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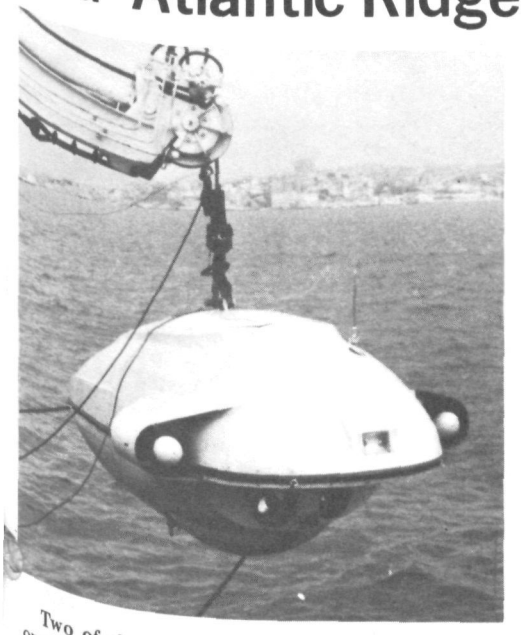
Mid-Atlantic Ridge Study To Use Submersibles



Two of three deep-diving submersibles to be used in this summer's Project FAMOUS operation: *Alvin*, operated by Woods Hole Oceanographic Institution, and *Cyana*, formerly known as *Plunging Saucer-3000*, from France's National Center for Exploitation of the Oceans.

Three small deep-ocean research craft—two French, one American—will make a total of about 60 dives to probe the black depths of the Atlantic Ocean during a three-month long expedition this summer that is the culmination of a three-year project to study one of the most significant geological areas on earth. They will seek scientific clues to the origin of the earth's crust, conditions under which metallic ores are formed, and the nature of mid-ocean earthquakes.

Operating at depths that would crush ordinary submarines, the deep submergence vehicles will permit scientists from the two nations to examine at first hand the huge rift that splits the Atlantic floor from the Arctic Ocean almost to Antarctica.

The submersible probes are part of Project FAMOUS (French-American Mid-Ocean Undersea Study), and will take place about 200 miles (320 kilometers) southwest of the Azores between June 20 and September 2.

U.S. Chief Scientist is Dr. James Heirtzler of the Woods Hole Oceanographic Institution, under the joint sponsorship of three Federal agencies, NOAA, the National Science Foundation, and the Department of the Navy. The U.S. submersible *Alvin*, owned by the Office of Naval Research and operated by Woods Hole, will make half of the dives.

The French project chief is Claude Riffaud, Director of the Centre Oceanologique de Bretagne, which operates under the aegis of France's National Center for Exploitation of the Oceans. The

(Continued on page 2)

SMS-1 Launched By NASA May 17

The first Synchronous Meteorological Satellite, SMS-1, was launched by NASA from the Kennedy Space Center on May 17. The satellite's flight into space was slowed by a faulty burn in the second stage of the three-stage Delta launch vehicle. NASA technicians are attempting to maneuver the spacecraft to the planned orbital altitude and location, making use of propellant carried aboard the satellite. If the series of manuevers proves successful, the spacecraft is expected to be on station about June 1. Its VHF communications and Space Environment Monitoring System have been tested and are performing well.

Researchers Probe Oklahoma Storms Using Latest Tornado Technology

During May, the center of maximum tornado activity in the United States moves from the southeastern states to the hot open country of the southern plains, as the seasonal skirmishes between hot and cold, and moist and dry air masses shift northward.

This year, as this intense period of severe storm activity drifts across the Oklahoma prairie, it will be monitored, probed, and pursued by NOAA scientists using the best tornado-watching tools present-day science and technology can provide.

Mounted by the Norman, Okla.-based National Severe Storms Laboratory (one of the Environmental Research Laboratories) the 1974 spring program is the latest in a yearly series of projects that began in the early 1960's, and which has evolved into the present sophisticated, multiplatform experiment.

Beginning in mid-April and running through mid-June, the 1974 experiment brings together new dual doppler and conventional weather radars, an experimental electronic tornado detector, a dense network of balloon-sounding (rawinsonde) stations and boundary layer instruments, instrumented aircraft, a tornado-hunting camera van, and scientists from NOAA, other federal agencies, and universities.

Dr. Stanley L. Barnes is overall coordinator for the NSSL's spring program. Dr.

(Continued on page 4)

Scientists To Use Submersibles in Study

Graphic representation shows Mid-Atlantic Ridge down the center of the ocean floor, bisected by the Rift Valley and with network of rifts emanating from the Ridge. White square shows operating area of Project FAMOUS.

(Continued from page 1)

French Navy will also assist in Project FAMOUS. The two French submersibles will be the bathyscaphe *Archimede*, a French Navy research craft that made seven successful reconnaissance dives last summer along the Mid-Atlantic Ridge, and the *Cyana* (formerly *SP-3000*).

Object of the study is to investigate the axis of the Mid-Atlantic Ridge, the most extensive surface feature on earth. It is a giant undersea mountain range whose tops average about 7,200 feet (2160 meters) under the sea and whose maximum depth is about 12,000 feet (3600 m.). In the Atlantic it is about 900 miles (1500 km.) wide. The ridge extends the full length of the Atlantic, then continues south of Africa into the Indian Ocean.

The submersibles will focus on a major rift valley that splits the Mid-Atlantic Ridge. Through this fissure, molten rock from deep within the earth bubbles up, accompanied by countless tiny earthquakes—as many as a dozen per hour in certain localized areas. A network of cracks in the seafloor, up to 10 miles (16 kilometers) wide and two miles (3.2 kilometers) deep, is believed to exist in the rift valley system.

Scientists aboard the three craft will undertake geological mapping, sample the water from undersea vents, and make extensive collections of the rock and mineral deposits along the rift valley and up its walls. Special tools operated from within the submersibles, consisting of drills, hammers, and devices for prying and recovering rock samples and for core sampling, have been developed for this work. The scientists will also make a complete photographic record, both still and videotape, of their observations, and will emplace earthquake detectors on the valley floor to provide a continuous supply of precise data on the dynamics of seafloor spreading and the emergency of new crustal material.

Data Requests Increase Sharply

The Environmental Data Service's National Climatic Center responded to 4,325 requests for data and information during April 1974. Responses to requests during the first four months of 1974 totaled 16,360. When compared with the January through April response totals of 9,455 and 12,052 for 1972 and 1973 respectively, this total gives an indication of the continued growing demand for climatic data and information.

Herbert P. Benner Named to Post In NWS Region

Herbert P. Benner

Herbert P. Benner has been named Executive Officer to the Director, National Weather Service Western Region, replacing Lloyd H. Magar, who has retired. Mr. Benner, who formerly held a staff position in the Region's Meteorological Services Division, received a Commerce Gold Medal in 1970 for his efforts in developing a cooperative interagency weather radar program for the Western United States.

noaa week

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Scientists Study Role of Cirrus Clouds as Severe Storm Inhibitors

Thin, high altitude, ice-crystal clouds called cirrus can cause sufficient cooling at the surface to prevent the formation of regional "hot spots" in the lowest layer of the atmosphere—perhaps inhibiting thunderstorm formation over such areas as the comparatively treeless, sun-baked region of the Midwest's "tornado alley."

In an effort to evaluate this possibility, Environmental Research Laboratories scientists are using infrared, remote sensors to study the thermal effect of both natural and artifically produced cirrus cloud decks in an experimental program that began in the spring of 1973.

During the 1973 experiments, which took place over California's hot San Joaquin Valley, a National Aeronautics and Space Administration F-104 jet made overlapping contrails at 40,000 feet, creating an artificial cirrus deck, while the infrared radiometer-equipped NASA 990 jet laboratory measured the earth's before-and-after surface temperatures. These measurements showed a temperature drop of up to 15 degrees Celsius that persisted for one hour after the artificial cirrus clouds were generated.

"In other words," explains Dr. Peter M. Kuhn, Chief of radiation studies of ERL's Atmospheric and Chemistry Laboratory, "the sun is inhibited from forming hot plumes of air over open flat land by the presence of a cirrus cloud cover at altitudes of 30,000 to 40,000 feet. The layers of ice crystals contained in the cirrus clouds block the large input of solar power over the area, reflecting sunlight back up into the atmosphere. This results in a cooler earth surface temperature similar to conditions which occur when a sweltering hot day changes to more acceptable coolness with the onset of a cirrus canopy."

"A favorite area for hot spot formation is a plowed, moderately dry field or dark sand area such as the strongly illuminated or high sun angle regions of the Great Plains," he explains. "Cities, on the other hand, generate hot spots later in the day, when their high heat capacity makes them warmer than the surrounding open, rural areas, which begin to cool near sunset.

Since the 1950's, attempts have made to link these "furnace areas" to the development of severe thunderstorms. Particularly conducive to the onset of the heavy storms are very hot, cloudless conditions, followed by rapid late afternoon buildup of cumulus clouds, and the explosive progression from swelling cumulus to giant thunderheads and a full-blown squall line.

"If the hot spots are inhibited by preceding cloudiness, then the storm activity should decrease in such regions," Dr. Kuhn says. "Recent satellite observations clearly show on a very large scale, that high, wispy cirrus over an area indeed inhibits severe storm outbreaks, and a clear link to the hot spot-storm relation is established.

Dr. Kuhn and his colleagues plan to pursue the study of thermal modification of the atmosphere by studying natural cirrus cloud effects in a series of flights between California and the West Coast of Africa this summer as part of the Global Atmospheric Research Program's Atlantic Tropical Experiment.

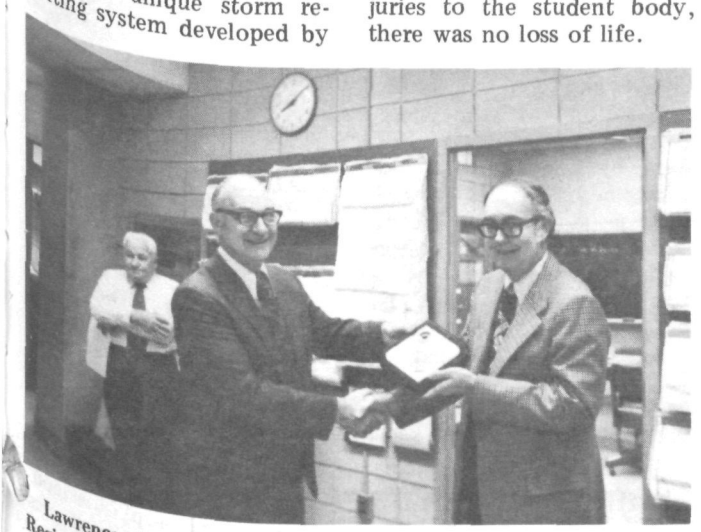
"Such experiments have practical significance," Dr. Kuhn says. "If scientists could create artificial cloud cover over hot-spot areas, it might one day be feasible to use this technique to inhibit severe weather activity in certain thunderstorm-prone areas of the United States."

Staff of WSO in Jackson, Miss., Receives NOAA Unit Citation

The National Weather Service Forecast Office in Jackson, Miss., has received a NOAA Unit Citation for outstanding performance of duties during storm warning periods on April 24, 1973.

A series of timely and accurate warnings of tornadoes and severe thunderstorms for northwest Mississippi it issued that morning alerted the population to the likelihood of damaging storms. Reports of power line breaks, a unique storm reporting system developed by WSFO Jackson and the Mississippi Power and Light Company, provided essential information concerning the location of the tornado. The information was relayed instantly to the mass media and broadcast stations.

The warnings prompted a tornado drill to be held in the Sumner School just before the tornado smashed into the school building. Despite destruction of the elementary wing of the school and over 3 dozen injuries to the student body, there was no loss of life.



Lawrence R. Mahar (center), Director of the NWS Southern Region, presented the plaque to Meteorologist in Charge Clifton Green. In the background at the left is C.J. O'Brien, Hydrologist at WSFO Jackson.

NGS To Survey Along Highway In Kansas

An 18-man National Geodetic Survey field party headed by Ivan R. Crabbe will begin in early June a geodetic survey between Emporia and Kansas City, Kans.

The survey, to be made for the State of Kansas along more than 225 miles (360 kilometers) of Interstate Highway 35, is expected to take three months to complete. The survey will pass through the counties of Lyon, Osage, Coffey, Franklin, Miami and Johnson and in or adjacent to such communities as Kansas City, Olathe, Ottawa, Gardner, Wellsville, Lebo and Emporia.

Field work planning for the survey is now being conducted by surveying technicians Wesley O. Means and Daniel Frazier.

NOAA Corps Celebrates 57th Birthday

The NOAA Commissioned Corps celebrated its 57th anniversary this year with a dinner dance May 21 at the Bethesda Naval Center. The Corps was formed in 1917.

Multimedia Red Cross First Aid Training Course Initiated

NOAA has initiated a pilot inhouse Multimedia Red Cross First Aid Training Course at its Rockville, Md., Headquarters. The program is under the direction of the NOAA Safety Office, which is headed by Safety Engineer Milton S. Aronstam, and Safety Specialist Sydney T. Smith is the Program Coordinator.

Harold M. Schantz of the National Ocean Survey and Jeannie Garvin of the Administrative Operations Division, who are presently instructing courses, received their training and instructor's rating through the facilities of the American Red Cross. NOAA personnel now in training with the Red Cross are Donald Oliver and Marsha Berne, NOS; Robert A. Wolin and Rosetta Berverlein, Finance Division; and J. Allen Wallace, Environmental Data Service.

Plans are underway to institute similar training in other NOAA elements and field installations.

Mr. Schantz (bending over) and Ms. Garvin (with paper in hand) instruct a class including National Ocean Survey employees (from left) Henry Ames (partly visible); Robert W. Derkazarian (the patient); Leonard Van Scoy; and Mary McGinley. The spectators are Donald J. French (left), Chief, Organization and Manpower Branch, Office of Management and Computer Systems; Mr. Smith; and (on the right) Mr. Aronstam.

Researchers Probe Oklahoma Storms Using Latest Tornado Technology

(Continued from page 1)

Richard J. Doviak leads the Advanced Techniques Project, responsible for development and operation of the two doppler radars and other advanced instrumentation.

Much of the original design work represented in these systems is the product of Dale Sirmans, the laboratory's chief electronics engineer. Kenneth E. Wilk is chief of NSSL operations, and J.T. Dooley is responsible for the surface station networks. Dr. Joseph H. Golden is in charge of the Storm Chase Group, and J.T. Lee directs aeronautical portions of the program.

The experiment applies the lessons—and new theory—generated by the work of preceding seasons

"These spring experiments," says NSSL Director Dr. Edwin Kessler, "are a basic source of data for the continuing study of severe thunderstorms and tornadoes in the United States. Each year we go into the field a little bit better equipped in terms of scientific knowledge and instrumentation, and each year we get a little closer to being able to say when and where a severe storm will occur, and whether it will spawn a tornado."

The problem of severe thunderstorm and tornado observation, he notes, is mainly one of complexity and size. "These storms present extremely complex processes at every stage of their life cycle. And these processes are so intricate and their manifestations so short-lived as to be very difficult to detect before they have become visible—and destructive.

"However, we think we are getting close to having this capability."

But there are numerous other relationships being explored there.

"We also want to identify and relate the surface manifestations of severe storms—gust fronts, hailfall patterns, heavy rain, tornadoes—so that we can infer something about a storm's severity from these clues," Dr. Kessler explains. "And we hope to develop better descriptions of storm energy and moisture budgets, energy transfer between the thunderstorm and its environment, and the larger-scale processes which contribute to storm formation."

The laboratory is also studying patterns of turbulence in and around thunderstorms, with an eye to rewriting the aviation guidelines relating to flight safety near severe thunderstorms.

Hurricane Preparedness Workshop Held by NWS Eastern Region

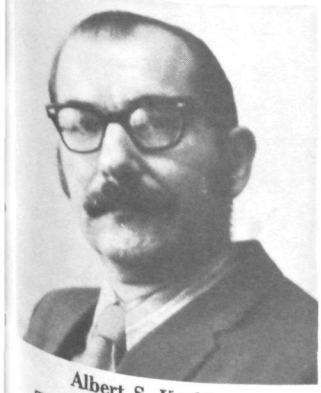
Representatives of all National Weather Service Eastern Region offices vulnerable to possible hurricane threats assembled for a Workshop from April 30 thru May 3, in Charleston, S.C.

The program included a presentation by Dr. Neil Frank, Director of the National Hurricane Center in Miami, Fla., supported by Hurricane Specialists Paul Hebert and John Hope; an explanation of the Community Preparedness Program by Joe Conti of the Emergency Warnings Branch; and a review by Andy Anderson of NWS Southern Region Headquarters of a book by Dr. Ben F. McLuckie of the University of Delaware, "Warning—A Call to Action," which deals with human behavior under warning and disaster situations.

Participants included Martin Ross, WSO Atlantic City, N.J.; Fred Davis, WSO Baltimore, Md.; Tony Tancreto and Bob Lynde, WSFO Boston, Mass.; Raymond Edwards, WSO Bridgeport, Conn.; George Young, WSO Charleston, S.C.; John Purvis, WSFO Columbia, S.C.; Joseph McCall, WSO Concord, N.H.; O.D. White, RFC Harrisburg, Pa.; John Clark, WSFO Raleigh, N.C.; Roland Laro, WSO Hartford, Conn.; John Mayer, WSO New York City; Harold Gibson, WSFO New York, N.Y.; Terry Ritter, WSO Norfolk, Va.; Bob Wassall, WSFO Philadelphia, Pa.; Joe Rigney, WSFO Portland, Maine.; Ralph Carlson, WSO Providence, R.I.; Al Hinz, WSO Richmond, Va.; Jerry LaRue and Eugene Hoover, WSFO Washington, D.C.; Roland Loffredo, WSO Wilmington, Del.; and Marvin Miller, WSO Wilmington, N.C.

Eastern Region Headquarters was represented by John Thomas, Hydrology, and Eugene Kilgore, Meteorological Services Division. William Fox, from RFC Atlanta, was also in attendance and the Sea Grant program was represented by Ken Roberts of Charleston, S.C.

Albert Kachic Is Regional Hydrologist



Albert S. Kachic

The new Regional Hydrologist at the Headquarters of the National Weather Service Eastern Region, Garden City, N.Y., is Albert S. Kachic, who has been Assistant Regional Hydrologist for the past eight years. He succeeds John Thomas who retired this month after 33 years of Federal service.

Mr. Kachic entered the Weather Service in 1961 as a river forecaster at the River Forecast Center in Hartford, Conn. He had served in the U.S. Army Corps of Engineers from 1953 to 1955, and from 1958 to 1961 was a hydraulic engineer with the Pennsylvania Department of Forests and Waters—Flood Control Division.

He received Bachelor Degrees in Meteorology and Civil Engineering from Penn State University and recently completed graduate studies in Environmental Engineering at the University of Connecticut.

Chinese Scientists Tour EDS Facilities in Boulder

Ten scientists from the People's Republic of China recently visited the Environmental Data Service's National Geophysical and Solar-Terrestrial Data Center facilities in Boulder, Colo., including the World Data Center A for Solid Earth Geophysics, as part of a National Academy of Sciences-sponsored area overview of earthquake research and data facilities. The delegation was headed by Professor Ku Kung-Hsu, President of the Chinese Geophysical Society and Vice-Director of the Institute of Geophysics Academia Sinica.

The NGSDC tour, arranged by the Cooperative Institute for Research in Environmental Sciences (formed by the Environmental Research Laboratories and the University of Colorado), was conducted by Alan H. Shapley, Center Director, and James Lander, Center Deputy Director, who described the archive of microfilmed seismograms from the Worldwide Network of Standard Seismographs, gave a demonstration of automatic digitization of strong motion seismograms, and showed a Cathode Ray Tube interrogating an on-line computer file of earthquake epicenters. Mr. Shapley also discussed the possibility of resuming data exchange with the visiting scientists, who were given samples of the Center's publications and data products.

Professor Ku Kung-Hsu signs the register at NGSDC WDC-A for Solid Earth Geophysics as Mr. Shapley (second from left) and Mr. Lander (top right) watch.

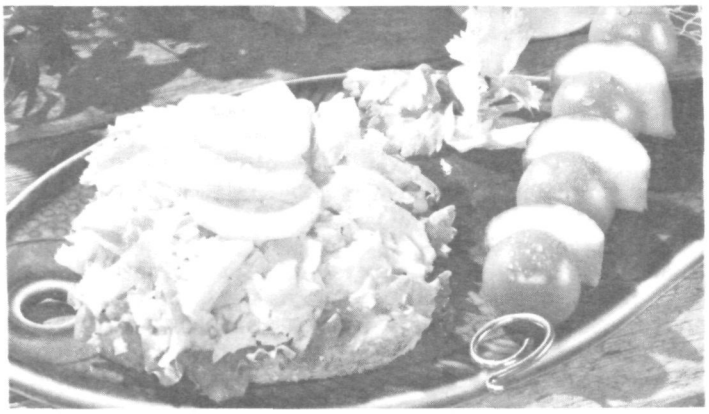
Correction

The item entitled "Employees' Association Offers Business Cards" on page 6 of the April 19, 1974, issue of NOAA WEEK contained an incorrect price. The correct price of 400 cards is $7.50.

Fisheries Service Facility in Kodiak Hosts Pandalid Shrimp Workshop

Participants in the recent Pandalid Shrimp Workshop held at the Kodiak Facility of the National Marine Fisheries Service Northwest Fisheries Center were (from left) Lael Ronhold, NMFS Kodiak; Jerry McCrary, Alaska Department of Fish and Game; Evan Haynes, NMFS Katsitsna Bay; Peter Jackson, ADF&G Kodiak; Dr. William Fox, NMFS La Jolla; Allan Carson, ADF&G Kodiak; Dr. Dayton Alverson, NMFS Seattle; Jack Robinson, Fish Commission of Oregon; Dan Hennick, ADF&G Homer; Tom Northup, Washington Department of Fisheries; Dr. Stjepan Jukic, Institute for Oceanography and Fisheries, Split, Yugoslavia; Paul Tate, ADF&G Petersburg; Dr. William Smoker, NMFS Auke Bay; Dr. Alan Beardsley, NMFS Kodiak; Terry Butler, Fisheries Research Board of Canada; Paul Anderson, NMFS Kodiak; Dr. Jerry Reeves, NMFS Woods Hole; Richard Peterson, ADF&G Kodiak; Fred Gaffney, ADF&G Kodiak; Dr. James Olsen, NMFS Auke Bay; and Richard MacIntosh, NMFS Kodiak.

recipe of the week



TUNA DANISH

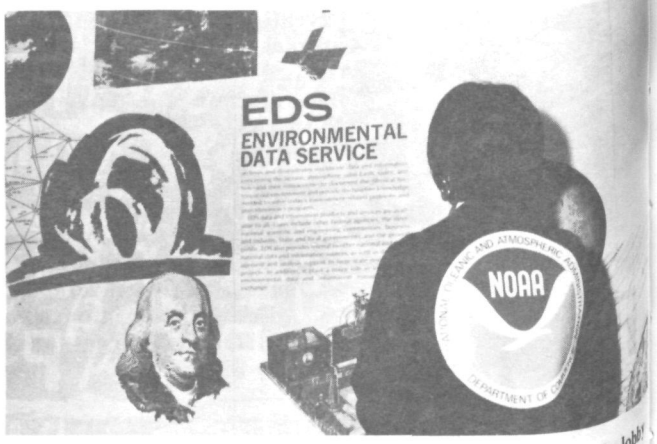
2 cans (6-1/2 or 7 ounces each) dietetic tuna
1 cup coarsely grated cabbage
2/3 cup coarsely grated carrot
3 tablespoons low calorie salad dressing (mayonnaise type)
1 tablespoon catsup
1 tablespoon lemon juice
1/2 teaspoon salt
Dash pepper
6 lettuce leaves
6 slices low calorie bread, toasted
18 cucumber slices

Drain and flake tuna. Combine cabbage, carrot, and tuna. Combine salad dressing, catsup, lemon juice, salt, and pepper. Add to tuna mixture and blend thoroughly. Place lettuce on toast. Place approximately 1/3 cup tuna salad on each lettuce leaf. Arrange 3 cucumber slices diagonally across each sandwich. Makes 6 servings. (Approximately 180 calories per serving.)

next week's best fish buys

According to the NMFS National Consumer Educational Services Office in Chicago, the best buys for the next week or so are likely to be ocean perch and breaded fish sticks along the Northeast Seaboard; breaded shrimp and king mackerel in the Southeast and along the Gulf Coast; smelt and bluepoint oysters in the Midwest; fish sticks and frozen silver salmon in the Northwest; and frozen dressed whiting and fresh butterfish in the Southwest.

New NOAA Exhibit on Display In Lobby of Page Building



An unidentified NOAAite studies NOAA exhibit in the main lobby of Page Building 2, in Washington, D.C. The exhibit, designed by Jim Shick of the Administrative Operations Division's Exhibit Design and Special Project Section and built by the Exhibit Design Group, dominates a full wall of the lobby from floor to ceiling. The display describes the missions and programs of both the National Marine Fisheries Service and the Environmental Data Service.

notes about people

Allan Schugeld of the Atlantic Marine Center's Public Affairs Office has won AMC's "Hero of the Month" award. He apprehended a suspect who stole a wallet from a secretary's desk and held him until the police arrived.

Sylvia Harris, of the Environmental Data Service's National Climatic Center in Asheville, N.C., has been appointed to serve as the Center's Federal Women's Program Coordinator. Ms. Harris succeeds Dianne Hollemans.

For their cooperation and determined efforts which resulted in completion of schedule of the elementary school on the Pribilof Islands of St. Paul, Special Achievement Awards have been presented to Richard W. Frazier, General Engineer; Jack N. Adams, General Foreman; and Harold A. Thayer, Facilities Maintenance Specialist, in the National Marine Fisheries Service Pribilof Island program.

(From left) Donald R. Johnson, Director of the NMFS Northwest Region, Seattle, Wash.; Mr. Thayer; Mr. Frazier; and William L. Peck, Acting Deputy Regional Director.

16th NWS Weather Radar Class Held

This is the Sixteenth Weather Radar Class held at the National Weather Service Technical Training Center in Kansas City, Mo., April 2-18. (Standing, from left) James A. Hayes, Kansas City, Mo.; Jerome Heideman, Neenah, Wis.; Henry C. Bigelow, Medford, Oreg.; William Frank, Amarillo, Tex.; Connie Hedgpeth, Instructor; George Russoy, Detroit, Mich.; Bob Allen, Daytona Beach, Fla.; E.J. Miller, Cape Hatteras, N.C.; and Joel Wertman, Instructor. (Seated, from left) Robert Thompson, Pittsburgh, Pa.; Robert Miller, Fort Worth, Tex.; James Skyrm, Waycross, Ga.; Kiyoji Tomita, Kwajalein, Marshall Islands; Derry Newby, Grand Island, Nebr.; and Larry Burns, Instructor.

Supervision Course Conducted at LSC

A NOAA training course in Supervision and Group Performance was conducted at the Lake Survey Center in Detroit, Mich., by Earl Laws, NOAA Employee Development Officer, from April 29 through May 1. LSC personnel who attended were Robert J. Goodnough, Robert L. Knox, Elmer F. Kulp, Jr., and William A. Bergen.

The course was also attended by the following National Weather Service employees: Robert J. Babb and James R. Taylor, Lansing, Mich.; Frederick H. Day, Sault Ste, Marie, Mich.; Charles R. Eggleton, Houghton Lake, Mich.; Elroy C. Jagler, Milwaukee, Wis.; Morton B. Perterson, Muskegon, Mich.; John P. Robertson, Evansville, Ind.; Marchall E. Soderbert, Grand Rapids, Mich.; and Gerald H. Watts and Gordon D. Thiel, Detroit, Mich.

Coastal Management Grant Awarded to State of Maryland

NOAA has made a $280,000 Federal grant to Maryland to assist the state's coastal zone management program.

The grant was made under the Coastal Zone Management Act of 1972 which is designed to ensure national and regional cooperation in achieving a balance of resource use and conservation along America's sea coasts and Great Lakes' shores. Such grants carry a matching-fund provision in which the state is required to furnish at least one-third of the funds for the program.

Maryland Governor Marvin Mandel has designated the Department of Natural Resources as the state agency to administer the grant.

In the first year of the program, Maryland's coastal zone management staff will collect and assess data on coastal resources and uses. A wetlands study will refine existing information and map the abundance, location, and specific biological functions of various wetland areas throughout the state. An archaeological resource management study will determine the locations of prehistoric coastal sites and develop guidelines for their preservation.

Other projects to be started during the fiscal year include new and revised shore erosion and shoreline geomorphological mapping, a study of critical coastal zone resources, habitats, and landscapes which will identify non-tidal wetlands, endangered fish, wildlife and plant habitats, prime agricultural areas, areas suitable for recreational activities, rivers suitable for inclusion in the State's Wild and Scenic Rivers Program, and other upland areas which have significant influence on coastal resources or processes; and an assessment of the impact of recreational boating facilities on the surrounding land and water areas.

The results of these studies will be communicated to Maryland citizens and officials through a program of public information and participation.

Supervision and Group Performance Course Held in Boulder, Colo.

Participants in the Supervision and Group Performance Course held Boulder, Colo., April 15-19, were (front row, from left) Warren O. Eckert, NWS; Jo R. Mendenhall, NBS; Margaret S. Rapier, Dorothy A. Reynolds, and Orvill McKim, ERL; Bill Coxsey, NWS; (seond row, from left) Dick Graham, ERL, Instructor; Loran W. Gearhart, Herbert L. Moore, Clifton A. Engiund, Melvin E. Velz, H. Jean Renwick, Ellis B. Burton, Clodoald Sauer, and Thomas H. MacKenzie, NWS; (third row, from left) Rudy Yoshida, ERL; George B. Overgard, Marvin E. Wycoff, Neil M. Coulter, Donald E. Wuerch, James C. Myers, Donald A. Kluckman, Ivin L. Gee, and Norman E. Prosser, NWS.

First NWS Community Preparedness Specialists Receive Training

A community Preparedness Training Course for the first group of persons selected as Community Preparedness Specialists in the National Weather Service's Community Preparedness Program was held at NWS Headquarters last week.

Under the new program, eventually, Community Preparedness Specialists will be assigned to all of the Weather Service Forecast Offices in the Nation.

Participants in the training course were (seated, from left) Palmer Scarniccia, DCPA Region Two, Olney, Md., Joseph J. Conte, NWS Project Leader for Community Preparedness, NWSH; Arlin E. Snider, NWS/Defense Civil Preparedness Agency Liaison Officer; Theodora Koshar, WSFO Washington, D.C.; J. Kenneth Covey, DCPA Region One, Maynard, Mass.; W.R. Anderson, NWS Southern Region, Fort Worth, Tex.; Richard R. Hagan, WSFO Memphis, Tenn.; Ronald L. Imes, WSFO Lubbock, Tex.; Laurence G. Shaffer, NWS Central Region, Kansas City, Mo.; (standing, from left) Daniel G. Houser, WSFO Indianapolis, Ind.; Joe Tonkin, DCPA Region Two, Olney, Md.; James E. McClanahan, DCPA Region Six, Kansas City, Mo.; Robert L. Somrek, WSFO Chicago, Ill.; D. Joseph Pedigo, WSFO St. Louis, Mo.; Herbert S. Groper, Flash Flood Program Leader, NWSH; Gerald L. Shak, NWS Eastern Region, Garden City, N.Y.; I. Ramer Racer, WSFO Boston, Mass.; Gordon E. Brokaw, WSFO Topeka, Kans.; Lawrence J. Krudwig, WSFO Des Moines, Iowa; David L. Reeves, WSFO Louisville, Ky.; Kenneth T. Koch, WSFO Atlanta, Ga.; Larry E. Mooney, WSFO Fort Worth, Tex.; Bernard L. Espositto, WSFO Little Rock, Ark.; Hugh Max White, WSFO Jackson, Miss.; Joseph Wheeler, WSFO Birmingham, Ala.; Kenneth L. Huckaby, WSFO Oklahoma City, Okla.; Clyde Stanley Hall, San Antonio, Tex.; Edward A. Shipley, DCPA Staff College, Battle Creek, Mich.; (not in photo) John R. Bryan, Jr., DCPA Region Three, Thomasville, Ga.

NCC-NWS Airport Orientation Training Program Nears End

The last class of employees of the Environmental Data Service's National Climatic Center who applied for the cooperative NCC-National Weather Service airport orientation training program began its classroom training the last week of April. The program was developed from ideas expressed by the NCC Equal Employment Opportunity Committee and has been conducted through a cooperative agreement between NWS Eastern Region headquarters and NCC. Sixty-eight NCC employees have completed the training since the program's inception in 1971.

National Seminar To Consider Minced Fish Products

The production and use of new fish products rich in food value and flavor will be the theme of a technical seminar to be held in Boston, Mass., on June 12 and 13.

NOAA and the National Fisheries Institute are jointly sponsoring the event, the second such seminar called to exchange scientific, industrial, and market information dealing with the mechanical recovery and use of minced fish. Participants will include National Marine Fisheries Service scientists, engineers, and market specialists; representatives of companies engaged in the manufacturing, processing, and marketing of fishery products; and persons engaged in similar minced fish research and development activities in foreign countries, States, and private institutions.

International and domestic interest in minced fish as a commercial product is high this year because of the extensive attention devoted to it during last December's FAO Technical Conference on Fishery Products in Tokyo, and because of the increase in usage of mechanical fish flesh separators both domestically and abroad.

Discussion topics will encompass research, development, testing, product or processing innovations, presentation of new products to seafood consumers, and market promotional techniques. The feasibility of combining minced fish with vegetable protein to achieve an even wider variety of nutritious inexpensive products than now exists, and results of research conducted in the past year will be discussed. Changes in industrial equipment, new equipment available, and equipment performance will be reviewed, and processing techniques will be demonstrated on machines set up by equipment firms in the Boston area.

Discussions of the broad economic and marketing considerations relating to both raw material and minced-fish blocks and other products will include the development of U.S. standards, desirable inspection methods for minced fish blocks, and the naming of minced fish products and procedures.

Further information may be obtained from Director, Science and Technology, National Fisheries Institute, 1730 Pennsylvania Ave., NW., Washington, D.C. 20006; and J.R. Brooks, Fishery Inspection Service, F27, Department of Commerce, NOAA, NMFS, Washington, D.C. 20235.

National Oceanic and Atmospheric Administration

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