



# NOAA WEEK

U.S. DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

## ERL Scientists Monitor San Andreas Fault Creep

Scientists at the Environmental Research Laboratories' San Francisco-based Earthquake Mechanism Laboratory are searching for the meaning of movements along the San Andreas fault in general, and a small, slow movement called "fault creep" in particular, which may hold important clues to collisions of gigantic crustal plates, and to the occurrence--or dearth--of major earthquakes in California's crowded coastal zone.

Creep is a non-seismic slip motion--that is, a motion that does not generate seismic vibrations--along certain segments of faults in the earth's crust, such as the San Andreas fault system in California. But the creep mechanism is not yet fully understood.

(Continued on page 6)

## Dr. Stewart Receives Decoration From the Republic of Colombia



Dr. Harris B. Stewart, Jr. (right), Director of the Environmental Research Laboratories' Atlantic Oceanographic and Meteorological Laboratories in Miami, Fla., recently received a decoration from the Republic of Colombia for his services to that country in the field of oceanography. He is shown above accepting the medal and certificate from Roberto Garcia, the Colombian Consul General in Miami.

## NWS Installs Flash Flood Automatic Warning System

The National Weather Service is putting into operation near Wheeling, W. Va., the first of a new series of warning systems that will automatically trigger an alarm when a flash flood is impending.

It plans to install a number of such automatic-warning systems in the Eastern U.S. where fast-rising flood waters from heavy rains are a chronic threat. The need was made clear in 1969 when the remnants of Hurricane Camille released 27 inches of rain in about eight hours on the James River Basin of Virginia, drowning 153 people.

The new flash-flood warning system has three main elements, linked together by electrical circuitry: a robot water-level sensor at an upstream point on the river; an intermediate station several miles or more downstream to provide electric power to the sensor; and a community-alarm station from which warnings can be spread quickly to the public.

The upstream station has an enclosed float device which operates like a bulb in a toilet tank to activate an electric current when a critical water level is reached. This device may be mounted on an appropriate site such as a bridge support. The sensor is connected to a weatherproof box containing a battery, signal transmitter, and associated circuitry. The signal goes from here to the intermediate station, which is located where both electric power and telephone service are available, and finally to an alarm station in a firehouse, police station, or other emergency center manned 24 hours a day, seven days a week.

When the alarm is triggered, it is the responsibility of community officials and the news media to see that the public is alerted by emergency broadcasts, and perhaps by siren, according to pre-arranged plan.

The Weather Service plans to install seven additional automatic-warning systems for flash floods within the next two years. There already are signed agreements for three such systems in Green Brook, N.J. (near Plainfield); Wayne County, Ohio (near Wooster); and Waynesboro, Va. (which is in the area deluged by Hurricane Camille). Negotiations are underway for an additional system in West Virginia, and others in the Carolinas and Maine.

## Week-Long Research Expedition By Diver-Scientists Is Underway

Three University of Michigan scientists have begun a week-long stay on the ocean floor off Grand Bahama Island, in a research expedition sponsored by NOAA's Manned Undersea Science and Technology (MUS&T) program.

Each will specialize in a major study area and assist the others in all aspects of their projects. Dr. Donald B. Macurda, Jr., is studying the biology of holdovers from the geologic past known as crinoids; Dr. Gordon E. McBride is investigating the relationship of coral animals and algae; and Dr. Lee H. Somers is evaluating the use of new diver support equipment and techniques for underwater scientific studies.

Their underwater base, the Perry Hydro-Lab, a steel cylinder 16 feet long and eight feet in diameter, is permanently installed in 50 feet of water about a mile off Lucayan Beach, Freeport. It has eight viewports, a four-foot "picture window," and an underside hatch for diver entry and egress.

Dr. Macurda's crinoid study will include a determination of the influence of depth on their abundance and distribution and an observation of their feeding habits and daylight and nighttime behavior.

Dr. McBride plans to collect samples of hard corals every ten feet from 50 to 90-foot depths (more, if possible) for preservation, de-calcification and analysis of zooxanthellae (a symbiotic algae which plays an important role in growth and development of coral animals.)

Dr. Somers will evaluate diving equipment and techniques developed at the University of Michigan under a NOAA Sea Grant, and formulate criteria for training scientists for future underwater habitat projects.

## Captain John O. Boyer Receives SAME's Colbert Medal for 1971

Captain John O. Boyer, Chief of the National Ocean Survey's Marine Chart Division has been awarded the Colbert Medal of the Society of American Military Engineers for 1971. He was cited for "outstanding leadership and initiative in directing the National Ocean Survey's role in the coordination of the Cooperative Charting Program with the U.S. Power Squadrons and the U.S. Coast Guard Auxiliary, resulting in basic improvement in nautical charting of vital interest to military operations."

The medal is awarded annually in memory of Rear Adm. Leo O. Colbert, former Director of the Coast and Geodetic Survey, predecessor of the National Ocean Survey, to an individual "for the most outstanding contribution to military engineering."

## Checks Reflect New Health Benefits Rates

The new premium rates for Health Benefits went into effect with the biweekly salary checks dated May 10, 1972, and semimonthly salary checks dated May 11, 1972.

## New Credit Union Brochure Available

A new Department of Commerce Federal Credit Union Brochure is now available. "FACTS ABOUT..." briefly describes its services, policies, rules, and operating procedures, including loan and payment schedules. Copies are available at all Credit Union offices, through the Field Representatives, and will be mailed upon request.

## NOAA Participates in Career Day at the University of Hawaii



Shown above is some of the activity at the NOAA Booth at the recent University of Hawaii Career Day. In the photo at the left, Mary Lynne Godfrey (left) and Tom Hida (center) National Marine Fisheries Service, discuss some of the NMFS work in the Pacific with a student. In the right-hand photo, Cynthia Suehiro, Junior Fellow at WSFO Honolulu, points out some of NOAA's challenging careers to one of the 250 me-



eteorology, oceanography, marine biology, mathematics and geology majors who inquired about job prospects in Hawaii and on the mainland U.S.

Other NOAA participants were Edwin Lee and Junior Fellow Glenn Sugiyama, NMFS; and from NWS, meteorological technician Sylvia Graff and Junior Fellow Wesley Young, WSFO Honolulu; and Frank Kocsis, Pacific Region Headquarters.

# NWS Regional Directors Attend Spring Conference



The National Weather Service Spring 1972 Regional Directors' Conference was held at NWS Headquarters, Silver Spring, Md., May 2-4. Shown above are some of the participants in the conference. They are (seated, from left) Max A. Kohler, NWS Associate Director, Hydrology; Lawrence R. Mahar, Southern Region Director; Paul H. Kutschenreuter, Pacific Region Director; Dr. John W. Townsend, Jr., NOAA Associate Administrator; Dr. Robert M. White, NOAA Administrator; Dr. George P. Cressman, NWS Director; F. W. Burnett, NWS Deputy Di-

rector; Silvio G. Simplicio, Eastern Region Director; Karl R. Johannessen, NWS Associate Director, Meteorological Operations; and Hazen H. Bedke, Western Region Director. (Standing, from left) Merritt N. Techter, Director, NWS Systems Development Office; Stuart G. Bigler, Alaska Region Director; Charles G. Knudsen, Central Region Director; Dr. William H. Quinn, NWS Assistant Director, Oceanography; and Dr. Frederick G. Shuman, Director, NWS National Meteorological Center.

## Rose G. Kerr Receives Commerce Bronze Medal

Rose G. Kerr, National Marine Fisheries Service research home economist who recently retired after 28 years of Government service, has received the Department of Commerce Bronze Medal for distinguished service.



Mrs. Kerr gained national recognition as the authority in Government on selection, preparation and serving of seafood. Her duties were national in scope and involved planning, organizing, and directing home economics programs and activities related to U.S. fisheries.

## R. Gray Receives Special Achievement Award

Robert S. Gray of the Environmental Data Service's Aeronomy and Space Data Center and Engineer-in-Charge of the Ionosphere Sounding Observatory operated by NOAA at NASA's Rocket Sounding Station, Wallops Island, Va., has received a Special Achievement Award for disassembling and cleaning, under adverse conditions, a \$60,000 ionosphere sounder damaged by fire. He worked several days in the fire-damaged building and managed to restore the equipment to operating condition and resume operation with less than four days of lost records.

## NASO Celebrates First Anniversary

Recently, employees of the Northwest Administrative Service Office celebrated the first anniversary of the establishment of the office with the help of a large cake and a personal message from Robert L. Carnahan, Deputy Assistant Administrator for Administration. Mr. Carnahan praised the employees for their efforts in making the NASO concept a successful reality.

The office was established in order to provide consolidated administrative services covering the functional areas of Personnel, Budget and Finance, and Administrative Operations. At the present time, these services are provided to National Marine Fisheries Service and National Ocean Survey activities in the states of Washington, Oregon, Idaho, California, Alaska, and Hawaii.

## Data Center Evaluating Seismograph Stations

The Environmental Data Service's National Geophysical Data Center is now systematically evaluating all of the stations of the NOAA/National Science Foundation-funded Network of Standard Seismographs. This evaluation will provide ERL maintenance teams with information they need during their periodic visits to the stations. The assessment will include information about the timing systems, magnifications, noise levels, recording quality and data backlog.

## Administrative Trainee Program

The Administrative Trainee Program offers comprehensive administrative training opportunities for NOAA employees in lower level jobs as well as recent college graduates, who desire a career and show potential in the administrative field. Graduates of the program go into a variety of fields in the general area of administration.

From six to nine trainees in grades GS-4 through GS-9 begin the one-year training program with an orientation to NOAA's basic missions, an overview of the major administrative areas and a tour of NOAA facilities in the Washington, D.C. area. Their on-the-job training consists of rotating work assignments in at least three administrative areas. Self development, an important aspect of the program, is completed through taking selected college level and Civil Service courses, attending NOAA seminars, and meetings of professional organizations. At the end of the program the trainee receives a permanent assignment and is promoted to a professional administrative position.

Since the Administrative Trainee Program began in September, 1970, thirty-one employees have participated. Approximately twenty-five new trainees will enter the program each year. To be eligible for the program, a candidate must be either: (1) a NOAA employee in grades GS-4 through GS-9 who has demonstrated above average performance in his current position; or (2) a recent college or junior college graduate who meets the Civil Service entrance requirements and demonstrates motivation, self-reliance, ability to deal with others, and willingness to accept responsibility.

It is anticipated that the next three groups of Administrative Trainees will begin training in July 1972, September 1972, and January 1973. Selections for the July group will be made from candidates whose applications are currently on file in the NOAA Personnel Division. At the proper time, announcements for the September and January groups will be distributed, so that all interested employees may apply.

## FPM Changes to Reduce Labor-Management Bargaining Restrictions

Civil Service Commission Chairman Robert E. Hampton indicated in a recent address that the Federal Personnel Manual will be significantly revamped within the near future to widen the scope of bargaining. CSC is currently soliciting comments from all interested parties and hopes to publish the FPM changes by

early fall. Possible alterations include: clearly identifying what is mandatory and what is merely advisory, removing provisions which unnecessarily restrict bargaining, and defining specific criteria for determining what bargaining authority should be delegated to agencies.

Chairman Hampton emphasized the evolutionary aspects of the Federal labor-management program. He foresees a steady growth in the scope of bargaining to the eventual, distant point of full collective bargaining. The challenge for the Federal community, he stressed, is to participate in this evolutionary process rather than fight the inevitable. The changes to the FPM are necessary to this participation.

## Political Activity

Presidential election years with their primaries, conventions, and campaigns always stimulate questions in the area of political activities of Federal employees. Following are some general guidelines which outline what Federal employees can and cannot do in the political arena.

A Federal employee may:

- vote as he chooses
- express opinions on all political subjects and candidates
- make voluntary contributions to any political organization
- display bumper stickers on a private car
- participate in a nonpartisan local election in which party designation, nomination, and sponsorship are completely absent
- attend political rallies and join political clubs, but not take an active part in their operation

A Federal employee may not:

- be a candidate for National or State Office
- solicit others to become candidates for partisan offices
- campaign for or against a political party or candidate
- use his car to transport voters, except his family, to the polls
- distribute campaign materials
- march in a political parade
- promote political activities
- write for publication or publish any article or letter soliciting votes for or against any political party or candidate
- make a political contribution in a Federal building or to another employee

## Grievance Procedures

The grievance program prescribes an employee grievance system under which an employee, or group of employees acting as individuals, may request personal relief in a matter of concern or dissatisfaction which is subject to the control of management officials of NOAA. Employees are entitled to file a grievance about any matter relating to their employment or working conditions except those personnel actions referred to in Chapter 13, Discipline, of the NOAA Personnel Handbook as "major adverse actions."

Major adverse actions are defined as removals, suspensions for more than 30 days, and reductions in rank or compensation not made at the employee's request. These are excluded from the grievance procedures because specific appeal procedures which differ from the consideration of grievances apply to them. If in doubt, employees should contact their personnel office for guidance as to whether appeal or grievance procedures are appropriate.

Grievance procedures consist of two parts: informal and formal. The informal procedures must be followed; the formal procedures may be used if the employee is not satisfied with the results of the informal process. This article will discuss only the informal procedures.

Both the aggrieved employee and the official receiving the complaint for informal resolution shall be free from restraint, interference, coercion, discrimination, or reprisal in connection with the processing of grievances.

Informal grievances may be presented within certain time limits unless, in the opinion of the person attempting to make the informal resolution, there is a justifiable reason for the delay. A grievance concerning a continuing practice or condition may be presented at any time.

However, a grievance concerning a particular act or condition must be presented not later than 15 days of the act or condition or the date the employee became aware of it. Action under the informal procedures should be completed within 14 days.

The informal grievance is submitted to an official who is at the lowest organizational level with authority to grant the relief the employee seeks. Normally, this will be the supervisor or the supervisor next in line.

The informal grievance may be either oral or written. If it is presented orally, however, before any investigation is made or any adjustment sought, the person attempting the informal resolution must reduce the substance of the complaint to writing and have the written concur-

rence of the employee that it is accurate. The employee's grievance must give a full, detailed explanation of the matter with which he is dissatisfied and state the corrective action he is seeking.

The official who receives an informal grievance is required to make a prompt, full, objective investigation of the complaint. He must counsel the employee and keep a record of his counseling because this record must be submitted to the deciding official when and if a formal grievance is initiated. Unless the employee gives his express consent, this official is not at liberty to reveal the employee's identity until the employee files a formal grievance.

If the employee is not satisfied with the result of his informal grievance, he may submit a formal grievance. In a future edition of *Personnel Perspective*, formal procedures will be outlined.

## NESS Computer Operator Training Program

On April 17, 1972, NOAA's National Environmental Satellite Service initiated a specialized Computer Operator Training Program in its Data Processing and Analysis Facility (DAPAF). Ten trainees, all Vietnam veterans hired at the GS-3 level under the Veteran's Readjustment Act, began an 800 hour course of instruction designed to qualify them for GS-4 Computer Operators. The 800 hours of training are divided into four phases. Phase I consists of a 16-hour orientation to the NESS organization and mission. The next 320 hours of training take place at the Civil Service Commission's Automatic Data Processing Training Center. Under a special agreement drawn up between NOAA and CSC, the Training Center is providing the trainees with a special course in basic computer operations, designed to meet specific NESS requirements. Phase III consists of 160 hours of instruction in DAPAF specialized operations. This phase will cover specific details of each item of equipment the trainee will be expected to operate, as well as DAPAF operating rules and routines. The final phase of training is on the job. It consists of 304 hours of actual shift work under the "buddy" system. Each trainee is paired with an experienced operator who serves as his instructor and monitors his performance.

Upon successful completion of the program, the trainees will fill jobs in DAPAF as GS-4 Computer Operators with the potential of eventually rising to the GS-7 journeyman level.

## Robot Weather Observers Installed At Coast Guard Light Stations

The last of three robot weather observers--automatic "winds only" systems--was recently installed atop the Coast Guard Light Station at Smith Point, Va. This and similar systems installed at Point Montara, Calif., and Whitefish Point, Mich., were necessary because the impending conversion of the stations by the Coast Guard from manned to unmanned status meant that there would no longer be anyone at the stations to take weather observations.

The systems were designed and installed by the Equipment Development Laboratory of the National Weather Service's Systems Development Office, under EDL Project Engineer Richard R. Reynolds. Each is composed of a data processor, wind speed and direction sensors, and a frequency shift transmitter, and sends, for dissemination on the weather network, the average one-minute wind speed, the peak one-second wind speed during the past hour, and average one-minute wind direction values.

According to John Lovkay, Jr., Director of the Equipment Development Laboratory, information from Smith Point goes by Coast Guard radio to the Milford Haven, Va., Coast Guard station, which relays it to the Norfolk, Va., WSO. There is a teletypewriter circuit direct from the Point

Montara Light Station to the WSFO at Redwood City, Calif. Information from Whitefish Point--which also includes the local temperature--goes by Coast Guard telephone circuit to the Coast Guard Station in Sault Ste. Marie, Mich., which relays it to the WSO there.

Four more systems are scheduled to be installed by the NWS Engineering Division this summer in Alaska at soon-to-be automated Coast Guard lighthouses at Capes Spencer, Decision, St. Elias and Hinchinbrook. In addition to wind speed and direction, these stations will report altimeter setting, precipitation, and temperature.



The photo shows weather instruments atop the Smith Point, Va., Coast Guard Light Station.

### REMINDER

When the rest of the Nation went on Daylight Saving Time at the end of last month, Arizona, Hawaii, Michigan, and eastern Indiana remained on Standard Time.

## Scientists Monitor Fault Creep

(Continued from page 1)

The existence of this non-seismic fault motion on California's San Andreas fault was first discovered in 1956 south of Hollister at the Cienega Winery, which straddles the fault zone and is being slowly torn in half by the fault movement. Dr. Don Tocher, director of the Earthquake Mechanism Laboratory, did the pioneering research on the phenomenon while he was with the University of California, and continues this work with his associates in the San Francisco laboratory.

The effect of fault creep on man's works is distinctive: everything on one side of the fault has shifted relative to everything on the other side, the shift usually occurring across a narrow zone about 15 feet wide. In cities like Hollister, the offsets produced by creep are evident in sidewalks, curbs, cracked pavement, crooked streets, kinks and bumps in fences, foundations, walls, and other structures, and in land formations.

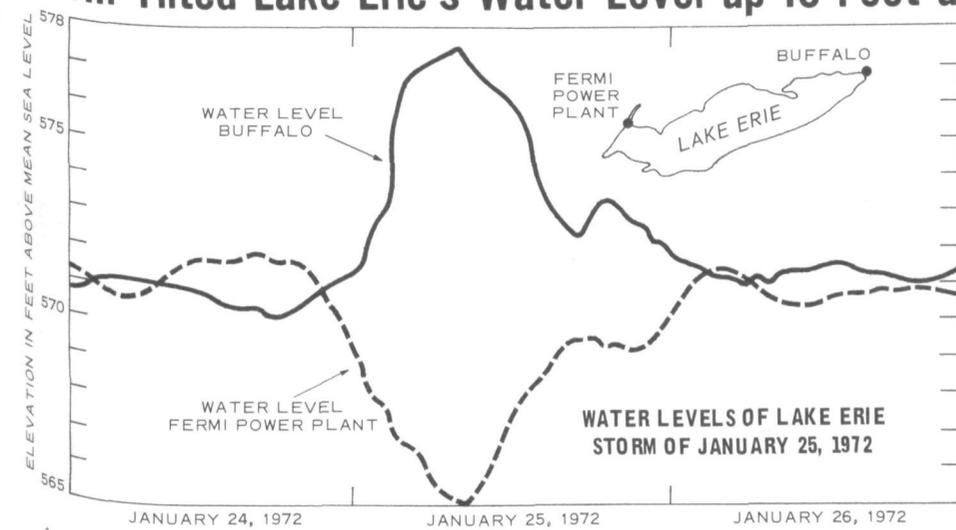
Scientists at the Earthquake Mechanism Laboratory have set up instruments wherever creep is revealed by these characteristic distortions. The laboratory's network of continuously recording creep meters includes eight instruments on the San Andreas fault near Hollister, eight on the Calaveras fault near Hollister, and six on the Hayward fault in Hayward and Fremont. The laboratory also measures creep in oil fields--for example, along the Buena Vista thrust fault near Taft, California--and measures the creep that occurs along faults after some earthquakes.

The instruments use invar metal rods installed at regular angles across the fault. Compression and elongation of the rods indicate the amount and direction of creep and are recorded by electronic gear near the installations.

Survey lines several hundred yards long are also run by the laboratory. The objective here is to define a very straight line across the fault, and then to measure offsets in the line caused by fault creep. The National Geodetic Survey shares this interest in horizontal distortions caused by fault creep, which moves geodetic markers, changes the direction of property lines, and otherwise affects the geodetic network's precision. The Survey has been measuring these displacements along the San Andreas since 1906, when the major fault break associated with the San Francisco earthquake occurred.

Dr. Robert D. Nason, a research geophysicist with the Earthquake Mechanism Laboratory, conducts the field program of creep measurement, and the related effort to identify additional areas where there is evidence of fault creep. Dr. Chi-Yu King, another Earthquake Mechanism Laboratory geophysicist, has been working on the development of creep theory, using data from the network to construct mathematical models of fault behavior.

# Storm Tilted Lake Erie's Water Level up 13 Feet at One End



America on paths that converge in that region, and Lake Erie, the southernmost and shallowest, is most susceptible to this type of storm action. Its general southwest-northeast orientation is close to the mean wintertime position of the polar front and exposes it to wind action of such storms, many of which reach their full intensity in the area, making it the most treacherous of all the Great Lakes.

For a number of years the Lake Survey Center

and the National Weather Service have been studying these storms and their potential danger for vessel groundings and flooding. The NWS has achieved considerable progress in forecasting these happenings, so the public may be forewarned.

The LSC is studying their effect on restricted channels and harbors where shippers and recreational boaters may be trapped by unexpected waves or currents, and on shore property, to secure information helpful in designing structures that will prevent loss or damage from these abnormal conditions.

While this particular storm did some property damage, had it happened at the height of the navigational season, its result might have been much more disastrous.

A violent, wind-driven storm struck out of the west last January 25, tilting Lake Erie so that the water level at Buffalo, N.Y., on the east end was almost 13 feet higher than it was at the Fermi Power Plant north of Monroe, Mich., on the west end. The average difference between the level in these two locations is about two inches.

The tilting of the lake waters is an aftermath of strong winds and strong barometric pressure gradients which pile the water up at one end and cause the other end to be extremely low. As the forces abate, a seiche forms. This is a regular fluctuation of water levels back and forth with diminishing magnitude, much as water sloshes in a broad, shallow pan.

The Great Lakes are subject to numerous intense squall lines that move across North

## NOIC Acquires Versatile Test Facility

A precision-controlled salinity-temperature environmental facility is now fully operational at the National Ocean Survey's National Oceanographic Instrumentation Center.

The Center's capability to test, evaluate and calibrate oceanographic instrumentation and sensing systems has been expanded by the addition of this new equipment. Three major sub units, specifically a cylindrical bath and console assembly, an outside equipment building and the refrigeration unit, make up this versatile laboratory test facility.

The cylindrical bath, which is thirty inches in diameter and eighteen inches deep, provides an unobstructed working volume of approximately 7.3 cubic feet. The equipment has been designed to use working solutions of distilled water, tap water, natural or artificial sea water and ethylene glycol-water solutions.

Bernard B. Polanin, Facilities Manager, says the facility will be used to meet the expanding requirements for calibration and test services for a large number of activities in the governmental, academic and industrial communities.

## Gemo Yakubovsky Receives Bronze Medal



Gemo Yakubovsky (right), Flight Service Quality Control Officer at the Los Angeles Weather Service Forecast Office, is shown receiving a Department of Commerce Bronze Medal from Hazen H. Bedke, Director, National Weather Service Western Region. Mr. Yakubovsky was recognized for his many outstanding contributions to the aviation programs of the Weather Service.

## NMFS Shrimp Workshop Attracts 18 Latin American Biologists



Shown above are the participants in a two-week workshop in shrimp culture conducted at the Galveston Laboratory of the National Marine Fisheries Service Gulf Coastal Fisheries Center. They are, from left (front row): Craig B. Kensler, FAO; Martha Signoret, Mexico; Anna Restori, FAO; Albert K. Sparks, NMFS; M. Alice Kenslow, NMFS; Michael N. Mistakidis, FAO; Zoula P. Zein-Eldin, NMFS; Esperanza Kasuga, Mexico; Lope Garcia Pinto, Venezuela. (middle row): Daniel Novoa R., Venezuela; Mario Cobo Cedeno, Ecuador; Patricio Arana, Chile; E. Americo Lopez, El Salvador; Francisco Villegas, Uruguay; Luis B. Lares, Venezuela; Luis E. Martinez Silva, Colombia; Gonzalo Godoy, Venezuela; (back row): Ray S. Wheeler, NMFS; George W. Griffith, NMFS; Raymundo L. Manzanilla L. de Llargo, Mexico; Antonio Renato V. Ladeira, Brazil; Corneliu R. Mock, NMFS; Richard A. Neal, NMFS; Arthur C. Simpson, FAO; Hugo Montesinos Romero, Venezuela; and Olintho da Silva, Brazil.

Staff members of the Galveston Labora-

tory lectured on nutrition and physiology; diseases, identification of postlarval and juvenile shrimp, marking or tagging techniques, sea water filtration for chemical analyses, and sedimentology as related to shrimp.

Intensive laboratory sessions provided individual experience in actual research activity, and field trips were made to Palacios, Tex., where pond culturing research is conducted by the Texas Department of Parks and Wildlife, and Angleton, where pond work is carried out by Texas A&M University under the Sea Grant Program.

In addition to the success of visitors and those in charge of the workshop in coping with language problems, highlights of the program included a lecture on "Economic factors and shrimp culture in the United States," by Dr. Jack Parker of the Texas A&M Sea Grant Program, and the successful culturing of about half a million brown shrimp from eggs spawned in the laboratory to the postlarval stage.

## NOTES ABOUT PEOPLE

Ola Watford and William Jones of the Environmental Data Service's National Geophysical Data Center, Boulder, Colo., are serving on the Planning Committee for the National Conference on Minority Participation in Earth Science and Mineral Engineering, to be held in Golden, Colo., June 7-9.

Dr. David Miller represented the National Marine Fisheries Service at a recent meeting of the Scientific Committee of the International Association of Fish Meal Manufacturers, in York, England. Dr. Miller, the Animal Nutrition Program Leader at the College Park Fishery Products Technology Laboratory, was appointed to the Committee on Methods for Determining Protein Quality, which will report at the October meeting to be held in Rome.

Robert H. Hanson, a cartographer in the National Ocean Survey Geodetic Research and Development Laboratory, was recently elected Chairman of the Council for Computational Photogrammetry, Photogrammetric

Surveys Division, American Society of Photogrammetry.



This photo from the NOAA Ship DISCOVERER was taken during festivities marking the departure of Captain Robert C. Munson, former Commanding Officer of the Ship. From left to right are: Ernest Doak, Capt. Munson, William J. Guthrie, Commander Archibald J. Patrick, and Charles K. Howard.

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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