

NOAA WEEK



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

Veterinary Panel Calls Pribilof Seal Harvest Humane

Sea Grant Colleges To Be Designated

Secretary of Commerce Maurice H. Stans has announced that four United States Institutions will receive the designation of Sea Grant Colleges. They are the University of Washington, the University of Rhode Island, Oregon State University, and Texas A & M University.

Formal ceremonies marking the occasion will be held in the Secretary's office on September 17.

"This is an historic moment in the marine affairs of the Nation and one in which the Commerce Department, as the national civil focus for oceanic matters, is proud to participate," Secretary Stans said.

"In the 19th century, the Land Grant College concept began to widen our national horizons in agricultural and mechanical arts. The Sea Grant College concept, working through existing institutions, will help America toward more effective development and conservation of our final unexplored frontier, the oceans.

"I know of few other programs which offer as much long-term promise for the Nation."

Since the Sea Grant Program was created in 1966, it has invested more than \$40 million in projects in 27 states, the Virgin Islands, and the District of Columbia. Currently, there are approximately 90 active individual projects, and 13 institutional grants covering a total of 457 projects, in the areas of fisheries and aquaculture, ocean engineering, coastal zone resources management, marine pharmacology and pharmaceuticals, pollution, ecological studies, mineral resources, marine and coastal zone law and economics, biological oceanography, seafood science and technology, management and preservation of the environment, man in the sea, and physical and chemical oceanography.

A panel of six distinguished Doctors of Veterinary Medicine has found the annual Pribilof Islands fur seal harvest humanely conducted.

The panel, in a preliminary report after viewing the Pribilof operation, stated unanimously that killing methods "cannot be criticized from the standpoints of humaneness and efficiency."

The panel also pointed out that "not a single instance of inhumaneness was noted among...visitor reports (obtained from tourists), independently collected over a three-week interval in 1971."

Early this year, Commerce Secretary Stans invited the team of nationally known veterinarians, headed by Dr. C. Roger Smith, Professor of Research at Ohio State University's Department of Physiology and Pharmacology, to review sealing practices of the National Marine Fisheries Service, and to make recommendations, if possible, for improvement.

While on St. Paul Island from July 7 through July 14, the group conducted its investigation with complete freedom of action and with the cooperation of all NMFS employees involved in the harvest.

Highlights of the report were:

-- In the present operation, good management and supervision aid in achieving humaneness.

-- The Aleut sealers are continuously supervised, performing their strenuous, dangerous jobs "in a serious manner and without evidence of malice toward the animals."

-- Animals were not forced to travel at maximum speed from the beach to the killing field, and were rested en route where it appeared desirable.

-- Killings were confined entirely to male seals, generally in the 3 - 4-year age class. (Widely circulated advertisements have implied that baby seals are taken, which is never the case.)

Labor Contract Signed In Boulder Affects 170 Employees



On August 27, a negotiated contract was approved by the National Bureau of Standards/Boulder Laboratories and the NOAA/Environmental Research Laboratories with Local 2186, American Federation of Government Employees.

The contract, executed under the provisions of a Presidential Executive Order, covers approximately 170 employees of the two Commerce agencies in Boulder.

This is the first multi-unit/ multi-bureau labor contract in the Department.

Shown above at the contract signing are: Seated (from left) - Dr. Wilmot N. Hess, Director, NOAA's Environmental Research Laboratories; Philip F. Biddle, President, AFGE Local 2186; B. W. Birmingham, Director of NBS Boulder Laboratories. Standing (from left) - E. A. Hubin, Management Chief Negotiator; Glenn L. Seubert, Union Chief Negotiator.

Satellite Training Workshop Scheduled

A Central Region Satellite Training Workshop has been scheduled for Kansas City on September 14 and 15 to cover the use of satellite data in the Central Region.

Speakers will be Vincent J. Oliver, chief, and Edward Ferguson, meteorologist, of the Applications Group in the National Environmental Satellite Service's Office of Operations; Bill Williams, satellite specialist at the National Weather Service National Severe Storms Forecast Center in Kansas City; and Dr. Theodore Fujita, of the University of Chicago's Department of Geophysical Sciences, an eminent authority on the analysis and use of satellite data in mesoscale meteorology.

AMOL Reaches Goal on First Day Of Combined Federal Campaign

At the Miami, Dade County, Fla., 1972 Combined Federal Campaign kick-off meeting on Thursday, September 9, Dr. Harris B. Stewart, Jr., Director of NOAA's Atlantic Oceanographic and Meteorological Laboratories, announced that the AOML has reached 100% participation and 100% of its dollar goal for this year's campaign.

He stated, "This is the fifth consecutive year that my organization has accomplished this goal. I am extremely proud of my people for their unselfish participation in this worthwhile community program."

Sea Grant Colleges (continued from page 1)

Among the National Sea Grant Program's major accomplishments are identification of Great Lakes mineral deposits valued at more than \$300 million, the first commercial harvest of cultured shrimp, new methodology for coastal zone management decisions, innovative fishery technology, acoustic counting of fish populations, and a system to use deep, cold ocean water as an aquacultural nutrient source.

Designation as a Sea Grant College, the Secretary said, is a high honor, symbolizing a mutual recognition of continuing responsibility by the Department of Commerce and the institution to maintain and develop the excellence and relevance of the institution's Sea Grant Program.

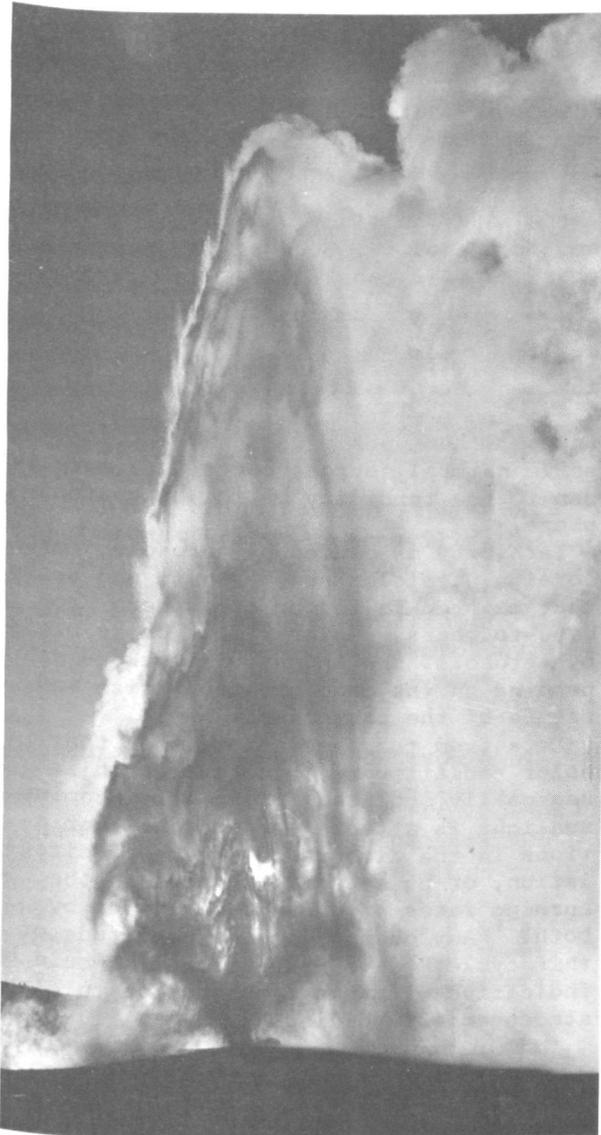
"The four universities accorded this designation have set exceptionally high standards of effort, performance, and innovation in their marine programs," he said. "Their designation stands as an inspiration for the many other institutions involved in this vital area. Their selection was by no means an easy one, for so many institutions receiving Sea Grants have made outstanding progress."

Veterinary Panel (continued from page 1)

-- Clubbing is a rapid, highly efficient and humane method of rendering the animal unconscious when properly performed.... Clubbing, followed by exsanguination, constitutes painless, humane euthanasia.

-- Quick, deep unconsciousness followed stunning, with not one recovery of consciousness in the 30-60 elapsed seconds between the stunning and sticking of the 3200 animals viewed by the panel.

NOAA Scientist Reports Geyser- Earthquake Link



(produced by the astronomic combinations which generate ocean tides), and tectonic (or structural) stresses often associated with earthquake activity.

According to earthquake theory, tremors occur when subterranean stresses exceed the capacity of surrounding rock structure, which ruptures and causes stress-relieving slippage along zones of weakness, or faults, in the earth's crust. By filtering out the effects of barometric pressure and earth tides, Dr. Rinehart was able to isolate the influence of these earthquake-related stresses on the periods between geyser eruptions.

The time span of these strain episodes for a major earthquake appears to be two to three years for the stress buildup prior to the earthquake, followed by a two-to-three-week relaxation period. Strain episodes associated with small earthquakes have a repeatable pattern and appear to last a few days.

The three most fully documented geysers in the United States are Old Faithful and Riverside, both in Yellowstone National Park, and Old Faithful of California, located at Calistoga, Calif. Of these, the Yellowstone geysers showed the strongest correlation with earthquake-related stresses.

Rinehart's analysis of variations in the eruption interval of the Yellowstone Old Faithful over the past century, and major earthquakes during the same period within about 60 miles of the geyser, shows a clear and consistent pattern: two to four years before every major earthquake, the interval between geyser eruptions begins to decrease, reaching a minimum near the time of the earthquake, and then rises for a few years.

The search for reliable earthquake prediction techniques is the subject of intensive research in NOAA and other government and private organizations. Because stress accumulations are apparently related to earthquake generation, measurements of strain along active fault zones form an important element in that quest.

The patterns reported by Dr. Rinehart suggest that geysers are natural instruments for detecting the strain episodes associated with earthquake activity. In fact, visitors to Old Faithful years hence may discover they are viewing a giant strain gage as well as one of the world's great natural wonders.

Old Faithful shows signs of stress when earthquakes are imminent, according to Dr. John S. Rinehart, senior research fellow at NOAA's Environmental Research Laboratories.

Dr. Rinehart reports that analysis of extensive records for several geysers indicates the frequency of eruptions is partly controlled by naturally varying mechanical stresses. Apparently, as stresses build up in the earth around a geyser's hot-water "plumbing," the time interval between eruptions decreases; as stresses are relieved, the interval between eruptions increases.

The most influential forces acting here are atmospheric pressure, earth tides

Texas Area Storm Evacuation Maps Being Prepared

NOAA is preparing six storm evacuation maps covering the Galveston-Houston area in Texas. The small-scale, special purpose maps will depict areas subject to flooding and elevations that may afford "safety islands" for storm evacuees, and will be distributed by the National Weather Service to public officials, Civil Defense, Red Cross and other agencies involved in evacuating people from hurricane-endangered areas.

The maps will cover generally an irregular area extending from Freeport on the coast, north to Houston, east to the Winnie-Stowell area and south to Whites Ranch and the coast. Such communities as Texas City, La Marque and Baytown also will be included.

Input for the maps is being provided by a field party headed by Dale Fuller, which is investigating ground levels and contours and inspecting highway, railroad and ferry evacuation routes.

The maps, which will be printed at a scale of one mile to one inch, will show, in distinctive color tones, areas subject to flooding in increments of five or ten feet above sea level. Surfaced and un-surfaced evacuation roads, their existing county, state and federal route designations and the number of lanes for each, as well as railroads which may offer avenues of escape, will be identified. Details will be sufficiently clear so that the maps can be reproduced by mass circulation media, including newspapers.

NOAA's storm evacuation mapping program will eventually cover all flood-prone area along the Atlantic and Gulf coasts where hurricanes may strike.

Lake Survey Establishes Temporary Gages To Check Elevations of Bench Marks

Three teams from Lake Survey's Engineering Division have established seventy temporary water level gages in the Great Lakes. By comparing the mean water surface elevations obtained from readings of these temporary gages, in combination with records of gages permanently maintained for charting activities, water level information, etc., it will be possible to verify or adjust the elevation of bench marks at particular sites in the Lakes. This method of carrying elevations from site to site along a lake is known as a "water level transfer" and is used as a substitute for instrumental leveling.

Study Shows Man Not Responsible For High Atmosphere Turbidity

A recent finding by NOAA scientists indicates that high-level air over Hawaii has not shown a continuous increase in turbidity due to human activity in the past 13 years.

The Hawaiian study by Howard T. Ellis and Dr. Rudolf F. Pueschel of the Atmospheric Physics and Chemistry Laboratory's Mauna Loa Observatory, found no persistent trend in what is called insolation, or the rate at which solar energy passes through the atmosphere. According to Mr. Ellis and Dr. Pueschel, their findings support the hypothesis that on a global scale natural sources contribute more than man to the turbidity of the high atmosphere.

Turbidity is caused by aerosols, small foreign particles such as dust and smoke, that may remain in the atmosphere from days to years. Solar radiation is blocked by aerosols, the amount of blockage depending on the concentration, size and nature of the particles.

Data from the observatory show that solar radiation reaching the earth is seasonally cyclical. That is, incoming sunlight is affected by seasonal variations in the atmosphere's general circulation, or by seasonal changes in the burning rates of organic fuels, or by both. "Any changes in the amplitude of this cycle," says Dr. Pueschel, "would be indicative of man's contribution to global atmospheric turbidity."

Within the annual cycle, solar radiation passing through the stratosphere appeared to be affected more by natural than by manmade aerosols. This is because the concentrated power of volcanoes blows tremendous amounts of aerosols into the high atmosphere as compared to the relatively meager quantities of manmade aerosols that reach those altitude levels.

The NOAA scientists believe that their observations may well be representative of high-level atmospheric conditions for the Northern Hemisphere and possibly for the world as a whole.

2500 Geodetic Controls Contribute to Airport Safety

Approximately 2500 geodetic control stations have been established on about 750 airports in the United States and its possessions. They are part of a system of geodetic controls which contribute to the safe movement of aircraft landing or taking off from airports.

Air Weather Service Joins NWS/EDS Training Program



The Air Weather Service's Data Processing Division, headquartered at EDS' National Climatic Center in Asheville, N.C., has joined the National Weather Service/National Climatic Center effort to provide in-house and airport training in the observational rudiments of meteorology. Training of the first two Air Weather Service employees is scheduled to begin soon.

The training program, an outgrowth of the NCC's Equal Employment Opportunity Committee activities, is aimed at broadening the experience base of employees in or below the GS-5 grade level.

Through the cooperation of the Air Weather Service, Henry Vigansky, a retired Air Force weather observer, will augment the NCC instruction team of Horst Beckert and Bruce Blankenship.

NCC trainees Calvin McCoy (left) and Don Duckett (right) are shown above with E. A. Rodney, MIC, at instrument console at the Asheville airport.

\$1,000,000 Sea Grant Awarded

NOAA has awarded a \$1 million Sea Grant to support the fourth year of operation of the University of Wisconsin's Sea Grant Program. The focus of the program is effective management of the marine and coastal environment of the upper Great Lakes.

The university's Sea Grant Program, coordinated by Dr. Robert A. Ragotzkie, has gained statewide support, as evidenced by a State Legislature appropriation that will constitute a major part of the university and industry matching funds.

Program plans, both regionally and locally oriented, include research on Lakes Michigan, Superior, and Huron. A major effort to combine research and advisory services to make possible better management decisions has been carried on in Green Bay. The Wisconsin Sea Grant group, attempting to obtain an overall view of the bay, has undertaken research in management, economics, and marine recreation as well as physical, biological, and chemical interactions.

Together with research teams, marine advisory service representatives try to help communities and industries better cope with problems of waste disposal and water quality management. The specialists also assist communities in work with the Environmental Protection Agency and in obtaining EPA planning grants, and advise and assist the paper industry, and other small industries and groups.

Under the new grant, Wisconsin scientists will continue and expand their efforts in the underwater minerals program, including mineral placer investigations that emphasize understanding of the processes leading to placer deposits, and identification of ocean sites most favorable for their formation.

Climatic Center Receives Bond Participation Award

Dr. Robert M. White, NOAA Administrator, recently presented a Treasury Department "Minute Man Flag" to William H. Haggard, Director of the National Climatic Center, in a ceremony at the Washington Science Center.

The blue and white flag is the second highest award offered by the Treasury and is given to groups of 100 to 999 employees attaining at least 90% participation in the Payroll Savings Program.

NCC reached the 92% mark with 330 of its 359 employees enrolled. Sparking the campaign in the Asheville-based group was Keyman William M. McMurray, who received a personal letter of appreciation from Dr. White.



Dr. White and Mr. Haggard Display Minute Man Flag'

Officials Named To NWS Southern Region Posts

Dr. Ray E. Jensen, the new Chief of the Data Acquisition Branch at the National Weather Service Southern Region Headquarters in Fort Worth, Tex., was formerly the North Dakota State Climatologist.



Dr. Jensen joined the Weather Service at Fargo, N.D., in 1956, after spending six years in the Air Force. In 1960 he became principal assistant at Brownsville, Tex., and in 1962 was selected for a Weather Bureau scholarship at Iowa State University. In 1963 he was assigned as advisory agricultural meteorologist in Griffin, Ga., and in 1966 as agricultural service operations meteorologist at Kansas City Regional Headquarters.

He took leave without pay to do graduate work at North Dakota State University in 1967, and upon his return to the Weather Service in 1968 as North Dakota State Climatologist, continued his graduate work. He received his Ph. D. last May.

David H. Owens, forecaster in Oklahoma City, Okla., has been named MIC at Austin, Tex.

Prior to his assignment at the Forecast Office in Oklahoma City, he was an instructor at the National Weather Service/Federal Aviation Administration Academy, also in Oklahoma City. He joined the NWS at Midland, Tex., in 1961, after nine years with the Air Weather Service, where he had both forecasting and supervisory assignments.

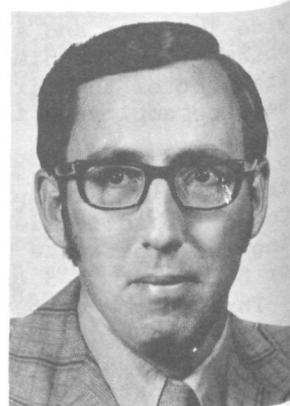
He has attended the University of Oklahoma and Oregon State University.

Elden V. Jetton, Meteorologist in Charge at El Paso, Tex., since 1968, has been named MIC at the National Weather Service Forecast Office in Little Rock, Ark.

After entering the Weather Service at Cleveland, Ohio, in 1942, he served in Anchorage, Summit, and Fairbanks, Alaska, and Washington, D. C., before taking leave without pay to complete his college work at the University of Kansas. He returned to Cleveland as a forecaster after receiving his degree in 1947. In 1952 he moved to El Paso as an aviation forecaster and became principal assistant there in 1963.

Mr. Jetton has done graduate work at Massachusetts Institute of Technology and at the University of Texas at El Paso.

Ernest S. Ethridge, former weather service specialist at El Paso, Tex., recently reported to his new position as Official in Charge at the Weather Service Office in Shreveport, La.



Mr. Ethridge was a section leader and forecaster in the U. S. Navy before entering the Weather Service at El Paso in December 1959. In October 1963 he accepted a position in Antarctica, and returned to El Paso the following year. He became supervisory meteorological technician there in June 1970, and weather service specialist in September 1970.

California Cemetery Is Site Of Most Prominent Triangulation Station

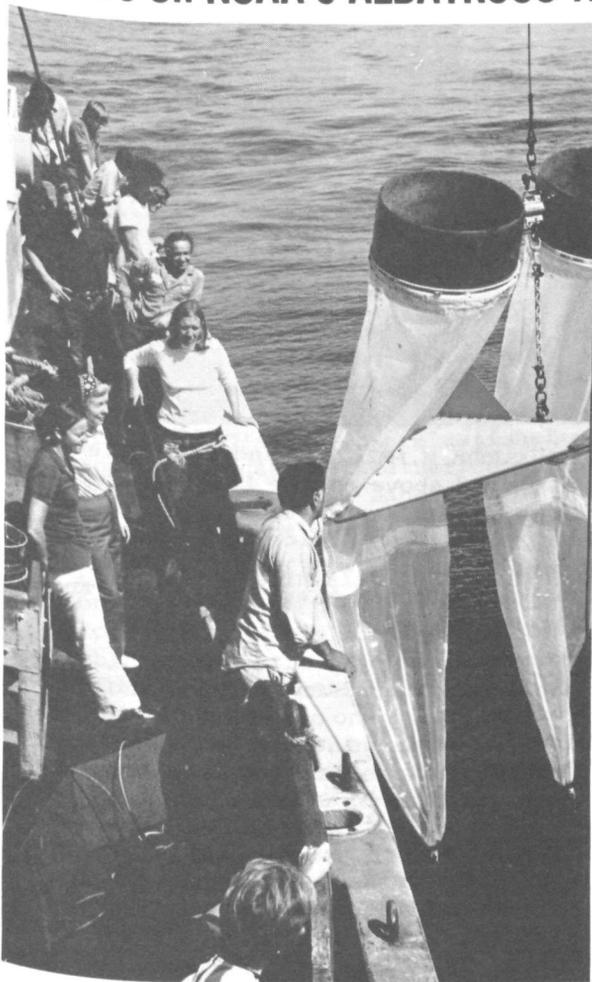
What is probably the nation's most prominent NOAA triangulation station (marking the latitude and longitude of a specific point in the NOAA national surveying network) is located in a cemetery. It is situated atop a nine-foot-high granite monument in the center of Monument Hill Memorial Park near Woodland, Calif. The station marker dates back to 1880 and was moved to its present position when the hollow brick pier to which it was attached was demolished and the granite monument erected by the

cemetery. Leo A. Critchlow of NOS's mark maintenance crew said that the marker was prominently placed in the cemetery when the people who purchased the land for the cemetery were concerned about what to do with the triangulation station.

Fish Facts

Oysters vary in size, texture, and flavor according to where they were harvested.

NMFS Woods Hole Summer Staff Cruises On NOAA's ALBATROSS IV



Biology students and other summer staff of the National Marine Fisheries Service Woods Hole Biological Laboratory recently left routine work behind and spent a day at sea as part of their summer work experience. They went aboard the NOAA Ship ALBATROSS IV during brief cruises to test its propulsion system, deck machinery used in taking marine samples for biological and statistical research, and new electronic logging system.

The students are shown above watching plankton nets being raised after a 15-minute tow to collect fish larvae and microscopic marine life in surface waters.

Use of the otter trawl was demonstrated by dragging the net along the ocean bottom and then winching it in over the ship's stern.

Fishery biologist Robert Livingstone identified species of herring caught and pointed out distinguishing characteristics of winter and summer flounder.

Early Cartographic Engravings Published by Ocean Survey

The National Ocean Survey has published its collection of 19th-century copper-plate engravings of the Pacific Northwest, representing the most romantic period of American cartography.

The historical engravings include 26 marine charts made as part of the 1838-42 United States Exploring Expedition of Admiral Charles Wilkes, U.S.N. They were issued originally in the mid-1840's. A few of the original charts still exist, carefully preserved against deterioration. The new series of reprints is the first to be issued since the originals were published about 125 years ago. The Wilkes engravings are dated 1841.

The experience gained in their production contributed materially to the nautical chart engraving program of the U. S. Coast Survey (predecessor of the National Ocean Survey) of the late 19th century. Several of the artistic craftsmen who engraved the earliest charts of the U. S. harbors and coastal waters worked on the plates. Wilkes was assigned to the Coast Survey for a brief period while the engravings were being made.

The copper engravings include an interesting map of the Oregon Territory, seven charts of the Columbia River, most of Puget Sound, and charts of the Sacramento River and San Francisco and San Pablo Bays.

Other areas covered are Grays Harbor, Strait of Juan de Fuca, Admiralty Inlet, Port Discovery and selected ports, harbors, and inlets.

Lithographic copies are available of the Exploring Expedition Charts of Northwest America at 75 cents each from the National Ocean Survey, Distribution Division (C44), Washington, D. C. 20235. Remittances should be made payable to NOS, Department of Commerce.

U.S. Fishery Products To Be Promoted At German Food Show Beginning Sept. 25

U. S. fishery products will be exhibited and promoted at the world's largest food show in Cologne, Germany, Sept. 25 - Oct. 1. International trade specialists will coordinate fair activities for the U. S. fishery industry. In 1969, 1,876 exhibitors from Germany and other European countries participated.

Employees Receive Length of Service Awards



Lake Survey Center, National Ocean Survey, employees who received length-of-service awards recently were: 30 years - Carl B. FELDSCHER, Thomas H. FREEMAN, and Thomas W. FLYNN. 25 years - Francis B. LEE. 20 years - Albin L. BARBUZINSKI, Donald C. DOMINICK, Joseph PALERMINO, John L. GRUM-

BLATT, John M. MALCZYK, and Mary Ellen MANSER. Pictured above at the Lake Survey Center's 30-year award ceremony are: (from left) Operations Officer Cdr. Sigmund R. Petersen, Thomas W. Flynn, Joseph Schanta, Thomas H. Freeman, Carl Feldscher, and Frank A. Blust.

Environmental Data Service employees who recently received length-of-service awards are: 30 years -- Charles KINCAID and William MOLO of NODC; Edward KOEHLER of ESIC; and Lewis PIERCE of NCC. 25 years - Dorothy BUGBEE of EDS Headquarters. 20 years - Bob OSBORNE of EDS Headquarters.

National Ocean Survey Mid-Centent Field Area employees who received length-of-service awards in August 1971 were: 30 years - Wilson A. ZIEGLER, Mark Maintenance; and Ivan L. CRABBE, Party G-16. 20 years - Joe T. MIZELL, Party G-20; and Harvey S. MURPHY, Party G-20.



John S. GOTTSCHALK, left, of the National Marine Fisheries Service, is shown receiving his 25-year length-of-service pin from NMFS Director Philip M. Roedel.

Awards for 35 years of service were recently presented to Victor J. SAMSON and F. M. WOOD, of the NMFS Northwest Region.

National Weather Service Central Region employees who received length-of-service awards in August 1971 were: 30 years - Mathias G. BATES, Springfield, Ill.; Leo F. JESKE, Substation Management Section; Edward P. JOHNSON, Louisville, Ky. 25 years - Max R. GRIFFITH, Neenah, Wis. 20 years - William E. LOCKETT, Evansville, Ind.; Bernard P. Oelke, Kansas City, Mo.; and John A. WARD, Waterloo, Iowa.

The National Weather Service Pacific Region recently presented a 30-year length-of-service award to Robert H. BURNZ, PMRWS Barking Sands.

National Weather Service Western Region employees who received length-of-service awards during August 1971 were: 35 years - John W. FULLER, San Diego, Calif.; and Alfred B. NELSON, Red Bluff, Calif. 30 years - Elmer P. SCALET, San Francisco, Calif.; 25 years - Donald D. HOWARD, WRH DATAC. 20 years - Billy D. ALLEN, Auburn, Wash.; Donald H. MORAN, Phoenix, Ariz.; and John P. MAZUR, Tucson, Ariz.

National Oceanic and Atmospheric Administration

ERRATA NOTICE

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

Discolored pages

Faded or light ink

Binding intrudes into the text

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

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