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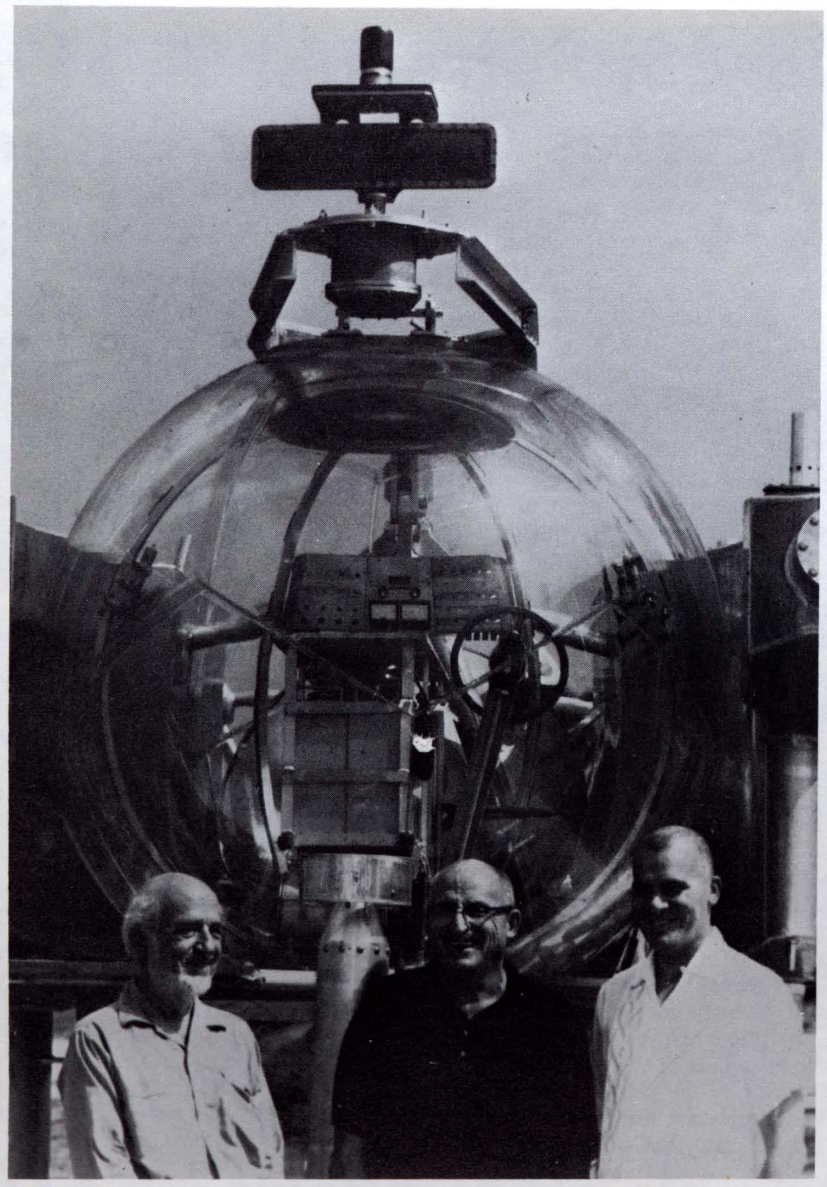

A new era in underwater research by the Smithsonian opened January 29, when the *Johnson-Sea-Link* was commissioned in ceremonies at Link Port, Fla. Standing in front of the vessel are (left to right) J. Seward Johnson, Edwin A. Link, and Dr. I. E. Wallen.

'Johnson-Sea-Link' Opens New Research Era

By Tom Harney

The Smithsonian Institution has been given an oceanographic submersible and the funds to launch a major program of underwater research.

Named for designer and donors Edwin A. Link and J. Seward Johnson, whose contributions will help finance its operations, the ***Johnson-Sea-Link*** is a small acrylic and aluminum diver-carrying vehicle, capable of exploring the ocean at depths of 1,000 feet or more.

Its unique feature is the pilot sphere, a six-foot diameter bubble of transparent acrylic plastic that gives the pilot and a scientific observer panoramic vision under water.

The submersible will be used on a support-ship that will operate out of the Marine Science Center (Link Port) channel on the Florida inland waterway, four miles north of Fort Pierce, on the east coast of Florida. It will be used to carry out a program of research activities directed by the Smithsonian's Office of Environmental Sciences headed by Dr. I. Eugene Wallen.

With the vessel's launching, the Smithsonian becomes one of the few independent oceanographic centers to have available its own submersible for research activities.

Commissioning ceremonies for the ***Johnson-Sea-Link*** were held January 29 at Link Port. Mr. Johnson's daughter, Mrs. Jennifer Johnson Gregg, assisted by Mrs. (Marion) Link, christened the submersible as a crowd of more than 300 persons watched.

At the ceremony, Secretary Ripley presented Messrs. Link and Johnson with a newly established Smithsonian Institution medal to honor distinguished contributions in the field of ocean science.

The medal is named after U.S. Naval Commander Matthew Fontaine Maury (1806-1873), the founder of the science of oceanography.

The citation read:

"For meritorious contributions to underwater science through conception and development of the Johnson-Sea-Link, the first of a pioneer class of submersible research vehicles."

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Quake Brings Calls to SAO

The earthquake in California February 9 brought an avalanche of calls to SI's Center for Short Lived Phenomena in Cambridge, Mass.—from the press, who have come to rely on the Center on such occasions; from scientists, anxious to get precise information the press wasn't providing, and from the public, worried about relatives and friends in California, or wanting to know if the Center would advise them to take out earthquake insurance.

"We were even getting calls from radio stations in Los Angeles asking us what was happening," said Center Director Bob Citron.

For Citron, who deals monthly in earthquakes, the California tremor wasn't a big event. Ordinarily a quake must have a Richter rating of 7.0 or above for him to report it.

"We usually have at least one a month exceeding 7.0 somewhere in the world," Citron said. "Right now, we're handling three other important events—a major volcanic eruption in Nicaragua, a meteorite fall in Mauritania, and a fireball that passed over Princeton, New Jersey.

When an earthquake worthy of notice does occur, Citron leans upon expert advice provided by Dr. Paul Mohr, SAO's seismologist. Dr. Mohr, a British scientist, is studying the major rift systems of the world. Along these crustal cracks he finds evidence of sequences of quakes with distance and time relationships. His studies have focused on the Rift Valley in Africa and the Middle East where he has set up a precise geodetic network that detects crustal movement. Dr. Mohr spent a number of years as a professor at the Geophysical Observatory in Addis Abada, Ethiopia, and he recalls that the great Alaska earthquake of 1964 occurred on a day they had chosen to dismantle and clean their seismic equipment.

"We couldn't understand why we couldn't get it to register properly when we tried to put it back together," Dr. Mohr said. "It was a while before we realized that we were missing one of the earthquakes of the century."

Spirit of '76

NCFA Starts Nationwide Inventory of Paintings

By Ben Ruhe

The Smithsonian's National Collection of Fine Arts recently began the largest, most inclusive compilation of data on United States paintings ever undertaken. Initiated in honor of the Bicentennial of the American Revolution to be celebrated in 1976, the project has been named the *Bicentennial Inventory of American Paintings Executed Before 1914*.

It is one of a series of programs either under way or projected in connection with the Smithsonian's Bicentennial goal of paying homage to and helping in the preservation of the American heritage.

With the participation of state art councils, historical societies, schools and universities, local museums, historic sites, and individual scholars and students, the Inventory will seek in the next several years to locate as many paintings as possible which are not now widely known or recorded in already accessible compilations. Information on paintings held in public and private collections all across the country will be recorded by computer. Such a central index of American paintings, which when developed is expected to include many thousands of works now virtually unknown beyond the area of their location, will be a basic research tool for expanding understanding of the art of this country since its beginnings. The computerized record is to be complemented by a research file of photographs of as many of the inventoried works as possible.

The Inventory was conceived by Dr. Joshua C. Taylor, Director of the National Collection of Fine Arts. Its formation is being coordinated by Miss Abigail Booth, formerly an Assistant Curator at the NCFA and an aide at the Boston Museum of Arts. The NCFA's primary intention in forming the Inventory is to reveal "the whole texture of American art," in Dr. Taylor's phrase. It can be expected that among the thousands of works to be listed, some unknown or assumed lost masterpieces will be discovered.

The Inventory will also support the organization of a major Bicentennial exhibition of American paintings at the NCFA in 1976, and, it is hoped, inspire organizations across the nation to mount their own Bicentennial tributes to American art.

While extensive background information on individual paintings will be welcome for inclusion in the Inventory record, it is expected that most entries will consist of minimum identifying data. The value of the Inventory will lie thus in the quantity of works located and centrally collated. The increased accessibility of information on works will inevitably increase the range and depth of study of American art and artists. As new information on individual paintings comes to light, it will be incorporated into the inventory.

A project recently completed by the Vermont Council on the Arts demonstrates the validity of such surveys. Vermont's "Art Out of the Attic" project, through the coordinated efforts of a number of the State's museum and art centers, located and recorded approximately 300 privately owned American paintings of nineteenth century date—among them an outstanding and previously unknown work by William Ranney. An exhibition comprised of a selection of 77 of these paintings was shown at Middlebury College in October, 1970.

Headquarters for the NCFA's inventory is the library shared by the National Collection and its sister museum, the National Portrait Gallery, in the Old Patent Office Building.

HERMAN SCHADEN

Herman Schaden, *Evening Star* reporter and a faithful friend of the Smithsonian for the last ten years, died of a heart attack February 23. Memorial tributes to Mr. Schaden may be made in the form of contributions to the Heart Fund. The TORCH will carry a special section on Mr. Schaden in its next issue.

Challinor Named To Science Post

Dr. David Challinor, Director of the Office of International Activities, has been appointed Deputy Assistant Secretary (Science) of the Institution, Secretary Ripley has announced.

Dr. Challinor also has been designated acting Assistant Secretary (Science), in the absence of Dr. Sidney R. Galler, former assistant secretary who has joined the Department of Commerce as Deputy Assistant Secretary for Environmental Affairs.

A specialist in forest ecology, Dr. Challinor has been at the Smithsonian since 1966. He was, consecutively, a special assistant in tropical biology, deputy director and then director of the Office of International Activities.

Dr. Challinor came to the Smithsonian from Yale University, where he had been Deputy Director and then acting Director of the Peabody Museum of Natural History. He holds a B.A. from Harvard College, an M.F. from Yale Forestry School, and a Ph.D. from Yale Graduate School.

After service in the U.S. Navy in World War II, Dr. Challinor joined a cotton merchandising firm in Houston. He subsequently became a self-employed cotton farmer and then assistant secretary of a mortgage company before returning to school.

A member of numerous professional societies and committees on biology and ecology. Dr. Challinor is on the boards of Manhattanville College, the National Outdoor Leadership School, and the Gesell Institute of Child Development. He is a resident of Washington, D.C., is married, and has four children.

LABOR-MANAGEMENT WORKSHOP—Union officers and shop stewards are meeting with representatives of management in a series of monthly workshops sponsored by the Buildings Management Department to discuss objectives, policies and problems at the Smithsonian. Meeting together in one session were (from left) Hal Cohea, BMD programs manager; Robert Dean, MNH building manager; Capt. Winfred L'Abbe, guard commander of "A" Company at MNH; Robert Day, steward of Local 2463 of the American Federation of Government Employees; Frank Mathis, president of Local 2463; Frank McGrath, vice-president of the local, and Mrs. Mary McNeary, MNH elevator operator.

New SI Personnel Chief Discusses Goals for Office

By Mary Krug

Vince Doyle wants to make a believer out of you.

The new personnel chief discussed his goals for his office in a recent interview with the TORCH, and a summary might be for employees to look for more of the same, only better. The words most frequently used were "solidify," "credibility," and "communication."

These words keynote a personnel philosophy which demands support of the Institution and its programs, emphasizes the key role that supervisors and executives play in managing both people and programs, and recognizes the vital importance of human resources in the life and success of any organization.

"My aim is for a good solid personnel management program," says Doyle. "I want to help management to be aware of the need to give recognition to the value of the individual employee. I do not see myself as the Smithsonian morale officer in the sense of someone who keeps everyone happy, but I would like to build the kind of morale that comes from making an employee know he is a part of the Institution, that we do care for him, and that if he feels he has a question, it will be answered. Sometimes the answer has to be 'no,' but the employee has a right to know where he stands."

The role of the personnel officer is not to be an advocate for either the employee or management, but to provide both with the help they need to get a job done, Mr. Doyle believes. He wants his office to be something "that is real and is not in business for the sake of Personnel but for the sake of the Smithsonian and its employees."

His plans for "solidifying" call for a strengthening of the supervisor-employee

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Doyle, Grant To New Posts

Vincent J. Doyle has been appointed Director of Personnel and Carl E. Grant Associate Director for Personnel Resources.

Mr. Doyle had been acting Director since September. Prior to that he was a senior personnel consultant with the Institution for two years. Before coming to the Smithsonian, he served as a civilian staff member in the Department of the Army for more than 10 years as civilian personnel officer, career planning specialist and training director.

After teaching school in the Philadelphia School District for three years, Mr. Doyle was employed as an education specialist with the Department of the Army at Fort Lee, Va. He is a graduate of Villanova University with both bachelor's and master's degrees. He discusses his goals in the adjacent interview.

Mr. Grant came to the Smithsonian in 1969 as a personnel management specialist. After serving in the U.S. Navy he earned a B.S. degree in economics and business administration at the University of Detroit and then entered personnel work. He was an occupational specialist with the Civil Service Commission immediately prior to joining the Smithsonian.

Shank Conducts Indonesian Study Of Library Needs

By Bill Craig

The first survey of science and technical libraries in the government research institutions of Indonesia has been completed by Dr. Russell Shank, director of the Smithsonian libraries.

The project included a six-week tour of more than 50 libraries at institutions on the islands of Java, Sumatra and Bali. The survey was undertaken at the request of the Indonesian government. Dr. Shank was employed for the project by the American Library Association, under contract with the Agency for International Development.

Dr. Shank evaluated the results of AID's book program in Indonesia over the past few years, and at the same time took stock of the institutional libraries and their needs. The survey necessitated hundreds of miles of travel by land and air on an itinerary planned by the Indonesian government. During the survey Dr. Shank worked closely with representatives of the Indonesian government, and conferred with government and university officials at institutions on the survey route.

"In a way it was like going home," Dr. Shank commented, noting that in many of the places he visited he was greeted by friends of the Smithsonian, scientists and scholars who were acquainted with SI personnel, or who had done research at the Institution.

The "special libraries" surveyed ranged from very small ones with old book collections to the world-renowned Bibliotheca Bogoriensis, a large and well-established library at Bogor with a collection of works on agriculture and related biological sciences that attracts scholars from throughout the world.

Dr. Shank recommended that the Bibliotheca Bogoriensis and the National Scientific Documentation Center in Jakarta be used as nuclei for building improved technical library services in the nation. He advised the Indonesian government to adopt officially a policy of upgrading the nation's technical libraries and facilities for training librarians.

Dr. Shank said there is room for library improvements in the five-year national development plan by which the country is now pulling itself up by its own bootstraps. He observed that Indonesia has the advantage of one workable, official national language, unlike some other Asian nations, and is favorably located for international commerce. It is included in the scope of a UNESCO plan for a multi-nation network of information centers linked by rapid communications.

Although it is plagued by many of the problems of underdeveloped nations, Dr. Shank noted that Indonesia also possesses a large population with a strong national feeling, great scenic beauty and abundant natural resources, and may be developed into a rich nation if capital can be procured and management personnel can be trained.

Discussing the survey recently in his office, Dr. Shank studied the brightly-colored covers of the volumes outlining the national plan and remarked:

"They can make it."

Adams Catalog Gets Design Award

The Life Portraits of John Quincy Adams, an exhibit catalog designed by Crimilda Pontes and published by the Smithsonian Press, has been selected for an outstanding design and production award by the Design Production Committee of the Association of American University Presses.

The publication was one of 22 chosen from among 256 submitted by more than 60 members of the Association in the 1970 award competition. The publications selected will be displayed in exhibits circulated among major universities and graphic arts centers in the United States and overseas.

Officials Discuss NASM Building Plans

Plans for construction of a National Air and Space Museum on the Mall were discussed at a meeting convened by Secretary Ripley January 18 in the Hall of Aerospace Art in the Arts and Industries Building. Attending were members of the Board of Regents, members of the NASM advisory board, members of Congress, officials of the National Aeronautics and Space Administration, and representatives of the aerospace industry. Sen. Barry Goldwater (R-Ariz.) was moderator of a discussion session. Below, inspecting mementos of the Apollo Program, are (left to right) F. C. Durant III, Acting Executive Officer of the museum; Dr. Wernher von Braun, Deputy Associate Administrator of NASA, who is pointing to the helmet visor worn by Astronaut Michael Collins on the Apollo 11 mission; Collins, who is new director of the museum; Rep. James G. Fulton (R-Pa.); Paul E. Garber, NASM historian emeritus, and Marine Maj. Gen. H. J. Hill, member of the museum advisory board. At left, Elwood R. Quesada, a member of the NASM board, is shown conversing with two members of the Board of Regents, Rep. Frank T. Bow (R-Ohio), and William A. M. Burden. Among others attending were Caryl P. Haskins, member of the Board of Regents, and William E. Hall, member of the museum board.

Mrs. A. Remington Kellogg converses with Dr. Richard S. Cowan, MNH Director, at a ceremony in which Mrs. Kellogg donated her husband's scientific library to the Smithsonian, and established a research fund in his honor. Other participants were Dr. Leonard Carmichael (left), and Dr. Alexander Wetmore (second from left).

Library, Funds Donated In Memory of Dr. Kellogg

In a ceremony that appropriately took place in MNH's Hall of Life in the Sea, Mrs. A. Remington Kellogg, widow of Dr. A. Remington Kellogg, former Director of the National Museum, on December 18 presented her husband's scientific library to the Smithsonian and established a research fund in his memory.

At the same time the Kellogg Fund was supplemented by a $5,000 contribution presented by former Smithsonian Secretary Dr. Leonard Carmichael on behalf of the National Geographic Society, of which Dr. Kellogg was a fellow and of which Dr. Carmichael is now Vice President for Research and Exploration; and a $2,000 gift from 55 of Dr. Kellogg's friends, presented by one of his former colleagues, Dr. Frank Whitmore of the Geological Survey of the U.S. Department of Interior.

Two other former SI Secretaries, both old friends of Dr. Kellogg's, Dr. Charles G. Abbot and Dr. Alexander Wetmore were on hand at the ceremony hosted by Dr. Richard S. Cowan, MNH Director. Dr. Wetmore, who accepted the gift on behalf of the Smithsonian, had been one of Dr. Kellogg's instructors when he was an undergraduate at the University of Kansas (1911-1915), and he reminisced briefly about their long personal association. (Dr. Carmichael's tribute to Dr. Kellogg is reproduced in part on this page).

Dr. Kellogg joined the National Museum's Division of Mammals in 1924 and in 1948 became the museum's Director. In 1958 he was made Assistant Secretary of the Smithsonian, a position that he held until his retirement in 1962. He died in 1969. The Kellogg fund will be used for advancing knowledge of fossil marine mammals. The Kellogg books will be used as the foundation of a working library of marine mammalogy to be held jointly between the Division of Vertebrate Paleontology and the Division of Mammals.

One facet of Dr. Kellogg's multi-sided career was underlined at the end of the ceremony when Dr. Carmichael announced that an additional $5,500 memorial tribute to Dr. Kellogg had been received from J. J. Fényközi, the Madrid engineer who shot and donated the giant African bush elephant which stands in the museum rotunda. It was Dr. Kellogg who in 1955 arranged with Mr. Fényközi for the donation of the elephant, which measures 13 feet, 2 inches high at the shoulder, a foot taller than any elephant on record.

Mr. Fényközi's check will make it possible for Dr. Clayton Ray, curator in the MNH Division of Paleontology, to purchase from the University of Rome the fossil skeleton of a three-foot-high dwarf elephant for the MNH Ice Age Hall. Dr. Ray had been attempting to find a means of acquiring the fossil since learning of its discovery in Sicily. He spoke to Dr. Cowan and Dr. Cowan spoke to Dr. Carmichael who wrote a letter to Mr. Fényközi. A reply, which Dr. Carmichael read, with a check came from Madrid the morning of the ceremony. Mr. Fényközi wrote that he was honored to be the person who had donated the smallest elephant as well as the largest to the Smithsonian.

"The only thing I would ask is that this donation should be considered as a contribution in the memory of our late common friend Dr. Remington Kellogg," he wrote.

A Tribute to Dr. A. Remington Kellogg

by Dr. Leonard Carmichael

It is hard for me to speak about Dr. Kellogg, because I admired him so deeply, and because he was such a many-faceted man. He was a great biologist, he was a gifted administrator, and of course he was a close personal friend.

His brilliance was already recognized when he was an undergraduate at the University of Kansas. He was not an ordinary graduate student, but a recognized, original, general biologist and paleontologist by the time he received his Ph.D. degree at the University of California.

We all tend to think of him as one of the greatest paleontologists that America has produced, and that is true! But, he was also interested in modern mammals. He was, I think, really as much interested in modern mammals as he was in the bones of their evolutionary ancestors. From the days when he was a field scientist in the Biological Survey he was always amassing information that came to make him later the universal authority on all recent American mammals. Many of you here will think immediately of that wonderful big book of his that summarizes this information [*List of North American Recent Mammals*]. The major portion of his life was given unselfishly to the service of this great scientific institution, the Smithsonian. He was an administrator who never used paper-pushing as an excuse to give up original scientific work or publication. One of the best things I did for the Smithsonian, when it was my privilege to be here, was to persuade him to become Assistant Secretary of the Smithsonian after his years as Director of the United States National Museum. He was a great administrator because he had a clear understanding of what the mission of the Smithsonian really is. Harvard and other universities tried hard to lure him away, to take positions of great prestige, but he always said—thank goodness for the Smithsonian—he always said, no! He was loyal to the great collections, and above all to the great research ideals of the Smithsonian. This is natural, for he himself had done much to create both these collections, particularly in his own special field and, even more important, he had done much to create the scholarly ideals of the Smithsonian.

During his life he did innumerable things, not directly associated with the formal work at the Smithsonian, to advance scientific biology. He was active in the National Academy of Sciences, the American Philosophical Society, and many professional societies in which he held positions of trust and responsibility.

To many however, he was above all America's superlative scientific authority on fossil and living whales. As a member, and for years chairman of the International Conference on the Regulation of Whaling, he led the world in a clear demand for whale conservation. There was not a capital of the great nations to which he had not gone to support this basic idea, long before conservation was a "popular general cause" as it properly is now. Long before that he was producing a firm foundation for later work not only to protect the whales but all other endangered species.

How appropriate it seems to me that this ceremony should be held in this hall, in the shadow of Dr. Kellogg's great blue whale. When I was Secretary of the Smithsonian, this hall was planned, and Dr. Kellogg said that above all we must avoid putting on display, as most museums had done, the model of a dead beached whale shaped like an old limp cigar. I think those were his exact words. Rather, he said, we must show an active, full sized blue whale. And you all know that the blue whale that you see here is the largest mammal that ever lived, not only now—there aren't too many of them left—but in prehistoric times, in earlier geologic times. He wanted us to show this whale in a characteristic vital and rapid movement. Thus, in a true sense this largest of all Smithsonian exhibits is a lasting public memorial to Dr. Kellogg. This is most appropriate. In important matters of policy his ideas were large, as is this whale, and comprehensive. Also, his forward-looking mind was never static, but active, venturesome and dynamic, again like this whale. Thus, I hope, no one here will ever at any time look at this, the greatest of all Smithsonian exhibits, without thinking of its outstanding creator, A. Remington Kellogg. Also, may the young scientists of the future who profit from the fund created by Mrs. Kellogg, and by other gifts such as the one I have just announced—may they realize that the name of A. Remington Kellogg now and in the future stands for the very best in science and in modern scholarship.

Toastmasters Club Seeks New Members

Members of "The Torchlighters," the Smithsonian Toastmasters Club, are seeking recruits from among men and women employees of the Institution who are interested in improving their public speaking ability.

Club meetings are held every other Tuesday at noon. For further information contact Richard Farrar (Extension 5561); Walter Male (5150), or Richard Berher (5221).

The club will soon observe its fifth anniversary. It was chartered by Toastmasters International in April 1965.

Ault Joins SI as Executive Officer

Richard L. Ault, a retired Air Force brigadier general, has joined Under Secretary Bradley's staff as Executive Officer.

Mr. Ault will be responsible for supervision and executive direction of the Administrative Systems Division; Buildings Management Division; Information Systems Division; Office of Equal Employment Opportunity; Office of Personnel Administration; Photographic Services Division; Supply Division, and Travel Services Office.

Mr. Ault is a graduate of the University of Maryland. In the Air Force, he served as Deputy Director of Plans in Air Force headquarters, as Director of Compensation and Career Development in the Office of the Secretary of Defense, and as commander of an Air Force support wing.

Weaver's Record Receives Award

A recording by James Weaver, concert director of MHT's Division of Musical Instruments, has received a "Record of the Year Award" from *Stereo Review* magazine.

"Bach: Six Sonatas for Violin and Harpsichord" was produced by Cambridge Records for the SI Press. Mr. Weaver, on harpsichord; Sonya Monosoff, violin, and Judith Davidoff, viola da gamba, used restored instruments from the SI collections in the performance. The recording grew out of the regular concert series sponsored by the division in the Hall of Musical Instruments.

The magazine states that its records of the year are selected "in recognition of great artistic achievement and genuine contribution to the recorded literature." A reviewer in *High Fidelity Magazine* noted that "Monosoff and Weaver turn in performances fully attractive as the best available. They are chamber musicians of the first order, who sound as though they have spent a lifetime playing this music together."

The three-record set is available in the Museum Shops and in record stores for $11.40.

SMITHSONIAN TORCH

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OFFICE SKILLS WORKSHOP—Taking part in an SI Office Skills and Service Workshop taught by Brenda E. Howell of the Office of Personnel Administration January 19-22 were (seated left to right) Priscilla Griffiths, Marjorie Jones, Brenda Howell, Paula Richardson, Mary Williams, (standing left to right) Clifford Boocks (Assistant Director for Career Development), Priscilla Hensley, Fredella Baylor, Margaret Cunningham, Vera Kilton, Geraldine Crosby, Florence Stebbins, Luwan Thompson, Ruth Sims, Martha Smith, Carl E. Grant (Associate Director, Office of Personnel Administration). Jean Blinn also participated.

GETTING TO BE A REGULAR—First Lady Patricia Nixon paid her second visit in recent months to SI to view a photography exhibit on the first two years of her husband's presidency. She toured the MHT exhibit area and an adjacent display of carousel animals in the folk art hall. Her guides were, from left, Mrs. Ripley, MHT Director and Mrs. Daniel Boorstin, and Secretary Ripley. Mrs. Nixon's other recent visit to the Institution was to view a special exhibition of portraits of John Quincy Adams at the National Portrait Gallery. The First Lady has been in MHT on two other occasions since her husband took office, for his Inaugural Ball, and to place her ball gown on display in the First Ladies' Hall.

Submersible

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Link, who holds more than 27 patents for his inventions in the field of aviation and ocean engineering, is best known for his 1929 development of the Link Flight Trainer. During World War II, the Link Trainer was used to teach flying to more than half a million airmen throughout the world. Today Link Trainers and Simulators are produced for a variety of uses including the training of airline pilots, the astronauts and maritime operators.

Link's association with the Smithsonian Institution began in 1953 when his Link Foundation, set up to assist persons who attempt to advance knowledge in the field of aeronautics and oceanology, made the first of a number of grants to the Smithsonian's National Air and Space Museum, enabling it to expand its educational activities.

The Foundation has since provided funds for the establishment of an annual "Edwin A. Link Lecture" at the Smithsonian. The first of this series was delivered in 1964 by astronaut Alan B. Shepard, Jr.

From the early 1960's Mr. Link has devoted the major part of his time to oceanographic exploration and research. He designed, and built, an oceanographic research vessel, the ***Sea Diver,*** and with the Smithsonian one of his supporters undertook the underwater excavation of the Jamaican city of Port Royal, which had tumbled into the sea during an earthquake in 1692.

Following the project, he tackled the task of solving the problems of undersea diving, a technology then still in its infancy. One of his objectives was to develop equipment that would make it possible for men to do scientific work underwater for lengthy periods.

His inventions included an inflatable underwater habitat, an aluminum diving chamber for deep submergence, and, in conjunction with John Perry, the submarine ***Deep Diver,*** the first mobile submersible with an exit hatch which divers could use to perform work at great depths.

He subsequently gave free use of this equipment to SI scientists involved in research on the ocean bottom in the South Florida-Bahamas area sponsored by SI's Office of Oceanography and Limnology under Dr. Wallen.

Mr. Johnson, Vice President and member of the Board of Directors and chairman of the Finance Committee of Johnson & Johnson, the New Brunswick, N.J. pharmaceutical company, for many years has lent his support to oceanographic research, including programs conducted by the University of Miami, and Woods Hole Oceanographic Institution of which he is a trustee and a member of its development committee.

His association with the Smithsonian began in 1966 when he provided his yacht ***Ocean Pearl*** as a backup and transport vessel for diving operations in the Caribbean being carried out by SI with the Link equipment. In 1968 Mr. Johnson supported a month-long underwater research program involving 15 scientists off British Honduras.

When a follow-up diving program could not be scheduled because suitable diving equipment was not available, Mr. Johnson joined Link in paying for the construction of a revolutionary new submersible for SI. Mr. Johnson also is helping bear the costs of renovating a surplus U.S. Coast Guard cutter that will be used as a support ship for the submersible, and giving other help that will make it practical for the Smithsonian to develop a scientifically valid and productive program in underwater oceanography.

The ***Johnson-Sea-Link,*** which was two years in planning and construction, was designed to make research possible on the shallow depths of the continental shelf. Behind the transparent pilot sphere is a separate three-man, eight-foot-long cylindrical welded aluminum alloy lock-in/lock-out compartment, that will enable three scientists to exit from its bottom and collect specimens of the undersea flora and fauna. It will not be necessary for the scientists to be trained divers to work from the vessel.

The 23-foot-long, 18,000-pound vessel will be able to stay under water for as long as 48 hours. Six electric motors will propel it at speeds up to four knots. The pilot's ability to scan in all directions through the acrylic sphere will make it easier for him to hug the bottom and maneuver effectively.

The aluminum alloy parts of the submersible, lightweight and tough, were fabricated by the Aluminum Company of America. Alcoa's engineers also assisted with design details of the craft. The acrylic capsule was produced by Swedlow, Inc., Long Beach, Calif.

Emphasis in engineering of the submersible was—and during its operations will be—on safety. More than 100 innovations were incorporated in the design to contribute to safety. Switches, connectors and all operating gear were especially designed to avoid possible hazards.

Two divers will operate as a team outside the chamber and a third diver will stay in the aluminum chamber as a safety officer. Wherever the divers are outside the chamber they will be tethered for recovery. Electronic devices will monitor and transmit diver heartbeat and respiration rates to a surface support vessel where a trained physician will always be on duty during dives.

At the launching, the ***Johnson-Sea-Link*** was lowered into the water by a crane on the stern of the support ship, Ed Link's ***Sea Diver.*** After it completed a demonstration dive in which it let two divers exit and reenter, it surfaced and was lifted back out of the water by the same crane, an operation that can be performed in less than a minute even in rough seas.

When the craft comes back to the surface after a deep dive its divers will have already begun decompression inside the submersible. They will be able to complete the process inside a roomy, deck-mounted chamber on the new Smithsonian ship, ***R/V Johnson*** to which the lock-in/lock-out hatch of the ***Johnson-Sea-Link*** will be mated.

At a press conference following the launching, Dr. Wallen said the research initially planned for the craft will include studies of porpoise and manatee underwater transmissions, study of submarine freshwater springs on the ocean floor east of Jacksonville, and an intensive "Ocean Acre" study off the coast of Fort Pierce. He said that SI expects to have up to 10 employees at Link Port, the base of the submersible.

Doyle

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relationship at the first level. It is the supervisor at this level who is the real personnel manager, he contends. A greater emphasis on supervisory training will be a tool for achieving this goal. He hopes that such training will help managers to "take a closer look at the compensation system to identify people who are working hard and making important contributions and make sure they are adequately compensated, and likewise to identify those who are not producing as they should."

A new program for strengthening labor-management relations is already underway, a program that Mr. Doyle says is his office's response to a need pointed out by the union. He adds:

"I would like to point out that I personally endorse the theory behind the latest executive order on labor-management relations—that problems should be resolved on the lowest possible level. That allows you to communicate as quickly and simply as possible."

Already underway in BMD, the program calls for joint meetings between shop stewards and first and second-line supervisors *(see photo on page 2).* To be conducted throughout the Institution wherever there is a recognized union, the program is being monitored but not directed by the personnel office.

Another new program that Mr. Doyle believes will help solidify personnel management and improve communications is employee orientation. A complete orientation package, ranging from the rights and responsibilities of the employee to an introduction to the Smithsonian, has been drafted and will probably be initiated by this spring. "It will start when a new employee walks in the door and continue until he has been here about three months," Doyle revealed.

"We are interested in equal employment opportunity in general, in employment of the handicapped, and in working with the culturally deprived," he says. "We would also like to work with people who have potential and who are in dead-end jobs, to help them develop career possibilities. But in all these areas great care must be exercised. I don't want to run a program for the sake of having a program. It has to pay off. I don't want to raise false hopes."

An area in which he does want to raise hopes, but not false ones, is merit promotion.

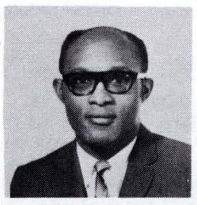
"I would like to streamline and build up the internal recruiting system in order to develop confidence in it," he says. "It should work faster and with better communication. If a person applies, he should know the disposition of his application quickly. If he does not qualify he should be told why, and he should know who was selected and why. I want a system with credibility."

Changes have already been effected for promotion within the guard force. For first level promotions, only one announcement is made every six months, instead of a new announcement each time a vacancy occurs. Applicants thus need be rated and ranked only once, and their ranking stays the same for the entire period. Jobs are filled more quickly, more efficiently, and with more built-in safeguards. For supervisory positions, everyone who is eligible is personally invited to apply.

To help him develop the program he envisions, Mr. Doyle is assisted by Carl Grant, Associate Director for Personnel Resources; Cliff Boocks, Assistant Director for Career Development, and eight personnel consultants, each assigned a certain number of bureaus. "They are in effect almost in business for themselves," he points out. "Each provides the total services—pay, recruitment, promotions, labor relations, awards, discipline, etc.—for his assigned bureaus, backed up by an efficient clerical staff. I think we have a great staff."

And if Mr. Doyle has his way, that great staff will solidify their practices, communicate more effectively, and make you the true believer that he obviously is himself.

Dr. Ayensu Honored By Ghana Academy



Dr. Edward S. Ayensu, Chairman of the MNH Department of Botany, has been elected a Fellow of the Ghana National Academy of Arts and Sciences. He is a specialist in comparative anatomy and phylogeny of angiosperms. He joined the Botany Department as an Associate Curator in 1961.

Museum Shops Sale

Smithsonian employees have been invited by the Museum Shops to select from among the bargains available in the shops' first sale, beginning March 1.

One-of-a-kind items from more than 50 countries will be on sale, including handloomed fabrics, pottery, carvings, metalwork, jewelry, folk dolls, sculpture, masks, shields, beadwork, and ceramics. Prices will be reduced as much as 50 per cent.

MARKSMEN INVITED—Officers of the Smithsonian Rifle and Pistol Club took a few minutes off from the firing range to be photographed during a recent practice session at the D.C. National Guard Armory. Left to right are Joseph M. Young, vice-president and acting secretary; Lyle Steede, president, and Richard Atkinson, public relations officer. Smithsonian employees and members of their families are invited to join the club. Members, who furnish their own equipment, are active in area as well as national competition. They fire every Saturday at the armory from 8 a.m. to noon, and practice at outdoor ranges in good weather. A junior program for young people from 12 to 19 years old is being organized. For information about the club, call Mr. Young at Extension 5124 or 5039.