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

noaa week

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Upward Mobility Training in 8 Categories Is Available

Contract Let For Automated Chart System

Award of a $1,496,442 contract for construction of the final link in an automated nautical charting system designed by the National Ocean Survey has been announced by Secretary of Commerce Elliot L. Richardson.

Under the contract, Planning Research Corporation's Information Science Corporation, McLean, Va., will prepare an automated information process which will store and retrieve nautical chart information and allow NOS cartographers to compile charts using computer-generated graphics interacting with a nautical chart data base.

The new charting system, slated to become fully operational by 1980, will replace the present day manual system, which prints approximately three million charts each year for coastal areas, estuaries, harbors, and the Great Lakes.

R. Adm. Allen L. Powell, NOS Director, said the information system is the final link in NOAA's $25 million nautical chart automation program that includes the automated acquisition, storage, and retrieval of chart data, compilation of charts, and chart negative production.

"Once the program is fully operational," he said, "most data now appearing on nautical charts will be available in digital form for the computer. These data can

(Continued on page 2)

Message From the Administrator

I am pleased to again announce NOAA's eight Upward Mobility Training Programs. Since their inception in FY 74 and successful growth in FY 75 and FY 76, these programs have indeed proven to be in keeping with NOAA's expanded EEO effort. To date over two hundred trainees have been placed in ongoing career fields through these programs.

The Upward Mobility Program can be expected to continue as one of NOAA's major upward mobility efforts for FY 77. It is my hope that NOAA employees will recognize the wide variety of careers offered by these Programs, and will avail themselves of the opportunities to grow as members of the NOAA family.

Robert M White

Dr. Robert M. White
NOAA Administrator

Openings are available in NOAA's expanded career opportunity training programs. Upward mobility training programs announced by Dr. Robert M. White, NOAA Administrator, will provide NOAA–financed training in eight broad categories: Administrative Technician, Scientific Technician, Administrative 20/20 Work Study, Scientific 20/20 Work Study, Administrative Trainee, Science Intern, Administrative Fellowship and Graduate Scientist.

The programs are planned to train up to 10 Administrative Technicians, 50 Scientific Technicians, 8 Administrative 20/20 Work Study Trainees, 20 Scientific 20/20 Work Study Trainees, 8 Administrative Trainees, 5 Sci-

(Continued on page 4)

Public Hearing Set In Kansas City On NWS Services

A public hearing on possible ways to improve the forecasting services of the National Weather Service will be held in Kansas City on April 29. The hearing, one in a series being conducted in various American cities on subjects of concern to the Department of Commerce, will be conducted from 9 a.m. to 5 p.m. in the Grand Ballroom of the Radisson-Muehlebach Hotel.

Hearing moderator will be Murray Nolte, Director of Community Development for the city of Merriam, Kans. Panel mem-

(Continued on page 4)

Two-Part Public Hearing Set On Hawaii Estuarine Sanctuary

A proposal by the State of Hawaii to establish an estuarine sanctuary in uninhabited Waimanu Valley on the island of Hawaii moves a step closer to reality this month with the scheduling of a public hearing on the impact it would have upon the environment.

The hearing will be held on April 26 at Honokaa and on April 27 in Hilo by NOAA officials in cooperation with State representatives.

At the two sessions, residents will be given the opportunity to comment upon a draft environmental impact statement outlining the proposed sanctuary, expressing their views on the nature and adequacy of the proposal.

The purpose of the sanctuary is to ensure long-term protection of a virtually natural area for scientific research, educational study, and as a control for measuring the impact of human activities in the estuarine environment.

Hawaii has requested a grant of $191,250 from the Office of Coastal Zone Management, to be matched by at least an equal amount in State program funds. This would let the State conduct baseline studies, and purchase lands to establish the sanctuary.

The total area of the proposed sanctuary is about 3,700 acres (roughly six square miles) and includes almost an entire valley-stream system plus the trail corridor, or access route, leading from nearby Waipio Valley.

Under proposed regulations, certain activities within the sanctuary would be prohibited or controlled. Prohibited uses would

(Continued on page 2)

Dr. Hess Elected Member of Academy Of Engineering

Dr. Wilmot N. Hess, Director of the Environmental Research Laboratories, has been elected a member of the National Academy of Engineering. He was honored for his work in applying nuclear, space, and geophysical sciences to engineering, industrial, and public needs.

Dr. Hess

A private organization established in 1964, the Academy sponsors engineering programs aimed at meeting national needs, encourages engi-

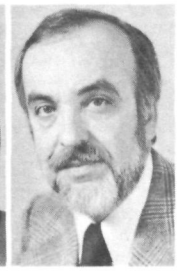
(Continued on page 3)

Dr. Bonner Will Head NWS Eastern Region

Dr. William D. Bonner has been selected as the new Director of the National Weather Service Eastern Region, and will oversee NWS activities in Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia, and West Virginia. He is scheduled to assume the position on May 24.

He succeeds Silvio Simplicio, who has retired after 35 years of Federal service, eight of them as Eastern Region Director. Earlier, Mr. Simplicio served as Supervis-

Mr. Simplicio



Dr. Bonner

(Continued on page 3)

U.S./U.S.S.R. Experts on Data Exchange Hold First Meeting

The first meeting of the U.S./U.S.S.R. Experts on Data Exchange was held March 29 to April 2, at Environmental Data Service Headquarters in Washington, D.C. The group is one of several established by the U.S./U.S.S.R. Joint Committee on Cooperation in World Ocean Studies, to implement U.S./U.S.S.R. projects under the June 19, 1973, Nixon-Brezhnev Agreement on Cooperation in the World Ocean.

At the meeting, the experts agreed upon general principles and procedures for the exchange of data and made recommendations for consideration and approval by the Joint Committee on Cooperation in World Ocean Studies during its forthcoming third session (Fall 1976).

They agreed that:

–Formal exchange of data should be accomplished at the national level between national centers and subsequently through the World Data Centers. Most data will be exchanged within one year of completion of a project, but extensions can be granted.

–On completion of a project under the Agreement, a general inventory of all observations and samples should be submitted for exchange between the National Oceanographic Data Centers.

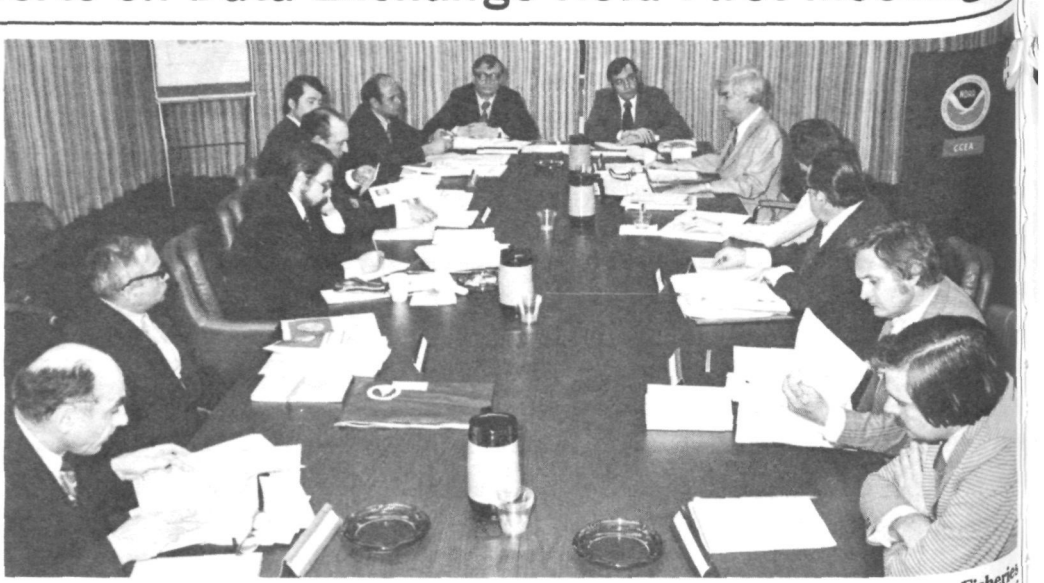
–A more detailed inventory should be prepared for all data not well suited to exchange or which must undergo time-consuming processing before exchange.

–All fully processed data should be submitted to the appropriate repositories within the U.S. and U.S.S.R. and be promptly exchanged with counterpart centers. All data should be accompanied by adequate documentation.

–Technical details of exchange arrangements will be developed by experts within the project.

–The recommended carrier for digital data exchange is one-half inch, nine track, 800 BPI magnetic tape in the agreed formats.

–Official publications with data or analyses should be exchanged through national centers.



Participants were (from left) Dr. D. E. Gershanovich, All-Union Research Institute of Marine Fisheries and Oceanography, U.S.S.R.; Dr. V. A. Burkov, Shirshov Institute of Oceanology, U.S.S.R. Academy of Sciences; P. Afanasenko, translator, U.S. State Department; Dr. V. I. Lamanov, All-Union Scientific Research Institute of Hydrometeorological Information, Oceanographic Data Center; A.S. Barinov, U.S.S.R. Embassy; Dr. A. P. Metalnikov, U.S.S.R. Council of Ministers, State Committee for Science and Technology; Dr. V. I. Alekseyev, Chairman of Soviet Delegation, U.S.S.R., Council of Ministers, State Committee for Science and Technology; R. V. Ochinero, Chairman of U.S. Delegation and Director, National Oceanographic Data Center, Environmental Data Service; Dr. T. S. Austin, Area Coordinator for Data Exchange, Joint Committee on Cooperation in World Ocean Studies and Director, EDS; J. K. Barnes, U.S. State Department, T. Winterfeld, NODC, EDS; J. Churgin, World Data Center A, Oceanography, EDS; P. J. Grim, U.S. National Geophysical and Solar-Terrestrial Data Center, EDS; and (not in photo) R. R. Freeman, Rapporteur, and U.S. Environmental Science Information Center, EDS.

Hawaii Estuarine Sanctuary *(Continued from page 1)*

include mining, clearing, logging, construction, introducing exotic flora or fauna to the area or removing native species, and anchoring vessels within the sanctuary's bay or stream. Also, no improvements would be allowed in the sanctuary to accommodate boats or helicopters.

Controlled uses would include camping, hunting, and swimming. Unrestricted uses include fishing in saltwater areas, hiking along interpretive trails, and research which will not alter the environment.

Dr. Robert Kifer, estuarine sanctuaries coordinator for OCZM, explained that testimony at the Hawaii hearing will be scheduled on a first-come basis.

Individuals desiring to testify have been asked to contact OCZM in order that a speakers' list may be developed. Written comments from persons unable to attend the hearing will be accepted by OCZM through May 10, 1976, for consideration in the final environmental impact statement.

Automated Charting System *(Continued from page 1)*

then be recalled, not only for charts, but for other purposes as well."

According to Donald H. Hunt, Director of the NOS Chart Automation Projects Office, data would include soundings (water depths); prominent landmarks and radio beacons which enable mariners to fix their positions at sea; channel limits; bottom characteristics (sand, gravel, clay, mud, etc.,); Coast Guard aids to navigation, such as light buoys, lightships and electronic navigation systems (Loran); underwater cables and pipelines; submerged navigational hazards, such as wrecks, and shoals; restricted regulated areas; safety shipping lanes; and ship traffic separation lanes for ports.

Automation of chart production will also speed up publication of new and revised charts. "It takes us about six to nine months now to construct new chart negatives from the time we receive the data," said Capt. Richard H. Houlder, Chief of the NOS Marine Chart Division. "Under an automated program, we should be able to produce new chart negatives in four to six weeks, once documentation is stored and available for recall. For revised charts, those updated to incorporate new data, production time should be reduced to three months or less, instead of the four months it now takes."

Proceedings Are Available

The proceedings of the Marine Data Acquisition Conference held at National Weather Service Headquarters in Silver Spring on October 21-23, 1975, have been printed. A limited number of copies of the proceedings are available from Bob Schoner, W521x2 (FTS 427-7792).

Dr. Golden, ERL, To Speak at AMS

The District of Columbia Chapter of the American Meteorological Society is scheduled to hold its Annual Election/Installation Dinner Meeting on May 13 at the Interstate Inn in College Park, Md. Dr. Joseph Golden, of the Environmental Research Laboratories in Boulder, Colo., will be the guest speaker. He will talk on "Tornadoes and Waterspouts - Are They The Same?"

Reservations for dinner are required by April 30. Contact W. Gale Haggard (427-7778) for additional information.

Frank Pierce Dies

Frank W. Pierce, Supervisory Meteorological Technician at the National Weather Service Forecast Office in San Antonio, Texas, died April 13.

He entered the NWS in 1959 after serving in the U.S. Navy for three years and as a Rhode Island State Trooper for one year. His assignments before transferring to San Antonio in 1974 included service at Resolute Bay, Canada; Athens, Ga.; and 13 years at Jacksonville, Fla. He was active in union and management relations, and had served as chairman of the Southern Region Council of NWS Locals of the National Association of Government Employees.

He is survived by his wife, Donna, and four children, Andrea, Lynda, Amy, and Matthew.

noaa week

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

Catherine S. Cawley, Editor
Warren W. Buck, Jr., Art Director

James Receives ATA's 1975 Gorrell Award

Ralph P. James, Chief of the Aviation Branch of the Meteorological Services Division at National Weather Service Headquarters in Silver Spring, Md., since 1965, has been awarded the 1975 Edgar S. Gorrell Award of the Air Transport Association (ATA) of America. This is only the second time someone not a member of ATA has received the highest honor the Association can bestow on members of the aeronautical meteorological profession.

Mr. James was selected for the award because of his extensive contributions to aeronautical meteorology, including setting up the weather forecast program for jet aircraft and the computer-to-computer en-route forecast program.

Mr. James began his weather service career in 1944, interrupted it to serve as a forecaster for the Naval Air Transport Service in the Far East during World War II, and returned to the NWS in 1946.

In 1964, he received a Commerce Department Silver Medal for his work in developing high-altitude weather services for domestic and international aircraft operations. He also participated in the Department's first Science and Technology Fellowship Program.

He received his B.S. degree in physics from Wheaton (Ill.) College, received weather training at New York University, and also studied advanced forecasting at the University of Chicago.

(From left) James T. Green, chairman of the ATA Meteorological Committee and manager-weather services, American Airlines; General C. F. von Kann, ATA senior vice president-Airports and Operations, who presented the award on behalf of ATA; Mrs. James; and Mr. James.

NOAA Contract Funds Process To Monitor Ocean Productivity

NOAA has awarded a $170,000 contract for the design of systems and techniques to permit the monitoring of ocean productivity by global orbiting satellites to the Scripps Institution of Oceanography, University of California, San Diego.

David S. Johnson, Director of the National Environmental Satellite Service, said measurement of ocean productivity by satellite would be a major contribution and service to the commercial fishing industry and to ecologists.

"The value to the fishing industry in maintaining and managing the oceans' living resources is obvious," Mr. Johnson said. "And, the importance of being able to continually monitor properties which would indicate any ecological changes in the oceans is increasingly significant as we become more responsibly concerned with man's impact upon his environment."

The Scripps contract will fund research on the relationship between the amount of chlorophyll-a contained by phytoplankton—microscopic plant life in the oceans—and the color of the sea as observed from a satellite, according to Jack Sherman, Chief of NESS's Spacecraft Oceanography Group.

Tropical oceans are clear and blue, Mr. Sherman explained, because they are almost devoid of any significant plankton growth. The North Atlantic, particularly in the fishing grounds off the Grand Banks and Iceland, is green because it is rich in plankton.

Phytoplankton is at the beginning end of the food chain which supports higher life forms in the ocean, Mr. Sherman said. The primary productivity of a water body is directly related to the presence of amounts of phytoplankton containing chlorophyll-a.

The Scripps research is a necessary step in preparing to use observations from the Coastal Zone Color Scanner instrument to be carried into space aboard NASA's NIMBUS-G spacecraft to be launched in 1978. This will be the first satellite instrument dedicated to providing data on ocean bio-productivity, according to Mr. Sherman.

A large part of the research task will be focused on processing and analyzing data acquired off Southern California last fall by scientists from NOAA, Scripps Institution, NASA's Goddard Space Flight Center and Ames Research Center, and the Environmental Research Institute of Michigan. This work resulted in a wealth of in-situ physical and optical data, as well as simulated satellite data acquired by coordinated aircraft overflights and research ship cruises.

The 1975 activity was designed and directed by Roswell Austin of Scripps and Dennis Clark of NESS, both members of the NIMBUS-G Coastal Zone Color Scanner team.

Dr. Hess Is Elected to Academy of Engineering *(Continued from page 1)*

neering research, and recognizes distinguished engineers. With the National Academy of Sciences, it examines questions of science and technology at the request of the Federal government. Election to the Academy is the highest professional distinction that can be conferred on an engineer and honors those who have made important contributions to engineering theory and practice or who have demonstrated unusual accomplishments in the pioneering of new and developing fields of technology.

Dr. Hess was appointed Director of ERL when NOAA was formed by a Presidential reorganization plan in October 1970. For about a year before that, he had been Director of the Research Laboratories of the Environmental Science Services Administration, NOAA's predecessor.

Previously, he was Director of Science and Applications at the National Aeronautics and Space Administration's Manned Spacecraft Center in Houston, Tex., where he was responsible for direction of the Lunar Receiving Laboratory. He planned and conducted research in earth and lunar sciences; provided environmental data for mission and spacecraft design; conceived, developed, and integrated experimental meteorological programs and instrumentation for space; and provided space environment data and support during manned space flights.

From 1961 to 1967, as head of the theoretical studies division at NASA's Goddard Space Flight Center in Greenbelt, Md., he directed research in almost every discipline of space science, including particles and fields, aeronomy, ionospheric physics and geodesy. He also carried out a personal research program aimed at understanding the origin and nature of the Van Allen radiation belt. From 1954 to 1961, he was associated with the University of California's Lawrence Radiation Laboratory (now the Lawrence Livermore Laboratory), where he directed studies of industrial uses of nuclear explosions for making harbors and canals, recovering energy from underground explosions, and producing oil from oil shale.

Dr. Hess is a Fellow of the American Geophysical Union and of the American Physical Society. His other honors include receiving, in 1965, the Arthur S. Flemming Award as one of the 10 outstanding young men in the Federal service, and in 1969, the G. Edward Pendray Award from the American Institute of Aeronautics and Astronautics.

Dr. Hess received his B.S. in engineering from Columbia University, did graduate work at Purdue University and Oberlin College, and received his M.S. in physics from Oberlin, and his Ph.D. degree in physics from the University of California.

Dr. William Bonner

(Continued from page 1)

ing Forecaster of the NWS Airport Station at Kennedy Airport and as Chief of the Scientific Services Division at ERH.

Dr. Bonner began his NWS career in 1970 as a Research Meteorologist in the Techniques Development Laboratory, and has been Chief of the Data Assimilation Branch of the Development Division at the National Meteorological Center since 1972.

Previously, he was assistant professor in the Department of Meteorology at the University of California at Los Angeles (where he co-authored an introductory text on meteorology), and also a part-time staff meteorologist for a Los Angeles television station. Earlier, he was a research associate on the Satellite and Mesometeorology Research Project at the University of Chicago. He also has worked closely with the National Aeronautics and Space Administration, which funded much of the work conducted by his branch at NMC, and has served as a U.S. Air Force weather forecaster.

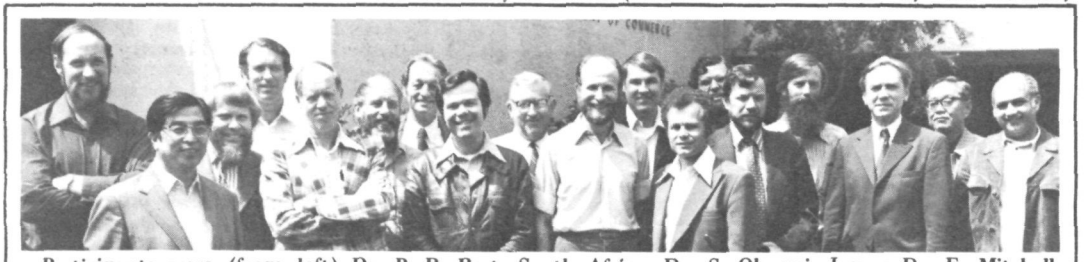
He holds a bachelor of science degree in meteorology from Penn State University, and a bachelor's degree in liberal arts and master's degree and doctorate in meteorology from the University of Chicago.

IWC Scientific Advisers Meet, Discuss Status of Sperm Whales

At the invitation of the U.S. government, 16 scientific advisers to the International Whaling Commission (IWC) met recently at the National Marine Fisheries Service Southwest Fisheries Center in La Jolla, Calif., to discuss the status of sperm whales.

The meeting was chaired by Dr. Ray Gambell of the Whales Research Institute, U.K., the newly-appointed Secretary of the International Whaling Commission. The U.S. representatives included Drs. William Perrin and William Fox of the La Jolla Laboratory; Dr. Douglas Chapman of the University of Washington; Dr. Michael Tillman of the NMFS Northwest Fisheries Center; and Dr. Tim Smith of the University of Hawaii (formerly of the Southwest Fisheries Center). Dr. William Aron, Director of NOAA's Office of Ecology and Environmental Conservation, and Dr. Gerard Bertrand of the President's Council on Environmental Quality also joined the deliberations of the group at mid-week.

Conclusions and recommendations drawn by the advisory group will be reported to the International Whaling Commission meeting in June 1976 in London.



Participants were (from left) Dr. P. B. Best, South Africa; Dr. S. Ohsumi, Japan; Dr. E. Mitchell, Canada; Dr. J. Bannister, Australia; Dr. Chapman; Dr. S. Holt, FAO, Rome; Dr. L. Boerema, FAO, Rome; Dr. Fox; K. R. Allen, Australia; Dr. Gambell; Dr. Bertrand; V. Vasileev, U.S.S.R.; Dr. Smith; R. Borodin, U.S.S.R.; Dr. Perrin; Dr. M. Ivashin, U.S.S.R.; Dr. Y. Fukuda, Japan; and Dr. Aron.

Public Hearing

(Continued from page 1)

bers will be NWS Director Dr. George P. Cressman; and Director Charles G. Knudsen, Deputy Director Robert C. Baskin, and Philip A. Calabrese, Chief of Meteorological Services, of the NWS Central Region, headquartered in Kansas City.

The public is invited to attend the hearing, participate in question and answer sessions, and submit views and recommendations on the services provided by the NWS.

Prepared statements will be included in the hearing record.

Further information may be obtained by contacting NWS Central Region Headquarters at (816) 374-3239.

Upward Mobility Training in 8 Categories Available

(Continued from page 1)

entific Interns, 4 Administrative Fellows, and 15 Graduate Scientists.

NOAA employees and outside candidates may now submit applications for the Upward Mobility Training Programs described below. Targeted positions for administrative training will be in the following fields: Budget, Finance, Personnel, Procurement, Computer Science, Administrative Operations and Economics. Targeted positions for scientific training will be in the following fields: Cartography, Chemistry, Computer Science, Fishery Biology, Geodesy, Geographics, Hydrology, Marine Enforcement, Mathematics, Meteorology, Oceanography and Physics.

The Administrative Technician Program, an on-the-job training program for employees who have been with NOAA for at least six months, is designed to foster para-professional administrative jobs throughout NOAA. It is created for employees in GS-2 through GS-5 or equivalent grades, who will be taught skills for their targeted positions by on-the-job and formal classroom training. This training will prepare employees for technician positions as they become qualified.

The Scientific Technician Program is an on-the-job training program for NOAA or outside candidates, designed to develop technicians in science or technology. Candidates at the GS-2 through GS-7 level or equivalent, without specialized skills and experience in science or technology may apply. Upon selection trainees will be taught scientific skills on-the-job and in specialized courses. Trainees selected for positions in the National Weather Service and National Marine Fisheries Service will be required to sign a mobility statement. It is anticipated that these positions will be in the field.

The Administrative 20/20 Work Study Program was created as a half-time study program for employees who have been with NOAA for at least one year in grades GS-4 through GS-9 or equivalent, who possess a minimum of one year of administrative experience or one year of post high school education. Upon selection, the employee will be expected to carry a nine semester hour course load relevant to the target position and work 20 hours per week. Sponsorship by NOAA will end after one year. After successful completion of all program requirements, trainee is considered for promotion and/or reassignment to the target position.

The Scientific 20/20 Work Study Program is a half-time study program for NOAA employees only at the GS-4 through GS-9 level who possess a minimum of one year of technical experience or one year of post high school education. Upon selection, trainees will work a minimum of 20 hours a week, and take college courses which are career-oriented in NOAA's scientific professions the balance of the week. After successful completion of all program requirements, trainee is considered for promotion and/or reassignment to the target position.

The Administrative Trainee Program was designed to prepare NOAA employees presently in grades GS-4 through GS-8 or equivalent grades, and who have been with NOAA at least one year, to enter professional administrative positions. It will consist of 12 months of intensive on-the-job training and also formal classroom training in the appropriate administrative area. After successful completion of all program requirements, trainee is considered for promotion and/or reassignment to the target position.

The Science Intern Program is a full-time one-year study program designed to develop professional scientists. NOAA employees at GS-4 and above who possess an Associate Degree or have successfully completed two or more academic years of post high school education in an accredited college, junior college or technical institute are eligible for consideration for entry into the program. This study must have included 24 semester hours of scientific or technical courses such as biology, physics, mathematics, etc. Upon successful completion of all program requirements, trainee is considered for promotion and/or reassignment to the target position.

The Administrative Fellowship Program is open to NOAA employees in grades GS-9 through GS-12 or equivalent, with a high degree of managerial potential who have been with NOAA for at least one year. Training consists of one year of broad introductory training and developmental experience in administrative work. After successful completion of all program requirements, each trainee is considered for promotion and/or reassignment in the targeted position either in the Washington metropolitan area or in the field.

The Graduate Scientist Program is a one-year full-time undergraduate or graduate level study program for NOAA or outside applicants, designed for candidates who possess a Bachelor or Masters Degree, but lack scientific training in a specific NOAA discipline (e.g., a physics major who lacks hours in meteorology to qualify as a meteorologist). After successful completion of all program requirements, trainee is considered for promotion and/or reassignment to the target position.

Candidates who have successfully completed one program may apply for consideration to another program after a twelve-month waiting period. More detailed information on eligibility requirements is contained in the Scientific and Administrative Upward Mobility Training Program brochures scheduled for NOAA-wide distribution by April 26, 1976. NOAA employees interested in applying should submit an Employee Interest Statement (NOAA Form CD 261) and an up-to-date Personal Qualifications Statement (SF 171) for each program they are interested in to: NOAA Personnel Division, AD 452, 6001 Executive Blvd., Rockville, Md. 20852. Candidates are encouraged to discuss program content with their supervisor and/or servicing personnel office. Closing dates for acceptance of applications are as follows:

PROGRAM	Application Closing Dates	Program Starting Dates
Graduate Scientist	May 31	July Aug.
Science Intern	May 31	Aug.
Scientific 20/20 Work Study	May 31	Aug. Mar.
Administrative Technician	July 31	Oct. Jan.
Scientific Technician	June 30	Oct.
Administrative Fellowship	July 31	Oct.
Administrative Trainee	July 31	Oct.
Administrative 20/20 Work Study	Oct. 31	Jan.

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