

Snowfall is Simulated in Computer

As NOAA scientists watch, a northeast wind pushes moist air against the Rocky Mountain foothills, which lift the air, and cool it. Soon water vapor in this air mass condenses into clouds, and, completing a process that has been disastrously rare this winter, snow begins to fall.

But the snow is an illusion.

The precipitation-bearing storm is one of numbers and equations; a simulation, a three-dimensional model that exists in the electronic mind of a computer.

The mountain precipitation model created by a trio of scientists at Environmental Research Laboratories in Boulder, Colo., is unique because it is three-dimensional, and, as a result, is able to simulate the intricacies of air-flow patterns over mountains. When weather data from a particular mountain area are fed into the model, the computer calculates when a cold

(Continued on page 2)

Oil Spill Effects Are Reported



Dr. Arthur S. Flemming (left) is shown presenting the award which bears his name to Dr. Bradford E. Brown. Assisting Dr. Flemming is Beverly Sincavage of the D.C. "Jaycees."

Last December's major oil spill off Massachusetts apparently did not greatly contaminate the water or seafloor. It did appear to have had some impact on the marine ecosystem there; however, the effect on area fisheries could not be assessed fully without further study. These were among the tentative conclusions of NOAA's preliminary report on the scientific response to the Argo Merchant oil spill.

The report was based on material submitted by scientists of many disciplines, from many organizations, compiled by the Environmental Data Service's Center for Experiment Design and Data Analysis.

Specifically, NOAA reported that:

-the number 6 fuel oil carried by the Argo Merchant did not enter the water column, but tended to form large floating "pancakes," which decreased in area and thickened with time;

-oil detected in the water column appears to have been a lightweight "cutter stock" used to dilute the heavier number 6 oil;

-no oil contamination greater than 250 parts per billion was observed, and this was diluted to background levels in a few days by turbulent mixing;

-no oil was observed on the ocean floor beneath the spill, and little contamination was found in sediments except where the ship's severed bow had dragged the bottom; however, at some stations within 10 miles of the bow, concentrations as high as 100 parts per million were detected, suggesting some movement of bow-contaminated sediments in currents along the bottom;

-existing computer models simulated the oil spill's trajectory reasonably well, considering that the situation was wind-dominated (that is, current predictions were not crucial) and involved no beaching of the

(Continued on page 3)

Bradford Brown Is Flemming Award Winner

Dr. Bradford E. Brown, supervisory research fishery biologist with National Marine Fisheries Service's Northeast Fisheries Center in Woods Hole, Mass., is one of this year's ten winners of the Arthur S. Flemming Award. The winners are selected each year by the D.C. Junior Chamber of Commerce to honor outstanding young men and women in the Federal government.

Dr. Brown was cited for his scientific assessments of fish stocks of the Northwest Atlantic Continental Shelf. Because of his wide range of knowledge, he has been much in demand for advice on the National and international level brought about by the recent proliferation of regulations on fish and fishing rights.

In receiving the Flemming award, Dr. Brown joins other members of the NOAA family who have been Flemming winners. Among these are Dr. Richard E. Hallgren, Deputy Director of the National Weather Service, and Robert J. Learson, NMFS supervisory research food technologist.

Do you jog? Would you like to start? The NOAA Employees Association is sponsoring NOAA Joggers' Day in the D.C. area on Saturday, June 11. The purpose: to run for fun and get some exercise. You'll have a choice of three runs—1500 meters, 3000 meters, or 5000 meters. A certificate will be awarded to each person who "finishes" his or her selected distance or distances. Watch for the place, to be announced later in NOAA News.



Prepared for anything, including a sudden rain squall, these NOAA divers from the Surveyor sun themselves in the Bering Sea after a hull inspection of the vessel. Left to right, Lt. (j.g.) Hans Ramm, Lt. (j.g.) William Harrigan, NOS technician assistant Pat McKeown, and Yeoman Steve Thorn.

Snowfall

(Continued from page 1)

cloud develops, ice crystals form, snow begins to fall, and finally, how much accumulates, and where.

This information is particularly useful for planning weather modification programs because the three-dimensional model can simulate the effects of cloud seeding before conducting an actual field demonstration.

"For example, we can first run the model for a specific location with meteorological data representing natural snowfall conditions, then rerun the model, adding cloud seeding effects to determine what the outcome would be," explains Dr. Charles F. Chappell, the meteorologist who leads the modelling effort in ERL's Atmospheric Physics and Chemistry Laboratory.

"Until now meteorologists have had only one- and two-dimensional mathematical models of these processes available. These could not satisfactorily predict the extent or distribution of the effects of cloud seeding."

To determine this extent, the NOAA scientists can first run the model under natural meteorological conditions with more than one mountain range included in the topography. Then they introduce cloud seeding on the upwind mountain range into the model's program and deter-



The statuette is called a "Connie"—a whooping crane symbolizing the conservation cause. NOAA Administrator Dr. Robert M. White (right) is shown here as he received the National Wildlife Federation's International Conservation Award at the Federation's 41st annual meeting March 26 in Washington, D.C. Dr. White was honored for his work in marine mammal protection. Federation president G. Ray Arnett (left) presented the award.

mine if there is a cloud seeding effect, and whether it reaches the second range of mountains.

Using the model to study complex air-flow patterns over mountains, the researchers can determine where cloud-seeding generators should be installed and the resulting snow that would accumulate.

At present, the NOAA scientists are attempting to demonstrate that the model is really capable of simulating the significant snowfall features of a particular geographic location.

It is NOAA policy that each employee receive a personal copy of the NOAA Magazine. If you have not been receiving a personal copy, contact the responsible person within your mail stop. He or she should determine the number of employees being served by the mail stop and send this information to the NOAA Directives Section, AD161, Rockville, Md., 20852 (FTS 443-8192). Each employee is encouraged to read the NOAA Magazine and take it home for family and friends to read.

Observers Are Placed On Foreign Ship^{ms}

The first of an estimated 160 United States observers have been placed on foreign fishing vessels that are permitted to fish within the 200-mile fishery conservation zone, National Marine Fisheries Service reports.

Four observers from NMFS boarded two Japanese crab factory ships when the ships sailed from Hokkaido, Japan, bound for the Eastern Bering Sea. They will remain on the ships until the Japanese reach their quota of 12,500 metric tons of tanner crabs, probably in July.

Under the terms of permits issued under the Fishery Conservation and Management Act of 1976, observers are placed on foreign fishing vessels to collect catch and biological data, information on the types of gear used as well as the fishing effort of the vessels. In addition, they will monitor compliance with the regulations and terms of the fishing permit.

Beginning this month, observers are scheduled to be placed on the fishing and processing vessels of Spain, Japan, Italy, East and West Germany, Taiwan, Poland, USSR, France, (Continued on page 8)

Aviation Weather

New Instrument Package Flown in Airlines Test

A Pan American World Airways Boeing 747, in regular passenger service for the international airline, is doing double duty as a flying laboratory, demonstrating the concept that aircraft can collect important weather information in flight and relay it via satellite to weather forecasters on the ground.

An electronics package which collects data from the aircraft's instruments is the heart of the joint program conducted by NOAA and the National Aeronautics and Space Administration (NASA).

The project is under the direction of NOAA's World Weather Program Office. Jim Giraytys of Environmental Monitoring and Predictions (EM) is the project manager, with Dr. James K.

Sparkman, NOAA physical scientist, and Dr. Rex Fleming, director of the FFG project office, working together with NASA to develop and implement the instrument package.

The package was developed for NOAA by NASA's Lewis Research Center, Cleveland, under the technical management of the Goddard Space Flight Center, Greenbelt, Md. It is designed to tap into the inertial navigation systems of wide-bodied 747 and DC-10 series jets, collecting data on the air temperature, wind direction and speed, aircraft location and altitude.

This material is automatically converted into a message format which is transmitted to a NOAA geostationary satellite for instantaneous retransmission to the (Continued on page 8)



Juan A. Munoz Ramirez (right), hydrographer from the Hydrographic Institute, Valparaiso, Chile, received a NOAA certificate March 18 upon his completion of a 14-month program in Map and Chart Reproduction. The course was provided under a technical cooperative agreement between the U.S. and the United Nations. Upon his return to Chile, Ramirez plans to update his country's operations in reproducing nautical charts. Shown presenting the certificate is Melvin M. Gienau, Chief, NOS Reproduction Division.

Fishery Management Report Sent to Congress

Actions taken by the eight Regional Fishery Management Councils and the Department of Commerce to implement the Fishery Conservation and Management Act of 1976 are summarized in a report sent to Congress by the Department of Commerce.

The report covers the period April 13-December 31, 1976, during which preparations were made to insure that the United States would be prepared to exercise its management authority of the 200-mile limit on March 1, 1977. Members of the Councils were appointed in mid-August, began meeting in late September and early October, and by the end of the year had elected officers and, in many cases, had selected executive directors and administrative headquarters.

Scientific and statistical committees were established and the Councils began evaluating the fishery resources within their areas, and reviewed and provided comments on matters and documents associated with management of foreign fishing.

In addition to processing nominations for Council membership, conducting an orientation conference, and issuing regulations and an operations manual on Council activities, NMFS prepared 16 preliminary fishery management plans. The plans

identified those portions of the optimum yields of fisheries that could be allotted to foreign fishermen.

Other major actions were undertaken with the cooperation of the Department of State and the U.S. Coast Guard. Six Governing International Fishery Agreements were signed and others were being negotiated by the end of the year. In addition, forms for foreign permits and permit applications were developed, a proposed fee schedule prepared and published, and enforcement and surveillance requirements assessed to insure compliance with the Act.

The activity report contains detailed information on actions taken regarding the formation of the Fishery Management Councils, fishery management, and inter-agency activities. It also discusses the accomplishments of the eight Regional Fishery Management Councils, and lists membership of the Councils and the administrative staffs, committees, and panels.

"Aquavet" Funded By Sea Grant

With the help of a \$59,800 NOAA grant, five universities and research laboratories in three states are launching a cooperative program to train specialists in aquatic veterinary medicine.

Funds for the project come from the Office of Sea Grant, and will be augmented by more than \$45,000 in matching contributions from the participants.

Called "Aquavet," the project will be administered by the New York Sea Grant Institute at the State University of New York, and will involve faculty members from two schools responsible for veterinary education in the northeastern United States, the University of Pennsylvania School of Veterinary Medicine and the New York State College of Veterinary Medicine at Cornell University.

Because of growing interest in the physiology and behavior of whales and other marine animals, as well as the expansion of aquaculture to raise food fish, veterinary medicine has begun a move toward aquatic medicine as a speciality.

They Do It All For You McDonald's Receives NOAA Certificate

McDonald's, national restaurant chain, has received a certificate of recognition from the Department of Commerce for participation in a nationwide consumer education effort on behalf of the Department's Voluntary Fishery Products Inspection Program.

In early March the McDonald's restaurant chain started a program to inform consumers that it uses USDC inspected, Grade A fish portions exclusively in the fish sandwiches sold throughout its 3,700 U.S. fast food outlets. McDonald's restaurants serve more than 42 million pounds of USDC Grade A fish portions each year.

This is the first time that a restaurant or restaurant chain has helped the Department of Commerce educate consumers about the availability and significance of USDC-inspected products. The Voluntary Fishery Products Inspection Program

is carried out by the National Marine Fisheries Service.

McDonald's Director of Quality Assurance, Victor Wortman, said the restaurant chain strongly supports the program, which encourages the fishing industry to assure the safety and improve and maintain the quality of its products through inspection and standardization procedures, usually carried out by Federal inspectors.

The certificate was presented by Under Secretary of Commerce Dr. Sidney Harman. Other Commerce officials at the presentation included Dr. Robert M. White, NOAA Administrator, David H. Wallace, NOAA Associate Administrator for Marine Resources, Robert W. Schoning, NMFS Director, Joseph W. Slavin, Assistant Director for Fisheries Development, NMFS; and Thomas J. Billy, Chief, Seafood Quality and Inspection Division, NMFS.



Dr. Sidney Harman, Under Secretary of Commerce (left) and Dr. Robert M. White, NOAA Administrator are shown here presenting the NOAA certificate of recognition to Vic Wortman, Director of Quality Assurance, and Julius Dorsey, National Advertising and Promotion Supervisor, of McDonald's, for the national restaurant chain's nationwide consumer education efforts on behalf of the Department of Commerce.

Oil Spill (Continued from page 1)

spilled oil;

—spilled oil contaminated the zooplankton components of the oceanic food web near the wreck;

—pollock eggs collected near the spill were contaminated, with a high proportion of dead, moribund, and deformed embryos, and sand lance larvae appeared impacted by oil contamination within the spill zone;

—the economic impact of the spill cannot be assessed fully without additional study.

A recurring note in the report is that ecosystem baselines—measurements of life and environment as they were before the spill—were inadequate for purposes of assessing the true impact of the Argo Merchant incident.

NOAA NEWS

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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.

Nancy Pridgeon, Editor
Warren W. Buck, Jr., Art Director

The Public's Invited

National Ocean Survey's Display Center. . .

More than a glimpse of the National Ocean Survey's proud and diversified 170-year heritage can be seen at the NOS Display Center. The Center, located on the second floor of Building #1, Washington Science Center, Rockville, Md., is attracting increasing numbers of NOS employees, their families, and the general public. Everybody is welcome to browse, and many are making return trips to the "living exhibit."

The Center's artifacts are changed from time to time,

often featuring new specialties. To help insure ever-new interest for the viewer, the Director of the National Ocean Survey has asked active and retired employees who may own historical U.S. Coast and Geodetic Survey artifacts, to consider lending, or donating these items to the Center. Proper credit is given, and all loaned items are returned when the lender desires.

NOS Display Center highlights include first superintendent Ferdinand Rudolph Hassler's 24-inch theodolite, the

first tide-and-current records, and James McNeill Whistler's engraving of Anacapa Island in Santa Barbara Channel, California (produced during Whistler's brief tenure with the Coast and Geodetic Survey in the 1850's). Some of the Center's other one-of-a-kind objects on display were loaned by the Smithsonian Institution.

Visitors to the Center find a dramatic capsule-history of the agency's significant impact upon the Nation's technical sciences. Scientific and technical fields

represented include cartography, geodesy, weights-and-measurements, and fleet operations.

The diligent efforts of many employees over a two-year period made the Display Center possible. The idea for it, initially considered 20 years ago, became a reality February 10, 1976, in dedication ceremonies on the agency's 169th anniversary in time for the Bicentennial. As Bicentennial Year activities pass into history, the NOS Display Center prepares to celebrate its first birthday—and NOS's 170th.



One of the NOS Display Center cases.

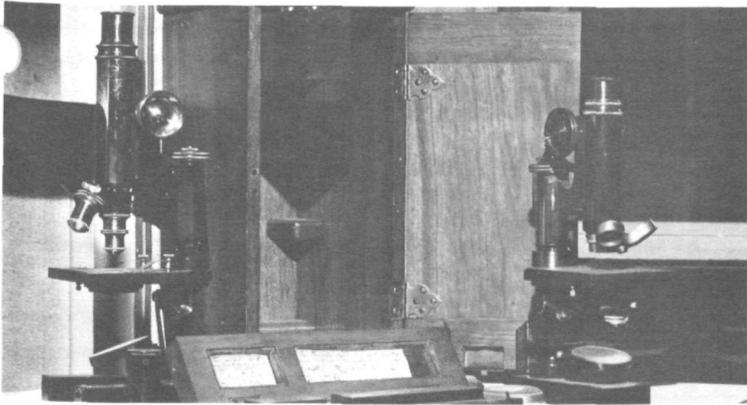


Corridor leading to the NOS Display Center offers historical items in the form of letters and pictures—including early Gulf Stream research, not shown.



A small copper engraving featured at the NOS Display Center is the work of James McNeill Whistler, a U.S. Coast and Geodetic Survey employee of three-months' duration in the mid-1850's.

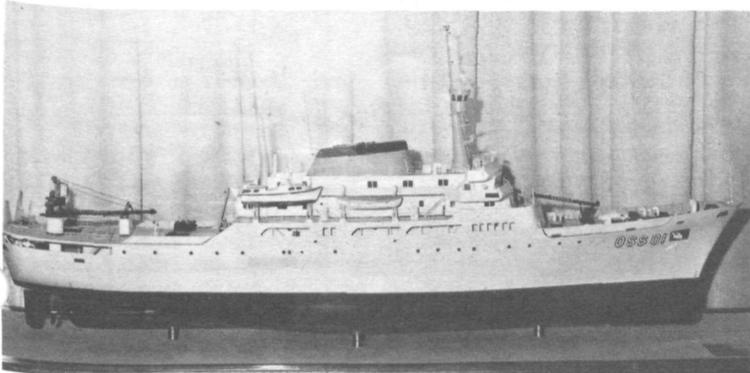
Relics and Models and Remembrances Past



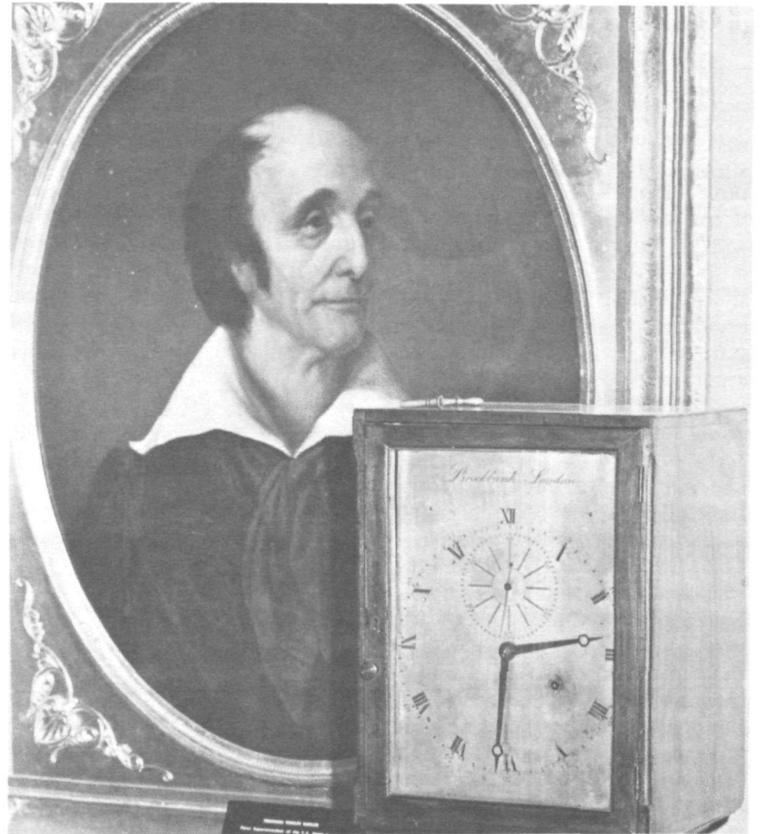
Some of the instruments used during the period when Hassler incorporated the work of the Office of Weights and Measures into the Survey.



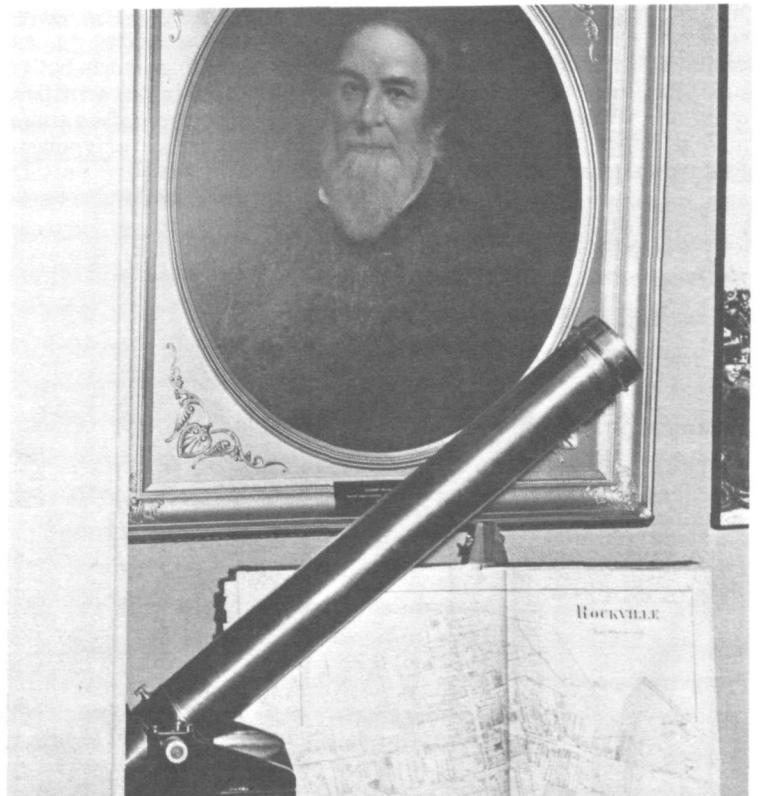
The scope—all that is left—of Hassler's 24-inch theodolite, used in the initial surveys on Long Island in 1816-1817, for measuring horizontal or vertical angles.



A model of a typical NOAA ship used in NOS work, on display at the Center.



Ferdinand Rudolph Hassler, a dedicated public servant and the Survey's first Superintendent, with his "grandmother clock."



The second Superintendent of the Survey, Alexander Dallas Bache, great-grandson of Benjamin Franklin. Foreground: the Zenith Telescope No. 4, used in making the trigonometrical connection of the Rockville Latitude Station 1891-92.

DOC Personnel Director

John M. Golden Discusses the Vacancy Review Program

The basic tenet of the vacancy review program is very simple. Supervisors and managers are held responsible for reviewing every vacant position in their organization to determine if the position is still necessary and if so if it is properly described as to duties and responsibilities. Appropriate steps are taken to insure that such a review is in fact conducted in every instance where a vacancy occurs and that a capability is maintained for reporting the results of such review by major operating units on a quarterly basis. The vacant position is not looked upon as an isolated entity but as a part of a whole. Can the vacant position be filled at a lower grade without having adverse impact on the mission of the organization? We have found in many cases that it can be. If the position is classified in a professional series does it have to remain so classified? Can a technician fulfill the necessary job requirements? Can we break away from the status quo and look at new concepts of job structuring and organization? We are requiring our position classifiers throughout the Department to sit down with the supervisor and explore these questions. When the Department's Personnel Management Evaluation team moves into an area for review, the vacancy review program is given high priority for evaluation.

The control of the upward

movement of average grade is immediately apparent under this program. To keep personnel costs down through a diligent review of vacant positions and proper classification of all positions is of course the main purpose of the vacancy review program, but even more important, we are insuring the effective management of our personnel resources.

The results of our vacancy review program have been most gratifying in terms of achieving the objective of the control of our average grade and salary expenditures but also in terms of benefits to our other personnel management objectives.

Let's take a quick look at some of the side effects of the program.

—We have found that we have been able to lessen the impact of adverse actions by utilizing the vacancy review program. Quite often an employee faced with an adverse classification action can be reassigned to a vacant position or restructured vacant position without loss of grade or of status.

—In many instances we are coming up with a much better age distribution in our activities. Lowering the grade often times results in an intake of younger people, which tends to provide more recent educational experience to management. Interestingly enough this also has tended to stimulate or motivate

the older employees to learn new techniques for self development.

—The program has provided us an additional avenue for the intake of minorities and women into many organizations and into the mainstream of their programs without specifically creating jobs or setting unrealistic goals.

—Where management has restructured positions and changed their requirement from a professional to a technician type position it has resulted in a higher degree of professionalism within an organization. This is primarily brought about by better utilization of both the professional and the technician. This also permits, if not requires, the professionals to work at their full level and ultimately increases the status of the professional.

—Managers throughout the Department are beginning to perceive the personal values to be derived from the vacancy review program. They're taking a much closer look at the total position structure in the organization and putting forth a special effort in their review of the vacancies. This is improving the awareness of, and the performance of, their total personnel management role. Managers are really spending more time managing their resources and, I think, obtaining better utilization of those resources. They are realizing that in the final

analysis their actions as strengthening the remaining position structure and resulting in an improved and more balanced total staff.

An additional benefit derived from our accelerated vacancy review program is in the area of involvement of our position classifiers with management in studying the position structures. The contributions that the classifiers can make, and are making, in assisting management in studying the structures, proposing alternative structures, promoting job enrichment and maximum utilization considerations are a giant step towards achieving our total position management objectives.

When we recharged the vacancy review program just a year ago now, we had no idea how readily supervisors and managers would take to it. I have spoken before hundreds of the Department's supervisors and managers and, yes, even employees, and the understanding, backing, and praise for this program has been beyond our greatest expectations.

Perhaps it is a sign of the times, but we feel that this program is bringing managers and personnelists closer together to strengthen our personnel management systems, but even more realistically to ward off the spectra of harsh formal controls which are perceived as the only viable alternative.

NOAA Personnel Division Lists Current Vacancies

Announcement Number	Position Title	Grade	MLC	Location	Issue Date	Closing Date
408-77	Asst. Director Scientific & Technical Services	GS-16	NMFS	Washington, D.C.	4-11-77	5-2-77
414-77	Oceanographer	GS-9	ERL	Princeton, N.J.	4-11-77	5-2-77
424-77	Public Information Specialist	GS-12	OCZM	Rockville, Md.	4-13-77	5-4-77
422-77	Voucher & Accounting Tech (2 positions)	GS-6	HDQS	Rockville, Md.	4-13-77	5-4-77
421-77	Supervisory General Engineer	GS-15	NOS	Washington, D.C.	4-13-77	5-4-77
420-77	Hydrologist	GS-12	NWS	Harrisburg, Pa.	4-13-77	4-27-77
417-77	Physical Scientist	GS-14	ERL	Norman, Okla.	4-13-77	5-4-77
416-77	Meteorologist	GS-11	ERL	Princeton, N.J.	4-13-77	5-4-77
423-77	Personal Services Accounting Tech. (2 positions)	GS-6	HDQS	Rockville, Md.	4-13-77	5-4-77
419-77	Meteorologist (Forecaster)	GS-13	NWS	San Francisco, Calif.	4-13-77	4-27-77
418-77	Mathematician	GS-12	ERL	Boulder, Colo.	4-13-77	4-27-77
399-77	Meteorologist	GS-12	NWS	Portland, Oreg.	4-5-77	4-19-77
396-77	Meteorological Technician	GS-10	NWS	Cape Hatteras, N.C.	4-5-77	4-19-77
402-77	General Engineer	GS-11	NDBO	Bay St. Louis, Mo.	4-5-77	4-19-77
397-77	Engineering Technician	GS-10	NWS	Honolulu, Hawaii	4-5-77	4-26-77
398-77	Supervisory Meteorological Tech.	GS-12	NWS	Kansas City, Mo.	4-5-77	4-19-77
401-77	Fisheries Data Assistant	GS-6/7/8	NMFS	Juneau, Alaska	4-5-77	4-19-77
400-77	Oceanographer	GS-12	ERL	Seattle, Wash.	4-5-77	4-19-77

NOTES ABOUT PEOPLE

Judith B. Tenney has been appointed as Chief, Career Development Branch, NOAA Personnel Division. Mrs. Tenney entered the Federal service as a management intern in the Air Force Data Systems Design Center. In 1971 she joined NOAA as an analyst with the Management Analysis Division and subsequently served as a special assistant to the Assistant Administrator for Administration. Following this assignment, she joined the Personnel Division as Executive Development Officer in the Planning and Evaluation Branch, and where she was responsible for the development of NOAA's current Executive and Management Development Programs.



Judith B. Tenney

Mrs. Tenney has taught at the high school level in the D.C. public school system and has been a part-time instructor for the past five years at both the University of Maryland and Prince George's Community College. In addition, as a member of the Speech Communication Association of America, she has been a lecturer and consultant on training and development opportunities in the Federal government. Mrs. Tenney did undergraduate work at the University of Wisconsin in Madison and earned a M.A. Degree in Speech Communication and Personnel Management in 1972 from the University of Maryland.

Paul D. Fulham, has been named Intergovernmental and Constituency Liaison on the staff of the Director of the Southeast Region of the National Marine Fisheries Service.

Mr. Fulham was formerly a Marketing Specialist with the Fisheries Service. He has been with the Federal government since 1958. He attended Northeastern University and Boston College.

Charles A. Oravetz, has been named Fishery Management Council Coordinator on the Staff of the Director of the Southeast Region of the National Marine Fisheries Service.

Mr. Oravetz has been serving as a Fishery Marketing Specialist in the St. Petersburg Regional Office since 1975. He was employed in a similar capacity in Little Rock, Arkansas. He received a Bachelor's Degree from Rollins College in 1971 and in 1972 received a Master's Degree in Management.



Cdr. Walter F. Forster, II

Commander Walter F. Forster II has been appointed Officer-in-Charge of the NOAA Officer Training Center at the U.S. Merchant Marine Academy at Kings Point, N.Y.

Forster has been a NOAA commissioned officer since 1963. He attended Huntington (N.Y.) High School from 1955 to 1959, and in 1963 joined the NOAA Corps following graduation from the State University of New York Maritime College with a degree in maritime transportation. He subsequently served aboard the Surveyor as a junior officer and then as executive officer of the Hodgson, before being named to command the vessel. He also served on the Fairweather and the Davidson. He received a Master's degree in Public Affairs from the University of Washington, Seattle, Wash., in 1976.

Raymond Ramsay has been named OCEANLAB Project Manager in the Manned Undersea Systems and Technology (MUS&T) Office. A naval architect, he received his training and education in England prior to serving with the British Army in Singapore and Malaya. He holds a Master of Science degree in Administration from George Washington University. Mr. Ramsay is a member of the Society of Naval Architects and Marine Engineers and the North East Coast Institution of Engi-

neers and Shipbuilders (U.K.) During his 23-year career as a naval architect, he has participated in the design of a great variety of special purpose marine vehicles, including conventional cargo ships, air-cushion craft and submarines/submersibles.

The MUS&T office has also named **William S. Busch** to the post of systems ocean engineer. He will be involved with the development and implementation of the OCEANLAB underwater habitat program. For the past three years, he has been with NESS's Office of System Engineering where he worked on development and implementation of an International Data Collection System using GOES spacecraft.

Busch graduated from the University of Michigan with a Bachelor's degree in Electrical Engineering in 1966. He is a graduate of the Navy Officer's Candidate School. His two major fields have been ocean engineering and satellite communications.

Joan Vandiver Frisch of NOAA's Public Affairs office in Boulder, Colo., has received three awards from the Colorado Press Women for news stories about NOAA's Environmental Research Laboratories. It is the fourth consecutive year in which she has been honored by the organization.

Gregory Dietz is the first MIC at NWS's new WSMO in Volens, Va. An ex-New Jerseyite, he graduated from Belknap College with a B.S. in Meteorology. He participated in private industry as a staff Radio Station Meteorologist and a Research Meteorologist before joining the National Weather Service in Buffalo in 1974. He worked his way up the Met Intern ladder and this is his first assignment as Meteorologist in Charge.



Peter B. Chaston

Peter B. Chaston has been selected as the new MIC at Rochester, N.Y. He received his B.S. from New York University and an M.S. from the University of Wisconsin. The latter was obtained on an NWS Fellowship. After serving in the Air Weather Service, he joined the NWS at WSO Binghamton in 1971. He worked at WSO Hartford and WSFO Pittsburgh before assuming his duties at Rochester as MIC.

Dr. Brian Rothschild's name was inadvertently misspelled in the 4/1 issue. NOAA News regrets the error.



Four members of NOS's Oregon II engineering department recently received cash awards of \$300 each for "maintaining the engine room in an outstanding state of appearance and operational readiness," as shown by fleet inspections dating back to January 1974. R. Adm. H. R. Lippold (left), Associate Director of the NOS Office of Fleet Operations, presented the award to (left to right) Chief Engineer Louis Guirola, Assistant Engineers Jake Marinovich and Victor Johnson, and Qualified Member of the Engineering Department Herbert Young.

FROM THE GALLEY



SVENSKIE SMELT FRY

20 medium-sized smelt
(about 1 pound)
1 can (2 ounce) flat fillet
of anchovies
Flour
3 tablespoons butter
or margarine
3 tablespoons vegetable
oil
2 tablespoons minced
onion

Remove heads from smelt, clean, and bone. Drain anchovies, reserving oil for sauce. Cut anchovies in half lengthwise. Place one half anchovy inside each smelt. Sprinkle fish with salt and pepper; roll in flour. Heat butter or margarine and vegetable oil in a large skillet. Fry fish in butter-oil mixture until crisp. Keep fish warm while preparing sauce. In a small saucepan saute onion in reserved anchovy oil until tender. Blend

1/2 teaspoon salt
1-1/2 tablespoons flour
1-1/3 cups light cream
or half and half
1 egg yolk, beaten
1 tablespoon fresh
lemon juice
1 tablespoon fresh dill
or 1/2 teaspoon dried
dillweed
4 slices rye bread, toasted,
crusts removed

in salt and flour. Gradually stir in cream or half and half. Heat to boiling, stirring constantly; boil one minute. Add a little hot sauce to egg yolk; return all to saucepan. Heat and stir until thickened. Stir in lemon juice and dill. Makes 1-1/3 cups sauce. To serve, place smelt atop each slice of rye bread. Spoon sauce over fish. Garnish with a lemon twist and a sprig of dill. Serve with sliced tomatoes and cucumbers. Makes 4 servings.

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 fresh cod fillets and fresh rainbow trout along the Northeast Seaboard; fresh whole croaker and sea bass in the Middle Atlantic States, including the D.C. area; mullet in the round and Spanish mackerel fillets in the Southeast and along the Gulf Coast; whole and pan dressed smelt, and whiting fillets in the Midwest; frozen silver salmon and Dungeness crab in the Northwest; and butterfish and turbot fillets in the Southwest.

Observers

(Continued from page 2)

Romania, South Korea, and Bulgaria during those periods of the year and in the areas in which they have permission to fish.

U.S. observers will board the ships either before they leave their home ports, from Coast Guard vessels at sea, or when the foreign ships enter U.S. ports to pick up the observers.

Spring Forward, Fall Back

Be sure to set your clocks one hour ahead the last Sunday of this month. Daylight saving time begins on April 24.

Aviation Weather (Continued from page 2)

ground.

Throughout this year, five more of the electronic packages are expected to be installed on aircraft operated by other international carriers. The packages are called Aircraft to Satellite Data Relay (ASDAR) platforms.

The prototype ASDAR model weighs about 40 pounds (18 kilograms) and is about the size of an electric typewriter. It requires about 200 watts of power, and transmits on a frequency of 401.7 megahertz.

The satellite which relays the message to the Weather Service through NOAA's Command and Data Acquisition Station at Wallops, Va., is one of two geostationary spacecraft the agency operates. While their main use has been to provide images of the earth and its atmosphere—

seen nightly on most TV weather broadcasts—they also each have the capability of handling messages from more than 10,000 data collection platforms; land-based, on ocean buoys, or, as in the case of ASDAR, aircraft aloft.

NOAA and NASA scientists see the major potential for the ASDAR system as providing meteorological data from the tropics and southern hemisphere where weather information is particularly difficult to obtain. But the retrieved information also is considered valuable to airlines, providing up to the minute weather conditions for inclusion in last-minute flight planning, with resulting potential savings in fuel and flight time, as well as more accurate forecasts of importance in aircraft routing.

OBITUARIES

Capt. Edward B. Brown

Capt. Edward B. Brown, Mid-Continent Field Director of the Coast and Geodetic Survey in Kansas City, Mo., until his retirement in 1968, died April 6, 1977. During his 39 years of service in the Coast and Geodetic Survey, he served aboard ten vessels, five of which he commanded.

He is survived by his wife Marguerite of 7824 Falmouth, Prairie Village, Kans., 66208, a son Donald, and a daughter,

Gwendolyn W. McKay of Richland, Wash.

Miss Grace W. Carter

Miss Grace W. Carter, a former Weather Bureau employee who retired in 1957, died April 1, 1977, in Indianola, Miss., of heart attack. Miss Carter was with the Weather Bureau for many years where she was affectionately known as the "Travel Clerk," preparing travel authorizations. She is survived by a sister, Mrs. F. M. Featherstone, 306 E. Percy St., Indianola, Miss. 38751.



Graduates of the Basic Meteorological Technician course held January 18 - March 10, 1977, at NWS Technical Training Center: Seated, left to right: Maxine Pacheco, WSO Houston, Tex.; Cliffetta Jones, WSFO Omaha, Neb.; Charlene Gross, WSFO Bismarck, N.D.; Bobby Brewer, WSFO Oklahoma City, Okla. Standing, left to right: James Allen, Wheaton, Md.; Leslie Harris, WSFO Jackson, Miss.; Mike Coffin, Instructor; Mauri Ward, Instructor; William Trainor, WSFO Cheyenne, Wyo. (not shown).

National Oceanic and Atmospheric Administration

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