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NWS Micronesians Are Transferred to TT Government

Since July 1951 the National Weather Service has employed Micronesians as weather observers at Koror, Ponape, Truk, and other in the Trust Territory of the Pacific (TT). A fifth station was established at Majuro in 1955. Micronesians were trained and supervised by American officials-in-charge and staff members of the NWS Pacific Region headquarters in Honolulu. An NWS policy has been to train Micronesians to manage the TT Weather Services Offices as well as to operate them. Accordingly, beginning in 1968, promising Micronesians were selected for OIC positions and formally trained for this role. By January 1974 Micronesians were in charge at all five of the TT O's. The only Americans now assigned to these stations are electronics technicians—one at each station.

A further step toward independent operation of the TT O's by Micronesians was taken this week when an interagency agreement between the NOAA NWS and the Trust Territory of the Pacific Islands became effective. Under terms of the agreement, the Micronesians (30 in number) were transferred from NOAA to the government of The Trust Territory of The Pacific Islands. The NWS will continue to maintain equipment and station facilities and will provide program guidance and assistance through officials. There will be no changes in surface and upper air (rawinsonde) observational programs. Forecasts and warnings based on data provided by the Micronesians are vital to the safety and well being of local populations and are essential for an efficient air and sea transportation system throughout the Pacific, especially in Micronesia. The TT weather stations are included in international meteorological observing networks which cover the globe.

This historic event marks the culmination of a technical development training program for Micronesians in weather work which began over twenty years ago with the establishment of the first Weather Technical Training School at Truk in 1954.



Kim Novotny, a student at South Kitsap High School in Kitsap County, Wash., who was working on a special project at the Manchester Experiment Station to receive academic credit, vaccinates a coho salmon. See article on page 3.

Porpoise Regulations Are Issued

The Commerce Department has set a 1975 goal of a 50 percent reduction below the 1974 level in the rate of porpoises killed in U.S. yellowfin tuna fishing operations, and has issued regulations designed to achieve that goal, Robert W. Schoning, Director of the National Marine Fisheries Service, has announced.

Achievement of the goal will mean a reduction in porpoise mortality from one per ton of yellowfin tuna caught in 1974 to one per two tons in 1975. A reduction from an estimated 117,000 porpoises killed in 1974 to approximately 58,000 in 1975 will result if U.S. tuna fleets set on porpoises at about the same rate in 1975 as they did in 1974, Mr. Schoning said. The precise number will depend upon the number of sets on porpoises and the tons of tuna taken.

"Our goal is to achieve the purposes of the Marine Mammal Protection Act of 1972, which required that the porpoise mortality and serious injury rate be reduced as closely as possible to zero within the state of science and technology," Mr. Schoning said. "The new regulations are expected to accelerate the downward trend of porpoise mortality experienced in recent years without inflicting severe economic damage on the American tuna fishermen."

He also pointed out that additional porpoises are killed by foreign tuna fishermen who operate under no regulations that protect porpoises. "There is a need to insure that foreign fishermen, too, will make a greater effort to protect the porpoises," he said, "and our government will be taking further steps to encourage other governments to reduce porpoise mortality."

The three changes in the current regulations governing U.S. commercial yellowfin tuna purse seine fishing operations, published in the Federal Register and effective on January 3, are:

—All U.S. yellowfin tuna purse seine fishermen holding certificates under a general permit must attend training sessions to

(Continued on page 2)

New Orleans, Mississippi Delta Area Storm Evacuation Maps To Be Published

Seven storm evacuation maps will be published early this year for New Orleans and the Mississippi River Delta. The small-scale maps, designed to facilitate evacuation of people from endangered areas, are part of a series of 180 maps being published by the National Ocean Survey for Atlantic and Gulf coast areas subject to flooding from hurricane and other high waters. Thirty-one have already been issued.

The new storm evacuation maps will cover New Orleans and the Mississippi River from about 25 miles west of New Orleans southeast to the Mississippi Delta, Lake Pontchartrain and part of Lake Borgne. Within the area are parts of the Parishes of Jefferson, Lafourche, Livingston, Orleans, Plaquemines, St. Bernard, St. Charles, St. John the Baptist, St. Tammany, Tangipahoa and Terrebonne. In

addition, numerous small communities will be shown, including Ponchatoula, Laplace, Grand Isle, Chef Menteur and Buras.

The maps, which show emergency evacuation routes, areas subject to flooding, and elevations which might afford "safety islands" for storm evacuees, are distributed to state and local officials and community emergency preparedness committees by the National Weather Service and are available also to the public.

To date, maps have been issued for three Gulf coast areas—New Orleans to Mobile, Ala., Galveston to Houston, Tex., and Corpus Christi, Tex.; the Atlantic coast from Charleston, S.C., to Savannah, Ga.; the Greater Tidewater area of Virginia, including Norfolk; and New York-New Jersey coastal areas, including all of Long Island.

EDS Receives N.J. Inshore Water Data

The Public Service Electric and Gas Company of New Jersey has released to NOAA environmental data collected in the inshore waters of New Jersey, north of Atlantic City (centered at 39° 28' North latitude and 74° 15' West longitude).

The data, deposited in the Environmental Data Service, was collected as part of a site survey for a proposed nuclear generating station by several research groups under contract to the Public Service Company. Data sets consists of six biological reports, two geological/geophysical reports, three water quality (chemistry) reports, 13 physical oceanographic reports (currents, waves, tides, hydrography), 98 analog seismic reflection profiles, and digitized depth, temperature, salinity and current observations.

The reports contain detailed information on ecological studies; physical properties of water masses; currents; tides; hydrography; and geology/geophysics.

The data in scientific report form and analog form are available from EDS on loan or microfilm copy. Automated data are available as magnetic tape copy or machine listing. Write the National Oceanographic Data Center, EDS, NOAA, 3300 Whitehaven St., Washington, D.C. 20235, or phone (202) 634-7441.

Porpoise Regulations

(Continued from page 1)

ensure that they are personally aware of the provisions of the Marine Mammal Protection Act of 1972, regulations based on the Act, and methods they must use to protect porpoises;

—The fishermen must use an additional rescue technique for porpoises, by stationing two men in a small boat close to the net and readily available to extricate and release all porpoises entangled in the net; and

—A technical revision in the wording of existing regulations concerning corkline net hangings clarifies its applicability to only a part, rather than the entire net.

The three changes in the regulations are the most recent step in the NMFS continuing effort to reduce the porpoise mortality rate.

They are based on recent research conducted by NMFS and on the results of proposals made at an informal public hearing held by NOAA on December 10 and 11, attended by representatives of the fishing industry, conservationist and protectionist organizations, and government agencies.

For more than two years, NMFS has worked with conservationists, protectionists, the



Shown at the recent combined dedication ceremony for the new National Weather Service and Federal Aviation Administration facilities at the Olympia, Wash., airport, are (from left) John Lwellyn, Olympia Weather Service Specialist; Dale Gough, Director of NOAA's Northwest Administrative Services Office in Seattle, Wash.; Barry Aronovitch, Meteorologist in Charge at the Olympia WSO (Fire Weather); Larry Zimmerman, MIC at the Weather Service Forecast Office in Seattle, Wash., who represented the NWS Western Region Director; Frank Taylor, Official in Charge of the Olympia WSO; and Bob Haywood, Olympia WSS.

Master of Ceremonies for the occasion was the Director of Olympia's Chamber of Commerce, and the 56 dignitaries who attended included the mayors of Olympia, Lacey, and Tumwater, Wash. The program included a weather briefing, and tours of both facilities and was followed by a luncheon for all guests hosted by the Port of Olympia.

ERL Funds Coastal Remote Sensing Research

A \$27,000 grant for continuing research on monitoring ocean bottom currents, tides, and wave heights of the coastal area has been given to two scientists at Old Dominion University in Norfolk, Va., by the Environmental Research Laboratories.

The grant recipients are principal investigator, Dr. John C. Ludwick, Director of the School of Sciences' Institute of Oceanography; and co-principal investigator, Dr. Preston B. Johnson, an associate professor of electrical engineering at the School of Engineering.

"The shore face of the inner continental shelf represents one of the most dynamic of all marine environments," Dr. Ludwick says. "Its sediment transport system, as regulated by the near-shore tide system, is intimately related to a spectrum of critical coastal zone problems."

fishing industry, the Marine Mammal Commission and its scientific advisors to establish regulations and improve fishing methods and gear to protect marine mammals, especially porpoises which are incidentally killed during yellowfin tuna purse seine fishing operations.

Additional informal public hearings in regulations are tentatively scheduled for late in 1975. Regulations may be changed, deleted, or added, based upon any new data. "We will monitor the progress being made in 1975 to evaluate the effectiveness of our regulations and ensure that every effort is made to meet the goal," said the NMFS Director.

Among the most apparent problems are beach erosion, development of coastal shoals hazardous to navigation, and the destruction of navigable harbors and inlets by sediment deposition.

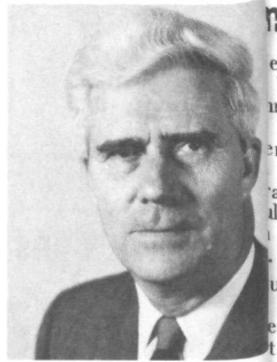
"In seeking effective remedial programs for such problems, scientists must have thorough knowledge of the shore tidal system," Dr. Ludwick explains. "The shore face study area near Virginia Beach, Va., at Cape Henry, was selected as a test site because of its multicomponent tidal regime."

As part of the original NOAA grant, the university scientists designed and implanted a 3500-pound (1590-kilogram) seabed platform, equipped with commercially manufactured remote sensors for measuring bottom currents, wave, and tidal heights. The seven-foot high (two-meter) tripod rests on the ocean bottom in 30 feet (9 meters) of water approximately 2100 feet (640 meters) offshore.

Data from the sensors are being transmitted by cable to shore and recorded on magnetic tape, then directly transferred into a large digital computer for summarization and analysis. The continuation of the grant will enable the scientists to learn how to separate tidal currents, wave surge currents, wind-driven currents, and other currents from single records in which these effects of currents are combined.

Dr. Donald J. Swift, a research oceanographer with ERL's Atlantic Oceanographic and Meteorological Laboratories in Miami, Fla., will monitor the project.

obituary



Leonard M. Murphy

Leonard M. Murphy, Director of the Seismological Investigations Group of the Environmental Research Laboratories Earth Sciences Laboratory, died on December 27 in Bethesda, Md. Before retiring in 1968, he had spent 31 years as a seismologist for ERL and the National Ocean Survey and its predecessor, the Coast and Geodetic Survey.

During his career, he played a leading role in establishing the Tsunami Warning System, seismic and tidal networks throughout the Pacific Basin, developing the Global Earthquake Location Program, providing rapid earthquake location reporting service; establishing the Worldwide Seismograph Station network of stations in 40 countries that provides data for earthquake studies; developing a program for monitoring the seismicity of potential sites for nuclear reactors. In his achievements, he received NOAA's 1971 Engineering Applications Development Award.

He is survived by his wife, Mary Ann, of Glen Mill, Rockville, Md.; and nine children—Leonard, Paul, Christopher, Jerome, Mary, and Martha, of Rockville; Andrew, of Norwood, N.J.; James, of Frederick; and four grandchildren and a sister.

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Catherine S. Cawley, Editor
Anna V. Felter, Art Director

Automated System Forecast Cloud Amount Developed

Meteorologist Gary Carter of the National Weather Service's Techniques Development Laboratory has developed an automated system to forecast cloud amount, a new product, which became operational on November 29. Cloud aid forecasters concerned about the prediction of cloudi-

Automated cloud forecasts for stations are on teletype service on a request basis. Probabilities of clear, scattered, overcast, plus a "best" category forecast, are produced for each of seven forecast periods. These forecasts appear in the same bulletin with surface wind, ceiling, and visibility forecasts. The forecasts are updated twice daily at approximately 0700 GMT and 1900 GMT.

Soviet Union To Pay Damages to U.S. Fishing Vessels' Gear

The Soviet Union has agreed to pay \$11,400 to the R & G Fisheries of Tiverton, R.I., for damage to gear and financial hardship caused when Soviet trawlers destroyed the company's lobster traps while trawling through a marked area in October

of the U.S.S.R., agreement to which was reached during a meeting of the U.S.-U.S.S.R. Fisheries Claims Board which was established this year to hear claims submitted to it for damages caused by fishing vessels of the other country. Members of the board include Carmen J. Madin, of the National Marine Fisheries Service; Clinton J. McGuire, U.S. Coast Guard; and V. Znamenskiy and A.G. Masyshev of the Soviet Union. R & G Fisheries alleged that on the morning of October 9, 1971, their fishing vessel, *Seven G's*, found numerous Soviet trawlers towing through their lobster traps in an area marked with flags, buoys, and radar reflectors. The *Seven G's* removed many undamaged lobster traps possible and returned to port. On October 27, the *Seven G's* returned to the area and found that the rest of her gear and traps were gone. A total of 210 lobster traps and accompanying gear was lost. The owners of R & G Fisheries stated that they were forced to curtail offshore fishing for the remainder of the season because of the inci-

Hoppe To Head EDS Satellite Data Branch



Eugene R. Hoppe

Eugene R. Hoppe has been named Chief of the Environmental Data Service's new Satellite Data Branch, located in the World Weather Building in Camp Springs, Md., and managed by EDS' National Climatic Center in Asheville, N.C. The Satellite Data Branch was established by agreement between EDS and the National Environmental Satellite Service to consolidate and provide improved environmental satellite data services for users. Eventually, the branch will be expanded into a full-fledged National Oceanic and Atmospheric Satellite Data Center (NOASDC).

Mr. Hoppe joined NESS in 1973 as Technical Staff Assistant to the Associate Director for Data Processing. In that capacity, he provided the contact between the Data Processing Division and users of operational satellite data products, compiled and co-authored the first NESS Catalogue of Operational Satellite Data Products, initiated plans for an automated Management Information System, and served as a member of the TIROS-N Project Team responsible for planning the ground data handling system for this new series of polar-orbiting satellites.

Previously he spent five years at the National Space Science Data Center and World Data Center A for Rockets and Satellites at Goddard Space Flight Center, where he served in a variety of managerial positions and as the Center's Deputy Program Manager for three years.

He retired from the Air Force in 1968 after more than 20 years as a meteorologist with the Air Weather Service, and has done graduate work in meteorology at St. Louis University.

Salmon Vaccinated To Prevent Disease

Salmon reared in floating pens are being vaccinated to prevent disease.

National Marine Fisheries Service scientists at the Northwest Fisheries Center Experiment Station in Manchester, Wash., are developing vaccines and equipment to immunize coho and chinook salmon against the greatest killer of salmon in salt water, the *Vibrio* bacterium.

Growing salmon in pens both for commercial use and for management of recreational fisheries is widespread. Manchester laboratory personnel have assisted in establishing salmon rearing projects from California to Alaska, from New Hampshire to Nova Scotia, and on the coast of France.

The rapid expansion of commercial saltwater rearing in Puget Sound, with over 300 metric tons of coho salmon produced in the first half of 1974, has stimulated worldwide interest. In addition, the Washington State Department of Fisheries releases more than 100,000 saltwater-reared chinook and coho salmon into Puget Sound each year for the benefit of recreational fishermen.

The early development of a *Vibrio* vaccine was pioneered under a NOAA-sponsored Sea Grant program at Oregon State University Department of Microbiology, and field trials were conducted on coho and chinook salmon by the Fish Commission of Oregon.

Mortalities from disease can approach 100 percent if saltwater-reared stocks are not treated. However, fish infected with *V. anguillarum*, the most common virulent species of *Vibrio*, normally respond to orally administered tetracycline antibiotics, a method of treatment that is both expensive and slow. Many fish die before the antibiotics take effect.

NMFS scientists have found that a single injection of heat-killed cells cultured from a Puget Sound strain of the disease is adequate to provide at least 90 percent protection to the young coho salmon from early summer through late fall.

The experimental injection equipment, made from "off-the-shelf" material, consists of flasks to hold the vaccine and plastic tubing through which it flows by gravity into repeating syringes. The heat-killed cells are suspended in a saline solution and injected into the posterior body cavity of the fish. Up to one-half million young salmon can be injected with a little over two pounds of vaccine.

With minimal training, a worker can vaccinate 600 to 1,000 fish per hour. Cost of the vaccine and labor ranges from \$300 to \$700 per 100,000 fish, considerably less than the cost of

Captain Boyer To Command *Researcher*



Captain John O. Boyer

Captain John O. Boyer has been appointed commanding officer of the NOAA Ship *Researcher*, which is based at Miami, Fla. He will assume command in mid-January.

For the past seven years, Captain Boyer has served as Chief of the Marine Charts Division in the National Ocean Survey in Rockville, Md.

The *Researcher*, equipped with the most modern oceanographic facilities for ocean research, has a normal operating range of 13,000 miles. The 2800-ton, 278-foot craft has 4000 square feet of enclosed laboratory space and accommodations for 76 officers, scientists, technicians and crew.

Captain Boyer began his Federal career in 1942 as a deck officer with the Coast and Geodetic Survey, predecessor of the NOS. His more than three decades of service have included 13 years of sea duty and with geodetic and hydrographic field parties on the Arctic coast, the western states and Liberia. He was awarded the Colbert Medal of the Society of American Military Engineers in 1971 for his work in improving nautical charting.

Captain Boyer received his civil engineering degree from Santa Clara (Calif.) University.

administering the vaccine orally.

Several weeks after the fish are vaccinated, they develop detectable agglutinating antibodies against the disease. Rather than maintaining production of antibodies, the scientists found that antibody production in the fish declined as the season progressed. Although antibody production can be restimulated with the followup vaccinations, it is expensive. The NMFS scientists are now testing media that will allow the vaccine to enter the fish more slowly so that it will continue to stimulate antibody production for a longer period.

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personnel perspective

Current Vacancies in NOAA

To insure that NOAA employees are aware of job possibilities throughout the agency, a list of current NOAA-wide vacancies is published below. Employees interested in any of the listed vacancies

should contact their servicing personnel office for information where to apply.

Announcement No.	Position Title	Grade	MLC	Location	Issue Date	Clos. Del.
368-75	Physicist	GS-13	ERL	Boulder, Colo.	12/26/74	1/10
369-75	Biologist	GS-12	ERL	Ann Arbor, Mich.	12/26/74	1/10
370-75	Physical Scientist	GS-12	ERL	Ann Arbor, Mich.	12/26/74	1/10
371-75	Physical Science Tech.	GS-7	ERL	Ann Arbor, Mich.	12/26/74	1/10
372-75	Physical Scientist	GS-13	EDS	Washington, D.C.	12/26/74	1/10
373-75	Supv. Meteorologist	GS-13	NESS	San Francisco, Calif.	12/27/74	1/10
316-75	Meteorological Tech.	GS-9	NWS	Cheyenne, Wyo.	1/2/75	1/10
(Cancelled)						
374-75	Supv. Meteorological Tech.	GS-12	NWS	Las Vegas, Nev.	1/2/75	1/10
375-75	Meteorological Tech.	GS-10	NWS	Des Moines, Iowa	1/2/75	1/10
376-75	Meteorological Tech.	GS-9	NWS	Topeka, Kans.	1/2/75	1/10
377-75	Packer Leader	WL-6	NWS	Kansas City, Mo.	1/2/75	1/10
373-75	Publications Officer	GS-13	EDS	Washington, D.C.	12/26/74	1/10
378-75	Meteorological Tech.	GS-10	NWS	Columbia, Mo.	1/3/75	1/10
381-75	Meteorologist	GS-12	NWS	Juneau, Alaska	1/3/75	1/10
380-75	Industry & Marketing Services Admin.	GS-15	NMFS	Washington, D.C.	1/3/75	1/20
379-75	Foreign Affairs Officer	GS-14	NMFS	Washington, D.C.	1/3/75	2/20

1974 Legislative Session Provided Gains for Federal Employees

The nineteen-seventy-four session of Congress produced a better-than-average score for Federal employees. Progress was made in improved benefits for employees that made this year's legislative session a worthwhile one for government workers. Here are the key laws enacted by the 1974 Congress:

Administrative - Public Law 93-344, approved July 12, 1974, establishes a new congressional budget process. Title V provides that beginning in October 1976 the fiscal year shall commence on October 1 of each year and end on September 30 of the following year.

Retirement - Public Law 93-260, approved April 9, 1974, reduces the marriage requirement for entitlement to survivor annuity from two years immediately prior to death to one year. This change is not retroactive.

Public Law 93-273, approved April 26, 1974, establishes a minimum monthly rate for a civil service retirement annuity equal to the Social Security minimum. The minimum annuity would change to reflect future changes in Social Security. Section 2 of P.L. 93-273 grants a \$240 increase in any annuity of a former employee based on separation occurring before October 20, 1969, and a \$132 increase to a survivor (except a surviving child).

Public Law 93-350, approved July 12, 1974, permits the head of an agency with the concurrence of an agent designated by the President, to determine and fix minimum and maximum age limits on original appointments to law enforcement and fire-fighting personnel.

Other provisions set retirement computations of these law enforcement and fire-fighting personnel at 2 1/2 percent of the high-three average salary for the first 20 years of service and 2 percent on years of service over 20. Mandatory retirement is set at age 55 with 20 years of service, although exceptions may be made by the head of an agency. These employees may retire at age 50 with 20 years service, with no reduction in annuity for each year under age 55, as was formerly the case. They shall pay 7 1/2 percent of salary for these benefits.

Public Law 93-406, approved September 2, 1974, authorizes studies of government pension plans by congressional committees, to determine the adequacy of existing participation, vesting, funding and fiduciary provisions.

Public Law 93-474, approved October 26, 1974, provides for eliminating, during periods of nonmarriage, the annuity reduction a retiree takes in order to provide a surviving spouse with an annuity. Upon remarriage of the retiree, the annuity shall be reduced again by the same percentage reductions that were in effect at the time of retirement.

Health benefits - Public Law 93-246, approved January 31, 1974, provides for increasing the government's contribution to the cost of health benefits for Federal employees to 60 percent of the average high option of the various participating plans effective first pay period on or after January 1, 1975. It also requires carriers participating in the health benefits program to comply with Civil Service Commission decisions in health benefits claims disputes.

Pay - Public Law 93-259, approved April 8, 1974, brings most Federal and postal employees under the Fair Labor Standards Act and its overtime provisions. Section 28 bars age discrimination in

appointments and promotions of government employees and authorizes the Civil Service Commission to enforce the provisions.

Injury Compensation - Public Law 93-416, approved September 1974, overhauls and liberalizes the injury compensation benefit system for government workers.

Unemployment Benefits - House Resolution-17597, approved Congress December 19, 1974, is awaiting the President's signature would increase unemployment compensation benefits for most job employees to 52 weeks a year.

Information - Public Law 93-502, enacted November 21, amends the Freedom of Information Act to give the public access to government records. If courts find Federal employees capriciously or arbitrarily in denying information, the Civil Service Commission must initiate proceedings against employees to disciplinary action, such as suspension from the job, is warranted.

Direct Deposit of Salary Checks Possible

NOAA employees can have their net salary check deposited directly to their account at a bank or other financial institution. The safer and more effective procedure for assuring receipt of pay time every pay day.

A composite payroll check issued payable to a bank or other financial organization representing the consolidated net pay of more NOAA employees who have chosen the same financial organization to receive their paycheck for deposit. Some of the purposes and objectives of the Composite Payroll Check Program are to eliminate theft and forgery of paychecks, (2) guarantee the deposit of paychecks, (3) avoid the issuance of individual and supplemental paychecks, and (4) reduce postage and administrative costs.

Since the beginning of Calendar Year 1974, eighty-four replacement checks were requested for those lost in the mail, stolen, placed or accidentally destroyed. The hardship and frustration employees involved could have been avoided if these employees had been participants in the Composite Payroll Check Program. The program guarantees that each bank account will be credited with net pay of the employee on the established payday, even if covering remittance is delayed, lost or stolen.

In order to have your check deposited directly to your account at a bank or other financial institution, just fill out Standard Form 1189, "Request by Employee for Payment of Salaries or Wages by Direct Deposit to a Financial Organization," have it signed by you, your bank or other financial institution, and submit the original completed form to the Personal Services Accounting Branch.

More detailed information on direct deposit is available from Robert L. Dulaney, Chief, Personal Services Accounting Branch, (301) 496-8507.

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