

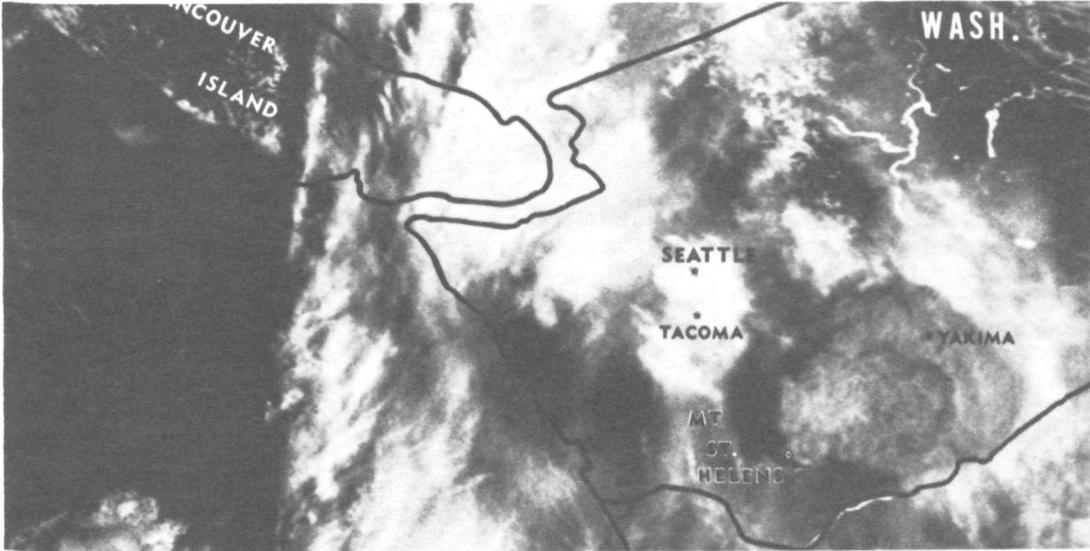


Volume 5
 Number 14
 July 14, 1980

U.S. DEPARTMENT OF COMMERCE

NOAA news

National Oceanic and Atmospheric Administration



Big Bang — At 9:54 on the morning of May 18, the polar-orbiting satellite NOAA-6 looked down at the Pacific Northwest and “snapped” this remarkable picture of the Mt. St. Helens volcanic eruption. The great gray cloud of smoke and debris has begun its eastward drift. Yakima is about 100 miles from the volcano.

Satellite System Endorsed

Administrator Richard A. Frank has urged that the United States move toward development of a greatly advanced civil land remote sensing satellite system. “Society will reap substantial benefits from President Carter’s proposed operational system,” Frank said in testimony on June 26 before the Subcommittee on Science, Technology, and Space of the Senate Committee on Commerce, Science and

(Continued on p. 2)

Special Hurricane Alerts Set

Twenty densely populated areas along the Atlantic and Gulf Coasts where hurricanes could cause dangerous flooding will get early warning of such threats through the use of computer models being developed by NOAA, Dr. Chester Jelesnianski of the National Weather Service reports.

The models take into account storm size and speed as well as coastal topographical features which contribute to flooding when a hurricane strikes. Such flooding is called storm surge and can reach heights of 25 feet above sea level. Nine out of ten hurricane deaths are due to storm surge, Jelesnianski said.

The National Hurricane Center in Miami, Fla., uses the computer models to predict storm surge whenever a tropical storm threatens a coastal region. Coastal communities also employ the models for planning purposes

and to generate data with hypothetical storms for storm evacuation studies, Jelesnianski noted.

Models already have been developed for the New Orleans area; Lake Okeechobee, Fla., and Tampa Bay, Fla., he said. Two other models nearing completion for the 1980 hurricane season are Galveston, Texas, and Charlotte Harbor, Fla., Jelesnianski added.

Jelesnianski said, future models are planned for Massachusetts Bay; Buzzard Bay, Mass.; Narragansett Bay, R.I.; Long Island Sound, N.Y.; Delaware Bay; Chesapeake Bay; Pamlico Sound, N.C.; Charleston Harbor, S.C.; Pensacola Bay, Fla.; Corpus Christi, Texas; Lower Laguna Madre, Texas; Matagorda Bay, Texas; and Lake Sabine, Texas.

“The New Orleans storm surge model was used last

(Continued on p. 4)



Weather Watcher Meets President

75-year weather watch — Edward H. Stoll, 93, who has served as a volunteer weather observer on his farm near Elwood, Nebr., since 1905, meets President Carter at the White House. Stoll was honored in June as Dean of the National Weather Service’s nationwide network of approximately 12,000 volunteer weather reporters.

Sulu Sea Internal Waves — Dr. John R. Apel and James R. Holbrook of the Pacific Marine Environmental Laboratory in Seattle headed a group of scientists working aboard the NOAA ship *Oceanographer* during the month of May to study very large, nonlinear internal waves in the Sulu Sea.

According to Apel, who was the principal investigator, and Holbrook, co-investigator and chief scientist during the project, internal waves are found all around the world, but the Sulu Sea, southwest of the Philippine Islands, is one of the best natural laboratories for studying them. "Our main interest in doing this research in this area," Apel and Holbrook said, "is that these waves are very large, coherent, and regular in the Sulu Sea. They also play a role in the redistribution of bottom sediment and material dumped in the ocean, so this research applies to continental shelves throughout the world, including off New York."

The study was stimulated by the observation of internal waves in satellite imagery of the Sulu. It was conducted with the help of scientists from the Atlantic Oceanographic and Meteorological Laboratories (AOML) in Miami and two Philippine oceanographers, and was directed toward finding out

how the nonlinear internal waves are generated, what their propagation characteristics are, and how they dissipate.

The scientists report that the research was highly successful. They discovered that the waves are created by strong ebb tidal currents flowing over a narrow sill in the Sibutu Passage in the south part of the sea. Waves were observed throughout the sea. They occurred in packets generated at the tidal periods of 12½ or 25 hours, each moving at about two meters per second (4½ miles per hour) and containing from four to eight solitary waves. Each internal wave was accompanied by a narrow "rip" of breaking surface waves.

Before work began, the ship stopped in Zamboanga City to pick up the two Philippine scientists. "A Philippine general also briefed us on the possibility of hostile action by pirates or rebels, since the southern Sulu Sea is the center of their activity," the oceanographers said, "and he assigned three marines to our ship, to stand watch around the clock. A gunboat also accompanied us. During the cruise, Zamboanga was attacked by 2,000 rebels, a British ship in Manila harbor was boarded by rebels and two officers killed, and Mount St. Helens erupted.

While there was no trouble on the *Oceanographer*, it was nevertheless an eventful cruise."

* * *

Lightning Flashes — Michael W. Maier of AOML reports that the National Climatic Center in Asheville, N.C., is preparing a national lightning hazard climatology, sponsored by the Nuclear Regulatory Commission, which will help builders and planners to estimate the lightning hazard of any area of interest in the U.S. The estimates, based on the thunderstorm-hours reported for each weather station, draw on cloud-to-ground lightning frequencies observed by Maier and his co-workers.

Maier, who has helped to apply lightning maps of cloud-to-ground strokes to thunderstorm research (NOAA News, June 2, 1980), thinks that lightning detection and mapping stations should be used as part of a public early-warning system for approaching thunderstorms. "A large number of these inexpensive direction-finding stations are now in place throughout the western United States to aid in forest fire detection," he says. "This could be the first step toward the development of a national thunderstorm-warning network to serve the general public. I estimate that the station network could be extended throughout the

eastern U.S. for the cost of just one modern weather radar unit." Maier feels that the mapping system, developed at the University of Arizona and now available commercially, could help to reduce the approximately 210 lightning-caused deaths that occur each year in the U.S.

Preliminary work is also underway to develop a Satellite Lightning-Mapper Sensing System, according to Dr. W. David Rust of the National Severe Storms Laboratory in Norman, Oklahoma. NSSL is a part of a team working with NASA's Marshall Space Flight Center to identify potential users in science and industry, as well as each user's lightning data needs.

In another cooperative project, NSSL is using a conventional radar to help route a NASA Langley Research Center aircraft to active lightning areas within thunderstorms, says Rust. The specially instrumented F-106 is being used to study the flow of lightning-induced currents in aircraft.

Correction

Letter to the Labs on June 2: NOAA's two WP-3D Orion research aircraft have C-band nose and belly radar and an X-band tail radar. Insertion of the term "doppler" radar was an error.

Land Remote Sensing Satellite System Development Endorsed

(Continued from p. 1)

Transportation. The administrator urged Congress to enact legislation so that the system can move forward.

Frank explained that the Federal Government is considering development of the operational system in two phases. The second, fully operational, phase could be implemented by 1989 at the earliest, he estimated, when new sensor technology will have been developed and tested. However, he said that an expansion of the experi-

mental Landsat D system, proposed for initiation in 1982, can meet the President's commitment to continuity of data through the remainder of the 1980's.

The NOAA administrator told the Subcommittee that hypothetical technical options and alternatives for a fully operational system vary widely in cost. Expenditures can range from about \$1 billion (in 1980 dollars) over a ten-year period to almost ten times that much, depend-

ing upon the complexity of the system ultimately chosen.

The Remote Sensing Satellite System provides valuable information to a variety of public and private sector users in the United States and abroad, and will aid in making decisions related to such areas as agricultural crop forecasting, rangeland and forest management, mineral and petroleum exploration, mapping, land use planning, water quality assessment and disaster assessment.

Frank noted that reliable projections of revenues from selling the products of the system cannot be made at this time. However, he said tentative projections indicate that the system probably will not be self-sustaining before the end of this century, even with a five-fold increase in fees and an annual ten percent growth in the market. Thus, the Federal Government will have to make up any annual deficits for the foreseeable future.

Sharon MacLean Is Honored by Maryland Federation



Sharon MacLean, a fishery biologist at the NMFS Oxford (Md.) Laboratory, has been chosen Young Career Woman by the Maryland Federation of Business and Professional Women. She won the statewide contest in which 33 women, including a pastor, a lawyer, a podiatrist, and a bank official, competed. MacLean, who went to work for the Oxford Laboratory 7 years ago as a technician, continued her schooling to earn a master's degree and is currently examining the parasites and diseases of planktonic crustaceans collected from ocean dumpsites.

MacLean is the first representative of the Easton club to win the state contest. There is no national competition.

"Winners from each state will be at the convention," she told the (Easton, Md.,

Star Democrat.) "But we're not there to compete. We'll be meeting business contacts," she said.

"Men have lots of opportunities to meet other businessmen, but there are few outlets for women. I don't expect to meet anyone in my field, but I think I can learn from some of the people I may meet there," she said.

Nancy Wilson, past president of the Easton BPW said Miss MacLean was selected to represent the local club because of her career field and her interest in the advancement of women.

"We were looking for someone who would truly represent the Shore, and I think Sharon was the right person. Working with the environment, especially the water, gives her a good tie in with the area."

Settlements Top \$1.8 Million

Three foreign fishing vessels seized last year for violating regulations permitting them to fish within the U.S. 200-mile conservation zone have agreed to pay more than \$1.1 million in settlement of these violations.

The *Tsuda Maru*, a Japanese stern trawler, was seized in the Bering Sea in January of last year after special agents of NOAA's National Marine Fisheries Service discovered more than 54 tons of fish that had not been recorded in compliance with the fishing regulations. A settlement of \$700,000 was paid in lieu of the government pursuing its complaint for forfeiture of the vessel.

Two South Korean stern trawlers, *Seo Yang* and the *Pung Yang Ho*, were seized off Alaska for discrepancies in their fishing logs. The two cases were settled for a total amount of \$400,000.

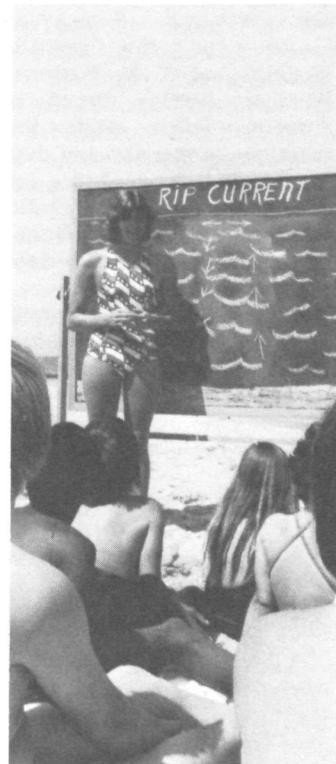
Altogether, eight of 14 foreign vessels seized last year have paid more than

\$1.8 million in settlements with five cases yet to be decided. One ship taken into custody was released as a result of the U.S. Attorney's decision not to prosecute. Any further action will be handled through the administrative penalty procedure.

The number of foreign fishing vessels seized for violations within the 200-mile conservation zone has increased yearly since the zone was created in 1977. That year, three vessels taken into custody paid a total of \$589,000 in settlement of the cases. In 1978, 11 vessels paid \$680,000 in FCMA violation actions.

Galileo Project

NOAA has awarded a \$361,000 supplemental contract to the Naval Sea Systems Command in Washington, D.C. for continued development of a scientific instrument package for the Galileo satellite project.



Current Event — Melissa Belote, 1972 and 1976 Olympic swimming medalist, tells kids how to escape a rip current, a swimming hazard at ocean beaches everywhere.

Four NMFS Labs Get DOE Grants

NOAA's fishery laboratory at Woods Hole, Mass., has received a grant of \$113,829 from the Department of Energy to install a solar power heating and water heating system.

The grant is one of four awarded to National Marine Fisheries Service laboratories. Other laboratories receiving grants are located at Gloucester, Mass., La Jolla, Calif., and Narragansett, R.I.

The Woods Hole system, to be completed in 18 months, is expected to provide approximately 18 percent of the building's energy requirements.

The project is one of 843 totaling \$31 million funded by the Department of Energy.

The program demonstrates the Federal Government's commitment to solar energy.



Medal Winner – Jeff Sampaga holds the gold and bronze medals he won at the National Wheelchair Games.

Wheeling To The Olympics

Jeffrey D. Sampaga of the Honolulu Laboratory of NOAA's Southwest Fisheries Center was selected as a member of the U.S. team at the International Wheelchair Olympic Games held in Arnhem, Holland, June 18-July 2.

Sampaga qualified for the olympic team by winning the gold medal in the discus throw and the bronze medal in the shotput events at the National Wheelchair Games held at the University of Illinois campus in Champaign May 28 to June 1.

"The weather was miserable at Champaign," said Sampaga, who competed in the National Wheelchair Games for the seventh straight year. "The National Weather Service issued a tornado watch while the meet was underway and during my events we had a lot of wind and rain. But I did a lot of practicing in Honolulu under all kinds of weather conditions."

Sampaga held the record in the discus throw until last year and also has won silver and bronze medals in the javelin throw.

NOAA Hurricane Models *(Continued from p. 1)*

year during Hurricane Bob which struck near the city in early July with minimal force," said Jelesnianski.

"The model performed exceptionally well, and information from it was helpful to NOAA forecasters in New Orleans in preparing local warnings for southeast Louisiana," he added.

The model was used again to forecast storm surge effects in the New Orleans areas as Hurricane Frederic

approached last August 12. The storm hit Mobile, Ala., east of the area covered by the model.

Each of the computer models contains topographical information on lake and river basin configurations and water levels, levee systems, roads, and other geographical features. The models can be used to compute the surge resulting from various combinations of wind and pressure brought by the storm.

PACE May Augment Midwest Precipitation

The farmer's dream of calling down rain just when and where his crops need it is being taken a step closer to reality by NOAA.

Under a multi-phase study, called PACE (Precipitation Augmentation for Crops Experiment), NOAA is examining the possibility of applying the most advanced weather modification techniques where they will do the most good – the nation's midwestern breadbasket. The agency has awarded a \$337,218 contract to the Water Survey Division of the Illinois Institute of Natural Resources to begin preliminary stages of the experiment this summer in Illinois.

The purpose of PACE is to learn whether midwestern weather can be beneficially modified, and then, if so, to develop techniques for doing it.

A little rain at the right times could not only increase the productivity of midwestern farmlands, but stabilize yields, which now vary greatly from year to year. "What we're trying to do is not so much increase the total annual precipitation, as even it out over the growing season," explained Klaus Liedtke, acting director of NOAA's weather modifica-

tion office, which is coordinating PACE. For most midwestern crops, chiefly corn and soybeans, the amount of precipitation in July and August is critical.

The Illinois Water Survey will ask the Universities of Chicago and Wyoming, Purdue University, and Agricultural Experiment Stations to assist on the project. The Survey will examine not only the feasibility of augmenting precipitation, but the economic, environmental and agricultural effects.

Under the first phase of the project, Midwestern clouds and precipitation processes will be studied to determine whether seeding techniques that have been successful in other climates will work there. If the results are promising, the scientists will move to the next phase – actual cloud seeding experiments. Aircraft and ground instruments, radar, and satellite imagery will be used to gauge the effects of seeding on cloud structure and precipitation.

In the last stage, scientists will assess the overall effectiveness of seeding, outline optimum techniques and determine what information might be needed to extend the technology of other regions.

NOAA Golf Tournament Set

The National Weather Service Golf Association has announced plans for a special celebration of their tenth annual NOAA golf tournament. They are returning to West Palm Beach, Fla., where the first tournament was held in 1971. Highlighting the occasion, the prestigious PGA National Golf Club has agreed to host the four-day event.

Play is scheduled for October 28th through 31st and all NOAA golfers are invited to participate. Mixed

team and separate womens events are also planned. For further information contact Buck Christian, 4245 Southern Blvd., W. Palm Beach, Fla., 33406.

Tax Note

Employees who are subject to state tax withholdings for the state of Alaska may notice a change in their state tax for salary checks dated on or after July 9.

Sport Diving Fatalities Show Decrease...

A dramatic drop in the number of U.S. sport diving fatalities occurred during 1977 and 1978, according to a team of University of Rhode Island researchers, sponsored, in part, by NOAA.

In 1977, 108 deaths were recorded, 25 percent below the average of the previous three years. Fatalities increased slightly to 116 in 1978, 18 percent below the previous three years' average.

The 108 deaths in 1977 marked the lowest number of fatalities since 1970 when URI began its National Under-

water Accident Data Center to collect statistics and analyze the causes of deaths. Fatalities reached a high of 147 in 1976, a year in which scuba training activities reached a low in enrollment.

John J. McAniff, the URI diving safety officer who heads the project, attributes the increased safety record to better instruction and equipment. "Training agencies have improved their programs and are including more open water dives. There are more continuing education and specialty courses being

offered which keep beginning divers under supervision longer. Manufacturers have also made great advances in equipment design, such as with the buoyancy compensation vests," he explained.

In both training and equipment improvements, McAniff points out that investigations into scuba fatalities have helped highlight needed improvements in training and equipment. Resulting changes are making diving much safer although, as McAniff says, the current safety record for the sport diving industry is

good considering there are between 1.5 and 1.9 million active divers.

More detailed information on the diving fatalities are available in a report "United States Underwater Diving Fatality Statistics 1977-1978" which will be out later this year. It can be ordered from Scuba Safety, P.O. Box 68, Kingston, RI 02881. Sponsors include NOAA's Manned Undersea Science and Technology Office, the U.S. Coast Guard, and the National Institute of Occupational Safety and Health.

....And NOAA Re-Issues Drowning Warnings

NOAA is urging that no potential drowning victim be given up for dead even though they have been under water for a long period of time.

A study NOAA has funded at the University of Michigan under the Sea Grant program showed that persons often thought beyond assistance can be revived and recover without irreversible brain damage.

In one instance, the Michigan researchers found this true for a victim who had been submerged for 38 minutes.

Previously, it was thought that anyone under water longer than four minutes suffered irreparable impairment.

The Michigan study concluded that the key to saving a potential drowning victim is aggressive and sustained resuscitation.

The Michigan researchers also found that water temperature also is an important factor in reviving drowning victims. Those who had been pulled from water with temperatures below 70 degrees Fahrenheit had the better chance of being revived, NOAA said the Michigan study revealed.

However, the scientists' review of 25 case studies also showed that 20 victims who had been submerged for more than five and one-half minutes in water colder than 70

degrees recovered fully when given immediate and continuous resuscitation. The victim who had been below water 38 minutes was one of these.

The researchers found that when victims fall into cold water, changes occur in the body's metabolism and all oxygen remaining in the system automatically goes to the heart, brain and lungs. This reflex, known as the "mammalian diving reflex," is a phenomenon peculiar to mammals.

The Michigan researchers emphasized that drowning victims often appear dead when they are not. Therefore, they urged that resuscitation be begun as soon



as possible, using any of the standard techniques taught by the American Red Cross, the Heart Association and other organizations.



Outreach — As part of its community outreach program, NESS' EEO Committee arranged for 17 of the division's employees to serve as judges at the 1980 Prince Georges Area Regional Science Fair. Winners received NESS "superior performance" plaques and a tour of the Technical facility. From left to right are: George D. Jones, NESS Coordinator; Gretchen E. Ginter, Dwight D. Eisenhower Jr. High School; Dale Ann Proctor, McDonough High School; Mark A. Uehling, Bowie Sr. High School; Daniel J. DiLorenzo, St. Columbia School; John S. Iekel, Ryken High School; Keith L. Bernard, Holy Family School; and Dr. Clifford A. Spohn, NESS Deputy Director.

NOAA Suggestion Awards

Employees who had suggestions accepted for adoption during the months of October through March 1980 include: (Continued from June 30 issue)

Pappas, Helen M. NOS, Headquarters	\$ 25.00	1767	Wording Correction on Aeronautical Charts
Tilton, Carl D. WSO, Green Bay, WI.	25.00	3-2377	HO63 Powerline Surge Protection
Tucker, Frank M. WSO, Norfolk, Va.	50.00	3-2365	Modified Bore Site Program
Weber, Shirley B. PB1, Headquarters	25.00	1949	Telephone Listing for Health Unit
Weber, Shirley B. PB1, Headquarters	50.00	1958	Authorization for Incidental Use of NOAA Vehicles
Wilkins, Amy A.	255.00	1947	Code-a-Phone Recording describing Upward Mobility Program
Christoffers, Edward W. NMFS, Northeast Region Gloucester, Mass.	50.00	NE 79-1	Film Cost Savings

**CURRENT
NOAA
VACANCIES**

NOTE: This list includes only NOAA-WIDE or DOC-WIDE vacancies: Vacancies posted only within a local commuting area are excluded.

Announcement Number	Position Title	Grade	Organization	Location	Issue Date	Closing Date
ER-80-38(SB)	Supervisory Meteorologist	GS-15	NWS	Washington, D.C.	6/30	7/22
NOS-80-78(DH)	Supervisory Cartographer	GS-15	NOS	Rockville, Md.	6/30	7/22
ERL-80-176(LS)	Supervisory Physical Scientist (may be filled at GS-14 level)	GS-15	ERL	Ann Arbor, Mich.	7/8	8/15
HQS-80-102(RW)	Management Analysis Officer	GS-14	OA	Rockville, Md.	6/30	7/22
ERL-80-238(ML)	Oceanographer	GS-14	ERL	Ann Arbor, Mich.	7/8	8/1
NOS-80-82(MME)	Supervisory Cartographer	GS-14	NOS	Silver Spring, Md.	7/2	7/17
NWS-80-116(GZJ)	Supervisory Meteorologist (may be filled at GS-13 level)	GS-14	NWS	Silver Spring, Md.	7/2	7/24
NOS-80-81(MME)	Supervisory Cartographer	GS-14	NOS	Silver Spring, Md.	7/2	7/17
ER-80-39(SB)	Meteorologist	GS-13	NWS	Washington, D.C.	6/30	7/15
SR-80-65(JG)	Computer Equipment Analyst	GS-13	NWS	Fort Worth, Tex.	7/2	7/17
SR-80-64(JG)	Hydrologist	GS-13	NWS	Fort Worth, Tex.	6/30	7/15
NWS-80-117(WL)	Computer Specialist	GS-13	NWS	Camp Springs, Md.	7/2	7/24
NOS-80-83(MME)	Supervisory Cartographer	GS-13	NOS	Silver Spring, Md.	7/2	7/17
SR-80-66(JG)	Meteorologist (may be filled at lower grade)	GS-13	NWS	Fort Worth, Tex.	7/8	7/22
ERL-80-139(VP)	Physical Scientist (promotion potential to GS-14)	GS-13	ERL	Boulder, Colo.	5/19	7/14
NWS-80-114(FM)	Meteorologist	GS-13	NWS	Silver Spring, Md.	7/2	7/24
NESS-80-29(BJJ)	Physicist	GS-13	NESS	Suitland, Md.	6/24	7/16
ERL-80-134(VP)	Supervisory Meteorologist or Supervisory Physical Scientist	GS-13	ERL	Research Triangle Park, N.C.	5/19	7/14

"IF YOUR APPLICATION IS NOT RECEIVED IN THE SERVICING PERSONNEL OFFICE BY THE CLOSING DATE, YOU WILL NOT BE CONSIDERED FOR THE VACANCY"

NOAA Vessels Chart Coast

Two NOAA hydrographic ships are continuing an intensive nautical charting survey this summer of a 5,000-square-nautical-mile area off the Delaware-Maryland-Virginia-North Carolina coasts.

The six-month survey, dubbed DELMARVANC, is in its fifth year of operation and is being conducted in support of marine navigation safety, mineral exploration, environmental management, and deep-draft port development.

This summer's operations will involve the NOAA ships *Mt. Mitchell* and *Peirce* working along the coasts of Virginia and North Carolina, extending offshore to about forty nautical miles.

The area being surveyed is one of the busiest in the Nation supporting not only shipping along the coast between major east and Gulf coast ports, but also international routes to Delaware and Chesapeake Bays.

The routes through the bay areas lead to 11 major shipping ports including the large terminals of Philadelphia, Norfolk, and Baltimore. More than one billion tons of cargo annually pass through the Delmarva area to the "Delaware River Port" alone. It is also the second leading shipping area in the Nation and the largest importing port in tonnage volume.

Already working on the project is the NOAA Ship *Peirce*, a 163-foot, 760-ton hydrographic ship. The 231-foot, 1,800-ton *Mt. Mitchell*, will begin its phase of the DELMARVANC project in mid-July.

Wind-Profiling

NOAA has awarded two contracts for a wind-profiling system to Raytheon Company of Sudbury, Mass. and TIW Systems, Inc. of Sunnyvale, Calif., for \$218,544 and \$132,700 respectively.

NOTES ABOUT PEOPLE

Franklin D. Woods has been appointed Deputy Meteorologist-in-Charge of the Weather Service Forecast



Franklin D. Woods

Office at Ann Arbor, Mich. Frank began his Weather Service career at Wichita in September, 1960, and went on to serve in Kansas City and St. Louis as Aviation Forecaster, Severe Storms Forecaster, WOC Meteorologist, Lead Forecaster, and Satellite Meteorologist (in

NESS), before his promotion to Ann Arbor.

Frank's commitment to equal opportunity in employment, school, and community affairs, led him to be named to the Mayor's Citizen Advisory Council of Kansas City from 1969 to 1972.



Milan Allen

Milan Allen was recently appointed the new EEO committee chairperson. Allen was formerly a hydrologist with the River Forecast Center, Kansas City, Mo.

CENTURY

William R. Thickstun, NWS Employee

William R. Thickstun, who retired from the National Weather Service in 1960, died recently in a traffic accident in Rockville, Md. A native of Louisville, Ky., Thickstun came to Washington, D.C., in 1918 and began his Weather Service career as a drafts-

man. In 1937, he transferred to the instrument division. In 1941, he became chief of the division, holding that post until his retirement.

Survivors include his wife, Mabelle, a son, William R. Thickstun, Jr., and three grandchildren.

Weather Association Awards Set

The National Weather Association has announced its Awards program for 1980. The awards will recognize outstanding achievements in the production, dissemination, and use of operational weather products, according to Bruce A. Eggers of the Washington-based organization's awards committee.

Emphasis, Eggers says, is focused on the people who perform the day-to-day job of providing meteorological support services. For information on the types of awards to be made and nominating procedures write the National Weather Association, P.O. Box 243, Clinton, Md. 20735.



Forty Years Service — Robert F. Ryan (above, l.), meteorological technician, NESS, Research Meteorological Satellite Lab., Camp Springs, Md., and Han P. Jensen (below, l.), electronics technician, NWS, Equipment Development Lab., Silver Spring, Md., recently received their 40 year service pin from Dr. Thomas Owen, assistant administrator for Oceanic and Atmospheric Services.



NMFS Appointments Announced

Three appointments to major positions in the National Marine Fisheries Service have been announced.

Robert W. McVey is the regional director, NMFS Alaska Region in Juneau. Alan W. Ford is the regional director, NMFS Southwest Region in Terminal Island, Calif.; and Dr. William I. Aron is the Director, Northwest and Alaska Fisheries Center, Seattle, Wash.

The regional directors serve as the NOAA assistant administrator for Fisheries' regional representatives with recreational interests, State conservation agencies, the fishing industry and other constituencies, and the public within their areas. They are

responsible for planning, organizing, and implementing fishery management and conservation programs, fishery development actions, habitat protection, and other services throughout the range of NMFS programs.

Robert W. McVey served as deputy regional director for the Alaska Region for the past 10 years prior to his new position. He began his career as a fisheries biologist in 1955 with the Missouri Conservation Commission. From 1957 to 1966, he served with the Bureau of Commercial Fisheries in Juneau as a fisheries biologist. In 1966, he began a three-year tour as an assist-

(Continued on p. 8)

FROM THE GALLEY

**SHRIMP NOODLE
DINNER CASSEROLE**

- 3/4 pound peeled, cleaned, and deveined shrimp, fresh or frozen
- or
- 3 cans (4½ ounces each) shrimp
- 1 package (8 ounces) medium noodles
- 2 cans (10¼ ounces each) condensed cream of mushroom soup
- 1 cup dairy sour cream



- 1/3 cup sliced green onion
- 1/2 teaspoon dried dill weed
- 1/3 cup shredded Cheddar cheese
- 1 medium size tomato, sliced
- Fresh dill springs for garnish, optional

Cook shrimp as directed on package; drain. If canned shrimp is used, drain and rinse with cold water. Cook noodles as directed on package; drain well. Combine and mix soup, sour cream, onion and dill weed; stir in noodles. Cut 1/4 of the shrimp into thirds and fold cut shrimp and cheese into noodle mixture. Spoon into a shallow 2-quart baking dish. Cover dish with aluminum foil, crimping it to edges of dish. Bake in moderate oven, 350°F., 20 minutes. Remove from oven; remove foil. Arrange remaining shrimp in rows on top of casserole. Return to oven and continue baking 10 to 15 minutes or until hot and bubbly. Garnish with half tomato slices and fresh dill weed sprigs, if desired. Makes 6 servings.

NOAA news

Published biweekly at Rockville, Md., by the National Oceanic and Atmospheric Administration, **Richard A. Frank**, Administrator; produced by the NOAA Office of Public Affairs, **Albert Mark**, Director; **Philip P. McGeoghan**, **Robert L. Buchanan** and **Charles G. Thomas**, Editorial Board; **Brenda A. Diggs**, Production Assistant.

The publication provides information for employees of NOAA, an agency of the U.S. Department of Commerce.

Articles for publication should be submitted at least ten work days in advance to **NOAA News, NOAA Office of Public Affairs, Room 108, Rock-Wall Building, Rockville, Md. 20852.**

NOAA News reserves the right to make changes in submitted copy in conformity with the policies of the publication and of NOAA.

Blood Donors Cited

The following is a list of NOAA employees who have achieved blood donations totaling one or more gallons during the first 6 months of 1980.

NAME	MLC	GALLONS
Michael R. Braden	OA/NOS	1
Thomas R. Carroll	OA/NWS	1
David A. Christenson	OA/NOS	1
Harry R. Glahn	OA/NWS	1
Dale G. Pursell	OA/NOS	1
Howard E. Stewart	OA/NOS	1
Eva G. Thomas	OA/NOS	1
Donna Amoroso	OA/NOS	3
Bruce W. Hamilton	OA/NOS	3
John H. Richards	OA/NOS	3
Richard Massengill	MB/FIN	4
Pearlie M. Stephens	RD	4
Charles M. Lee	OA/NOS	5
Heinz G. Poetzchke	OA/NOS	5
Alfred C. Priester	OA/NOS	5
John M. St. Clair	OA/NWS	5
John E. Comerford	OA/NOS	6
Creighton O. Demarr	OA/NOS	6
Carl G. Fefe	OA/NOS	6
Robert Van Fleet	MB/PER	6
Wendell K. Shoun	OA/NWS	11

New NMFS Appointments

(Continued from p. 7)

ant fisheries attache in Copenhagen, Denmark; served a short while in Washington upon his return from Denmark; and returned to Juneau in 1970.

Alan W. Ford served as a political advisor to the NATO Commander-in-Chief for the Mediterranean area until his new position. He has served in various positions of increasing responsibility in the State Department since joining them in 1956.

Dr. William I. Aron was serving as the director, Office of Marine Mammals and Endangered Species, when named to his new position.

Dr. Aron has served as a research assistant professor for the University of Washington's Department of Oceanography, as head of the Biological Oceanography Group at the General Motors Defense Branch Laboratories, and as director of the Smithsonian

Institution Oceanography and Limnology Program in Washington. From 1971 to 1978, he was director, Office of Ecology and Environmental Conservation for NOAA. In 1977, he was named as the U.S. Commissioner to the International Whaling Commission.

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

NOAA CENTRAL DISTRIBUTION UNIT (MB/A 0354)
12227 Wilkins Avenue
Rockville, Maryland 20852

THIRD-CLASS MAIL
POSTAGE & FEES PAID
NOAA
PERMIT NO. G-19

OFFICIAL BUSINESS

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