to the Department of Commerce in the field of labor management relations. Mr. Fay exhibited the highest caliber of skill, tact, ability, and diplomacy in successfully negotiating contracts with National Federation of Federal Employees Local 1547 in SESA Headquarters; with the American Federation of Government Employees Local 2799 in Pittsburg, Kansas; and with NFFE Local 1438 in Jeffersonville, Indiana. Mr. Fay's appreciation and deep concern for employee welfare have contributed considerably to the present favorable rapport between labor and management.

## Salme H. Gorokhoff

*Administrative Librarian  
Social and Economic Statistics  
Administration*

Mrs. Salme H. Gorokhoff has displayed expertise in developing library systems and programs responsive to the needs of the Social and Economic Statistics Administration. She has made maximum use of her facility with foreign languages, her outstanding abilities to organize and analyze information materials, and her talent for guiding and directing the work of other employees and representatives of foreign governments. Her efforts have enabled the Library to provide SESA with information needed for its programs of national and international significance. Her work has had an impact on other libraries which have adopted the SESA Library classification system and subject heading list.

## Harry C. Burnett

*Physical Science Administrator  
National Bureau of Standards*

Mr. Harry C. Burnett is recognized for his meritorious contributions in metallurgy research in the area of heat treatment and fatigue of steel, his management of important metallurgy programs in corrosion prevention in desalination plants, his leadership of groups carrying out the production of new and unique alloys, and his leadership in various roles concerned with the administration of the Metallurgy Division of the National Bureau of Standards. In addition, his scientific credentials are recognized internationally in the area of the mechanical properties of metals.

## Russell C. Casella

*Physicist  
National Bureau of Standards*

Dr. Russell C. Casella's contributions to such diverse fields of science as elementary particle physics and solid state physics has earned him an international reputation and demonstrated his outstanding versatility. His direct proof of the failure of time reversal invariance is a major contribution to the fundamental understanding of elementary particles and exemplifies the quality of the scientific contributions which he has made. In the area of solid state physics, his theoretical work has provided powerful tools for the interpretation of experimental results which have found use throughout the world as well as contributing directly to the excellence of materials science at NBS.

## Given W. Cleek

*Research Chemist  
National Bureau of Standards*

Mr. Given W. Cleek has made valuable contributions to the science and technology of glass and to the administration of standards programs concerning glass. He has served as member, secretary, and chairman of a number of committees in and out of government dealing with glass, its properties, and their control. He is secretary of the ASTM Committee on Glass and Glass Products, which has written and approved thirty-one standards during his tenure. Mr. Cleek is continuing to serve as a liaison representative among the glass industry, the American Society for Testing and Materials, and the NBS Office of Standard Reference Materials. He is also serving as Assistant Chief of the NBS Inorganic Glass Section handling many of the local administrative matters.

## George T. Furukawa

*Supervisory Physicist  
National Bureau of Standards*

Dr. George T. Furukawa is being recognized for his excellence in research and management of NBS programs in low-temperature calorimetry and thermometry extending over a quarter-century of service. He has received both national and international recognition for his leadership in these fields of endeavor as is attested by his serving as a principal officer and leader in the Calorimetry Conference. He has had the responsibility of improving platinum resistance thermometry calibrations and research at NBS (in this endeavor he has been exceptionally successful in the precise realization of thermometry fixed points); of producing an authoritative monograph on platinum resistance thermometry; and of increasing the operational efficiency of the calibration laboratory.

## Sidney B. Geller

*Electronic Engineer  
National Bureau of Standards*

Mr. Sidney B. Geller is recognized for his outstanding technical competence and valuable contributions to computer technology. Through his development of a magnetic tape reference and calibration standard, Mr. Geller has made a direct, significant contribution to improved quality control in the manufacture of computer magnetic tape, to reduced Federal expenditures in the procurement of magnetic tapes, and to cost savings in overall computer operations.

## William R. Hosler

*Physicist  
National Bureau of Standards*

Mr. William R. Hosler is recognized for his outstanding contributions to the field of electronic transport in semiconductors and insulators. His vast knowledge of experimental techniques has made it possible to measure the electrical properties of many novel materials over a wide range of external conditions. The results of his investigations not only have provided valuable new data but often have led to basic scientific explanations and significant technological developments.

## Ernest E. Hughes

*Research Chemist  
National Bureau of Standards*

Mr. Ernest E. Hughes is recognized for his outstanding contributions to the methodology of gas analysis, especially in studies of air purity and pollution. Through his work in analysis of gases he greatly improved methods of analysis and provided basic information on the composition of gases, especially atmospheric air. His organization of a high quality gas analysis laboratory has made available a unique facility which serves for the solution of gas analysis problems for several government agencies as well as NBS. Under his direction, new gaseous Standard Reference Materials have been developed to meet the needs of critical national problems in monitoring air pollution.

## Donald R. Johnson

*Physicist  
National Bureau of Standards*

Dr. Donald R. Johnson's pioneering instrumental developments for studying the microwave spectra of short-lived chemical species have opened up a new technique for the study of chemical reaction intermediates. His studies have also increased our knowledge of the structure and properties of specific important examples of unstable chemical species and have aided greatly in the identification of the myriad of radiotelescope observations now being obtained from the interstellar medium. The extent, reliability, and imaginativeness of Dr. Johnson's research work have made NBS one of the leading centers in the world in this new area.

## Walter H. Johnson

*Research Chemist  
National Bureau of Standards*

Mr. Walter H. Johnson is recognized for his highly accurate measurements of reaction energies. His work has established him as one of the most reliable sources of thermochemical data and has played an important role in establishing the Thermochemistry Section and the National Bureau of Standards as a leading laboratory for reaction calorimetry and energy measurements. His work has been applied to such diverse groups of compounds as hydrocarbons, borane fuels, titanium halides, perchlorate oxidizers, sulfur oxides, and standard reference materials for calorimetry. The results form an important part of the necessary data for utilization of national energy resources in the fuel gas and petroleum industries and for rocket propulsion. His measurements also lead to scientifically important standards for world-wide use in establishing chemical energies of substances having complex reaction products.

## Elliot A. Kearsley

*Physicist  
National Bureau of Standards*

Dr. Elliot A. Kearsley is recognized for his innovative, effective, and productive research on measurement, standardization, and materials science concerned with the viscoelastic properties of plastics and other materials. Dr. Kearsley made major contributions to the development and introduction of a new description of the mechanical and thermodynamic properties of elastic fluids which provided a powerful tool for expressing these properties in a compact and useful way. The results of this research have had important impact in many areas including commerce, defense, and space.

## Tamami Kusuda

*Senior Mechanical Engineer  
National Bureau of Standards*

Dr. Tamami Kusuda has made major contributions to the development of a computerized analytical system that is of unusual value for predicting the heating and cooling loads and the energy requirements for buildings of all types. He initiated the development of this program and has guided its application for NBS laboratories for uses by Federal agencies, architectural engineering firms, universities, and industrial organizations. These accomplishments have already contributed strongly to help conserve energy and to allow more effective use of energy in buildings and to show promise of greater future use in the United States.

## Owen B. Laug

*Electronic Engineer  
National Bureau of Standards*

Mr. Owen B. Laug has made contributions of consistently high quality in the design of electronic measuring systems of interest to the Federal Government. He completed a highly tamper-resistant surveillance system that will greatly enhance the success of the nuclear safeguards programs for the Arms Control and Disarmament Agency. Mr. Laug has standardized apparatus and methodology for comparing the permeabilities of membranes used in artificial kidney machines. His capability to obtain a superior solution to electronic instrumentation problems has led to the successful completion of many programs at the National Bureau of Standards.

## George E. Lindamood

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

Mr. George E. Lindamood is recognized for his exceptional technical competence and outstanding ability to interpret the impact of advances in computer technology on policy and management in the Federal Government. He has provided technical advice to U.S. trade negotiations, directly contributing to the liberalization by the Japanese of their policy restricting imports of U.S. computer products. He has made a major contribution to improved trade with the Soviet Union and Eastern Europe through his technical support to the export control activities of the Department including the development of performance criteria for determining exportability, the analysis of specific computer systems to determine their capabilities, and the technical review of individual export license requests. The results of his efforts have had a direct beneficial impact on U.S. international trade.

## Radu Mavrodineanu

*Research Chemist  
National Bureau of Standards*

Dr. Radu Mavrodineanu has made outstanding contributions to analytical emission and absorption spectroscopy, especially in the development of high accuracy spectrophotometry. With a background of extensive research in atomic flame spectroscopy, he has contributed in this and related fields more than sixty publications, including four books. He designed and constructed a high accuracy spectrophotometer which he used in developing Standard Reference Materials of glass filters for calibrating photometric scales. The urgent needs of research and clinical chemists have been met by his providing the first high accuracy standards in spectrophotometry.

## George R. Porter

*Personnel Officer  
National Bureau of Standards*

During his twenty-two years as Personnel Officer of the National Bureau of Standards, Mr. George R. Porter has operated a comprehensive and effective personnel program in such a way that the best interests, needs, and concerns of Bureau employees have been maximized. Bureau personnel programs have consistently emphasized the best interests of individual staff members irrespective of their positions, backgrounds, or stations in life. Mr. Porter has exhibited unusual dedication in assisting employees at all levels.

## Edward Prince

*Research Physicist  
National Bureau of Standards*

Dr. Edward Prince has made exceptional and highly significant contributions to the effective instrumentation of the NBS reactor beam facilities and to the effective use of this instrumentation in materials research. His outstanding leadership in the development of a time-shared computer system for the operation of eight neutron and x-ray diffraction instruments has provided an important advance in the materials measurement capability of NBS. By his vigorous cooperative and individual research, he has helped to stimulate a wide-ranging use of the computer system and the associated neutron diffraction instruments by a great number of NBS and other agency scientists in important investigations of the structure of materials.

## Thomas N. Pyke, Jr.

*Supervisory Electronic Engineer  
National Bureau of Standards*

Mr. Thomas N. Pyke, Jr. has shown outstanding technical leadership and has made valuable contributions in the field of computer networking technology. Through his resourceful and innovative development of unique tools and techniques for measuring the performance of computer networks and teleprocessing systems, Mr. Pyke has contributed to improved effectiveness, efficiency, and economy in the Federal Government's use of computer technology and has helped overcome obstacles to the broadened application of computers for public benefit. He has reflected credit on the Department of Commerce and strengthened the Department's role in the rapidly growing field of computer technology.

## Robert R. Stromberg

*Supervisory Research Physicist  
National Bureau of Standards*

Dr. Robert R. Stromberg is recognized for his effective and productive research on the interaction of plastics with surfaces. His experimental work has stimulated significant advances in the theoretical understanding of surface interactions. Dr. Stromberg pioneered in the introduction of new and powerful methods for the study of surfaces. His research has made valuable contributions to the understanding of adhesion, painting, reinforcement of plastics, and blood clotting. The results of his work are of importance to commerce, defense, and health.

## M. Zane Thornton

*Deputy Director  
Institute for Computer Sciences  
and Technology  
National Bureau of Standards*

Mr. M. Zane Thornton is recognized for outstanding achievement in reorienting the programs of the Institute to respond to the needs of the country and of the Federal Government in the field of computer sciences and technology, for directing the allocation of resources into specific areas of technology required to support improved efficiencies in the Federal use of ADP, for developing a responsive program management structure for these projects, and for instituting the management practices which resulted in the successful implementation of the technical program leading to a maximum return for the resources invested and accompanied by high morale and sense of accomplishment. He has represented NBS and the Department of Commerce with tact and distinction in associations with other Federal agencies, with Congress, and with the Nation's technical community.

## James J. Weeks, Jr.

*Chemist  
National Bureau of Standards*

The research of Mr. James J. Weeks, Jr. has had an important impact on the science and technology of the plastic industry. He has carried out investigations of crystallization, annealing, melting, structure and thermal properties—all of which control the commercial use and fabrication properties of plastics. His work has played a key role in the development of the classic theories of polymer crystals and this, in turn, has brought much recognition to the Bureau for its leadership in this field.

## Joseph H. Wegstein

*Mathematician  
National Bureau of Standards*

Mr. Joseph H. Wegstein has shown outstanding technical competence and has made valuable contributions to the innovative application of computer and pattern recognition technology to law enforcement. His design of computer-based systems for automatic fingerprint and footprint identification has contributed significantly to improved efficiency in law enforcement and government operations.

## Theodore E. Madey

*Physicist*

## John T. Yates, Jr.

*Physical Chemist*

*National Bureau of Standards*

Drs. Theodore E. Madey and John T. Yates, Jr. have made major contributions to the science of surfaces and have been instrumental in establishing the National Bureau of Standards as one of the world's foremost laboratories for surface studies. Their pioneering work in the use of Electron Spectroscopy for Chemical Analysis for fractional chemisorbed layer observations is considered a landmark in this field and represents a valuable technique which will prove most useful to the advance of surface science and technology. This and other research studies performed by Drs. Madey and Yates are having a profound effect and input to the scientific underpinning so vital to industrial needs and applications in catalytic processes and the understanding of corrosion.

**Gene A. Rowland**  
*Supervisory Mechanical Engineer*

**Charles T. Mahaffey**  
*Building Technologist*

*National Bureau of Standards*

Mr. Gene A. Rowland and Mr. Charles T. Mahaffey brought about a cooperative solution to the multiple problems facing the Nation's building regulatory system by assisting the states in establishing the National Conference of States on Building Codes and Standards (NCSBCS). NCSBCS provides a forum for the administration of programs pertaining to buildings as carried on by regulatory officers of states. Through their leadership, the NBS technical resources have been more effectively utilized in providing direct assistance to state and local governments and have resulted in strengthening federal-state relations in improving the Nation's building regulatory system. The Conference has been endorsed by all State Governors, the Department of Housing and Urban Development and has been recognized by prominent national organizations.

**Arthur G. Maki**  
*Supervisory Physicist*

**Walter J. Lafferty**  
*Research Chemist*

**William Bruce Olson**  
*Physicist*

**Andrew Kaldor**  
*Research Chemist*

*Optical Physics Division*  
*National Bureau of Standards*

Drs. Arthur G. Maki, Walter J. Lafferty, William Bruce Olson and Andrew Kaldor have used their specialized talents in such diverse fields as laser technology, high-resolution infrared spectroscopy, molecular quantum mechanics, and infrared optics to design and construct prototype devices for the measurement of NO and NO<sub>2</sub> pollutant concentrations in air and automobile exhaust. Their basic scientific work has led to inquiries from industry concerning the feasibility of moving from the prototype devices to a marketable product. As a result of the sustained collaborative activity of this group, NBS is becoming recognized as a leader in the application of infrared technology to atmospheric composition determinations. It is an outstanding example of the kind of teamwork necessary for attacking today's complex technological problems.



## Alvin W. Alexander

*Chief, Document Distribution  
and Reproduction Branch  
National Technical Information  
Service*

Mr. Alvin W. Alexander has demonstrated outstanding leadership and performance over a decade of NTIS service in developing and operating superior delivery systems for providing Federal technical reports to the public. With essentially level employment, his team of highly motivated and dedicated employees has absorbed a distribution workload which has doubled in volume and greatly increased in complexity over the past two years. He has also pioneered the development of new, lower-cost, plastic-wrap technology, now recommended by the U. S. Postal Service to other distributors.

## Dale N. Hatfield

*Physical Scientist  
Office of Telecommunications  
Boulder, Colorado*

Two major segments of the telecommunications industries, domestic satellite and land mobile, required major national policy decisions before they could evolve. Policy analysis performed by Mr. Dale N. Hatfield formed the foundation upon which these policies are based. The satellite policy, pending since 1965, required this evaluation of the opportunity for open entry market. The analysis demonstrated that all proposed applicants could be accommodated within the spectrum and orbit constraints. The land mobile policy required an analysis of competitive systems and institutional arrangements.

## Anita G. Longley

*Physicist  
Office of Telecommunications  
Boulder, Colorado*

Mrs. Anita G. Longley is a principal author of a technique for estimating the strength of radio fields at a receiving antenna, a critical quantity in the design of a radio circuit. The technique known as the "Longley-Rice model for radio propagation", is valid under a wide range of conditions. It has been adopted by many organizations to help in the design of their telecommunication systems. Mrs. Longley has also written numerous reports which support this technique and which extend its validity even further. She has consulted with many people to show how the method is to be used and to what degree of confidence may be placed in its results.

