



# noaa week

NOAA  
National Oceanic and Atmospheric Administration  
LIBRARY

Volume 6 Number 43

October 24, 1975

## NOAA Employees Receive Gold, Silver Medals



Mr. Bennett      Dr. Glahn      Dr. Collins      R. Adm. Nygren      Dr. Rasmussen      Mr. Moore      Dr. Noxon      Dr. Austin

NOAA employees received seven Gold Medal Awards and eighteen Silver Medal Awards from Secretary of Commerce Rogers C. B. Morton in an honors award program this week in the Commerce Department auditorium.

Recipients of the Gold Medal, the Department's highest honor, bestowed for rare and outstanding contributions of major significance to the Department, the Nation, or the world, such as major contributions to science, technology, or administration; highly distinguished authorship; heroic action involving jeopardy of life; and demonstrated outstanding leadership in the administration of major programs, were:

● **Dr. Thomas S. Austin**, Director of the Environmental Data Service, Washington, D.C., for his many years' service as a prime mover in developing national and international policies in marine science and environmental data management programs. In 1962 he planned and coordinated the first international survey sponsored by the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization (UNESCO). Later he developed the U.S. National Oceanographic Data Center into a model for similar national centers around the world.

Dr. Austin's career is marked with honors, attesting to his worldwide reputation as an outstanding scientist. In 1963 he planned and coordinated the first international survey sponsored by the International Cooperative Investigation of the Tropical Atlantic—a large, complex and diplomatically difficult undertaking. Successful completion of this mission demonstrated clearly

(Continued on page 2)

### Arctic Research Contract Awarded

The University of Colorado's Institute of Arctic and Alpine Research has been awarded a two-year, \$58,000 contract by the Environmental Research Laboratories to study the effects of weather and climate on ice along Northern Alaska's Beaufort Sea Coast.

The research to be performed under the contract is part of a major environmental study being conducted by ERL for the Interior Department's Bureau of Land Management under its environmental studies program that seeks to determine the probable ecological impacts of oil exploration and development activities on Alaska's Outer Continental Shelf.

"Fast" or fixed ice could create potential hazards to off-shore petroleum facilities and operations. It also influences the

life cycles of those Arctic birds and mammals for whom the ice is a breeding ground, climatic barrier, or migratory route.

Beaufort Sea climatic conditions are among the harshest in North America. Coastal fog and winds persist, accompanied by temperatures as high as 70 degrees Fahrenheit (20 degrees Celsius) in summer and as low as minus 67 degrees Fahrenheit (minus 55 degrees Celsius) in winter.

Ice covers the sea almost completely during the winter, with fast ice extending from a few miles to as much as 30 miles (50 kilometers) offshore and frozen to the bottom near shore. Yet little is known about shore-fast ice formation processes, stress changes, and year-to-year variations, and how they are related to specific weather patterns.

For example, ice freezeup and breakup dates for the region are variable and unpredictable. At Point Barrow, Alaska, one of the major ports of the region, freezeup may occur anytime between early September and mid-December. The annual ice breakup has occurred as early as mid-June and as late as August.

The University of Colorado research team, in cooperation with the University of Alaska, plans to produce regional maps of the fast-ice extent and characteristics for five off-shore areas of the Beaufort Sea.

By comparing meteorological data with ice information from satellites for the five regions, the scientists hope to establish relationships between weather variables such as wind, temperature, and precipitation, atmospheric circulation patterns, and ice.

### NWS To Support Space Missions to Distant Planets

The National Weather Service Space Operations Support Division has entered into a reimbursable agreement with the National Aeronautics and Space Administration's Jet Propulsion Laboratory in Pasadena, Calif. Under the agreement, the Washington Section of the Spaceflight Meteorology Group will provide weather support for missions to distant planets, notably to the Mariner-Jupiter-Saturn 1977 mission. It is expected that the project will continue for several years and will involve something more than a half-man-year effort annually.

The reason for the need for meteorological guidance is that the optional X-Band mode of communication, which can handle about four times more data in a given period than can other available channels, is vulnerable to weather influences in the line of sight to the tracking stations.

According to Kenneth M. Nagler, Chief of the Space Operations Support Division, initially, the SMG staff will be working on the X-Band degradation climatology and forecastability. It will also help the Jet Propulsion Laboratory staff develop a model for assessing the best mode of data transmission depending on the prediction of pertinent weather factors.

### GOES-A Launched

GOES-A (Geostationary Operational Environmental Satellite-A) was launched on October 16 as scheduled. It is now at an altitude of 22,250 miles (about 35,800 kilometers) above the earth's surface at the equator over Brazil, at approximately 55° W. longitude. It is in fairly close proximity to SMS-1, which currently covers the eastern half of the U.S. and part of the Atlantic Ocean. It will stay in that position for about 30 days while the National Aeronautics and Space Administration checks it out.

It subsequently will be turned over to the National Environmental Satellite Service for operational use.

# Gold and Silver Medal Awards Presented to NOAA Employees

(Continued from page 1)

that large ocean areas could be studied successfully through international cooperation. Its success also enhanced the prestige of the United States in the international scientific community.

●**Dr. Gerald B. Collins**, Division Director, Coastal Zone and Estuarine Studies, at the National Marine Fisheries Service Northwest Fisheries Center in Seattle, Wash., for his major contribution to fishery science and administration. For over 25 years he has spearheaded research by NMFS and its predecessor agencies on anadromous fish passage in the Columbia River and its major tributaries. He has gained international recognition for his work on the effects of water resources developments and their impacts on anadromous fish runs.

He conceived and started development of an adult salmon behavioral laboratory at Bonnerville Dam, Wash. Studies there, the only lab of its kind in the world, have resulted in major research advances in man's knowledge of fish physiology and performance in fishways, and have saved millions of dollars in fishway construction cost in the Columbia River basin alone. A program he proposed this year of transporting juvenile fish from the Snake River to downstream release points below the lowermost dams in the Columbia River was implemented and is expected to increase the survival rate of steelhead trout and the spring Chinook salmon from 50 to 2,000 percent with an economic gain of approximately \$20 million per year.

●**Dr. Harry R. Glahn**, Deputy Director of the Techniques Development Laboratory in the National Weather Service's Systems Development Office, in Silver Spring, Md., for his pioneering work in applying computer models to weather forecasts. His contributions include development of a method for combining computer-model statistics with actual surface observations of weather to arrive at highly refined forecasts of the probability of precipitation, its type and amount, maximum and minimum temperatures, surface windspeed and direction, cloud amount, ceiling and visibility, and the probability of thunderstorms. This method—known to forecasters as Model Output Statistics (MOS)—is one of the major advances in meteorology in the past decade.

He also has developed a computer program which produces automatically worded weather forecasts for issuance by telephone recordings, radio and newspapers. This will be an important part of the NWS' continuing effort to automate its field operations and services.

●**Dr. John F. Noxon**, Chief of the Optical Aeronomy Program

in the Environmental Research Laboratories' Aeronomy Laboratory, in Boulder, Colo., for outstanding contributions to atmospheric science by the creative use of optical spectroscopic techniques for measuring atmospheric composition and temperature. These include, according to the citation, "several important advances in atmospheric science of a 'break through' nature with very significant implications for atmospheric understanding. One important recent contribution is the discovery of periodic temperature variations at 85 kilometers and 95 kilometers which provides a powerful new technique for measuring internal gravity waves. A second major advance by him is the development of a spectroscopic technique for measuring both tropospheric and stratospheric nitrogen dioxide (NO<sub>2</sub>) concentrations...which has led to the discovery of an unexpected very large decrease in stratospheric nitrogen dioxide at high latitude in winter."

●**R. Adm. Harley D. Nygren**, Director of the NOAA Corps, for his sustained superior leadership for many years in areas of top level staff direction within NOAA and the Department of Commerce. He has provided distinguished leadership of the NOAA Corps, and streamlined it. His foresight led to the initiation of new, outstanding programs which have resulted in its strengthening and improved utilization. He has given special attention to the concerns of the minority groups, including the commissioning of women in the Corps to serve in the field on an equal basis with men.

His personal example of cooperation and of the highest career motivation in forging ahead on dynamic new efforts has challenged the Corps to serve more effectively across the broadening spectrum of agency programs.

Through perseverance and tact, he was almost singlehandedly responsible for the expansion of the NOAA Corps training program and for its location at the United States Merchant Marine Academy, Kings Point, N.Y.

He was also cited for his devotion to NOAA's interest in marine matters and his unselfish contributions in diverse areas at the policy level.

●**Dr. James L. Rasmussen**, now Director of the U.S. GATE (Global Atmospheric Research Program Atlantic Tropical Experiment) Project Office in the World Weather Program Office in the Office of the Associate Administrator for Environmental Monitoring and Prediction, in Rockville, Md., primarily for outstanding achievement in GATE, the largest and most complex international scientific experiment ever undertaken. Dr. Rasmussen was Chief of the United States Science Group at the operations

control center in Dakar, Senegal, and played a dominant role in the scientific, operational, logistic and political decisions involved in the multi-nation program.

The citation accompanying his Gold Medal says in part—"His record of sustained and distinguished accomplishment reflects great credit on the Department of Commerce and the United States, and has earned respect nationally and internationally."

●**Spencer Bennett and Randolph Moore** of the NWS Observing Station on Islas del Cisne (Swan Island), Honduras, for their heroic actions in the rescue of 19 shipwrecked fishermen in the Caribbean last December.

Simmons Tatum, a Swan Islander who is not a Commerce employee, also participated in the rescue and will receive a Certificate of Appreciation from the Department.

The rescue occurred after the Honduran fishing vessel "Lucky Girl" encountered heavy seas about 20 miles northwest of Swan Island. The hull ruptured and the ship began sinking rapidly. The Captain sent out an SOS and ordered all hands to abandon ship. The SOS was picked up by the Swan Island Meteorological Station and personnel there responded immediately. Without regard for their own safety, the three Swan Islanders launched two small motorboats into the rough seas to seek the fishermen. Demonstrating superb seamanship and at great risk to their own lives, they searched until they found the survivors adrift in the ship's eight dugout canoes, and towed them to Swan Island. Not a single life was lost.

Silver Medals, awarded for contributions of unusual value to the Department, such as contributions to science, technology, or administration; outstanding skill or ability in the performance of duties which has resulted in program advancement; meritorious authorship; or unusual courage or competence in an emergency, were presented to:

●**Ben P. Barker, Jr.**, Official in Charge of the NWS Office in Tulsa, Okla., for his leadership in natural disaster warnings and community preparedness programs in Alabama and Oklahoma.

His work with the news media, schools, and police and fire departments is credited by the NWS with saving many lives during outbreaks of severe weather.

As Principal Assistant at WSO Montgomery, Ala., he initiated a natural disaster preparedness program that won praise from state, county and local officials. He led campaigns for implementation of tornado drills in schools and for tying down mobile homes against damaging winds, enlisting the support of newspapers and radio and television stations.

Since being named OIC at WSO Tulsa, Okla., in early 1974 he has been involved in stimulating local preparedness against killer storms and floods. When the worst tornado ever to strike Tulsa and Drumwright, Okla., occurred on June 8, 1974, followed by a flood, those cities were ready. Warnings issued by the WSO, in cooperation with radio and television stations, amateur radio operators, and public safety organizations were credited with triggering well-rehearsed responses that saved an untold number of lives.

●**Capt. John O. Boyer**, now Commanding Officer of the NOAA Ship Researcher, for major contributions to the advancement of international cooperation in nautical charting and for outstanding leadership in citizen-government interrelations for safety at sea, while in his previous position as Chief of the Marine Chart Division in the Office of the National Ocean Survey's Associate Director for Marine Surveys and Maps in Rockville, Md.

Through significant accomplishments on both international and national levels, he promulgated U.S. national cartographic interests in the international arena and greatly expanded the public-government interrelationships of the Department of Commerce. Through his purposeful but diplomatic participation in the International Chart Commission, he was extremely influential in developing international specifications for nautical charts and in establishing an international cooperative charting program.

On the national level, he greatly expanded the U.S. Cooperative Charting Program of the Departments of Commerce and Transportation.

●**Dr. Robert W. Burpee**, a Meteorologist at ERL's National Hurricane and Experimental Meteorology Laboratory in Miami, Fla., for his meritorious service as chief of the international group responsible for providing weather forecasting to GATE. He organized

(Continued on page 3)

## noaa week

Published weekly at Rockville, Md., by the Office of Public Affairs for the Department of Commerce and Atmospheric Administration.

Articles to be considered for publication should be submitted at least a week in advance to NOAA Week, Room 221, WSO 5, Office of Public Affairs, National Oceanic and Atmospheric Administration, Rockville, Md. 20852.

NOAA Week reserves the right to make corrections, changes or deletions in submitted copy in conformity with the policies of the paper or the Administration.

Catherine S. Cawley, Editor  
Warren W. Buck, Jr., Art Director

# Gold and Silver Medal Awards Presented to NOAA Employees

(Continued from page 2)

ized a multi-national and multi-lingual group into a responsive team that provided accurate weather forecasts for operational decisions, particularly of convective activity over the intensive ship array. In addition he provided quality service for decisions involving the safety of all platforms. "His outstanding performance and extraordinary success reflected credit on the Department and enhanced the image of the United States," his citation stated.

●**Arthur R. Cooke**, Chief of the Telecommunications Management and Planning Division in the Office of Management and Computer Systems in the Office of the Assistant Administrator for Administration, for exceptional and outstanding leadership in coordinating environmental telecommunications planning among various Federal agencies.

The Executive Office of the President in 1974 designated the Commerce Department as the focal point in the Federal Government for coordination of environmental communication planning among Federal agencies. The task of organizing this effort was assigned to Mr. Cooke. He organized the multi-agency National Environmental Communications Committee which recently was commended by the White House for its effectiveness in promoting inter-agency coordination.

His efforts in establishing, and the successful functioning of the Communications Committee, have earned him and NOAA a commendation from the Executive Office's Office of Telecommunications Policy.

●**Robert B. Doeker**, Director of the Space Environment Services Center in ERL's Space Environment Laboratory in Boulder, for vision and leadership in the establishment of the first operational space weather forecasting service, the application of research information to service organizations, and the continuing development of international exchange of data.

He also was cited for cooperation with the Air Weather Service and for exceptional support of the National Aeronautics and Space Administration's manned spacecraft missions, research activities, and other facilities adversely affected by solar-terrestrial disturbances.

●**W. John Hussey**, Chief of the Field Services Division of the National Environmental Satellite Service, for exceptional skill in the implementation and management of the SMS/GOES (Synchronous Meteorological Satellite/Geostationary Operational Environmental Satellite) satellite data utilization system.

The citation states that, "His outstanding ability to give technical direction in several scientific

and engineering disciplines along with his unique management skills and ability to anticipate schedule and utilize scientific and technical personnel has been a strong factor in implementing this program. He demonstrates exceptional skills in program improvement and program management and as a result is recognized as the leader in geostationary environmental satellite data processing, distribution, and utilization."

●**Joseph R. Irwin**, a Meteorologist in the Meteorological Techniques Branch of the Automation Division at the NWS National Meteorological Center in Suitland, Md., for his key role in putting into effect a new automatic weather analysis and forecasting system.

He directed a task force of 80 programmers in the integration of more than 350 computer programs into one large system, which is now the heart of the NWS forecast-guidance program for its field offices and private meteorologists throughout the Nation. It takes in weather data from all around the world and produces global forecasts of storm systems, winds, temperatures and the state of the sea, and is a key element of U.S. participation in the World Weather Program. The forecast-guidance system directed by Mr. Irwin resides in NOAA's new computer facility at Suitland, and is described by NWS officials as "the largest system for real-time environmental data-processing in the world." Mr. Irwin received high praise for the dedication he showed for more than a year during which the system was being put into effect.

●**Dr. Ray E. Jensen**, Director of the NWS Environmental Studies Service Center (ESSC) at College Station, Tex., for the outstanding managerial skill he demonstrated in launching the Nation's first ESSC at Auburn University, Ala. The ESSC is a new concept in conducting agricultural/meteorological research and in providing more-useful weather information to farmers on a speeded-up basis. Among other things, it utilizes crop models ("plants grown in computers") and satellite data to make the weather input more useful. Services from the Auburn center are in the form of agricultural weather advisories which reach farmers in Alabama, Georgia and Florida through university or Federal farm specialists and through a teletype circuit serving radio and television stations and newspapers.

The ESSC concept serves as a pattern for similar weather services to agriculture across the Nation. A second ESSC has been established at Stoneville, Miss., and the College Station Center is the third one.

●**Russell G. McGrew**, Chief of the AFOS (Automation of Field Operations and Services) Implementation Staff in the Office of the NWS Director, for his leadership in developing a plan for automating field operations of the NWS and for applying computer technology to weather radars.

His contributions to application of computer technology to NWS operations are described as "truly outstanding." He has been a key figure in development of the 50-million-dollar AFOS program to be implemented over a span of five years at about 275 NWS offices.

Mr. McGrew's application of computer technology to radar is described as correspondingly significant. Under his guidance the program known as D/Radex (for Digitized Radar Experiment), has been conducted successfully at four sites in the Midwest since 1971 and in Pittsburgh since 1974. In D/Radex, radar pictures are automatically converted to digits for rapid processing by computers. The system has important implications for faster and more-precise forecasting of severe thunderstorms and flash floods.

●**N. Arthur Pore**, Chief of the Marine Techniques Branch of the Techniques Development Laboratory in the NWS Systems Development Office, for his outstanding contributions to the science of weather forecasting in the marine environment. He developed a valuable new computer program for producing facsimile charts to show wave and swell conditions on the high seas. The charts, now delivered twice daily, are an important part of NWS' service to maritime interests. The sea-state forecasting method he developed is useful not only for predicting wave height on a day-to-day basis, but also for predicting the onset of dangerous surf and breakers in Hawaii, caused by swells traveling hundreds of miles across the Pacific.

He developed a technique for forecasting storm surges that result from "extratropical" or non-hurricane-type storms. Extratropical storm surges are tides of wind-driven water that in some instances devastate much lengthier coastal strips than does the storm surge from a typical hurricane.

●**John H. Robinson**, Deputy Director of ERL's Outer Continental Shelf Environmental Assessment Program, in Boulder, for exceptional leadership demonstrated in the inauguration of NOAA's outer continental shelf assessment program in Alaska conducted for the Interior Department's Bureau of Land Management.

The citation reads that "Through his efforts and insight the original concept of a strictly

baseline study was enlarged to include more emphasis on physical, chemical, and biological processes and the physiological effects of oil on Alaskan marine life.

"He was personally responsible for organizing and compiling the expanded program plan for the entire Alaskan coastline—a plan that is now recognized as a model for similar plans to be developed in other outer continental shelf areas. His untiring efforts are primarily responsible for bringing the program to the Department of Commerce."

●**Laurence G. Shaffer**, Emergency Warning Coordinator for the NWS Central Region, in Kansas City, Mo., for his lifesaving activities against killer storms and floods.

He was cited for his leadership and unceasing efforts in coordinating warning procedures, preparedness efforts and public information programs against severe storms in the Central Region states of Colorado, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, Wisconsin, and Wyoming.

His outstanding results in recruiting and training storm spotters were given special mention, also his improvement of communications procedures and standardization of radar-warning criteria. He has been a key man in development of strong ties with the Defense Civil Preparedness Agency and with state and local public safety organizations.

●**Dr. Carl J. Sindermann**, Director of the NMFS Middle Atlantic Coastal Fisheries Center in Highlands, N.J., for outstanding leadership in administration of major ocean resource research projects.

He has designed and implemented an organizational structure oriented around major work projects rather than locations, which has allowed scientific staffs to identify with missions rather than locations. This has resulted in an increase in the esprit-de-corps and job satisfaction of the Center staff. He has decreased greatly the existing discrepancies in grade levels and job responsibilities and implemented fair personnel management policies and procedures which have restored job security and career opportunities for the employees.

●**Walter Telesetsky**, now Director of the Program Integration Office in the Office of Environmental Monitoring and Prediction in Rockville, Md., for exceptional service to the Nation in planning, managing and coordinating U.S. participation in GATE.

No precedent existed for participation in an international exchange.

(Continued on page 4)

# Gold and Silver Medal Awards Presented to NOAA Employees

(Continued from page 3)

periment of its scope. The program, which was headquartered in Dakar, Senegal, is regarded as an outstanding example of international cooperation.

Mr. Telesetsky was cited for his initiative, innovation and skill in a role that was essential to the entire operation.

●Donald R. Whitman, now Chief of the Data Acquisition Division at the NWS Central Region Headquarters in Kansas City, for his outstanding performance in his previous position as Assistant Director for Meteorology and Management of the NWS Technical Training Center in Kansas City.

He was cited for his administrative skill in organizing and developing the Meteorology and Management Section of the Training Center during the five years since the Section was begun. He directed preparation of new and original courses for weather-office operation, weather radar, basic meteorology, the taking of weather observations, techniques of instruction, air-pollution meteorology, and writing and broadcasting.

He produced "a new excellence in technical education" and a "substantial increase in the technical competence of field personnel." Special mention was given to his sensitivity to the needs of the handicapped and minorities.

●Group Award, for outstanding performance while serving as Chief Scientists aboard U.S. research vessels during GATE:

Dr. Kirby J. Hanson, now Director of the Geophysical Monitoring for Climatic Change Program in ERL's Air Resources Laboratories in Boulder;

Dr. Peter L. Grose, a Physical Scientist in the Applications Branch of the Operations Division in the Environmental Data Service's Center for Experiment Design and Data Analysis, in Washington, D.C.; and

Dr. James K. Sparkman, now a Physical Scientist in the World Weather Program Office of NOAA's Office of Environmental Monitoring and Prediction, Rockville, Md.

They designed and developed the complex observational systems required, molded the technical teams and were personally involved in the collection of data in fulfillment of GATE objectives.

Dr. Hanson, who was with the Sea-Air Interaction Laboratory at ERL's Atlantic Oceanographic and Meteorological Laboratories in Miami, Fla., at the time, aboard the Oceanographer was responsible for development of the sophisticated surface meteorological observing system deployed on the four primary U.S. vessels. He also led the pre-GATE international program of radiation instrumentation calibra-

tion and intercomparison, and played a central role in the development of the scientific plans for the experiment and contributed effectively to the incorporation of radiation studies in the GATE Central Program.

Dr. Grose, aboard the Gilliss, developed and implemented a near-real-time data processing system using the shipboard computer to sample, scale, plot and summarize all major parameters, and was able to identify and solve several problems, thereby enhancing the quality of data obtained not only from his, but also other ships. He personally supervised the rebuilding at sea of a pitch-roll buoy to preclude loss of valuable data, and also served as lead analyst for designing, developing and implementing the ship system data processing from all primary U.S. ships. His work is a key element in meeting the international schedule for producing and exchanging validated data.

Dr. Sparkman, aboard the Researcher, led a team that not only carried out the demanding observing schedule, but also undertook a number of special studies and engineering improvements to improve the performance of some of the systems.

He also served as International Coordinator of a 12-ship intercomparison period during the field phase. In preparation for GATE, he was U.S. representative and chief scientist for the GATE sea trials in 1973, to test technical, operational, communications and control procedures to be used during GATE. He also was the project coordinator for the design, development, test, production, training and deployment of the shipboard tethered balloon Boundary Layer Instrument System used in GATE.

●Group Award, for outstanding achievement in furthering man's understanding of the role of the tropics in the Global Atmospheric Circulation, to:

Robert F. Long, now Deputy Director of the World Weather Program Office in the Office of

Environmental Monitoring and Prediction, in Rockville;

Cdr. Sigmund R. Petersen, now Commanding Officer of the NOAA Ship Miller Freeman, Pacific Marine Center, Seattle, Wash.;

Capt. Richard H. Houlder, now Chief of the Marine Chart Division in the Office of the National Ocean Survey Associate Director for Marine Surveys and Maps, in Rockville; and

Edward V. Tiernan, now a Physical Scientist in the World Weather Program Office in the Office of Environmental Monitoring and Prediction, in Rockville.

Mr. Long, as Associate Director of the International Scientific and Management Group for GATE and senior U.S. representative, played a dominant role in integrating the international plans for achieving the research objectives and obtaining the operations and logistics support required. During the field phase of the experiment in Dakar, Senegal, "his performance in supervising international logistics and operations was outstanding and the results exceeded all expectations, which enhanced the image of the U.S. and brought credit to the Department of Commerce and NOAA," according to the citation.

Cdr. Petersen served as U.S. Representative to the International Scientific and Management Group at Bracknell, England, prior to GATE, and was responsible for developing the international ship operations plan for GATE. His planning and thoroughness was proven when all planned vessels arrived on station to form a cohesive observing network. During the field phase, he served as the international director of the experiment's Operations Control Center and skillfully coped with all changes and contingencies.

Capt. Houlder was assigned as Chief of the Operations Group of the office responsible for U.S. participation in GATE prior to and during GATE. His concepts, developed for the employment of all observational platforms, were adopted and executed in the field. He also planned and supervised, as Deputy Director for Operations, the international GATE Operations Control Center and its communication, traffic control and planning staff.

Mr. Tiernan was chief of plans for the project office responsible for implementing the U.S. commitment to GATE, prior to and during the experiment. He was deeply involved in the preparation of international plans for the field phase, support, early sea trials, ship operations and the U.S. operations plan. During the field phase he served as the international director of plans.

●And a Group Award to ten NWS hydrologists for their joint accomplishment in improving

methods used to forecast rivers and floods in the United States: Eric A. Anderson, Silver Spring, Md.; Robert J. C. Burnash, Sacramento, Calif.; Robert L. Ferral, Sacramento, Calif.; Donald W. Kuehl, Portland, Ore.; John P. McCallister, Gaithersburg, Md.; John C. Monroe, Rockville, Md.; Dr. Eugene L. Peck, Vienna, Va.; Charles E. Schauss, Falls Church, Va.; Vail P. Schermerhorn, Portland, Ore.; and C. E. Vicroy, Slidell, La.

Their efforts have placed the U.S. in the forefront, internationally, in the application of computer-modeling technology to the prediction of river conditions.

During a decade of effort, they produced a new computer model for the flow of water through river basins. The model is to be fitted to nearly 3,000 separate basins throughout the Nation. NWS officials consider it a milestone accomplishment—"a major step forward from the operational technology in use since the 1930's"—and say it will "enable hydrologic forecasters to keep pace with requirements for increased food production and energy self-sufficiency."

NWS hydrologists currently provide forecast service to 274 major powerplants and 178 large, multipurpose reservoirs. Studies show the new computer model will reduce the average error estimates of mean daily discharge by 25 percent. Also, for the first time, a hydrologic computer model can be adapted to predict water-quality factors important to pollution abatement. The success of the new model was demonstrated by precise predictions of severe flooding on the lower Mississippi River in 1973 and 1975, for which forecasters received high praise from affected communities.

Capt. Houlder and Dr. Peck had received Silver Medals in previous years, and so received lapel emblems and certificates at the ceremony, instead of Medals.

## Correction

The NOAA Unit Citation presented to the Operational Satellite Snow Mapping Program in the National Environmental Satellite Service was for the development of the program, and went to employees in the Environmental Sciences Group in the Office of Research, and in the Environmental Products Group in the Office of Operations.

NOAA Week of October 3, 1975, incorrectly stated that the recipients of this award were in the Analysis Branch, Data Processing and Analysis Division, Office of Operations.



## Best fish buys

According to the NMFS National Fishery Education Center in Chicago, the best fish buys for the next week or so are likely to be fresh cod and ocean perch fillets along the Northeast Seaboard; fresh croaker and spot in the Middle Atlantic States, including the D.C. area; speckled trout and mullet in the Southeast and along the Gulf Coast; pan-dressed smelt and ocean perch fillets in the Midwest; snow crab sections and Pacific snapper fillets in the Northwest; and fillets of Dover sole and butterfish in the Southwest.

# **National Oceanic and Atmospheric Administration**

## **ERRATA NOTICE**

One or more conditions of the original document may affect the quality of the image, such as:

Discolored pages

Faded or light ink

Binding intrudes into the text

This has been a co-operative project between the NOAA Central Library and the Climate Database Modernization Program, National Climate Data Center (NCDC). To view the original document, please contact the NOAA Central Library in Silver Spring, MD at (301) 713-2607 x124 or [Library.Reference@noaa.gov](mailto:Library.Reference@noaa.gov)

HOV Services  
Imaging Contractor  
12200 Kiln Court  
Beltsville, MD 20704-1387  
July 23, 2010