

Oh buoy! For an unusual ferris wheel ride turn to page 4.

## Geostationary Satellite Set For Launch Today

GOES-C, scheduled to be launched today, will undergo a carefully controlled series of

space maneuvers which will end next winter with the start of an international study of global weather.

## Commercial Catch Reached Highest Value In 1977

The value of fish and shellfish landed by U.S. commercial fishermen during 1977 reached an all-time high of more than \$1.6 billion, although the amount landed was down slightly from 1976, according to the Marine Fisheries Service.

The successful launch by NASA from Kennedy Space Center of NOAA's GOES-C geostationary satellite is a key element in the Global Weather Experiment, a worldwide, year-long accumulation of meteorological and oceanographic data which begins in December.

The largest international scientific experiment in history, with 140 nations participating, the Global Weather Experiment depends upon information collected from many sources. Oceanographic and wind observations all over the world will be made by nine satellites and scores of ships and aircraft, while thousands of surface and upper air observations will be made daily by several hundred buoys distributed in the Southern Hemisphere and by conventional observation methods elsewhere on Earth.

(Continued on p. 2)

## FACE-2 Tests Under Way

NOAA scientists are beginning a summer cloud seeding experiment over southern Florida to verify preliminary indications that seeding cumulus clouds increases net rainfall over an area.

Called FACE-2, for the second phase of the Florida Area Cumulus Experiment, the project began June 15, if weather conditions were favorable, and will run through September 15. A second summer of experimentation is planned for 1979, also to be conducted by NOAA's National Hurricane and Experimental Meteorology Laboratory in Coral Gables, Fla.

The seeding experiment is designed to confirm "strong and consistent" evidence from tier studies that cloud seeding does increase rainfall, both from individual cloud systems

(Continued on p. 2)

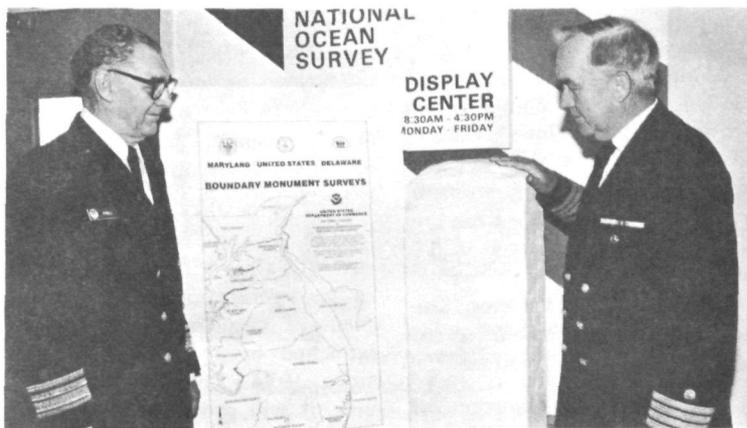
## Mason and Dixon Historic Marker on Display

A replica of a Mason and Dixon five-mile marker is currently being exhibited at the National Ocean Survey's Display Center in Rockville, Md. The marker was loaned to the Survey by the Talbot County (Md.) Historical Society.

The original marker, found in the historical society's garden in Easton several years ago, has

been placed back on the North-South boundary between Maryland and Delaware by the National Geodetic Survey.

A ceremony commemorating the resurvey of the 82-mile boundary will be held on Route 404 at the state boundary line, June 26, the date Charles Mason and Jeremiah Dixon began the North-South survey 214 years ago.



Director of NOAA's National Ocean Survey, R. Adm. Allen L. Powell (left) and Capt. John O. Phillips, Director of the NOS National Geodetic Survey view the replica of a marker from the Mason and Dixon line.

## FACE-2

(From p. 1)

and over a target area south of Florida's Lake Okeechobee.

Preliminary results of the first, exploratory phase of FACE suggested that net rainfall over an area on days of experimentation was increased from about 20 to as much as 70 percent by seeding. The most dramatic indication of increased rainfall came from data obtained during the last FACE summer work, in 1976.

If these findings are substantiated, the NOAA scientists and their university colleagues will have established that seeding does increase total rainfall, and does not merely increase rainfall from the seeded cloud while suppressing precipitation nearby. Thus, one of the persistent questions in weather modification may be partly answered this summer over Florida.

Three aircraft are to be used for seeding, one of them equipped to make cloud-physics measurements in and around seeded clouds. These aircraft will be joined in July and August by a research aircraft operated by NOAA's Miami-based Research Facilities Center, and by a cloud-physics-equipped plane from the University of Wyoming.

The target area is a 5,000-square-mile (13,000-square-kilometer) trapezoid south of Florida's Lake Okeechobee. A dense network of reporting rain gages installed there with the cooperation of local landowners will permit the scientists to make their most comprehensive assessment to date of rainfall quantities from seeded and non-seeded clouds. The rain-gage data also will be used to refine rainfall estimates based on radar data from the

### Tax Note

Employees who are subject to state tax withholdings for the State of Rhode Island may notice a minor change in their state tax for salary checks dated on or after June 14, 1978.

National Hurricane Center weather radar in Coral Gables, and a smaller radar operated under contract by the University of Miami.

Although primarily a confirmatory experiment, FACE-2 will continue some of the exploratory research begun in earlier seasons. One of these studies attempts to compare lightning production in seeded and unseeded clouds; another is exploring the possible effects of seeding on rainfall outside the target area.

If this summer's studies confirm the promising results of the earlier tests, the scientists plan a series of experiments in another location—perhaps over the midwestern corn belt—to determine whether the seeding technology pioneered over Florida can be used to increase the rainfall available to American crops.

## Catch

(From p. 1)

The total value of U.S. production of processed fishery products, edible and industrial, also rose; an 11 percent increase to \$3.9 billion.

U.S. fishermen landed 5.3 billion pounds at ports in the United States, Puerto Rico, and American Samoa, a four percent decrease in amount, but 12 percent increase in value over 1976. The decrease in landings was largely due to a drop in landings of industrial (non-edible) fish.

Commercial landings of edible species were about three billion pounds, valued at \$1.4 billion. This is a five percent increase in quantity, considerably above the average for the previous five years, and an 11 percent increase in value. Shrimp, tuna, crab, salmon, and flounder landings accounted for a large share of the increase.

Per capita consumption of fish in the U.S. in 1977 was 12.8 pounds per person, down slightly from the record 13 pounds in 1976.

## Satellite

(From p. 1)

22,300 miles (35,750 kilometers) is achieved, will replace another NOAA geostationary satellite now positioned to observe much of the Pacific Ocean and the western half of the United States. That spacecraft—GOES-1—will be moved by stages from its present position above the Equator at 135 degrees west longitude almost halfway around the earth to about 60 degrees east longitude.

GOES-1 first will be shifted to 15 degrees west, over the Atlantic Ocean, where it will remain under the control of NOAA's National Environmental Satellite Service Command and Data Acquisition Station in Wallops, Va. At the same time, space technologists at a new acquisition station being installed in Spain by the European Space Agency will participate in control of the spacecraft for familiarization purposes.

About the first of November, GOES-1 will be in position over the Indian Ocean, fully under control of the Spanish station and ready to begin providing information on December 1 for the Global Weather Experiment.

In that experiment five geostationary satellites—and four polar orbiting spacecraft—will be collecting data: GOES-1, and GOES-2 above the Equator over South America, and GOES-3; a European satellite in position above the Equator over Western Africa; and, a Japanese spacecraft over New Guinea.

Two of the polar-orbiting spacecraft will be operated by the U.S.; TIROS-N, a NASA satellite to be launched in July, and NOAA-6 scheduled for October launch. The other polar-orbiters will be operated by the U.S.S.R.

The satellite scheduled for launch is almost identical to four earlier geostationary environmental monitoring satellites launched by the United States since 1974. Like its predecessors, it will provide a variety of imagery of North and South America and much of the Atlantic and Pacific Oceans every half hour. The imagery is used by

meteorologists in weather forecasting, wind and cloud cover analysis, severe storm warning and hurricane tracking, and other activities. Oceanographers use information from the spacecraft for ocean current analysis, ship routing, and other purposes; while hydrologists find the information valuable for snow melt and snow area determination, water resource management, and various agricultural applications.

In addition, the GOES series spacecraft collect and transmit information recorded by data collection platforms at remote places on land, on buoys in the ocean, and carried aloft by balloons and aircraft. This information is communicated by the GOES satellites to users on earth.

The spacecraft also measure solar activity, detect solar flares, and determine the intensity of solar winds and the strength and direction of the Earth's magnetic field.

GOES-C is expected to be the last NOAA geostationary satellite to be launched by NASA atop a rocket. Three more geostationary spacecraft are planned during the next eight years, to be carried into space on NASA's Space Shuttle, beginning with GOES-D, now anticipated to be placed in orbit in late 1980.

## NOAA NEWS

Published biweekly at Rockville, Md., by the Office of Public Affairs for the information of employees of the Commerce Department's National Oceanic and Atmospheric Administration.

Articles to be considered for publication should be submitted at least 10 days in advance to NOAA News, Room 108, Rock-Wall Bldg., Office of Public Affairs, National Oceanic and Atmospheric Administration, Rockville, Md., 20852.

NOAA News reserves the right to make corrections, changes or deletions in submitted copy in conformity with the policies of the paper or the Administration.

Warren W. Buck, Jr., Art Director

# Use of Storm "Detectors" Questioned

The National Weather Service has issued the following information to guide employees who are asked about the effectiveness of commercial "tornado detectors" currently on the market:

"Several thunderstorm, severe weather, and tornado devices are available for purchase by the public. The devices, referred to in sales literature as monitors, detectors, or alarms, sense atmospheric electricity in the form of radio static or sferics.

"Operated independently, the devices may generate a false sense of security on the part of some buyers, thus reducing the 'call to action' impact of NWS warnings.

"Such devices may be helpful aids to warning when used with other keys or guides, such as radar observations, visual sightings, television interference, or NWS warnings. However, to our knowledge, no thunderstorm, severe weather, or tornado device has been scientifically tested and evaluated to the extent that reliability, lead time, and credibility can be conclusively determined.

"The National Weather Service policy is to neither approve nor disapprove the use of any particular thunderstorm, severe weather, or tornado device."

**BULLETIN**

Jackson State University at Jackson, Miss., has come to NOAA with a request for someone to teach Meteorology/Atmospheric Science courses and to aid in curriculum development. The assignment is under the Intergovernmental Personnel Act agreement for one to two years. Under this authority the NOAA employee would be transferred to the University as his/her duty assignment with full NOAA pay and allowances and no loss of status. Anyone interested in further details should contact Joe Bird on Area Code 301-443-8108.

## Authors and Others

# Research Laboratories Honor Employees

Environmental Research Laboratories staff members who have authored outstanding research papers, or who exemplify certain supervisory and employee qualities were recently honored by the laboratories at their annual awards presentation ceremony in Boulder, Colo.

Among the twelve ERL sci-

entists who received outstanding paper awards were: Dr. Donald E. Barrick, Michael W. Evans, and Dr. Bob L. Weber of the Wave Propagation Laboratory; Drs. Lawrence R. Lyons and David S. Evans of the Space Environment Laboratory; and Dr. Carleton J. Howard of the Aeronomy Laboratory in Boulder, Colo.

Five ERL scientists based in Miami, Fla., also received outstanding paper awards. They include: Drs. Patrick G. Hatcher, Philip A. McGillivray, and Lt. Commander Lawrence E. Keister of the Atlantic Oceanographic and Meteorological Laboratories' Ocean Chemistry Laboratory; Dr. Robert W. Jones of the National Hurricane and Experimental Meteorology Laboratory, and Duncan B. Ross, Jr., of AOML's Sea-Air Interaction Laboratory.

Dr. Rudolph W. Preisendorfer of the Pacific Marine Environmental Laboratory in Seattle, Wash., was honored for completion of a six-volume work on hydrologic optics.

The scientific papers were recognized for their originality, scientific or implied importance, writing quality, longevity, and relevance to NOAA missions. Single authors re-

ceived cash awards of \$700, and multiple authors, \$350 each. Papers by Howard and Ross were co-authored by scientists outside NOAA.

Barrick, chief of the Wave Propagation Laboratory's sea state studies program, also received the Outstanding Supervisor Award for the laboratories. He was given the award in recognition of his group leadership qualities, relationship to superiors, strong support of equal employment opportunity among his group, and personal characteristics. Barrick received a cash award of \$500.

John Eglund, administrative officer for NOAA's Atlantic Oceanographic and Meteorological Laboratories in Miami, was given a \$300 cash award "in recognition of significant contributions and achievements in promotion of equal employment opportunity activities while a supervisor in ERL."

Eduardo C. Padilla of the Research Support Services' Personnel Department was given a special ERL equal employment opportunity employee award "in recognition of significant contributions and achievements in promotion of EEO activities while an employee of the laboratories." He received a \$300 cash award.

## NMFS Financial Assistance Group Holds Seminar

The National Marine Fisheries Service's Financial Assistance Division held a national training seminar on April 24-26 at Berkeley Springs, W. Va.

The Financial Assistance Division administers programs to improve the fishing industry's access to equity and long-term debt capital for its vessel construction, reconstruction, and reconditioning costs. The Division also administers programs to protect domestic fishing vessels seized by foreign nations and to compensate domestic fishermen whose gear is damaged or destroyed by the operation of foreign vessels in the Fishery Conservation Zone.



At the request of the Intergovernmental Oceanographic Commission (UNESCO), the Atlantic Oceanographic and Meteorological Labs in Miami was host to an international working group May 22-26 set up to develop a syllabus for courses to train marine technicians in developing countries. Left to right around the table are Jean Tardy (France), Said Sohrabpour (Iran), Luis Herrera (Venezuela, IOC), Ned Middleton (Texas), Harris Stewart (AOML), Joe Zawodny (Miami-Dade Community College), Robert Lankford (Trinidad, IOCARIBE), Virginia Aprieto (Philippines), John Mumba (Kenya), and Werner Kroebel (Germany).

# Up, Up, and Around-NOS Tests Ocean Buoys On A Wave-Simulating Ferris Wheel



Five waverider buoys were calibrated recently on the 40-foot diameter ferris wheel at Marshall Hall, Md. As the ferris wheel rotates, measurements of buoy motion are transmitted to a receiver and tape recorder on the ground.

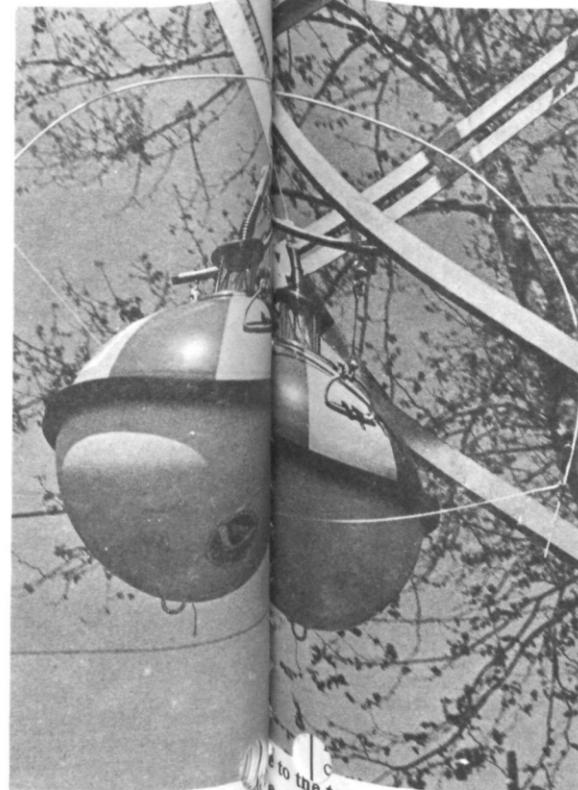


Albert Chin, Jerry Peterson, and Stan Russell secure a waverider buoy to the ferris wheel for calibration.

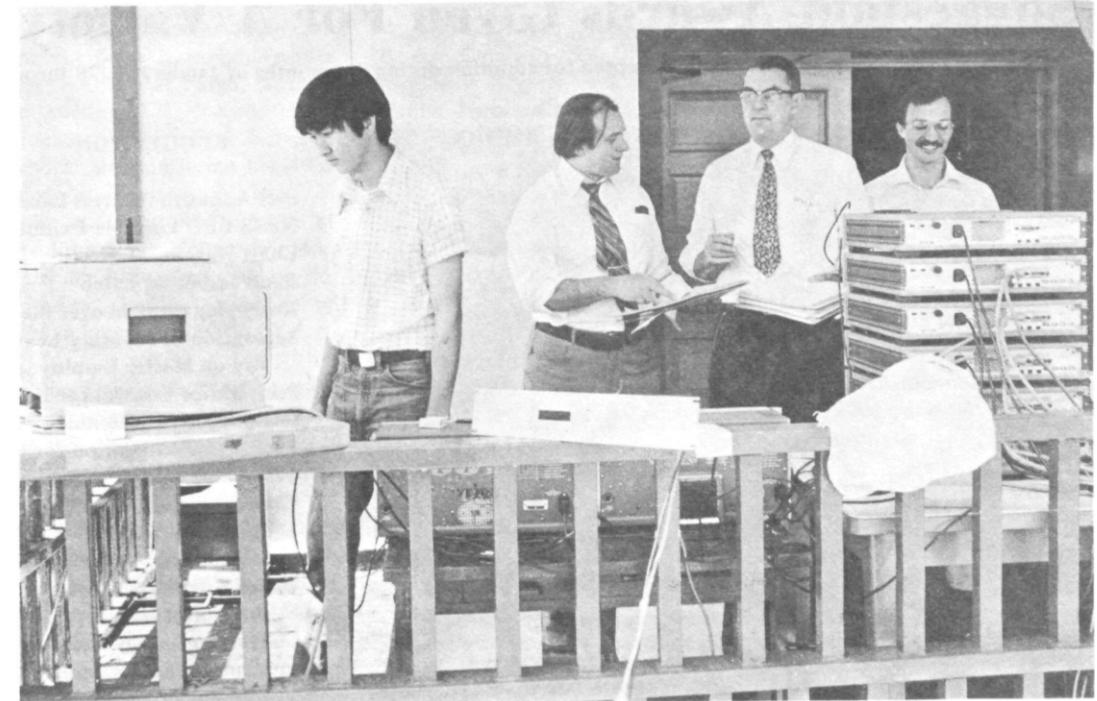
The 40-foot ferris wheel at Marshall Hall (Md.) Amusement Park was used recently by the National Ocean Survey's NOAA to test six buoys. The buoys are used to monitor wave conditions along the Delaware and Maryland coasts this fall.

The National Ocean Survey calibration program, said the project manager for the NOS wave monitoring program, Marshall P. Earle, consisted of several phases. "First, the electronics of the buoys and the receiving stations to which they transmit are thoroughly checked. Next, each buoy is placed on a special test apparatus which moves the buoy in a manner similar to wave motion. The data transmitted by each buoy is recorded and compared to the known motion of the buoy on the test apparatus."

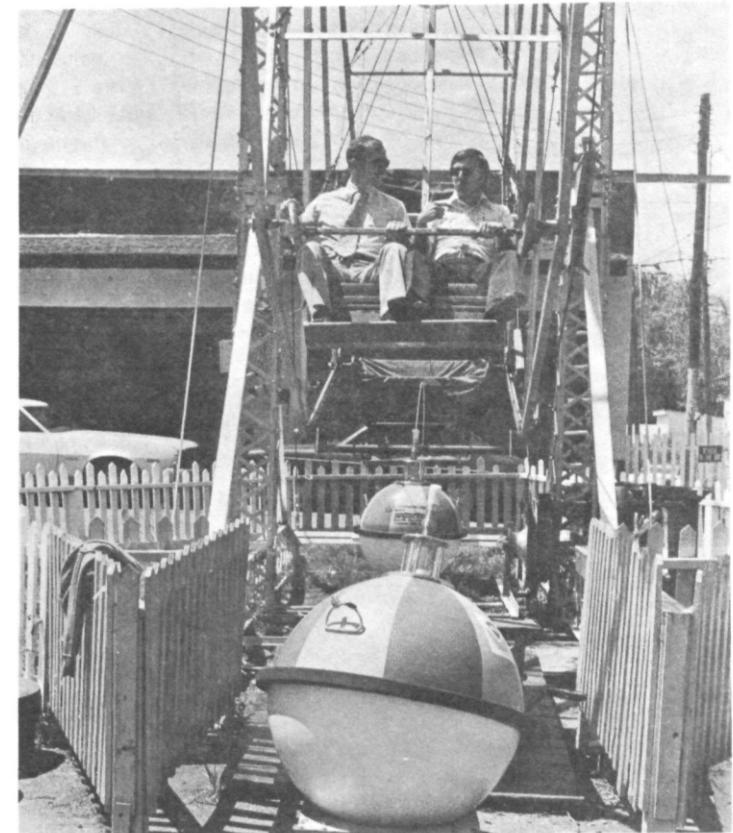
"In the Laboratory," said Earle, "these tests can only be conducted for simulated wave heights up to four feet. Hence, the buoys were calibrated on a 40-foot diameter ferris wheel at Marshall Hall Amusement Park." The buoy calibration was carried out by the NOS's Test and Evaluation Laboratory. Gene Russin is the project manager for the calibration part of the NOS program.



Two of the buoys being tested are tied down to prevent damage as the wheel rotates.



Personnel from the National Ocean Survey's Test and Evaluation Laboratory check waverider calibration data. The transmitted data is being recorded on magnetic tape and charts, and is being analysed in "real time" by a small computer. From left to right: Albert Chin, Dr. Richard Angelari, Stan B. Russell, and David R. Crump.



Dr. Marshall D. Earle and Gene M. Russin (right) took a turn on the ferris wheel before the last two 300-pound waverider buoys were attached.

## Suggestion Awards Given For A Variety of Good Ideas

Employees who have had suggestions accepted for adoption during the months of January 1978 through March 1978 include:  
(Note the variety of subjects covered)

NAME	AMOUNT	SUGGESTION
Oliver, Donald T.	\$ 30	Self Adhesive Address Labels
Wyvill, Mary F.	\$ 40	NESS EEO Portable Exhibit
Howard, Harold V.	\$ 50	Chart Warning Device
Shields, Greydon W.	\$ 50	Fault Indicator Latch
Wolin, Robert	\$100	Improving Control over the Collection of Salary Advances
Hudson, Marjorie and MacFarlane, Ken	\$ 15 (ea.)	Separation of Monthly Leave Supplement Pay from Regular Pay on Master Employee Record
Justis, Kenneth A.	\$ 50	Print Motor Control for H.P. 5050B Digital Recorder
Watanabe, Robert A.	\$ 75	Punch Block Un-Jammer
Massey, C. H. Stanton	\$125	Facilities Modification for H2 Generator
Miller, Audrey	\$ 50	Travel Log File
Koss, Walter J. and Trout, James W.	\$ 25 (ea.)	Establish Paper Recycling Program at the National Hurricane Experimental Meteorology Laboratory in Miami, Fla.
Zurick, Vernon J.	\$100	Use of Communication Systems in Lieu of Travel to Conferences
Lillie, David G.	\$ 95	Convert to Energy and Cost Saving Fluorescent Bulbs
Stephens, Kay	\$ 25	Implement Improvements to Parking Situation at Sussex Building in Boulder, Colo.
Theriot, Ronald K.	\$ 40	Provide Permanent Outdoor "Ash Trays" at Radio Building in Boulder, Colo.
Fournier, William E.	\$ 50	Use Bulletin Boards to Disseminate Information in Lieu of Multiple Xerox Copies
Kelley, Patricia A.	\$ 25	Provide Recycle Containers for Popcan Disposal in Lunchroom
Wolffington, Edward E.	\$ 25	Cleaning of WBRR
Bartell, Henry R.	\$ 50	RAWIN-Theodolite Comparison
Ayers, Arthur W., Jr.	\$100	FT Amendment Criteria for Gusty Surface Winds
May, John A., Jr.	\$ 75	Rearrangement of 'AMDTS NOT AVBL AFT' Statement in Terminal Forecast
Jennings, Thomas R.	\$ 50	MARSMAN: Marine Reporting Station Manual
Travers, James P.	\$ 50	Management Training
Quinlan, John H. and Fracassi, Joseph G.	\$ 50 (ea.)	Monthly Accomplishment Report-Specials/Specials only (MARSSO)
Travers, James P.	\$100	EEO Awareness for Supervisors
Basye, Bennie E.	\$ 50	Outboard Motor Lift
Warner, Donald P.	Certificate	Communications - Medical Emergency
Penland, Frank L.	Certificate	To Aid Computer Operators and to Prevent Feelings Among the General Public

## NOAA Personnel Division Lists Current Vacancies

Announcement Number	Position Title	Grade	Major Line Component	Location	Issue Date	Closing Date
SR-78-15	Electronics Technician (AFOS)	GS-10	NWS	Fort Smith, Ark.; and Macon, Ga.	6/12/78	6/26/78
CR-78-24	Electronics Technician	GS-10	NWS	Green Bay, Wisc.; Rochester, Minn.; Springfield, Mo.; and Goodland, Kans.	6/12/78	6/26/78
CR-78-23	Electronics Technician (Senior Electronics Technician)	GS-11	NWS	Indianapolis, Ind.	6/12/78	6/26/78
CR-78-21	Meteorologist (Lead Forecaster)	GS-12	NWS	Sioux Falls, S. Dak.	6/12/78	6/26/78
NWS-78-20	General Engineer	GS-12	NWS	Silver Spring, Md.	6/12/78	7/03/78
NOS-78-21	General Physical Scientist	GS-13	NOS	Rockville, Md.	6/12/78	7/03/78
HQS-78-41	Correspondence Control Specialist	GS-8/9	ADM	Washington, D.C.	6/12/78	6/26/78
NMFS78-32	Clerk (DMT)	GS-5	NMFS	Washington, D.C.	6/12/78	6/26/78
SER-78-21	Computer Systems Analyst	GS-13	NMFS	Miami, Fla.	6/12/78	7/03/78

## NOTES ABOUT PEOPLE

Zaki Ma'ayeh, Head of the Microfilm Section, Jordan Meteorological Department in Amman, recently completed a



**Zaki Ma'ayeh**

training course at EDS' National Climatic Center in Asheville, N.C. Ma'ayeh, a WMO Fellow, was trained in record filming, film processing and quality control review, and the indexing, storage, and retrieval of film products at NCC May 15-19. Ma'ayeh is responsible for maintaining and operating the microfilm system at the Jordan Meteorological Department.

## OBITUARIES

### Junior V. Teater

Junior V. Teater, 50, of the Coastal Mapping Division, NOAA's Atlantic Marine Center, Norfolk, Va., died May 23. He had been assigned for many years to Geodetic and Photogrammetric Field Survey parties, and during the past two years had served as a supervisory cartographic technician in the Field Surveys Branch. He was a Navy veteran and had completed over 30 years of Federal service. He is survived by his wife, Mrs. Vivian L. Teater of Virginia Beach, and his mother, Mrs. M. A. Stevens of Herbert, La.

### Jack L. Wiley

Jack L. Wiley, Supervisory Employee Relations & Development Specialist at the North Atlantic Administrative Service Office in Seattle, Wash., died May 16. He came to NASO in 1973 from the Office of Re-

Herbert L. Monson has been appointed Meteorologist in Charge of the National Weather Service Office at Fargo, N. Dak. He succeeds E. Vernon Hendrickson who retired last December. Monson began his NWS career at Bismarck, N. Dak., in 1956 and went on to serve at Resolute Bay, Columbia, Mo., again at Bismarck, and in the Antarctic, before returning to Bismarck again in 1973.

The Thomas Jefferson Award was presented posthumously to the late Francis Taylor of Redfield, S. Dak. Mrs. Harriet Taylor recently accepted the award from the National Weather Service for her husband who served as Redfield's volunteer weather observer for more than 41 years.

R. Adm. Robert C. Munson, Director of NOAA's Atlantic Marine Center (AMC) and two members of the Marine Chart Division represented the National Ocean Survey at a recent U.S. Power Squadrons' District 5 conference at NOAA's

search Support Services, ERL, Boulder, Colo. He is survived by his wife Sandra L. Wiley and four children at the family home, 6151 N.E. 192nd, Seattle, Wash., 98155; Page Wiley, daughter; Mrs. Isabelle Wiley, mother; and 2 sisters in Colorado. The family suggests remembrances be made to the Washington Heart Association, Memorial & Bequests, 333 First Avenue West, Seattle, Wash., 98119.

### Paul A. Smith

R. Adm. (Ret.) Paul A. Smith, who served 22 years with the Coast and Geodetic Survey (now National Ocean Survey) before retiring in 1954, died June 4. He was 77. Admiral Smith is survived by his wife Sylvia of Arlington, Va., and a son and daughter. There will be a memorial service at the Navy Chapel, 3810 Nebraska Ave., Washington, D.C., at noon on June 19.

AMC, Norfolk, Va.

Adm. Munson, Norman E. Banks, Chief of the Chart Information Branch, and John E. Hanna discussed the U.S. Power

Squadrons/National Ocean Survey Cooperative Charting Program which assists NOS in keeping its nautical charts up to date and accurate.



Observing the first anniversary of the elected NOAA Federal Women's Advisory Committee May 23, Ellen Overton, Coordinator of the NOAA Federal Women's Program, served refreshments to Anita Daymude and others at an open house in Rockville, Md.

### Flight Edit Program

## Aerial Survey Unit Cited

R. Adm. Allen L. Powell, Director, National Ocean Survey, recently presented a NOAA Unit Citation to the members of the Flight Edit Program, Aeronautical Chart Division, Office of Aeronautical Charting & Cartography, in recognition of outstanding and collective contributions in conducting aerial surveys throughout the United States.

"The members of this pro-

gram," said Adm. Powell, "achieved an enviable record of accomplishment. During Fiscal Year 1977, the Team surveyed 15 Sectional Charts, 6 Terminal Area Charts, and 3 Federal Aviation Administration Minimum Safe Altitude Warning (MSAW) areas. In addition, these 822,000 square miles of surveys greatly advanced the NOAA program for updating aeronautical charts."



At the Unit Citation presentation were (from left) Lt. Cdr. David J. Goehler, Admiral Powell, Lt. Cdr. Richard K. Muller, and Lt. Cdr. Patrick L. Wehling, Jr. Absent was Lt. David J. Tennesen who was on assignment.



COOL, COOL COD SUPPER SALAD WITH HONEY DRESSING

- |  |   |
|--|---|
| 2 pounds cod fillets or other thick fillets, fresh or frozen | 1/2 cups sliced celery                  |
| 2 cups boiling water   | 2 cups cantaloupe chunks                |
| 1/4 cup lemon juice  | 2 medium oranges, peeled and sectioned  |
| 1 teaspoon salt  | 1 cup pineapple chunks, fresh or canned |
| <b>Honey Dressing</b>  | 1 cup seedless green grapes cut in half |
| 1 package (7 ounce) shell or elbow macaroni                  | Crisp salad greens                      |

Thaw frozen fillets. Cut fillets into 1-1/2 to 2-inch chunks. Combine water, lemon juice, and salt in 10-inch skillet. Add fish chunks; cover pan and simmer 8 to 10 minutes or just until fish flakes easily when tested with a fork. Drain fish very well. Place in a bowl; pour half of the Honey Dressing over fish. Cover and refrigerate until well chilled. Cook macaroni as directed on package. Drain, rinse with cold water and drain well. Place in a large mixing bowl; pour remaining half of Honey Dressing over macaroni. Cover and refrigerate until well chilled. Add celery and fruits to macaroni mixture; mix carefully. Add fish chunks and dressing; mix carefully. Serve on salad greens. Makes about 14 to 15 cups salad, 8 to 10 servings.

**HONEY DRESSING**

- |                            |                          |
|----------------------------|--------------------------|
| 1/2 cup honey              | 1/4 cup salad dressing   |
| 1/2 cup white wine vinegar | 1 teaspoon onion salt    |
| 1/4 cup salad oil          | 1/2 teaspoon dry mustard |

Combine ingredients; beat with rotary beater or whiz in blender until well mixed. Makes about 1 1/2 cups dressing.

**Grant Roundup**

**NOAA Provides Assistance**

Recent NOAA grants have been awarded the following States and institutions:

*Georgia*, a \$208,850 OCZM grant to continue development of a management program for its coastal resources.

*Alaska*, a \$306,636 OCZM grant as part of the Coastal Energy Impact Program to mitigate the shoreside effects of the State's growing oil and gas exploration activities.

**Lab Is Center For Instrument Calibration**

NOAA's Air Resources Laboratories unit in Boulder, Colo., has been recommended as the World Dobson Spectrophotometer Calibration Center.

The recommendation was made by the World Meteorological Organization's Commission for Instruments and Methods of Observation (CI MO) Working Group on Measurements of Atmospheric Ozone which recently met in Hohenpeissenberg, Germany.

Expected to be endorsed by the United Nations' World Meteorological Organization, the recommendation followed two years of intensive calibration work at NOAA's Boulder-based Geophysical Monitoring for Climatic Change program headquarters. During this time 15 Dobson spectrophotometers—instruments which measure total atmospheric ozone—from various countries were modernized and calibrated.

NOAA scientists at the laboratory have established and maintain the world primary standard Dobson ozone spectrophotometer, a 150-pound (70-kilogram) device. During the summer of 1977, the Boulder laboratory hosted a World Meteorological Organization-sponsored international comparison of Dobson spectrophotometers in which scientists from Denmark, the United Kingdom, Canada, the Soviet Union, Japan, Australia, and the German Democratic Republic participated.

*Rhode Island*, a \$1 million OCZM grant to support the State's newly approved coastal zone management program.

*New York*, a \$1 million OCZM grant to complete its fourth year of work leading to an approved coastal zone management program.

*Louisiana*, a \$600,000 OCZM grant under the Coastal Energy Impact Program to improve a portion of the major road between New Iberia and the Port of Iberia.

*New Jersey*, a \$747,500 OCZM grant to complete work on its coastal management program.

*Virginia*, a \$636,930 OCZM grant to continue development of a program to manage its coastal region.

*Wisconsin*, a \$1.3 million OCZM grant to put into effect its recently approved coastal zone management program.

*University of Alaska*, a \$910,000 Sea Grant to help develop unique marine resources and to assist in such activities as marine education, marine safety, and seafood processing.

*New York Sea Grant Institution* (a consortium of the State University of New York and Cornell University), a \$1.4 million Sea Grant to pursue more than 50 research, educational, and extension projects.

**BEST FISH BUYS**

According to the NMFS National Fishery Education Center in Chicago, the best fish buys for the next week or so are likely to be:

Frozen cod and haddock fillets along the Northeast Seaboard; fresh sea scallops and whole bluefish in the Middle Atlantic States, including the D.C. area; fresh small shrimp in the Southeast and along the Gulf Coast; fresh dressed whitefish in the Midwest; fresh steamer clams and true cod fillets in the Northwest; and fresh butterfish fillets in the Southwest.

# **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](mailto:Library.Reference@noaa.gov)

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