

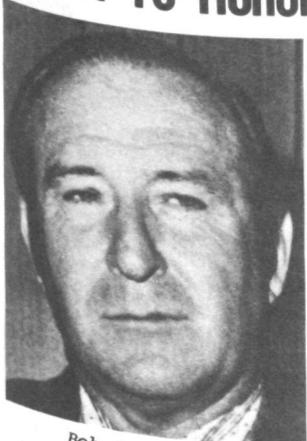


noaa week

Volume 4 Number 41

September 28, 1973

NOAA To Honor Six Employees for Significant Achievements



Bob E. Finley



Dr. James R. Wait



Dr. Clifford A. Spohn



William R. Long

NOS Solves Problem Hampering Radio Communications at Sea

The National Ocean Survey has found the solution to a problem which has hampered radio communications at sea during stormy weather since ships first began using wireless: During heavy weather of long duration, salt spray and water often short-circuit the insulators of radio antennas to such a degree that ships cannot communicate with other ships or with stations ashore.

The radio antennas used for transmitting and receiving messages by radio telephone and telegraph are isolated from the ship's steel structure by porcelain insulators located near the deck at the base of the antennas. As long as these insulators are clean and dry and have a high polish, they prevent the electrical current in the antennas from short-circuiting to the ship's steel hull. But when these insulators become covered with salt crystals from ocean spray and rain water from squalls, the electrical current is diverted to the steel hull. The antennas' radiated power is then diminished and, during prolonged storms, often terminated entirely, making radio transmission impossible.

This problem has now been solved by coating the porcelain insulators with a silicone grease to which water will not adhere. To protect the silicone grease from other contaminants, such as dust and particles from burned fuel oil, the grease is sheltered with a fiber glass shield shaped like an inverted funnel.

The method was conceived and developed by William F. Seibold, Sr., a naval architect technician with the Office of Fleet Opera-

(Continued on page 4)

The six winners of the 1973 NOAA Awards are: Dr. James R. Wait of Boulder, Colo.; Walter D. Komhyr, also of Boulder; Dr. Clifford A. Spohn, of Clinton, Md.; William R. Long, of Pittsburgh, Pa.; Bob E. Finley, of Chicago, Ill.; and Morris R. Jones, of Fairfax, Va.

For their outstanding contributions to NOAA programs, each will receive a plaque and one thousand dollars at a luncheon in Silver Spring, Md., on October 12.

Dr. Wait, Director of the Environmental Research Laboratories' Theoretical Studies Group, will be honored for scientific research and achievement. He is internationally recognized as a leader in theoretical studies of electromagnetic wave propagation in the earth and its atmosphere. His work in the area of wave-guide theory is considered basic to understanding the propagation of radio waves in the ionosphere. Current important research on electrical conductivity in the deeper parts of the earth's crust--which could lead to new systems of communication--is founded on his recent studies of propaga-

(Continued on page 4)



Morris R. Jones



Walter D. Komhyr

Scientists, Aircraft Alerted For 1973 Hurricane Season

As the North Atlantic hurricane season enters its most intense period--on the average, most hurricanes occur in September and October--NOAA scientists and aircraft are preparing to probe the big storms.

The tropical storm and hurricane research projects planned for the 1973 season are part of a continuing effort by the Environmental Research Laboratories' National Hurricane Research Laboratory to improve scientific understanding of these storms, and to improve man's ability to predict their intensity, the ocean waves they generate, and their direction of travel. Research penetrations will be made aboard the heavily instrumented aircraft of the Research Flight Facility.

The 1973 hurricane research program, says Dr. R. Cecil Gentry, Director of NHRL, includes cloud physics, water distribution, storm-and-ocean interaction, and natural variability studies which will improve comprehension of tropical cyclones and their important components, and how to manipulate them.

The cloud physics investigation will study the distributions of total water and liquid water through the storm and the distribution of supercooled water (supercooled = cooled below freezing, but still liquid) within the hurricane; attempt to assess the ratio of ice to liquid water in the storms, and to assess the dynamic seeding potential of hurricanes as a function of supercooled water content in the rainbands and eyewall. Paul Willis of NHRL is leading this part of the research.

The hurricane and ocean interaction experiment, directed by Peter G. Black of NHRL, will attempt to detect and measure the extent of cold water regions caused by the passage of a hurricane over the sea surface.

"We'll be using NOAA's C-13, a Piper Twin Comanche leased by the Office of Naval Research, and data from various earth-orbiting satellites to do this," says Mr. Black.

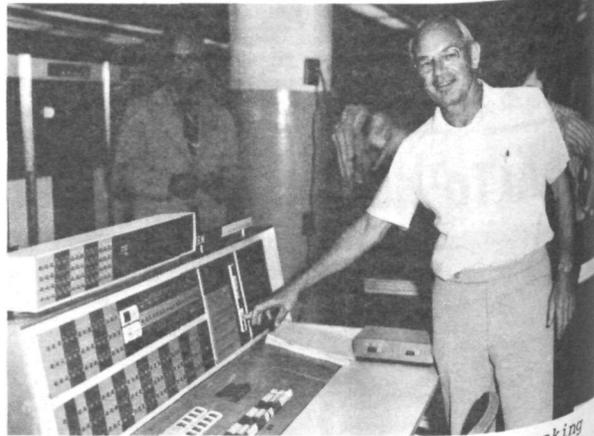
Dr. Gentry and Robert C. Sheets, also of NHRL, will conduct the hurricane variability studies in an effort to "quantify" the natural time and space changes of given processes and characteristics within the hurricane.

Douglas L. Davis Heads Huntsville, Ala., WSO

Douglas L. Davis of Richmond, Va., has been selected to head the National Weather Service Office at Huntsville, Ala. He is presently Principal Assistant at the Richmond, Va., weather station. He has had more than 15 years of meteorological experience, including duty as Weather Service Specialist at Asheville, N.C., and a number of assignments at remote weather observing points in his early career.



IBM 7094-II Computer Ends Distinguished Service to NWS



Mr. Saylor turning off the IBM 7094-II. Looking on are Harold A. Bedient, Chief of the Data Automation Division, and staff.

On September 14, Harlan K. Saylor, Deputy Director of the National Weather Service's National Meteorological Center turned-off the IBM 7094-II computer after thirteen years of faithful service. In attendance were approximately 60 current and former employees of NMC who had been involved with the 7094.

The computer arrived in Suitland, Md., in July 1960 as an IBM 7090 along with the first Electronic Associates, Inc., curve plotters. The system was first modified in April 1963 to be an IBM 7094 and then in June 1964 to an IBM 7094-II.

The main impact of the new computer in the early 1960's was to enable the then Joint Numerical Weather Prediction Unit to use more sophisticated models, provide more timely guidance to the field offices and to test new models for future use. Many of the things done during the years 1960 through 1966 were firsts in the field of NWS.

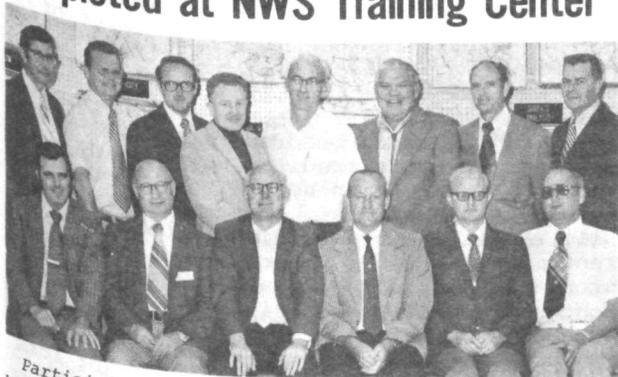
NMFS Issues Third Safety Information Placard

A new safety information placard, entitled "Safe Handling of Explosives Caught in Fishing Gear" has been prepared and issued by the National Marine Fisheries Extension Program in cooperation with NMFS's Northeast Region.

This placard, the third in a national series of safety information placards initiated by the Extension Program, was developed in the Northeast Region by John J. Murray, former Regional Safety Specialist; Dr. J. Perry Lane, Regional Extension Coordinator; and Paul Earl, Visual Aids Specialist. It illustrates the explosives most likely to be encountered in fishing grounds adjacent to the U.S. Coast, and gives instructions for handling any object not readily identified as a non-explosive item that may be snagged or netted in fishing gear.

The previous placards were entitled "Medical Assistance Available to Vessels" and "Helicopter Evacuation." Copies of the placards are available from NMFS Regional Offices or from the NMFS, Extension Division, Washington, D.C. 20235.

Eleventh Weather Radar Class Completed at NWS Training Center



Participants in the Eleventh Weather Radar Class held August 28-September 13 at the National Weather Service Technical Training Center, Kansas City, Mo., were: (front row, from left) Raymond Lowe, WSO Pensacola, Fla.; Kenneth Modlin, WSMO Marseilles, Ill.; Jack Webb, WSO Cincinnati, Ohio; Michael Ryba, WSFO Bismarck, N.Dak.; Tom May, WSFO Albuquerque, N.Mex.; Phillip Sellers, WSO Palmdale, Calif. (back row, from left) Larry Burns, Instructor; Arnold Malpass, WSO Kwajalein, Marshall Islands; Donald R. Baer, WSO Victoria, Tex.; Stanton Massey, WSO Fairbanks, Alaska; Donald Kastner, WSO Bristol, Tenn.; Ralph Foote, Jr., WSO Cape Hatteras, N.C.; Ralph Hocker, WSO Evansville, Ind.; and Bill Winkert, Instructor.

Obie Y. Causey Receives Commerce Bronze Medal

Obie Y. Causey, former Meteorological Technician with the Environmental Research Laboratories, has been awarded a Department of Commerce Bronze Medal in recognition of her meritorious service to the Director of the Air Resources Laboratories in Silver Spring, Md. She was cited for "many years of devoted service to an important classified national program." She retired recently after 30 years of government service.

CSC Supervision and Group Performance Course Held at National Climatic Center in Asheville, N.C.



Participants in the Civil Service Commission training course "Supervision and Group Performance" given at the National Climatic Center in Asheville, N.C., by Margaret Barnes of the NOAA Headquarters Employee Development Section, Personnel Division, September 10-14 were: (front row, from left) Warren L. Hatch, Troy O. Buckner, Ray W. Sharpe, Cecil Bradford, Joseph M. Meserve, R.D. Robinson, Francis M. Hallingse, and Harold R. Kenslow; (back

Combination Beef-Fish Patties Pass Acceptability, Taste Tests

A new product that combines beef with minced fish is suggested for public consumption in an article printed in a recent issue of the National Marine Fisheries Service's Marine Fisheries Review. The combination, called "beefish patties" is suggested by Dr. Frederick J. King of NMFS and Dr. George J. Flick, Department of Food Science and Technology, Virginia Polytechnic Institute and State University, Blacksburg, Va.

Tests with students at VPI indicated that the patties, containing pigmented minced fish, were just as acceptable as all-beef patties. The fish used in the experimental patties included cod, haddock, pollock, cusk, flounder, ocean perch, whiting, and carp. The ground beef contained 26-28 percent fat and a hydrolyzed plant-protein meat seasoning blend was added, increasing consumer acceptance.

Results of another taste test indicated that the proportion of minced fish in the patties can vary from about 25-50 percent without changing the overall acceptability. From one to four percent hydrolyzed plant-protein meat seasoning was preferred.

Minced fish, according to the authors, is made from meat remaining on a fish carcass after fillets have been removed. Use of minced fish for such products is recognized as being comparable to the greater use of a beef carcass which became possible when hamburgers became an American favorite.

The paper reports on experimental work and there is, as yet, no commercial production of "beefish patties." Such commercial production would require pre-clearance of the product, and processing under mandatory meat inspection requirements of the U.S. Department of Agriculture.

row, from left) Bynum E. Carson, Clifton J. Champion, George A. Lankton, Kathleen Meadows, Floyd M. Garland, William A. Brower, Irma S. Lewis, Lee Ray Hoxit, Edith F. Reed, Earl Laws, Margaret Barnes (instructor), Clyde J. Cable, William T. Hodge, James Stewart and Danny C. Fulbright. Mr. Champion is with the National Weather Service Office at Greensboro, N.C., and Mr. Laws is with the NOAA Employment Development Section, Rockville, Md.

NOAA To Honor Six Employees for Significant Achievements (Continued from page 1)

tion in this region of the earth. At the present time, he is working on the development of techniques for locating men trapped in mine disasters. One of the most prolific authors in the field, Dr. Wait has written three books, edited or contributed to several others, and has published several hundred papers on electromagnetic wave propagation.

Mr. Komhyr, Chief of the Geophysical Monitoring Techniques and Standards Group of ERL's Air Resources Laboratories, will receive the award for engineering and applications development. He has conceived, designed, and created several instrument systems required for measuring trace constituents in the atmosphere, particularly ozone. These devices are essential to monitoring long-term changes, both natural and manmade, in the atmosphere's composition. Mr. Komhyr modified standard instruments for specialized measurements of ozone and ultraviolet radiation, at large savings to the government. He developed and holds the patent on an electrical-conductivity ozone-sensing method used in urban surface measurements throughout the United States. In addition, he has developed an apparatus for preparation of primary standard gas mixtures, used in comparing atmospheric measurements made by different instruments at different locations.

Dr. Spohn, Director of Operations for the National Environmental Satellite Service in Suitland, Md., will receive the award for program administration and management, in recognition of his outstanding direction of the operations of the national weather and environmental satellite system. During the past seven years, while the satellite system has expanded rapidly, more and better products have been introduced to serve a wide variety of users. These products stem from complex systems for acquiring, processing, and disseminating satellite data, established under Dr. Spohn's direction. He was instrumental in beginning operational use of the National Aeronautics and Space Administration's Applications Technology Satellites, which provide continuous views of large areas of the earth. These pictures have become an essential ingredient in tropical and severe storm surveillance and warning.

Mr. Long, a meteorologist at the Pittsburgh, Pa., National Weather Service Forecast Office; Mr. Finley, Chief of the National Marine Fish-

eries Service's National Marketing Services Office in Chicago; and Mr. Jones, Chief of the National Ocean Survey's Distribution Division in Riverdale, Md., will receive awards for public service.

Mr. Long is being honored for flood forecasts and warnings credited with saving thousands of lives in northern New Jersey and in the Pittsburgh, Pa., area. In May 1968, while serving as Hydrologist in Charge of the Trenton, N.J., River District Office, he used information collected from a large and efficient network of cooperative observers in correctly predicting near-record floods in New Jersey. According to state officials, the early flood warning prevented major loss of life and substantially reduced property damages. When widespread flooding occurred in the northeastern United States in June 1972, Mr. Long was stationed at the Pittsburgh River District Office. He remained on the job continuously from June 20 to June 25, providing forecasts and warnings to the people in the river district. Although this was the most damaging flood in the area since 1937, not a single life was lost there.

Mr. Finley will receive the public service award for pioneering a "new look" in the consumer education materials produced by the National Marketing Services Office. The new formats, unique style, and added utility of these materials have increased their acceptance by the mass media and the public. Mr. Finley initiated and produced a popular series of full-color education posters on the fish of various regions. He also developed a bilingual kit in English and Spanish, designed for training low-income groups in the use of fishery products to obtain maximum nutrition at the lowest possible cost.

Mr. Jones will receive the public service award for his innovations in distribution of the NOS nautical and aeronautical charts and related publications. The number of these products has increased rapidly in recent years and now totals several million copies each year. Mr. Jones has developed new processes and procedures to expedite ordering, packaging, and delivery, and to reduce the cost of charts to the users. He has also installed an after-hours telephone recording service, so that orders for charts can be placed at any time of day or night.

NOS Solves Problem Hampering Radio Communications at Sea (Continued from page 1)

tions, with an expenditure in hardware of only \$2,200. He began experimenting with the silicone grease in 1970. A radio operator at sea for seven years, he subsequently served for nine years with the Maritime Administration's Engineering Division. For the past seven years he has been with the NOS and its predecessor, the Coast and Geodetic Survey.

Two years of testing by the Mt Mitchell, Researcher, and Rainier proved the success of the new method.

Mr. Seibold anticipated that the new development will lead to further improvements in ship antennas and that, in the future,

ships of all maritime nations will have antennas which will operate successfully with their radio equipment regardless of severe weather.

The new development may also prove a boon to radio and television broadcasting. Mr. Seibold said the same technique used on ships is also applicable to the antennas of radio and television broadcasting stations to prevent accumulations of ice and snow on their insulators. This accumulation, he said, sometimes short-circuits the insulators on the antennas, causes an undesirable shift in directional arrays, and prevents stations from broadcasting in very severe weather.

International Marine Pollution Monitoring Project To Be Launched

Intended as a major project within the framework of the Integrated Global Ocean Station System program, a Pilot Project for marine pollution monitoring has been designed by the Joint Intergovernmental Oceanographic Commission/World Meteorological Organization Planning Group for IGOS at its recent meeting in Geneva, Switzerland.

Robert C. Junghans, Acting Director, Oceanographic Services Office, in NOAA Headquarters, headed the U.S. Delegation to the planning group meeting. Other members of the delegation were Marvin Burkhardt of the Office of the Oceanographer of the Navy and William S. Davis of the Environmental Protection Agency's Office of Air and Water Programs. Several components are included in the Pilot Project which will focus initially on oil and petroleum hydrocarbon residues.

The first phase of the Pilot Project will include:

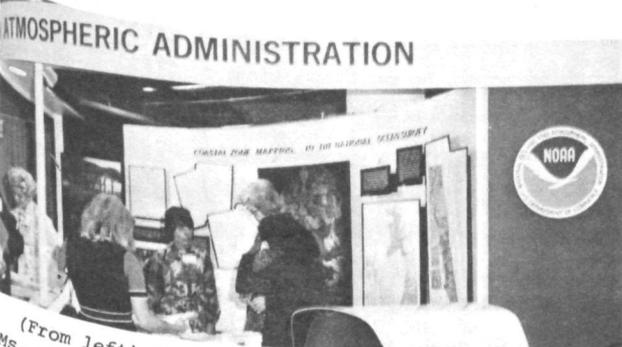
- oil slicks and other floating substances (observed visually and logged);
- particulate petroleum residues or "tar balls" (by semi-quantitative sampling and analyses);
- dissolved petroleum hydrocarbons in the surface waters (1 meter layer) of the ocean (by shore laboratory analysis of sea water samples); and
- dissolved petroleum hydrocarbons in the water column from selected areas (by shore laboratory analysis of sea water samples).

Since the transfer of atmospheric pollutants into the sea is of high interest, if suitable techniques for sampling can be identified, collection of rain water for analysis will be incorporated in the Pilot Project as well.

The operational plan for the Pilot Project is to be presented to the IOC Assembly in November 1973 for approval by Member States.

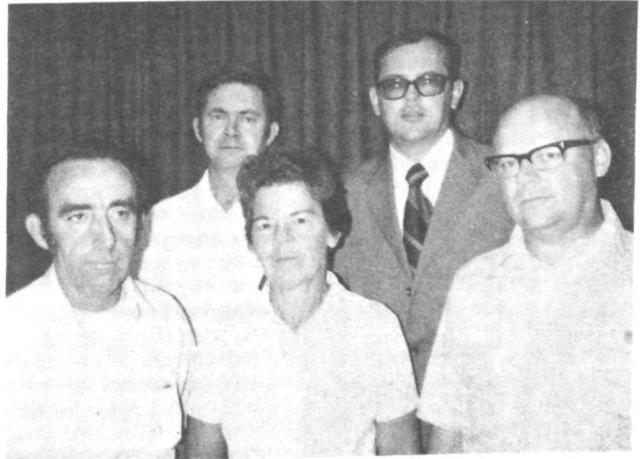
NOAA Exhibit at MTS Conference Is Manned by NOS, EDS Ladies

NOAA's exhibit at the recent Marine Technology Society Conference/Exhibition was manned by Jeannette O'Connor, Karin Baker, Ann Hall, Jenifer Wartha, Janet Farkas, and Beverly Dugan of the National Ocean Survey, and Doris Stewart of the Environmental Data Service.



(From left) Ms. Dugan, Visitor, Ms. Baker, Ms. O'Connor, and Ms. Stewart.

Anne M. Elder Receives Commerce Bronze Medal



Ms. Anne M. Elder, Weather Service and Radar Specialist at the Weather Service Office in Wilmington, N.C., has received a Department of Commerce Bronze Medal "in recognition of continued outstanding meteorological services to residents of eastern North Carolina."

With her in the photo are (from left) Joe Filion, WS&RS; Renn Honeycutt, WS&RS; Ms. Elder; Marvin Miller, Meteorologist in Charge; and Dave Stevenson, WS&RS.

NOS Field Party Surveying South Carolina River

A seven-month survey of the Wando River in South Carolina, which flows into Charleston Harbor, is being conducted by a National Ocean Survey field party led by Lieutenant Robert K. Norris.

Electronic echo sounders measuring the speed of sound through water are being employed to chart the depths of submerged obstructions which pose a hazard to marine traffic. The river was last surveyed in 1966.

Lt. Norris and his eight-man crew began the task at the swing bridge near Cainho about 18 miles north of the river's mouth. They will first sound the water's depth from Cainho to Remley Point where ship traffic is the heaviest, and then survey Nowell Creek and the upper reaches of the river.

They will investigate 17 reported obstructions--most of which lie along the river's shores--and chart the exact location of each.

NOAA Awards Luncheon

Contact your keyman immediately, if you wish to attend the NOAA Awards Luncheon and have not made your reservations. The luncheon will be held at the Sheraton Motor Inn, 8727 Colesville Road, Silver Spring, Md., on Friday, October 12, at 11:30 a.m. The entree will be a choice of steak or seafood. Tickets are priced at \$6.50. Adequate parking is available.

notes about people

Randolph S. Cross (right), the first Northwest Administrative Service Office Administrative Trainee and a Vietnam War era veteran,



received his certificate of trainee for successful completion of the one-year NOAA Administrative Trainee Program at graduation exercises on September 14. NASO Director John M. Patton, Jr., presented the certificate at an all-employee meeting in the NOAA Training/Conference Center in the Lake

Union Building in Seattle, Wash. Mr. Cross will be assigned as an administration support specialist in the Director's Office, NASO.

Dr. John Roberts, a physiologist and professor of zoology at the University of



Massachusetts, recently received a National Research Council Senior Research Associateship, awarded by NOAA and the National Marine Fisheries Service. He will devote the next 12 months to studies of the respiratory systems of scombroid fishes (tunas and tuna-like species), at the NMFS

Southwest Fisheries Center, La Jolla, Calif. The Center contains one of the world's largest and best-equipped sea-water aquariums,

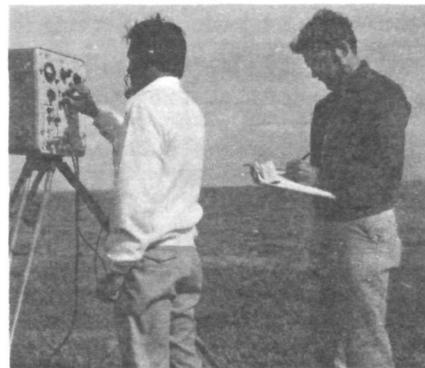
especially designed for marine research, and support laboratories for a wide variety of experiments on the physiology of marine fish.

A native of Wisconsin, Dr. Roberts received his Ph.D. in zoology from the University of California, and has been on the faculty of the University of Massachusetts since 1952.

Joe G. Walker, Weather Service Evaluation Officer at the Weather Service Forecast Office in Memphis, Tenn., has been promoted to the rank of Colonel in the Tennessee Air National Guard, and is now assigned to Headquarters, Tennessee Air National Guard, Nashville, as Weather Staff Officer.

Since 1969 he had served as Commander, 155th Weather Flight, Tennessee ANG, at Memphis, which in 1971 received an award as the nation's outstanding weather flight.

Lieutenant William R. Daniels is attending the U.S. Naval Oceanographic Office's Inter-



Lt. Daniels (right) records the electrotape distance measured during the Patuxent geodetic field operations. On the left is Lt. (j.g.) Valentino Pueblo, of the Philippines.

served aboard the NOAA Ship *Mt Mitchell* as Assistant Training Officer at the Officer Training Center at Kings Point, N.Y.

national Allied Hydrographic/Oceanographic Training Program for Officers and Civilians, in Washington, D.C. Other members of his class are from Brazil, Chile, Denmark, Indonesia, Korea, Mexico, Pakistan, the Philippines, and Singapore.

Lieutenant Daniels, a member of the NOAA Corps since 1969, previously

Deadline for World Environment Photography Contest Extended to December 31, 1973

The United Nations Environment Programme has extended the deadline for entering the World Environment Photography Contest until December 31, 1973.

Prizewinning pictures will appear in a 1974 World Environment Day Photo Exhibit to be distributed all over the world. Winners of first prizes will be invited to Nairobi, Kenya, to attend the 1974 World Environment Day Celebrations at the new U.N. Environment Programme Headquarters.

The contest rules and procedures are:

THEMES: All entries should reflect the two broad, main aims of the U.N. Environment Programme itself: (1) To identify and alert everyone to the problems of pollution in our global environment, and (2) To preserve, enhance, and improve that environment.

DIVISIONS: Professional photographers (all who earn their living as photographers); Adult amateur photographers (all over 18 who do not earn their living as photographers); and Young amateur photographers (all young people between ages of 6 and 18).

Photographers from any of the above groups may enter pictures on either or both

of the two themes. There will be separate prizes for each group and each theme.

ELIGIBILITY: Anyone is eligible to enter with the exception of present or former employees of the United Nations and their immediate families. The decision of the judges will be final. This competition is subject to all local, state, federal and international regulations.

HOW TO ENTER: Send one print (5 x 7 in. to 12 x 14 in.) of the picture you wish to enter by mail to the United Nations World Environment Photo Contest, UNEP, Palais des Nations, CH-1211, Geneva 10, Switzerland, no later than December 31, 1973. Enclose on a separate sheet of paper, your name, address, age, employment, the subject of the photo, the date it was taken, which of the two themes it represents and which division you wish to enter (professional, adult amateur or young amateur). ALL PHOTOGRAPHS AND NEGATIVES SUBMITTED TO THE WORLD ENVIRONMENT PHOTOGRAPHY CONTEST BECOME THE PROPERTY OF THE UNITED NATIONS ENVIRONMENT PROGRAMME, AND UNEP RESERVES THE RIGHT TO USE ALL SUBMITTED MATERIAL IN CONNECTION WITH THIS CONTEST AND RESULTING EXHIBIT.

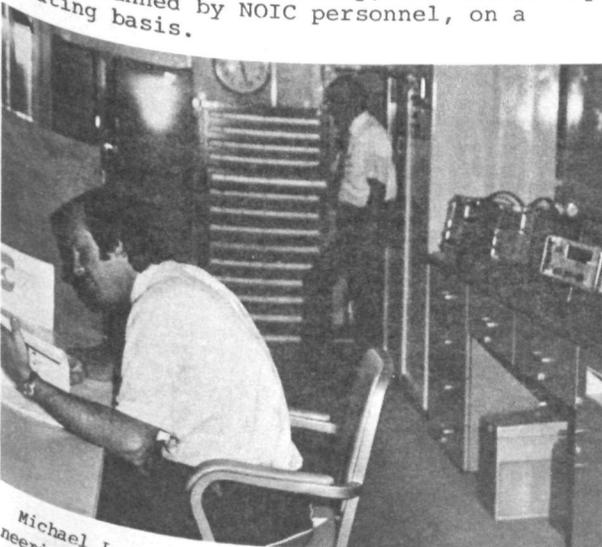
NOIC Develops Mobile Laboratory To Calibrate MESA Instruments

A Mobile Instrument Calibration Laboratory installed in a trailer type van, has been developed by the National Ocean Survey's National Oceanographic Instrumentation Center for the Marine Eco-Systems Analysis program and has been stationed near the New York Bight site at Floyd Bennett Field, N.J. The primary purpose of the laboratory is to assure that all MESA instrumentation is continuously calibrated throughout the life of the program in order that only meaningful data will be collected. In addition to calibration, the lab provides facilities for instrument inspection, check-out, repair, and system assembly, staging and training.

The basic 230 square-foot mobile laboratory is on loan from NASA. It contains precision equipment that allows for accurate calibrations or calibration checks of temperature, pressure, salinity/conductivity, voltage, frequency, resistance and time. Included in the laboratory, which is environmentally controlled to assure constant temperature and humidity conditions, is a precision temperature controlled bath which has gradients of $\pm 0.005^{\circ}\text{C}$ and a stability of $\pm 0.007^{\circ}\text{C}$ and is supplied with fresh water, saline solutions and ethylene glycol from four holding tanks installed on the van.

NOIC will perform an interlaboratory calibration for the MESA program and other laboratories to discover and minimize data discrepancies. A FAIlog program will be instituted to record and compile statistical data of instrument performance. Calibration of test equipment such as oscilloscopes, counters, voltmeters, etc., which will be used by MESA activities, will also be performed.

While it is in New Jersey, the laboratory will be manned by NOIC personnel, on a rotating basis.



Michael L. Sims (left), Staff Assistant for Engineering to the Director of NOIC and Coordinator of the Mobile Calibration Laboratory Program, and J.Z. Bell, Primary Electronics Technician, who were instrumental in the development of the laboratory, are shown inside the laboratory.

New Cheyenne, Wyo., WSFO Is Dedicated by NWS

The newly organized National Weather Service Forecast Office in Cheyenne, Wyo., was dedicated on September 7. Wyoming Governor Stanley Hathaway was among those present, and Robert C. Baskin, Deputy Director of the NWS Central Region, represented the NWS. Robert C. Beebe, Meteorologist in Charge of the new WSFO, commented that Wyoming citizens "are used to taking weather as it comes, but now they will have another weapon in the fight to make a living under these climatic conditions." He explained that a major concern in the state is potential losses to severe weather on the part of the cattle and sheep industries in addition to such problems as water supply, fireweather, aviation, recreation, and the safety of motorists who travel the sometimes lonely highways under the threat of winter storms.



(From left) Mr. Baskin; Governor Hathaway; M. Oliver Asp, Substation Management Section, CRH; and Mr. Beebe.

Department of Commerce Federal Credit Union To Offer 6-1/2 and 7 Percent Promissory Notes

Effective October 1, 1973, the Department of Commerce Federal Credit Union will begin offering to its members whose share balances are \$2,000 or more an opportunity to purchase Promissory Notes.

- Briefly, the conditions of purchase of the Notes are:
- The member must agree to maintain at least \$2,000 in his share account for a 12-month period, or as long as the Promissory Note is held.
 - The rate of interest to be paid by the Credit Union is:
 - 6-1/2 % on multiples of \$1,000, and
 - 7 % on amounts of \$5,000 or more, in multiples of \$1,000.
 - Maturity on all notes is 12 months. However, if a note must be redeemed before maturity, the holder will be paid interest at the rate of 5-1/2 % per annum for the length of time it has been held.

Further information is available from:

Department of Commerce Federal Credit Union
 Room 7056, Main Commerce Building
 Washington, D.C. 20230--202/967-4134

Branches: W.S.C. #1, Room 723, Rockville, Md., and Gramax Bldg., Room 416, Silver Spring, Md.

recipe of the week



WHITING -- ITALIAN STYLE

- 2 pounds headless whiting, fresh or frozen
- 1/4 cup Italian dressing or oil and vinegar
- 1 package (about 2 ounce) Italian-seasoned or seafood coating mix

Thaw frozen fish. Clean, wash, and dry. Dip fish into Italian dressing or oil and vinegar mixture; drain off excess. Coat evenly with Italian or seafood coating mix. Arrange in single layer in greased shallow baking pan. Bake in moderate oven, 350° F., until fish flakes easily when tested with a fork, about 25 to 30 minutes. Serve plain or with favorite tartar sauce. Makes 6 servings.

NWS Seeks MICs' Advice On Meteorologist Interns

The National Weather Service held a conference September 18 and 19 with Meteorologists in Charge of six Forecast Offices, seeking their advice on plans for recruitment, training and utilization of Meteorologist Interns.

The MIC's attending were Robert O. Cole, Jackson, Miss.; Edward D. Diemer, Anchorage, Alaska; Richard Fay, Cleveland, Ohio; Jerrold A. La Rue, Washington, D.C.; Edwin G. Provost, Topeka, Kans.; and Aaron L. Zimmerman, Seattle, Wash. Representing Weather Service Headquarters were James K. Huntoon, Chief, Manpower Utilization Staff; Burton H. Kirschner, Executive Assistant, Office of Meteorological Operations; Maurice Pautz, Technical Procedures Branch; and Andrew Husser, Weather Service Personnel Section.

The intern plan, as modified by input from the field meteorologists, will be considered at the Regional Directors Conference September 26-28.

At present, the Weather Service has about 160 Meteorologist Interns. Normally, it needs to take in about 100 new Interns each year, although manpower retrenchments in the past several years have reduced this number considerably.

Interns generally are recruited from college graduating classes or from weather-trained personnel leaving military service. They are required to have either a bachelor's degree or its equivalent in experience and education, including 20 semester hours of meteorology. They usually enter the Weather Service as GS-5's, and normally can expect to complete their internship in three years. Upon completion, they are eligible for promotion to Journeyman Forecaster, GS-11.



(From left) Mr. Kirschner, Mr. Diemer, Mr. Fay, Mr. Zimmerman, Mr. La Rue, Mr. Provost, and Mr. Cole.

Items to be considered for publication in NOAA WEEK should be submitted to:
Office of Public Affairs, NOAA, Room 221, Bldg. 5, Rockville, Md. 20852. Phone (301) 496-8243.

National Oceanic and Atmospheric Administration

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