



# noaa week

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## U.S., France Announce Joint Ocean Programs

New programs to develop methods of protecting the ocean and its resources, and to understand its processes, have been announced jointly by the United States and France.

Dr. Robert M. White, NOAA Administrator, for the U.S., and M. Yves LaPrairie, President and Director-General of France's National Center for the Exploitation of the Oceans, outlined the plans.

The May 12 announcement  
*(Continued on page 4)*

## Severe Storm-Tornado Research Program Underway

NOAA scientists in Norman Okla., have turned central Oklahoma into a densely instrumented laboratory to study the atmospheric violence that happens every spring.

As severe thunderstorms and their attendant tornadoes drift into this section of the southern plains, experimental radars read their internal winds; aircraft probe the erratic, dangerous shear zones between low-level air currents; and teams of tornado chasers pursue developing twis-

*(Continued on page 2)*

## Governors To Nominate Fishery Council Members

### \$753,000 CZM Grant Awarded To New York

The New York Department of State has received a \$753,000 grant to coordinate development of a coastal management program that will qualify for Federal approval.

Under the grant, the State planning division has been designated the State agency responsible for developing a broadbased program to achieve prudent use of the coastal environment. State officials will work closely with citizens and public agencies in designing a program that protects the coast through long-term man-

*(Continued on page 4)*

The first step in formation of eight Regional Fishery Management Councils is now being taken as the Governors of 27 coastal states and of Idaho draw up their lists of nominations for membership to the Councils.

The councils—to be composed chiefly of private citizens and state fisheries officials—are called for in the Fishery Conservation and Management Act of 1976 (P.L. 94-265). They will have primary responsibility for developing fishery management plans within their own geographical areas, under the "200-mile fisheries limit" or extended jurisdiction legislation.

Designations and recommendations are to be made to Secretary of Commerce Elliot L. Richardson by May 28. Secretary Richardson notified the Govern-

*(Continued on page 3)*

## Alaska May Take Over Management Of 10 Species of Marine Mammals

A series of public hearings will be held this summer on requests by the State of Alaska to lift an existing moratorium on the taking of marine mammals and seeking approval of Alaskan laws and regulations for the management of 10 species of marine mammals. If the requests are approved, the State will take over management of the animals from the National Marine Fisheries Service and the U.S. Fish and Wildlife Service.

Hearings will be both in Washington, D.C., and in Alaska, according to the Departments of Commerce and Interior. Dates and locations will be announced.

Approval of the requests would permit a limited number of ribbon seals, ringed seals, Pacific bearded seals, spotted seals,

harbor seals, northern sea lions, beluga whales, polar bears, sea otters, and walruses to be taken annually under Alaskan laws and regulations starting in 1977.

The Directors of NMFS and the Fish and Wildlife Service, who administer the Act, propose to approve Alaska's request.

At the present time the Marine Mammal Protection Act of 1972 prohibits the taking of any of the species except for native subsistence and by special permit for research, public display, and incidental to commercial fishing operations.

## Second Hearing Is Scheduled On Hawaii Estuarine Sanctuary

A second public hearing on the environmental effects of the estuarine sanctuary which Hawaii has proposed to establish in uninhabited Waimanu Valley will be held on May 22 and May 24.

The hearing will be conducted by NOAA officials in cooperation with State representatives. An earlier hearing was held in April.

Residents will be given the opportunity to comment upon a draft environmental impact statement outlining the proposed sanctuary, and to express their views on the nature and adequacy of the proposal.

The first session of the hearing will be held at 10 a.m. on May 22, in the County Council chambers in Hilo, and the second at 7 p.m. on May 24 in the Honokaa High School cafeteria.

Dr. Robert Kifer, estuarine sanctuaries coordinator for NOAA, explained that testimony at the hearing will be scheduled on a first-come basis, with priority given to persons with prepared texts. Depending upon the number, he said, speakers may be limited in the time they are allowed to testify.

Individuals desiring to testify can sign up at the hearing or contact the Office of Coastal Zone Management, NOAA, 3300 Whitehaven Street, N.W., Washington, D.C. 20235.

Details on the proposed sanctuary and regulations proposed for it were outlined on page 1 of NOAA Week dated April 23, 1976.

## NOAA Men Are Elected AAAS Fellows

Two NOAA scientists, Dr. Ronald L. Lavoie and Dr. Helmut K. Weickmann, have been elected Fellows of the American Association for the Advancement of Science. A Fellow of the AAAS is defined as one "who has produced a body of work on behalf of the advance-

*(Continued on page 2)*



Participants in the 54th NOAA Officer Training Class were (front row, from left) Lt. (jg) David Waltz, Ens. Karin Lerch, Ens. Susan Ludwig, Ens. Walter Latimer, Lt. (jg) Lee Doering, Ens. Steve Snyder, (back row, from left) Ens. David Minkel, Ens. Howard Jemison, III, Lt. (jg) Gary Lagerloef, Ens. Steve Jameson, and Ens. John Rubino.

# Severe Storm-Tornado Research Field Program (Continued from page 1)

ters to observe them at close range.

Conducted by the Environmental Research Laboratories' National Severe Storms Laboratory in Norman, the 1976 spring program runs from mid-April through mid-June, continuing a yearly series of experiments begun in the early 1960's.

This year, the two powerful Doppler radars at Norman and at Cimmaron, 25 miles (41 kilometers) away, and NSSL's digitized weather surveillance radar at Norman, have been joined by a third Doppler radar from the University of Chicago and the Illinois Water Survey—the so-called "CHILL" radar.

This marks the first opportunity scientists have had to use three large (10-centimeter-wavelength) Doppler radars simultaneously in probing the internal winds of massive mid-continent storms. The CHILL system, which also has a three-centimeter wavelength capability, is installed near Anadarko, Okla., about 50 miles (80 kilometers) southwest of Norman.

Doppler radars sense the motion of targets in a storm—water droplets or man-introduced metallized chaff—as a change in the frequency of the reflected radio pulse, or "echo." This "Doppler shift" in frequency can be interpreted to show wind motion along each radar beam, and this, in turn, can be expressed as a three-dimensional cross-section of winds throughout the volume of a storm observed simultaneously by three radars.

In 1975, ERL researchers reported a Doppler radar "signature" for tornadoes—a distinctive signal on the Doppler radar display that indicates regions of strong-wind shear along the tornado funnel itself.

Computer-controlled graphic terminals at both NOAA Doppler radars permit operators this year to display the radar-indicated windfields in real time, and to refine their criteria for tornado identification.

Addition of the CHILL radar improves the scientists' ability to estimate three-dimensional wind

velocities in storms passing through the area.

"Tornado Intercept" is a key element in the spring experiment. As a storm enters the general area, Intercept teams guided by radio messages from NSSL deploy toward developing storms. As the storm matures and a tornado begins to form, the interceptors move in to within a few miles to capture closeup observations of the elusive quantities and qualities of the tornado.

Two Intercept teams from NSSL and two from the University of Oklahoma are continuing efforts to chase tornadoes to earth and photograph them at close range.

Also scheduled to participate in the field program this spring are the Argonne National Laboratory; the University of Mississippi; the Federal Aviation Administration; ERL's Wave Propagation Laboratory; Eglin Air Force Base, Fla., and Tinker Air Force Base, Okla.; the University of Wyoming; the National Aeronautics and Space Administration; the U.S. Army at Fort Sill, Okla., and White Sands, N. Mex.; and Dr. Nancy Knight from the National Center for Atmospheric Research in Boulder, Colo.

## Dr. Lavoie and Dr. Weickmann Elected AAAS Fellows



Dr. Weickmann Dr. Lavoie

ment of science that is scientifically distinguished or socially highly significant, or both."

Dr. Lavoie, Director of the Environmental Modification Office at NOAA Headquarters in Rockville, Md. since 1973, was cited for "his research into the physics of tropical clouds and meso-scale modeling for study of land use effects on the atmosphere."

In 1972-73, Dr. Lavoie was on assignment to the National Science Foundation in Washington, D.C., as Associate Director of its Meteorology Program, from Pennsylvania State University, where he had been an Associate Professor since 1968. From 1959-1968 he was an Assistant Professor at the University of Hawaii, and from 1957-1959 was Meteorologist-in-Charge at the Mt. Washington Observatory in New Hampshire.

He served as a research assistant in tropical meteorology at Florida State University from 1954-1957, including several months with the National Hurricane Research Project during its formative year in West Palm Beach, Fla.

He received his B.A. in math-

News Directors and Staff Meteorologists from more than 30 television stations in 15 states gathered at the NSSL for a seminar and news conference on the 1976 Severe Storm-Tornado Research Field Program last weekend. In addition to formal presentations on the latest findings on improved tornado detection and predictions, they toured the research area and facilities.

Key personnel include Dr. Ron L. Alberty, meteorological director for the spring operation; Dr. Peter S. Ray, coordinating three-Doppler radar operations; Dr. Richard J. Doviak, who leads the Advanced Techniques project responsible for developing and operating the two NOAA Doppler radars; Kenneth E. Wilk, coordinating overall sensor operation; J. T. Dooley, Dale Sirmans, and Donald W. Burgess, Doppler data quality control; Dr. Robert P. Davies-Jones, in charge of the Tornado Intercept teams; and J. T. Lee, who directs the aeronautical portions of the program. Dr. Edwin Kessler directs the NSSL.

ematics from the University of New Hampshire; his M.S. in meteorology from Florida State; and his Ph.D. in meteorology from Pennsylvania State University.

Dr. Lavoie currently is a Fellow of the American Meteorological Society and a member of the AMS Cloud Physics Committee (Chairman, 1974), the Interdepartmental Committee on Atmospheric Sciences Weather Modification Panel (Chairman since 1973), the Advisory Panel for the National Hail Research Experiment, the American Geophysical Union, the Weather Modification Association, Sigma XI, Phi Beta Kappa, and in 1962-1963 was an NSF Science Faculty Fellow.

Dr. Weickmann, Director of the Environmental Research Laboratories' Atmospheric Physics and Chemistry Laboratory in Boulder, Colo., was cited "for his studies of rain processes in convective stratus clouds and research into means to modify weather artificially."

Dr. Weickmann emigrated to the United States from Germany, in 1949 and joined the U.S. Army Signal Research and Development Laboratories (now known as the U.S. Army Electronics Command) at Fort Monmouth, N.J. In 1965 he assumed his present position, with what is now NOAA.

He recently was awarded a degree of honorary doctor by the University of Clermont in France. His previous honors include receiving the Leningrad University's 150th Anniversary

# Gulf of Alaska Seismic Data Is Available

The U.S. Geological Survey is making available to the public continuous seismic reflection profile data collected in the Gulf of Alaska. USGS collected the data in its Northeast Gulf of Alaska Program to appraise natural resources and environmental hazards before sales of oil and gas leases.

The first data set, now available from the EDS National Geophysical and Solar-Terrestrial Data Center, contains 6,500 kilometers of seismic profiles collected in collaboration with the University of Washington during September and October 1974. These data, recorded at both high and intermediate frequencies, were taken on the Alaska Outer Continental Shelf from Yakutat Bay to Montague Island.

Copies of the original profiles on 35-mm microfilm together with ozalid copies of ship track lines can be obtained from the National Geophysical and Solar-Terrestrial Data Center, Code D621, NOAA, Boulder, Colo. 80302. (303-499-1000 ext. 6542).

(Continued from page 1) Medal in honor of his work as the former president of the International Commission on Cloud Physics, a post he held for eight years. He also has been elected a Fellow of the American Meteorological Society.

He studied at the University of Leipzig and received his Ph.D. from the University of Frankfurt in Germany. After serving as a physicist at a research laboratory of the German Air Force he became Director of the Observatory Hohenpeissenberg, the German Weather Service.

He is currently a member of the Royal Meteorological Society, Weather Modification Association, American Geophysical Union, and the Panel on Weather and Climate Modification of the National Academy of Sciences, and is an honorary member of the International Commission on Cloud Physics.

## 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 fillets of haddock and pollock along the Northeast Seaboard; bluefish and croaker in the Middle Atlantic States, including the D.C. area; fresh grouper and mullet in the Southeast and along the Gulf Coast; dressed whiting and butterfish fillets in the Midwest; steamer clams and sliced blackcod in the Northwest; and fresh oysters and Dungeness crab in the Southwest.

## noaa week

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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

## Dr. Hovis Heads Satellite Lab

Dr. Warren A. Hovis, Jr., an expert in the area of remote sensing of natural phenomena from satellites, has been appointed Director of the Satellite Experiment Laboratory of the National Environmental Satellite Service. He previously was Associate Chief for the Earth Observation Systems Division at the National Aeronautics and Space Administration's Goddard Space Flight Center in Greenbelt, Md.

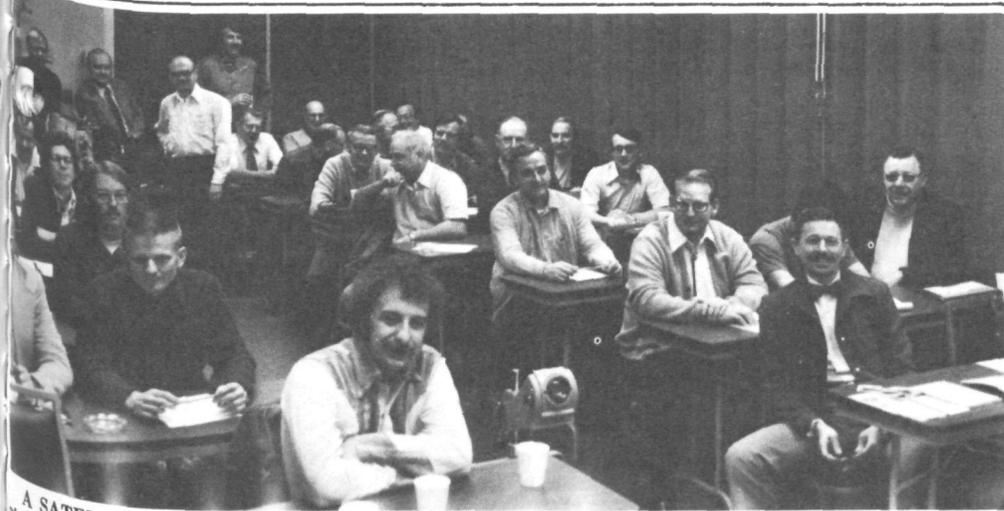


Dr. Hovis

In his new post, Dr. Hovis will be involved with expanding the capabilities of NOAA's environmental monitoring satellites in providing information about the earth, its atmosphere and its oceans.

A member of the American Institute of Physics and the Optical Society of America, he has published more than a score of technical papers on such subjects as atomic and molecular spectroscopy, infrared spectral measurements, and other subjects within his area of research experience.

He received both his AB and Ph.D. degrees in physics from the Johns Hopkins University.



A SATELLITE WORKSHOP was conducted recently for the National Weather Service Western Region at Redwood City, Calif., by Vincent Oliver and Roger Weldon of the National Environmental Satellite Service Applications Group. New concepts of interpretation of synoptic and small-scale motions using SMS-2 satellite pictures were presented to the more than 40 forecasters, including four military meteorologists, who participated.

## Hurricane Workshop Held for CMO Country Forecasters, Radar Operators

Dr. Neil L. Frank, Director of the National Weather Service National Hurricane Center in Miami, Fla., and Alvin Samet of his staff recently conducted a one-week hurricane workshop at the Barbados based Caribbean Meteorological Institute.

The objectives of the workshop, sponsored by the United Nations Development Program

### Recommendations for Fishery Councils

of the law, and requested their nominations, by letter on April 21, eight days after signature of the Act by the President.

The number of members on each Regional Council will vary because some Councils represent more states (and territories) than

others. However, each Council will include, as voting members, the principal state official with management responsibility of each state within the region; one additional qualified person from each state; the Regional Director of the National Marine Fisheries Service; and

additional qualified individuals whose number varies with each Council, and who serve at large.

Qualified individuals, by terms of the Act, are those who are knowledgeable or experienced with regard to the management, conservation, or recreational or commercial harvest, of the fishery resources of the geographical area concerned.

Secretary Richardson has asked each Governor to designate the "principal State official with management responsibility and experience" in his State; nominate at least three qualified individuals, residents of the State, from whom one will be selected by the Secretary of Commerce to serve on the appropriate regional council (except for the North Pacific Council); and nominate at least

three qualified individuals for each "at large" vacancy. In addition to the voting members of each Council, there will be non-voting members, consisting of the regional or area director of the U.S. Fish and Wildlife Service, the District Commander of the U.S. Coast Guard, the executive director of the appropriate Marine Fisheries Commission, a representative of the U.S. Department of State, and—in the case of the Pacific Council—one non-voting member appointed by the Governor of Alaska.

The Secretary of Commerce is required by law to make his selections to the Councils no later than August 11.

The eight Councils, and the States represented in each, are:

- New England Council—Maine, New Hampshire, Rhode Island, Connecticut, Massachusetts.
- Mid-Atlantic Council—New York, New Jersey, Delaware, Pennsylvania, Maryland, Virginia.
- South Atlantic Council—North Carolina, South Carolina, Georgia, Florida.
- Caribbean Council—Puerto Rico, the Virgin Islands.
- Gulf Council—Florida, Alabama, Mississippi, Louisiana, Texas.
- Pacific Council—California, Oregon, Washington, Idaho.
- North Pacific Council—Alaska, Washington, Oregon.
- Western Pacific Council—Hawaii, American Samoa, Guam.

ing the Caribbean; and facilitate the implementation of coordinated and uniform practices and procedures between the radar observing stations and the NHC.

Most of the hurricane tracking radars installed since 1968 through UNDP technical assistance in the countries in which the 12 workshop participants are based (Antigua, Barbados, Belize, Guyana, Jamaica, and Trinidad and Tobago) have already played significant roles in saving life and property.

## Research Data Users Workshop Is Held at NCC

The National Climatic Center (NCC) in Asheville, N.C., hosted an Environmental Data Service/National Science Foundation (NSF) cosponsored workshop for research users of climatological data on April 27 and 28.

The purposes of the workshop, which followed a survey of data users in the national research community, were to:

- Acquaint research data users with current and planned data processing techniques and service capabilities in EDS, the National Environmental Satellite Service, and the National Center for At-

mospheric Research (NCAR), and

—Seek information from the research community about current and anticipated data and service needs that could be used by EDS to plan future data base and service capability development at NCC.

Participants included representatives from the University of Alaska, California State College at Northridge, Colorado State University, Florida State University, Massachusetts Institute of Technology, University of Minnesota, University of Oklahoma, Oregon State University, Texas A&M University, and University of Wisconsin; consulting meteorologists; the Environmental Research Technology Corporation and the Rand Corporation; and NCAR, NSF, the Energy Research and Development Administration, the U.S. Navy, NOAA Headquarters, the Environmental Research Laboratories, NESS, the National Weather Service, and EDS.

The workshop resulted in the enumeration of a number of specific recommendations, including the establishment of a Scientific Advisory Panel for NCC. A formal Workshop Summary, now being prepared, will detail the recommendations that were developed.

## Think Visual Handbook,

## Slide Formats Available

The supplies of NOAA's 12 slide formats and *Think Visual* handbook have been replenished and may now be ordered. (NOAA Directives Manual 50-17). Use NOAA Form 37-4 to order copies of the 12 formats from NOAA Property and Supply Section (AD112), Riverdale, Md. For the *Think Visual* handbook write NOAA Publication Design Section (AD131), Rockville, Md., or phone 443-8739. These formats and the handbook are valuable aids for persons who plan briefings.

# notes about people

R. Adm Eugene A. Taylor, Associate Director of the National Ocean Survey Office of Fleet Operations, recently was presented the National Safety Council's Cameron Award in New Orleans, La.



R. Adm. Taylor

Adm. Taylor, who is a member of the Executive Committee of the Marine Section of the National Safety Council, was honored for his outstanding contributions in furthering the goals of the Council, a non-governmental, nonprofit, public service organization.

James Churgin, Director of the Environmental Data Services' World Data Center A, Oceanography,



Mr. Churgin

was elected Chairman of UNESCO's Intergovernmental Oceanographic Commission's (IOC) newly established Group of Experts on the Marine Environmental Data and Information (MEDI) System. MEDI is a referral system to marine data held by organizations around the world.

Dr. Charles B. Archambeau and Kendall L. Svendsen of NOAA have been elected chairman and secretary, respectively, of the Front Range Branch of the American Geophysical Union in Boulder, Colo.

Dr. Archambeau is a Research Associate with the Cooperative Institute for Research in the Environmental Sciences, a program funded by the Environmental

## News for Retirees

NOAA WEEK will carry the names, current addresses, final duty stations, and retirement dates of any NOAA retirees who request such listing. Each person will be listed only once, either at retirement or later. The names will be inserted in NOAA WEEK on a first-come, first-served basis when space permits.

Anyone wishing to be included, should write a letter to the Editor, and specifically request that his or her name, address, retirement date, and final duty station (as NWS, Chicago, Ill.; or ERL, Boulder, Colo.) be included. We must have for our files a letter from each retiree listed reflecting this request, which should also include a current phone number—for possible use by the editor, but not for publication.

Research Laboratories and administered by the University of Colorado.

Mr. Svendsen is a Technical Assistant for Geomagnetism with the Environmental Data Service's National Geophysical and Solar-Terrestrial Data Center.

Donald R. Rondy, Chief of the Lake Survey Center's Water Levels Branch, and Richard Price of the Detroit District Corps of Engineers recently selected sites near Green Bay, Wis., and De Tour, Mich., for two additional new water level gages. These sites, plus two selected late in 1975 at Ludington and Essexville, Mich., are part of the NOS gage replacement and improvement program. The data from the Great Lakes gage network are used in chartmaking, lake level forecasting, regulation, and for high water storm warnings.

William F. Frank has been named Meteorologist in Charge at the National Weather Service office in Lake Charles, La. He succeeds Don B. Munro, who has retired.



Mr. Frank

Mr. Frank entered the NWS at Springfield, Mo., in 1943, following duty in the armed services. He subsequently served as Principal Assistant at WSO, Port Arthur, Tex., and as Meteorologist in Charge at Baton Rouge, La., and Amarillo, Tex.

He attended Drury College

## U.S. and French Ocean Programs (Continued from page 1)

concluded a three-day meeting of the U.S. - French Cooperative Program in Oceanography, in New Orleans, La. The collaboration has been underway since 1970.

The two leaders said that nation-to-nation cooperation in ocean affairs, always important, has become more vital than ever as world interest in protecting the oceans increases and as needs for ocean resources become more acute.

Ocean problems are of increasing public concern, they said: "We meet against this background of concern. The past year has brought greatly intensified interest in the oceans. We feel fortunate that the U.S. - French program is in being, and producing constructive action."

New areas in which the U.S. and France will cooperate, and areas being examined for future cooperation, are:

—The exchange of plans and proposals for undersea scientific studies to determine where further cooperative efforts could be undertaken.

—A joint U.S. - French man-

HONORED AS THE OUTSTANDING SUPERVISORY FEDERAL EMPLOYEE OF THE YEAR in the Pacific Basin at the 20th Annual Employee of the Year Awards Luncheon was Marvin J. Walsh, National Weather Service Pacific Region Supervisory Electronics Technician, shown here with Mrs. Walsh. Sen. Daniel Inouye was the keynote speaker at the luncheon, which was sponsored by the Honolulu-Pacific Federal Executive Board. Other dignitaries present included Gov. George Ariyoshi, Sen. Hiram Fong, Rep. Spark Matsunaga, and Francis V. Yanak, San Francisco Regional Director of the U.S. Civil Service Commission.

Mr. Walsh, who joined the NWS in 1963 after four years in the U.S. Navy, was cited for his consistent attention to the maintenance

of facilities and equipment valued in the millions of dollars which has insured the availability of observations, forecasts, and warnings to the public, his supervisory ability and his consistent outstanding performance over the past four years. He is also active in community affairs.



and Southwest Missouri State University at Springfield.

Delores Reese, Technical Information Specialist with the Environmental Data Service's Environmental Science Information Center, recently provided basic instruction in techniques used in ESIC's bibliographic information-retrieval system OASIS (Oceanic and Atmospheric Scientific Information System) to several University of Maryland students. The students are members of a class in "Literature and Research in the Sciences" taught by Dr. Joseph F. Caponio, ESIC Director. Similar briefings also were given subsequently by Ms. Reese

to students from the Catholic University's Library School.

OASIS currently offers access to 23 on-line data bases throughout the country. Use of the system is rapidly increasing; requests for searches are now 380 per month; a year ago, there were about 50 per month.

## N.Y. CZM Grant

(Continued from page 1) agement and balanced competitive use.

With part of its coast on the Atlantic Ocean and part facing the Great Lakes, New York began its coastal management development program in 1974, funded by an initial planning grant of \$550,000 plus a \$373,000 supplement to study offshore oil and gas impacts from the Office of Coastal Zone Management.

The current grant supports the State's second-year planning effort. It will be used to expand and intensify work initiated during the first year, including identifying the coastal boundary, establishing a working relationship with relevant Federal agencies, generating greater citizen involvement in program planning, analyzing coastal resources, determining missible land and water uses, and existing laws for implementing the management program.

A significant part of the program will involve establishing a committee to coordinate all intergovernmental coastal activities and to accelerate preparation of partial geographic management plans with the Nassau-Suffolk Regional Planning Board and the St. Lawrence-Eastern Ontario Commission.

As required by law, New York will add \$376,500 in State funds to the grant.

# **National Oceanic and Atmospheric Administration**

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