RIPLEY URGES LARGER **ROLE IN EDUCATION** FOR MUSEUMS See Page Three

# THE SMITHSONIAN ORCH

No. 76-6

Smithsonian Institution, Washington, D.C.

**July 1976** 

THE FOLK FEST IS ON!

11 a.m. to 5 p.m.

Wednesdays through Sundays

Ending Sept. 6

# QUEEN ELIZABETH TO VISIT SI

### Tour of Castle Includes Crypt; Exhibits in Great Hall, Lounge

Queen Elizabeth II will visit the Smithsonian Institution July 8 as part of a six-day official state visit to the United States in connection with the Bicentennial celebration, Secretary Ripley has announced.

The Queen will view the Crypt Room in the Castle, which contains the remains of James Smithson, the will in which he makes his bequest to the United States for the founding, at Washington, of an Institution, "for the increase and diffusion of knowledge among men," and other Smithsonian memorabilia.

She also will view the exhibit "Federal City: Plans and Realities" in the Great Hall. and a special exhibit, "Treasures of London," in the Associates Lounge, that was organized by the Smithsonian Institution Traveling Exhibition Service and the Goldsmith's Hall in London.

"Her Majesty's visit is an historical occasion for the Smithsonian, for we are an organization that owes its inception to the generosity and far-sightedness of a great Englishman," Mr. Ripley said.

The Queen will arrive at the main entrance to the Castle on Jefferson Drive, where she will be greeted by Secretary Ripley and Chief Justice Warren Burger, who will be clad in academic robes.

Other dignitaries scheduled to be present for the occasion will include Vice President Rockefeller and other members of the Smithsonian Board of Regents.

While a group of costumed musicians play flourishes and fanfares from atop the portico, the Queen will be escorted into the building, to view the Crypt Room.

Her presence will mark the first official visit by a member of the British royal family to the tomb of the man responsible for the creation of what has become one of the world's leading cultural and research organizations.

After viewing the Crypt, the Queen will be escorted into the Great Hall, where Secretary Ripley will describe two of the main exhibits in "Federal City," the huge table model of Washington as it existed in 1900, and the model of the McMillion Commission Plan of 1902, (which, ironically would have razed the Castle if implemented).

From there, the Queen and her party will enter the Associates Lounge to view "Treasures of London," an exhibit of outstanding examples of 500 years of British

silver work.
While in the Lounge, Chief Justice Burger, in his capacity as Chancellor, is to read a Joint Resolution of Congress expressing to Her Majesty the appreciation of the people of the United States for the bequest of James Smithson

For this occasion, the Smithsonian Mace will be taken from its case in the Crypt and placed upon a table near the Chief Justice.

In addition to visiting the Castle, the Queen also has sent a group of rare anatomical drawings by Leonardo da Vinci from her personal collection for an exhibit at the Museum of History and Technology.

This exhibit, which opens July 2 for one month, marks the first time that drawings from the Queen's personal collection, at Royal Library, Windsor Castle, will be shown anywhere in the world, and the first time all the drawings will be displayed sideby-side.

The "Treasures of London" exhibit will feature such master works as King Charles II's Coronation Tankard, made in 1661, a hexagonal salt cellar from 1550, and works by Louis Osman, who crafted the crown for the investiture of Prince Charles as Prince of Wales in 1969.

Also on view will be the Great Dish made by Paul de Lamerie in 1741, considered the masterpiece of Britain's greatest goldsmith.

The exhibit, which Graham Hughes, Director of the Goldsmith's Hall, has termed the "best collection of British silver ever to visit the United States," also contains modern jewelry and modern pieces as well as antique pieces.

In addition to works from the Worshipful Company of Goldsmiths, the medieval guild formed in the 12th century, the exhibition also contains loans from other City of London Companies.

The Worshipful Company Fishmongers is lending a Ewer and Basin made in 1706 by David Willaume, and the Worshipful Company of Haberdashers is including the gilt Warwick vase made by Paul Storrs in 1821. Other lenders include the Bank of England and various London churches

"Treasures of London" will be on display here through July 18, after which it will tour a number of American museums as part of the SITES International Salute to the States program.

The Leonardo show will feature 25 anatomical drawings which heretofore were bound in three volumes and available only to a limited number of scholars.

A special new gallery on the first floor of the Museum of History and Technology will house the drawings, which can be viewed as works of art as well as accurate scientific documentation on what Leonardo observed.

Leonardo is said to have composed 120 books based upon his various scientific studies, and some 600 drawings from these eventually became part of the British Royal Collection.

The exhibit also reveals important new discoveries made when a number of the drawings from the Royal Library were studied under ultraviolet light.

Parts of drawings which had faded were once again visible, revealing important details. Ultraviolet photos of two drawings in this exhibit are displayed beside the original works.

A special catalogue will include an introduction by Sir Anthony Blunt, former Director of the Courtauld Institute of Art, and advisor for the Queen's pictures and drawings since 1972, and an essay by Kenneth Keele.



British Information Services Photo by Peter Grugeon

Her Majesty Queen Elizabeth II, pictured at Windsor Castle.

#### Text of Joint Resolution

Following is a joint resolution prepared for adoption by Congress as an expression of appreciation to Queen Elizabeth II of the people of the United States for the bequest of James Smithson to the United States, enabling the establishment of the Smithsonian Institution.

Whereas James Smithson, British subject, scholar and scientist, bequeathed his entire estate to the United States of America "to found at Washington under the name of the Smithsonian Institution an establishment for the increase and diffusion of Knowledge among men;" and

Whereas the Congress of the United States in 1836 accepted the bequest and pledged the faith of this nation to the execution of this trust, and in 1846 provided for the establishment of the Smithsonian Institution; and

Whereas the Smithsonian Institution, since the time of its founding, has been mindful of the charge stated in the will of James Smithson and has, through research and publication, through the collecting of natural history specimens and objects of art, culture, history and technology, and through the creation of museums for the display and interpretation of these collections, been privileged to share its resources, not only with the people of the United States, but with the world community, for purposes of education, enlightenment, and betterment; and

Whereas the generous and inspiring bequest of James Smithson continues to enrich the lives of citizens of every nation: Now, therefore, be it

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled. That on the occasion of the visit of Her Majesty, Queen Elizabeth II, during this year of the Bicentennial of the United States, the people of this nation make known their appreciation and gratitude for the gift of James Smithson, a gift whose significance grows with the passage of time and remains a lasting symbol of the indivisible cultural bonds which link Great Britain and the United States of America.

On display in "Treasures Of London," (l. tor.): 1741 Great Dish by Paul de Lamerie; 1680 Porringer; 1737 Cup and Cover by Paul de Lamerie; 1661 Tankard from Coronation of Charles II.









# Certificates Presented To 49 SI Fellows

Each year the Office of Academic Studies, headed by Edward S. Davidson, welcomes approximately 50 pre- and post-doctoral fellows to the Institution. This program, initiated in 1968, permits outstanding young scholars from the U. S. and abroad to spend from six months to a year in advanced research at the Smithsonian. Fellowships are awarded competitively through an elaborate internal review system.

The program, serving to enrich Smithsonian research with the benefits of new ideas, emphasizes cooperative scholarly relationships between fellows and staff, rather than completion of specific projects.

Each fellow has a Smithsonian "advisor," and is encouraged to use SI facilities such as labs and field stations, while investigating a specific topic.

Though the research studies are completed at various times, certificates of academic achievement are awarded each spring to those fellows who have been at the Smithsonian for six months or more.

For the academic year 1975-76, Secretary Ripley presented the following certificates on June 9:

American and Cultural History — Cynthia Field, Richard Glasow, Scott Hambly, Anita Jones, George McDaniel, Martha Sandweiss and Rebecca Welch.

Anthropology — Bernardo Dougherty, Geoffrey Gamble, Margaret Hardin, Brian Hesse and Gus Pantel.

Earth Sciences — Peter Jezek and John Sinton

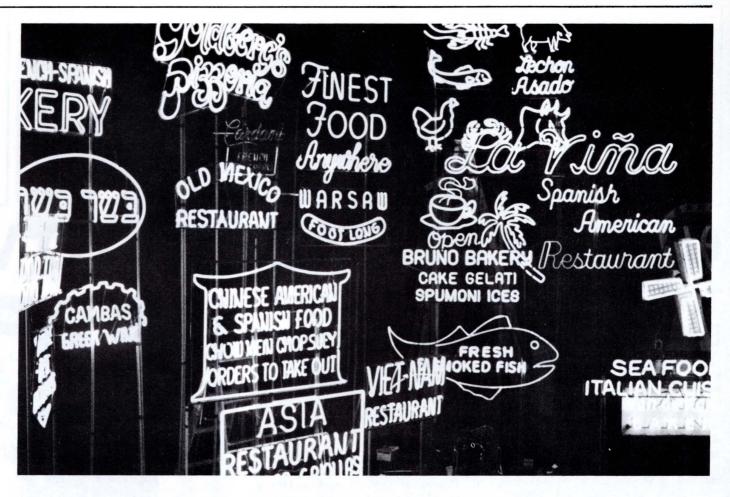
Environmental Sciences — Robert Hoage, Rasanayagam Rudran, Sandra Spurgeon, Jerry Thomas and Brenda Tremper.

Evolutionary and Systematic Biology — Wayne Clark, Cristina Dougherty, Bruce Hayward, Francisco Leccia, Albert Myrick, Jr., Timothy Palmer, Alfred Rosenberger, Seymour Sohmer, Robert Ward and Anders Waren

History of Art — Ruth Bohan, Ildiko De Angelis, Marc Miller, Deborah Muller, Neil Printz, Joan Seeman, Julie Wortman and Ann Yonemura.

History of Science and Technology — Christopher Beam, Virginia Drachman, Susan Frey, Robert Friedel, Arthur Nunes, Jr. and Leonard S. Reich.

Tropical Biology — Peter Abrams, Carol Augspurger, Eric Fischer, David Janos, Kentwood Wells and Orrey Young.



#### MHT Crowd Welcomes Flavorful 'Nations'

By Susan Bliss

Marble halls reverberated with musical vibrations from a German band, and the air carried tempting aromas of sausage, quiche, cheese, beer, and other ethnic delicacies, as a crowd estimated at nearly 2,000 gathered to welcome "A Nation of Nations" to its five-year home in the Museum of History and Technology.

This largest single exhibit ever created in the Museum has something for everyone. Most visitors found at least one display to study closely before moving on to others.

Crowds seemed to linger longest before the old movies of Charlie Chaplin, Amos and

**SMITHSONIAN TORCH** 

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Andy, and Fred Astaire, and in the sports section, where film clips of famous sports figures flashed on a screen.

Turning a dark corner, a visitor was surprised and delighted by the colorful array of neon signs flashing and blinking. The signs, pictured above in black and white, represent in a single display the ethnic, economic, and cultural diversity of our country.

Bittersweet memories seemed to hold men, young and old, before a section of a Ft. Belvoir Army Barrack, complete with latrine and footlockers arranged in perfect military fashion, as for an impending inspection.

fashion, as for an impending inspection.
Others, identifying with a different sort of

past, gazed sentimentally at Room 201, a sixth grade classroom in the Dunham Elementary School, transported from late 19th century Cleveland.

Still others were fascinated by a pencilmaking machine as it spewed out pencils at a rate of ten per minute, slowed down for the exhibit from its capacity of 190, to demonstrate American mass production techniques.

For guests who had come just to be exuberant, there were trails of savory aroma wafting from the tables by the Ft. McHenry flag, and dancing to the music of the German band, with the foucault pendulum acting as a slightly out-of-sync metronome.

Joined SI In '32

### Rehder Retires With Plans To Continue Mollusk Study

By Tom Harney

Dr. Harald Rehder had his first sight of the beautiful curving palms and sunlit blue lagoon of a tropical Pacific island in 1957 when the Smithsonian-Bredin Expedition vessel anchored off Polynesia's Tikehav Atoll

While there he went skindiving to collect living mollusks (shellfish) from a coral reef and lagoon bottom: "It was an unforgettable experience," he says, "And it suggested something to me."

What it suggested has grown into a 19 year project that isn't yet completed — a great survey of the distinctive character of mollusk life on the reefs and shores in the lagoons and deeper offshore islands and atolls of Polynesia.

It is "an area of particular interest to the marine biologist because of its marginal location bordered on the east by the deep water between it and South America and on the south by the deep and cold water stretching down to the Antarctic Continent," said Dr. Rehder, who retired last month after 44 years with the Smithsonian.

Pursuing this grail has taken Dr. Rehder to the South Pacific nine times and to more than 50 Polynesian islands, from well-known land marks like Tahiti, where on one expedition he and MNH's venerable Dr. Waldo Schmidt joined with a group of natives in dancing the hula, to remote and seldom visited island groups like the Marquesas and Pitcairn, where nothing or very little was known of its marine life until Dr. Rehder's arrival.

Pitcairn Island, he said, was one of the most intriguing of all the islands he has studied, not only because of its unique mollusks, but also because it is the home of the descendants of the Bounty mutiny.

"I went there three times and stayed each time with the Young family, descendants of Edward Young, one of the mutineers. They and the other islanders were very friendly and hospitable, and it was always a thrill to Dr. Rehder estimated that on his field trips, some of which involved schooner cruises covering over a thousand miles, he's helped dredge, pick up by hand on the reefs or in tidal pools, and by skin diving, as many as 100,000 mollusks, to amass a South Pacific collection that is unmatched.

"He's brought back enormous numbers of specimens, and at the same time he's also responsible for seeing to it that we have the best curated collection of mollusks in the world," said Dr. Rehder's colleague Dr. Joseph Rosewater.

The son of a botanist at Harvard University's Arnold Arboretum, Dr. Rehder credits the scientific atmosphere in which he was raised to an early interest in natural history.

Family vacations on Cape Cod and near New Hampshire's mountain lakes, gave him the opportunity to collect and study shells, an interest that grew through his undergraduate years at Bowdoin.

As a graduate student in malacology at Harvard in 1932 under Dr. William Clench, he jumped at the opportunity when Dr. Paul Bartsch wrote and told him that there was an opening on the Smithsonian staff.

Dr. Bartsch himself had been hired in 1896 by W. H. Dall, the first eminent mollusk authority to be associated with the Smithsonian, and, along with Dall, an important figure in raising the MNH mollusk collection to where it rivaled the British Museum's. Dr. Rehder succeeded Dr. Bartsch in 1946 as the man in charge of this collection.

The careers of Dall and Bartsch at the Smithsonian were long ones and Dr. Rehder is following in this tradition. His retirement does not mean, however, that he intends to stop working

He's still writing up his studies of the material he and his wife, Lois, collected on a 1974 trip to the Easter Islands which has yielded more than 30 species new to science (Dr. Rehder has described 285 new species and subspecies during his career).

In the fall he and his wife plan a cruise to Polynesia's Tokelau islands where once again he will be making pioneering shell collections.

## Bicentennial Inventory Of Art Lists 150,000 Paintings

By Marge Byers

The Bicentennial Inventory of American Paintings Executed Before 1914 is just what its name implies, a national "census" of American art. A major contribution by NCFA to America's 200th birthday celebration, it opens for use on July 4th.

A nonselective accounting of works, it has returned many "lost" paintings to record. This massive scholarly undertaking began five years ago with Bicentennial funds appropriated by Congress.

The Inventory now lists 150,000 paintings — indexed by artist, owner/location, and 245 separate subject headings — with all the data fed into a computer. A directory of the Inventory, an "index to the index," will be published in August.

Planned as a standard reference work, it includes introductory text and an alphabetical listing of 13,000 artists with the number, but not titles, of their paintings recorded so far in the Inventory. Institutional, but not personal, owners of recorded works and published sources of information also are given in the directory.

Coordinator and designer of the Inventory is Abigail Booth, formerly NCFA's assistant curator of exhibitions, assisted by Martha Andrews, who has worked on the Inventory since 1972. Over the years, the women have been joined by 35 others — mostly part-time students.

"Having such a constantly changing staff was not an accident, but the way I set it up," Miss Booth said. "Many have come back summer after summer. They are a lovely young group of very bright people who have been especially valuable in developing the Inventory."

In May 1971, NCFA asked for partners in the census-taking by mailing 6,000 explanatory brochures to museums, historical societies, service associations and clubs across the country. It was Miss Booth's idea to involve many Americans in the project during the Bicentennial year.

Professional and amateur volunteers helped locate the paintings and notified the NCFA Inventory staff.

The American Association of University Women made the Inventory a national program; in the San Francisco Bay area, one woman heard about the project from a friend and, with no institutional sponsorship, simply plunged in, said Miss Booth.

"We truly could not have done without all these volunteers," she says gratefully. "We're the manufacturing plant and they're the farmers producing the raw material. That's what made it work, and it's so beautiful and so Bicentennial that it hurts. I'm excited about it. It's not flashy, not something you look at and admire, but it's something to use."

The Inventory is open to almost everyone — from scholars to high school students writing term papers, and may be used in person or by mail. The service is free except when a query is so large or complex that it crosses many categories and involves going back to the computer.

As a public research service, the Inventory contains 30,000 photographic reproductions — glossies, snapshots, postcards, newspaper and magazine clippings — which are for study only at NCFA and will not be loaned or copied.

#### Ripley Advises AAM

## Museums Still Untapped Resources Cited For Help

At a time when educational institutions are beset by excessive bureaucracy, soaring costs and falling standards, the nation's museums remain an untapped source of education, and this must be changed, Secretary Ripley said recently.

In a speech to the 71st annual meeting of the American Association of Museums, May 31 in Washington, Mr. Ripley said the past decade has seen a "marked increase of school participation in museum experiences, at the early school level, and training at graduate levels, and interplay in course structure."

He predicted that this would continue, but noted that, "the meaning of museums still eludes the public," and museum officials "must begin to learn how to make more effective educational use" of the nation's several thousand museums.

"They represent virtually untapped resources within the academic community, and one would hope that the educational establishment would explore how best to integrate the assets of museums . . . into the teaching mosaic," the Secretary added.

But, warned Mr. Ripley, as museums themselves seek more federal and state aid, they run the risk of becoming enmeshed in the same bureaucratic web that has troubled educational institutions for the past few

"As museums come closer to success in establishing a precedent for government funding for services rendered, akin to the massive support for colleges and schools, it would be wise to look ahead and consider that with federal funding come certain reciprocals.

"Money begets power, but the ultimate power rests with the dispensers of the money. Vast money produces regimentation and pedantry. Museums would do well to measure thus their independence against their eventual dependence on government funds," he advised.

Mr. Ripley observed that the world of education is in a "terrible dilemma today. The certitude and self-righteousness of past years has been replaced by self-doubt over failing standards, diminishing numbers of young students and incredibly inflationary pressures."

"A century or more of increasing support for education from state and federal sources, gradually replacing, especially recently, much of the earlier highly motivated private or religious philanthropy, has produced a massive series of formulas for education," he said.

The decline in the quality of education is due, Mr. Ripley added, at least in part to "its very massiveness, its ponderous rules, its denial of individuality through rote teaching, as well as succumbing to the new luxurious modes of thought of the Sixties, the mindless drive towards self-fulfillment, which so often merely masks a lack of discipline and loss of

Turning to the field of television, Mr. Ripley said that this most promising of the new techniques of exposing an object and increasing the appeal of the museum experience "continues to be a failure."

'Now at last public television may come of age, and save us all, citizens and museums alike, from the numbing conformity meted out by the tube.

#### Cohea, Jones, Anderson Retire

Three SI employees, L. Frances Jones, Harold R. Cohea and Ralph Anderson, have recently retired.

L. Frances Jones, deputy assistant director for bureau service with the SI Libraries, joined the staff in 1949 as an assistant in the Catalog and Acquisitions Divisions and served the Libraries in several positions during her career.

Mr. Anderson began working at the Smithsonian as a guard in 1963. He later became a guard company clerk in NMHT and established administrative procedures for the guards. He also rewrote the SI guard manual which the American Association of Museums called the best of its kind.

When he retired, Mr. Anderson was deputy chief of the Protection Division.

Mr. Cohea joined the Smithsonian in 1964 as a training officer in the protection division, then within the Buildings Management Department. He served in various training, development, and systems management

words beautifully with objects exhibited, a museum-like technique, but performed the way Mme. Montessori showed us years ago, so that we reinforce the learning process in a way that children have always responded to with touch, sight and a deeper perception.

"Perhaps in this way, museums could find a firmer, a more committed involvement with the new media techniques and in the process produce our new open university."

Mr. Ripley concluded, "I think museums do possess some of the ultimate weapons for

"Here on the screen we could associate the future. As possibly the last legitimate growth industry, museums will continue over the years to amass more of the world's artifacts.

> "Museums thus have a moral responsibility to preserve these objects with newly refined skills, and on the part of the Smithsonian Institution, I can testify to our desire to serve as a leader in the field of conservation, but also the right to point out . . . how much more, how long and for what purposes we the people can continue to sully our planetary nest?"

#### **Presented Service Awards**

Career service awards were presented recently to 13 staff members of the National Air and Space Museum and the National Museum of Natural History in recognition of a total of 880 years of service to the Smithsonian.

Awards at NASM, presented by Director Michael Collins, went to Winthrop S. Shaw, museum specialist (30 years); Frank Winter, restoration assistant (10); Joseph Fichera, museum specialist (30); Sylvandous S. Anderson, exhibit specialist (30); Tony Baby, chief of exhibits (15); Michael N. Mikitish, administrative clerk (20), and Wilford A. Powell, museum technician (10).

Also receiving service awards were Costen Bennett, labor leader (20); Calvin C. Clark, electrician (15); Richard L. Wakefield, supervisory electrician (10); James C. Nyce, exhibit specialist (25); Walter R. Roderick, museum specialist (20), and Harold R. Payne, laborer (20).

Career service emblems were awarded to 38 MNH employees:

Anthropology Department: Saul H. Riesenberg (30 years); Bethune M. Gibson (10), and Herman Viola (10).

Botany Department: Tillie H. Berger, Cuatrecasas (20); Tom Soderstrom (15), and Clara T. Simmons

Building Manager's Department: Pearl C. Carroll (15); William E. Wells (15), and Calvin L. Battle (10).

Entomology Department: Ralph E. Crabill Jr. (20); Thelma F. Smith (20); Oliver S. Flint Jr. (15); Richard C. Froeschner (15); Gloria N. House (10); Virginia M. Ford (10), and Penelope B. Smallwood (10).

In Exhibits, a service emblem was awarded to Toussaint M. Wallace for 15 years of service.

Invertebrate Zoology: Dessie Mae Best (30); James A. Pendergrass (30); Roscoe C. Johnson (30); Norman R. Baylor (15), and Klaus Ruetzler (10).

Mineral Sciences: Paul E. Desautels (20); Eugene Jarosewich (10), and Kurt A. Fredriksson (10).

In the Office of the Director, William P. Haynes and Margaret Santiago received emblems for 30 and 15 years of service respectively

Paleobiology Department: James P. Ferrigno (20); Donald A. Dean (15); Donna Lee Copeland (10), and Robert W. Purdy

In Vertebrate Zoology, Ernest A. Lachner and Victor G. Springer received emblems for 30 and 15 years of service respectively.

SI Oceanographic Sorting Center: Katie Stroman (20); Betty J. Landrum (20); Alice P. Flerchinger (10), and Robert P. Higgins (10).

## Margaret Mead On Symposium

Dr. Margaret Mead received special recognition by Secretary Ripley at the close of a three-day series of preparatory workshops June 14-16 to help plan the Smithsonian's sixth international symposium. It will be held June 14-17, 1977, on the theme, "Kin and Communities: The Peopling of

Recognizing Dr. Mead for chairing the Smithsonian education program on families, and for her decades of cooperation with the Smithsonian, Mr. Ripley presented her with an embossed leather album containing photographs of materials in the Smithsonian collections representing the various cultures in which she had done field work.

Mr. Ripley took note of the coincidence of the Bicentennial and the 75th anniversary of Dr. Mead's birth, and praised her continuing efforts to call attention to the needs and the future of the entire human family.

The Secretary discussed the importance of families and communities as transmitters of the diverse cultural traditions which are manifest in such current Smithsonian exhibitions as "A Nation of Nations" and "The Golden Door," as well as in the Festival of American Folklife.

He also described the Smithsonian as "a big extended family of institutions where whole families come for the shared pleasure of learning.'

"Kin and Communities" was developed in response to growing enthusiasm for a nationwide popular and scholarly focus on the place of kinship and communities in the past and future of American civilization.

Last month's three-day program included workshops on "Techniques of Studying Contemporary and Historical Families,' and "Families and Communities as Educators."

Plans for the 1977 symposium are being directed by Wilton S. Dillon, director of Smithsonian Symposia and Seminars, and his staff, Dorothy Richardson, Jane J. Wallace and Carla Borden.

## Columbus Exhibit Caps Five Years Of Effort

By Linda St. Thomas

Silvio A. Bedini didn't start out to be a Columbian scholar, but after five years of research and hunting for artifacts, he certainly knows a lot more than most people about Christopher Columbus and his times.

"Last spring I spent several weeks in Spain visiting the cathedrals, libraries, museums and palaces seeking Columbus documents and artifacts," said Mr. Bedini, deputy director of the Museum of History and Technology. "I had already immersed myself in the literature on Columbus before the trip so we could tell the story of 'Columbus and his Time' at the Smithsonian." The exhibit opened last month in MHT.

The research started in 1971 when Mr. Bedini, on behalf of Secretary Ripley, served on a presidential committee to establish Columbus Day as a national holiday.

Instead of parades and holiday festivities, he suggested to the Spanish cultural attache that a collection of original documents and artifacts related to King Ferdinand, Queen Isahella Christopher Columbus and discovery of the New World be loaned to the Smithsonian for the MHT exhibit.

Last April, the Smithsonian was notified of the visit of King Juan Carlos of Spain, Queen Sophia and Don Cristobal Colon, a direct descendent of Columbus and the 17th duke of Veragua, and the exhibition was scheduled to open June 3 to coincide with their trip to MHT.

Despite the fact that Columbus and other Spanish explorers such as Ponce de Leon, Cortez, de Soto and others began exploring the Americas more than 480 years ago, Juan Carlos' tour was the first time in history that a Spanish monarch has visited either American Continent, Mr. Bedini said.

The exhibition, which includes the famous map of the New World by Juan de la Cosa, is part of Spain's observance of the American Bicentennial. It is also the first time these 39 documents and objects have been brought to the New World or have been exhibited in one

At the personal request of the Spanish Monarch, numerous Spanish museums. libraries, churches and cathedrals lent national treasures for "Columbus and His

Included in the exhibit is the pulpit from

which was read King Ferdinand and Queen Isabella's decree announcing Columbus' 1492 voyage and providing two ships and crew for the venture.

The artifact was taken from the church of San Jorge at Palos, the Spanish port city where Columbus began his Atlantic cross-

The last item to arrive for exhibition was the portrait on wood of Columbus from the Biblioteca Nacional in Madrid. It is believed by some scholars to be the most authentic portrait possibly completed within Columbus' lifetime.

The Cathedral at Seville loaned the Smithsonian seven books, with marginal notations in Columbus' handwriting, for this exhibition, Mr. Bedini said, noting that "This loan became somewhat complicated because the books were left to the Cathedral by Columbus' son, who specified in his will that the books should never leave the

The most striking display is of the map

Spanish monarchs the location of their newly-discovered lands.

A navigator and shipmaster of the Santa Maria during the first journey to the New World, de la Cosa also sailed with Columbus in his second voyage.

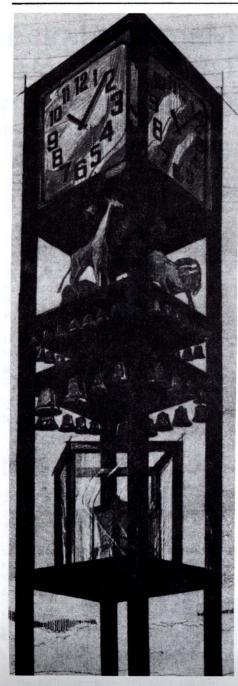
The wind rose design beneath the MHT foucault pendulum is based on this map's original wind rose compass.

Other treasures exhibited here are a royal decree assigning Columbus an additional castle and a lion for his coat-of-arms, the first letter written by Columbus in the New World, a summary of his journal handwritten by the son of a Columbus sailor, and a decree naming the navigator and "his children and successors" Admiral, Viceroy and Governor of all the "terrae firmae" and islands he discovered.

The map and two documents from Don Cristobal Colon's private collection will return to Spain in mid-July. The other objects will be exhibited through December, 1976, in the Museum's first floor pendulum



Secretary Ripley explains MHT exhibits to King Juan Carlos of Spain (left) during June 3 visit by the King and Queen Sophia to open "Columbus and His Time."



#### 'Uncle Doc' Gives Zoo Animal Clock

By William Eilers

The new sound of tinkling bells just inside the main pedestrian entrance to the National Zoo on Connecticut Avenue comes from a whimsical new carillon with animated animals called a Glockenspiel.

The \$100,000, 38-foot-high Glockenspiel is the only one in Washington and represents the largest donation by any citizen since the zoo was founded 87 years ago.

Visitors walking under the eight-foot-square tubular tower will gaze up through transparent walls to see a carilloneur playing a baton-type console with the 35-note range.

Most of the time, the 36 bells will be rung by a custom-made, 35-note magnetic tape digital automatic playing system hidden in a nearby old gate house.

Just below the four-faced clock atop the tower are animals four-feet high. Each is programmed for two movements.

A lion stands on its hind feet and opens its mouth, an elephant raises its trunk and flaps its ears, a bear rears to its hind feet and waves a paw, and a giraffe swoops its neck out and down to peer at the children. Birds on wires move with the breeze.

It will be known as the Pelzman Memorial Glockenspiel since funds to build it were bequeathed by the late Dr. Ivy A. Pelzman in memory of his wife, Katherine.

Before he died in 1970 at the age of 80, Dr. Pelzman, a prominent Washington urologist, spent his last years going over plans for the Glockenspiel.

Known fondly as "Uncle Doc," his inspiration came from the Glockenspiel at the children's zoo in New York's Central Park where he often walked with his grandnieces and grandnephews.

Located near the Dorcas gazelle yard, the Glockenspiel plays every hour on the hour from 9 a.m. to 8 p.m. Bells chime on the quarter hour. Fifty tunes are on tape.

Bronze bells for the instrument were cast at the Holland foundry of the I. T. Vardin Company of Cincinnati. The foundry is the world's largest and dates back to 1660.

The Glockenspiel is the largest ever made by the company, which has provided bells for more than 10,000 churches and 100 cathedrals throughout North America.

Zoo director Theodore H. Reed said of the gift, "We have a memorial that is simple, dignified, charming, whimsical, practical and a source of great amusement to the children and visiting adults."

# July at the Smith

1 EXHIBITION: A Walk in the Woods. Nature photographs by Ann Moreton. Approximately 25 color THUR photographs of spiders, snails, flowers and other flora and fauna of the woods. Museum of Natural History, through September 30.

FREE FILM THEATRE: Gravel Springs Fife and Drum; Ray Lum, Mule Trader; and Two Black Churches. Films from the Center for Southern Folklore. 12:30 p.m. Carmichael Auditorium, History and Technology Building. FREE.

NATIVE AMERICAN FILM/VIDEO SERIES: Works by, for and about Native Americans in the Southeast area. Sponsored by the Festival of American Folklife. Ecology Theater, Natural History Building. 10 a.m. to 1:45 p.m. and 3 to 4:30 p.m. FREE.

2 EXHIBITION: Anatomical Drawings by Leonardo da Vinci. Twenty-five rare drawings represent two distinct periods in da Vinci's life, when he focused on dissections of the sensory nervous system and an understanding of the physical function of the eye, and later, on the movements of the body. Ultraviolet photographs of two drawings are displayed with the original works, revealing important details that had faded. Lent by Her Majesty Queen Elizabeth II to commemorate the American Bicentennial. The first drawings from the Queen's personal collection at the Royal Library Windsor Castle, England, to be exhibited. Museum of History and Technology, through August 2.

NATURAL HISTORY FILM: Kon-Tiki. Thor Heyerdahl's famous voyage from Peru to Polynesia. Filmed by the crew. 12 noon. Baird Auditorium, Natural History Museum. FREE.

5 CHAMBER MUSIC CONCERT: Yehudi Menuhin School. Six students of the Menuhin School, ages 14 MON to 17, will perform on violin, viola, cello and piano, under the direction of Robert Masters. Among the program selections will be Ceilidh for Four Violins by Justin Connolly, commissioned by the School in 1976, and a string quintet by Dvorak. Presented by the Smithsonian under the patronage of Mrs. Gerald Ford and Lady Ramsbotham, wife of the Ambassador from Great Britain. 8 p.m. Baird Auditorium, Natural History Building. Tickets may be obtained at the Great Hall, Smithsonian Institution Castle Building, 10th and Jefferson Drive, S.W., or call 381-6264. FREE.

6 NMHT TUESDAY FILM: City Out of Wilderness: Washington. 1 p.m. Carmichael Auditorium, TUES History and Technology Building. FREE.

7 FREE FILM THEATRE: Quilting Women; and Kingdom Come School. The life and culture of WED Appalachia shown through dramatic and documentary films. 12:30 p.m. Carmichael Auditorium, History and Technology Building, FREE.

\*Sponsored by the Resident Associate Program of the Smithsonian. Discounts are available for members. For attendance or other information call 381-5157. FREE FILM THEATRE: Quilting Women; and Kingdom Come School. Repeat. See July 7.

NATIVE AMERICAN FILM/VIDEO SERIES: Films by, for and about Native Americans. Sponsored by the Festival of American Folklife. Ecology Theater, Natural History Building. FREE. 10-1:45, 3-4:30.

9 NATURAL HISTORY FILM: 99 Days to Survival. The Colorado River explorations of John Wesley FRI Powell, portrayed in a Smithsonian Institution film. 12 noon. Baird Auditorium, Natural History Building. FREE.

12 EXHIBITION: Wedgwood Portrait Medallions of the Period of the American Revolution. Fifty medalmon lions along with the original print or drawings on which they were based, and letters of Josiah Wedgwood expressing support for American independence. National Portrait Gallery.

ILLUSTRATED LECTURE: The Peoples of Ecuador: Past and Present. Dr. Douglas H. Ubelaker, Smithsonian Physical Anthropologist, discusses the cultural variety existing in Ecuador today as well as the biology and cultural advancement of the prehistoric peoples of Ecuador. Biological data about populations, including the long-lived Indians on Ecuador's southern coast, will be included. 8 p.m. Baird Auditorium, Natural History Building. \$3.\*

13 NMHT TUESDAY FILMS: Tops; and Toccata for Toy Trains. 1 p.m. Carmichael Auditorium, History TUES and Technology Building. FREE.

CREATIVE SCREEN: Copenhagen — a kaleidoscopic view of the city and its people; Sit Down-Sit Danish — Danish furniture is used to illustrate how people live, rest, eat, work and play. Bjorn Wiinblad — ceramics, porcelain, posters, costumes and fountains, all inspired by nature and designed by Wiinblad. Shown in conjunction with the current exhibition Arne Jacobsen, Danish Architect and Designer. Complete showings 11 a.m., 12 noon and 1 p.m. The Renwick Gallery. FREE.

14 ILLUSTRATED LECTURE: The Miniature Portrait: A Bond of Love. The history and tradition of WED portrait miniatures from their first popularity during the Renaissance through the 18th century when they were executed on thin slices of ivory, to the literal portraits of the American miniature. Speaker: Robin Bolton-Smith, Assistant Curator of 18th and 19th century painting and sculpture, National Collection of Fine Arts. Held in conjunction with the current exhibition. 8 p.m. Carmichael Auditorium, History and Technology Building. \$3.\*

FREE FILM THEATRE: Salute to the Tall Ships—filmed in New York and Bermuda in 1964, and The Tall Ships Are Coming, filmed in London and Amsterdam in 1975. Two films on Operation Sail '76. 12:30 p.m. Carmichael Auditorium, History and Technology Building. FREE.

**15** FREE FILM THEATRE: Salute to the Tall Ships; The Tall Ships Are Coming. Repeat. See July 14 for THUR details.

#### FESTIVAL OF AMERICAN FOLKLIFE — 1976

Tenth annual festival continues through September 6 along the Reflecting Pool between the Lincoln Memorial and 17th Street. 11 a.m. to 5 p.m., Wednesdays through Sundays (and July 5). Participants change weekly. Music, dance, foods, games, crafts, folklore represent the following theme areas (participants change weekly): Old Ways in the New World - France and Poland (1-5); Great Britain and Portugal (7-11); Yugoslavia (14-18); Belgium and Egypt (21-25); Germany and Pakistan (28-Aug. 1). African Diaspora - Haiti (1-11); Liberia, Trinidad and Tobago (14-25) together with U.S. groups. Regional America - five major regions. South (1-5); Upland South (7-11); Heartland (14-18); West (21-25); Pacific Northwest (28-Aug. 1). Native Americans - coordinated with Regional America. Tribes from the Southeast (1-5); Southern Plains (7-11); Prairie (14-18); Northern Plains (21-25); Northwest Coast (28-Aug. 1). Working Americans -Workers Who Build (1-11); Workers Who Clothe Us (14-25); Workers in Communications, Arts, and Recreation. Family Folklore. Children's Area. Evening Concerts - 5-8 p.m., each night except July 4, some specialized, some all-festival samplers. Foods demonstrated, sampled and sold along with related cookbooks and utensils. Fiddler's Convention July 4. FREE.

#### Museum

**GROUP TOURS** 

To arrange group tours call: National Portrait Gallery 381-6347; Museum of History and Technology; school or adult tours; 381-4141; Hirshhorn Museum 381-6713; Museum of Natural History 381-6135. National Collection of Fine Arts or The Renwick Gallery 381-6541.

WALK-IN TOURS

Hirshhorn Museum and Sculpture Garden

Highlights — Monday through Saturday: between 10 a.m. and 12 noon

Museum of Natural History

Museum guides provide spot talks on exhibits throughout the museum. 10 a.m.-2 p.m., seven days a week.

Foreign Language Tours are scheduled in advance (call 381-6135) for the following: French, Spanish, Italian, German, Japanese, Portuguese and Arabic.

National Collection of Fine Arts. Walk-in tours of the permament and special exhibitions. Monday through Friday: 12 noon. Printed self-tours provided free.

National Portrait Gallery. Walk-in tours of the permanent and special exhibitions. Daily between 10 a.m. and 3 p.m.

# sonian Institution

16 NATURAL HISTORY FILM: Krakatoa — The rebirth of a volcanic island in the Sunda Straits; FRI Succession on Lava — the process of life reestablishing itself on lava flows. 12 noon. Baird Auditorium, Natural History Museum. FREE.

ILLUSTRATED LECTURE: Theodore Roszak: Sculpture Before and After World War II. Joan Seeman, NCFA pre-doctoral Fellow from Stanford University, will discuss this major sculptor whose work ranged from geometric abstraction to a dramatic, subjective style and represented a transition between the machine esthetics of the 1930's and the expressionism of the postwar decade. 12:30 p.m. National Collection of Fine Arts. FREE.

**17** EXHIBITION: *The Daguerreotypes of Southworth and Hawes* (1843-1861). Over 100 daguerreotypes SAT from the nation's most prestigious portrait studio of the mid-19th century. National Portrait Gallery.

20 NMHT TUESDAY FILM: An Independent Voice: The Community Newspaper In America. 1 p.m. Carmichael Auditorium, History and Technology Building. FREE.

21 LECTURE/PERFORMANCE/PICNIC: Mikhail Baryshnikov and Gelsey Kirkland in a selection of WED pas de deux, and Baryshnikov's solo performance of Vestris. The program will be preceded by a discussion by Naima Prevots, Chairman, Dance Department, American University, on the technique and repertoire of the two dancers. A cold picnic supper will be served. Lecture and picnic: 7 p.m. Performance — 8:30 p.m. Wolf Trap Farm Park. \$20.\*

FREE FILM THEATRE: The Last Boat Home. The last Mississippi River steamboat as it travels the American heartland. Narrated by Johnny Cash. 12:30 p.m. Carmichael Auditorium, History and Technology Building. FREE.

22 FREE FILM THEATRE: The Last Boat Home.

Repeat. See July 21 for details.

NATIVE AMERICAN FILM/VIDEO SERIES: Works by, for and about Native Americans in the Northern Plains area. Sponsored by the Festival of American Folklife. Ecology Theatre, Natural History Building. FREE. 10-1:45; 3-4:30.

23 NATURAL HISTORY FILM: The Sea — exploration of ocean plains and mountains with insights into FRI. ocean ecology. The Science of the Sea — the relationship between the ocean and the atmosphere in the water cycle. 12 noon. Baird Auditorium, Natural History Museum. FREE.

ILLUSTRATED LECTURE: The 'New Path' and American Architectural Theory of the 1960's. Julie Wortman, NCFA pre-doctoral Fellow from the University of Michigan, will discuss the New Path, the short-lived journal of the Association for the Advancement of the Cause of Truth in Art, and its philosophies of architectural perfection. 12:30 p.m. National Collection of Fine Arts. FREE.

**27** NMHT TUESDAY FILMS: Last Wheel Works; and Sawyer and His Mill. 1 p.m. Carmichael Audi-TUES torium, History and Technology Building. FREE.

SUPPER CONCERT: A Courtyard Full of Brass. Joplin rags, Sousa marches, works by Charles Ives and William Billings, performed by the Gallery Brass Quintet. Box supper and beverages served. 8 p.m. Courtyard, Fine Arts and Portrait Gallery Building, 8th and F Streets N.W. Raindate: July 29. \$12.50.\*

CREATIVE SCREEN: Copenhagen; Sit Down — Sit Danish; Bjorn Wiinblad. Complete showings 11 a.m., 12 noon and 1 p.m. For program details see July 13. The Renwick Gallery.

28 ILLUSTRATED LECTURE: The Cosmic Saga. Speaker: Dr. Cyril Ponnamperuma, Professor of WED Chemistry and Director of the Laboratory of Chemical Evolution, University of Maryland. Dr. Ponnamperuma traces our society through the first radio message transmitted to a distant galaxy, including the current scientific research and data collected in our search for life beyond earth, and predictions about how such findings may affect our everyday lives. 8 p.m. Carmichael Auditorium, History and Technology Building. \$5.\*

FREE FILM THEATRE: *USArt* — the evolution of American art from Colonial times to today; *The Year They Invented the United States*; and *Now's the Time* — two Bicentennial films from TIME, INC. 12:30 p.m. Carmichael Auditorium, History and Technology Building. FREE.

29 ILLUSTRATED LECTURE: Victorian Gardens at the Smithsonian. Speaker: James Buckler, Smith-THUR sonian Horticulturist and designer of the Institution's new garden. Mr. Buckler will discuss the philosophy and planning of the Victorian-style garden and share his personal knowledge and observations on the plantings patterned after those at the Philadelphia Exposition of 1876. 8 p.m. Baird Auditorium, Natural History Building. \$3.\*

FREE FILM THEATRE: USArt; The Year They Invented the United States; Now's the Time. 12:30 p.m. Carmichael Auditorium, History and Technology Building. See July 28 for program details. FREE.

NATIVE AMERICAN FILM/VIDEO SERIES: Works by, for and about Native Americans in the Northwest Coast area. Sponsored by the Festival of American Folklife. Ecology Theater, Natural History Building. FREE. 10-1:45; 3-4:30.

30 NATURAL HISTORY FILM: Forbidden City. The Imperial Citadel, home of Emperors of China in FRI. Peking; now a museum of Chinese history and culture. 12 noon. Baird Auditorium, Natural History Museum. FREE.

ILLUSTRATED LECTURE: Katherine Dreier and the Société. Speaker Ruth Bohan, NCFA predoctoral Fellow from the University of Maryland, will discuss Dreier, one of the founders, President and chief spokesman for the Societe Anonyme — founded in 1920 and dedicated to the promotion of international modern art in America between the two world wars. 12:30 p.m. National Collection of Fine Arts. FREE.

#### WEST COURT FACILITIES

#### Natural History Building

A skylit cafeteria with hanging gardens and a stone wall waterfall is now open in the Museum of Natural History for public dining, from 10 a.m. to 5 p.m. seven days a week. Other facilities are scheduled to open later in the summer and fall — a Museum Shop with fresh flowers, herbs and Chinese vegetable seeds among the many items for sale; Naturalists Center where amateur naturalists can see and handle specimens of all kinds; and classrooms. The shop at the Constitution Avenue entrance will be closed and used as a public lounge when the new shop is opened.

HIRSHHORN CAFE: A selection of picnic box lunches are sold in the fountain court, Hirshhorn Museum and Sculpture Garden. Seven days a week. Beverages are available. Some tables and chairs.

CAFETERIA AND SNACK BAR: Museum of History and Technology. Open seven days a week. Cafeteria — 11 a.m. to 8 p.m. Snack Bar — 10 a.m. to 5 p.m.

RESTAURANT: Fine Arts and Portrait Gallery Building. 10 a.m. to 4 p.m. Monday through Friday; 11 a.m. to 4 p.m. Saturday and Sunday.

NATIONAL AIR AND SPACE MUSEUM: Cafeteria open 11 a.m. to 7 p.m. seven days a week.

# Big Cats Move To New Home



Four white tigers and three lions seem very happy in their new home at the National Zoo's Dr. William H. Mann Lion and Tiger Exhibit.

The display, which doesn't look like a building and definitely is not a cage, opened in May when the animals were returned from zoos in Chicago and Cincinnati, where they stayed during preparation of the new three-acre quarters.

The big cats each have about one-third of an acre, complete with moats, to roam around and establish life patterns as they would in the wild.

To preserve the natural setting, all service areas, offices and mechanical rooms are underground. The structure conforms to the contour of the hilltop and space has been set aside for educational graphics.

Visitors may observe lions and tigers from 800 linear feet of viewing space with no visual barriers. Inside the structure are two large glass-fronted animal exhibits and 25 holding areas for breeding stock, which are not on public view.

The Exhibit has a quarter-mile of rooftop walkway which permits visitors to observe, unobstructed by bars, the tigers and lions without entering the building.

There are three animal "theaters," two for tigers, one for the lions. Mohini Rewa, the matriarch of the Zoo's white tigers, occupies one theater, three two-year-old white tiger cubs occupy a second theater, and a pride of African lions reside in the third.

The Lion and Tiger Exhibit was named for Dr. Mann, who served as Zoo Director from 1925 to 1956. Dr. Mann's widow, Lucille Quarry Mann, attended the opening ceremonies in May.

The Government Services Administration recently named the Exhibit one of the 10 best examples of government design in its Second Biennial Design Awards Program.

## Lion & Tiger Films Set for New Exhibit

Two spectacular color films about large cats have been produced by the Smithsonian Film Unit for the new lion and tiger display at the National Zoo.

"The Big Cats and How They Came to Be" is an animated 10-minute film produced as a joint venture with the Polish government. The 35-mm film traces the evolution of the large carnivores from the extinct sabre-tooth tiger to the diversity of present-day cats.

"Our Polish animator-artist, Witold Giersz, is an absolute genius," said Karen Loveland, director of the motion picture unit. Supported by excess foreign currencies allotted to the Smithsonian, she negotiated the production with Film Polski.

"The musical score is by a very talented Polish composer and it was performed by the Polish equivalent of our National Symphony Orchestra," Loveland said.

Dr. John Seidensticker, the mammalogist who was first director of the Institution's study of tiger and leopard ecology in Nepal, prepared the script based largely on his field experience in radio-tracking Bengal tigers. The storyboard layout is by Ben Lawless, MHT assistant director for exhibits. It was reviewed by Zoo Director Dr. Theodore Reed and Judith White, chief of education and information at the Zoo.

The second film, "Tiger," also was written by Dr. Seidensticker. Smithsonian Secretary Ripley, at the request of producer Loveland, shot some of the footage during his February visit to the tiger project in Nepal. The nineminute color film was edited by John Hiller and Loveland.

Since the end of June, both films have been shown continuously during the Zoo's visiting hours.

#### Tours

#### Museum of History and Technology

Monday through Friday — Museum guides are stationed through the Museum to provide information on the exhibits and answer questions. 10 a.m.-3 p.m.

Saturday and Sunday — Highlight tours at 11:30 a.m. and 1:30 p.m.

Quilts Collection. By advance appointment only. 11:15 a.m. Tuesdays. Call 381-5121 or write Division of Textiles, Smithsonian Institution.

#### National Air and Space Museum

Volunteers are stationed in the galleries for information on the exhibits.

#### Freer Gallery of Art

Tours on a limited basis by special arrangement. Call 381-5344.

#### Arts and Industries Building

Docents, in costumes of the period, provide information on the 1876 exhibit.

#### TOURS FOR THE HANDICAPPED

Available in the Hirshhorn Museum, Museum of Natural History, Museum of History and Technology, National Air and Space Museum, by appointment.

## CAL Turns 'Junk' Into History

By Linda St. Thomas

"Preserving the Past is No Easy Matter," say the cards posted around the Conservation-Analytical Laboratory in the basement of the Museum of History and Technology.

One visit to the lab is enough to determine that conservation is a lot more than just cleaning off the dust and dirt of a few centuries.

The Smithsonian's 19 conservators must employ a variety of skills, including photography, chemical analysis, computer operation and just plain detective work to analyze and restore the treasures they receive.

The Laboratory, which supports museum curators in authenticity studies as well as preservation and restoration of their collections, has recently been doubled in size and opened last month to SI employees for tours of the facility.

In the general conservation area, staff receives everything from battered furniture to old posters. Working at desk-and-bench units with special exhaust fans and hoods, the conservators must first decide what treatments will restore an object without damaging it.

A computer system, installed two years ago, stores information on past restorations and quickly provides a history of treatments on similar objects.

"But that doesn't always work," said Conservator Supervisor Eleanor McMillan. "Many objects require special treatments that have never been done here before."

Miss McMillan was recently working to restore a 1905 map of the southwestern United States for the classroom in "A Nation of Nations."

Arriving in the lab torn and stained, the map had to be stripped of old tape, cleaned with special rubber crumbs, and rebacked.

"In restoring or stabilizing the objects, we try not to add new materials," said Mary Lou Garbin, a conservator of objects. "If parts are missing, we'll replace them, but we usually work with the curator."

There are different techniques for cleaning

objects. A machine, similar to those used for watches and jewelry, may be used for sturdy artifacts, but delicately-sprayed grit, chemicals or vacuum may also be used.

Sometimes curators are faced with the problem of an object which arrives "too clean." Mrs. Garbin described a coin sent in by an archeologist.

"Apparently, the coin had been left in a cleaning solution too long and the metal began to corrode," she said. "Sometimes, in their zeal to find out what they have, archeologists look at objects as pieces of information rather than artifacts to be preserved."

The delicate, time-consuming job of restoring paintings and sculptures is done by Tony Konrad, who was working on a painting taken from the side of a 1679 harpsichord. He used solution to clean the painting and then began to chip away several old coats of paint on the back to expose the original red pigment.

In the furniture department, Conservator Walter Angst sat at an old European workbench restoring furniture and replacing chipped or broken parts.

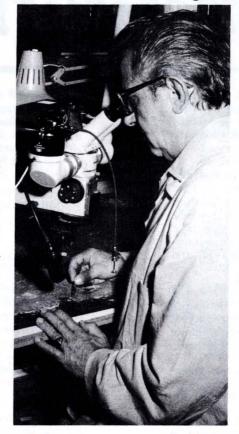
Faced with restoring a Victorian wall piece, an eagle holding the American flag, he went right to the library.

"You have to be a detective in this business," he said. "When I saw the old sketches of these artifacts, I found that this one was arranged in a different manner. I checked with the curator and we decided to reposition the eagle."

In the analytic section of the lab, seven people use x-ray machines, microscopes and thermoluminescence techniques, among others, to discover important facts about the objects.

When finished, the analytic team is often able to provide a curator with data relating to identity, age, authenticity and sometimes the place of origin of the object.

Jacqueline S. Olin, research chemist, is working with scientists at Brookhaven National Laboratory's atomic reactor section and other government facilities to find efficient methods, other than carbon-dating, for determining the age of an object.



Conservator Tony Konrad uses a surgeon's style microscope with camera attached as he chips away old layers of paint and restores a 1679 painting.

Lab Chief Robert E. Organ has delivered 80 lectures on museum conservation in recent years. The lectures, illustrating a variety of conservation procedures, have been videotaped and are available to SI staff and the public.

Tourists may not be able to see this lab or the delicate processes of restoration and preservation that occur here. But without the work of the Conservation-Analytical Laboratory staff, there probably wouldn't be much to see in the exhibit halls of the Smithsonian museums.

### Indian Names Booklet Goes Fast, SI Finds

"In the Chief's Lodge," "The Coming New Moon" or "She Guards the Corn," may sound like unlikely names for a child but they could be the vanguard of a new trend.

Just ask Margaret Ellis, office manager of the Smithsonian Reception Center or Ruth Selig, technical information specialist in the Anthropology Department, who have been trying to cope with the 2,767 requests about American Indian names that have poured into the Smithsonian.

It all started with a small article in the May issue of *Women's Day* magazine. Anyone interested in an Indian name for a new baby, said the article, should write to the Smithsonian Institution for a free pamphlet, *Indian Names for Popular Use*.

The response brought in so much mail that two SI information volunteers, Donna Rohrer and Sherri James, organized 50 members of Girl Scout Troop 461 and Brownie Troop 410 to donate their time and service to the Smithsonian by addressing and stuffing envelopes during troop meetings.

The pamphlet includes the Indian names used by 19 tribes and camps in the United States, and their English translations. It had to be reprinted quickly for the mass mailing.

"This pamphlet was developed by the Bureau of American Ethnology in 1926 to answer numerous requests for Indian translations of English expressions," said Mrs. Selig. "It provides a few translations and explains that many Indian languages differ so much from English in sound, grammar and semantics that it is difficult to provide even rough translations."

But the rough translations were enough for the thousands of people requesting the pamphlet.

Most received their brochures within three weeks. But there are always those who can't wait. One woman called the Anthropology Department from California and announced that her baby was due the next day. She had not yet chosen a name, and she needed a brochure immediately.

## SI Press Revamping To Meet New Challenges

By Johnnie Douthis

The Smithsonian Institution Press has been undergoing a thorough revamping since Edward F. Rivinus was appointed acting director last September.

It has been reorganized into four divisions, new people have been added to the staff, assignments have been changed, and plans are underway for the Press to move into A & I this summer.

These changes have been instituted by Mr. Rivinus, a former Foreign Service officer who joined the Smithsonian following his retirement from the State Department in 1970. Before moving to the Press, he served as special assistant to the Assistant Secretary for Public Service.

Appointed deputy director of the Press was Felix C. Lowe, who came here after seven years as sales manager for the Brookings Institution. Before that he was market director for Entelek, Inc., and was with the MacMillan Company.

The SI Press produces the federally funded Smithsonian Series publications.

which are the results of scholarly research in various Smithsonian bureaus. It also does books, pamphlets and exhibit catalogues for museums, galleries and SITES; information brochures for the Office of Public Affairs and the Visitor Information Center; floor plans for museums and galleries; posters, invitation forms and letterheads, and the *Smithsonian Year*.

The press also publishes privately funded trade or professional books, which Mr. Rivinus described as the smallest in terms of production, but the most demanding. Most of these publications are now written by Smithsonian staff, however, as the Press staff increases, Mr. Rivinus hopes to increase the number of "outside" authors whose books will be published by the Press.

George Braziller Inc. has been the exclusive distributor of privately funded SI books for the past four years. But at the end of June the SI Press formally joined the Columbia University Press Consortium, a sales organization representing university and university type presses.

Mr. Rivinus said, "The Press is urging the

new sales representative to focus special efforts on Washington area bookstores. However," he added, "overall SIP plans are aimed at developing the Press' own sales and distribution capability to where an outside representative will become supplemental to our own efforts."

Among other major changes, SIP has been reorganized into four functional divisions. The Series and non-Series publication sections each with full editorial, design and production components; a management section including the director, deputy director, and administrative officer and secretarial support; and a distribution section, which has assumed full responsibility for marketing, promotion, inventory control and order fulfillment.

To keep prospective customers aware of available publications, the SIP has given first priority to a new and revised catalogue of Press books, which will be published before the end of May.

The catalogue, which describes eight new publications and a backlist of about 60 books, will be available on request from the SIP or from the museum shops.

By using selected mailing lists, Mr. Rivinus expects to increase the direct mail sales of Press publications to where this activity will make up 65 percent of total sales.

In carrying out efforts to increase the efficiency and output of the Press, a number of new people have joined the staff, and several assignments have been changed. Jan Hahn is now administrative officer; Larry Long, the new production manager; John Harris, production assistant and Lorraine Rivard is design assistant. New editors added to the staff are Ruth Spiegel, Barbara Spann and Jerry Tyson.

Four lively new SIP publications are now available: "Blue Mystery, The Story of the Hope Diamond" by Susanne Patch; "Washington Plans and Realities," by Dr. Wilcomb Washburn; "America as Art," by Dr. Joshua C. Taylor and "The Golden Door: The Artist As Immigrant," by Cynthia McCabe.

The Press is looking forward to publication of "The Zoo Book," which will offer a colorful and attractively illustrated account of zoo activities in general, focusing on examples at the National Zoo. It will be available this summer.



MINIATURES - This Joseph Dunkerly miniature of Elizabeth Sheppard Morris is one of 125 miniature portraits exhibited at the National Collection of Fine Arts through January, 1977. Most never have been shown publicly and some have been acquired only recently from descendants of their original owners. The name "miniature" comes not necessarily from their size but from illustrations on medieval manuscripts which were known as miniatures because of the ink, minimum, that was used. Usually small enough to be held in the hand, the miniature was created as a symbol of a personal bond - love, friendship or honor - between the subject of the miniature and its owner. It first became popular during the Renaissance when tiny likenesses were worn as pieces of jewelry in a ring, clasp, pendant or brooch. Later, in America, it became an accessory for wall or table-top rather than a personal ornament.



Volunteers Jennie Clyde Hollis (left) and Roberta Downes, better known to coworkers as "Bonnie and Clyde," are presented copies of Secretary Ripley's book, "The Sacred Grove," by Edward F. Rivinus, acting director of the Press, in appreciation for their work on updating the Press's list of private trade books. Said Mr. Rivinus, "Thanks to your devoted efforts, the catalogue will be coming off the press shortly, and we are certainly looking forward to increased sales as a result." Mrs. Hollis and Mrs. Downes have worked as a volunteer team with the Smithsonian for five years.

Newsmakers

### SI Praised For Hiring Vets; 'Federal City' Exhibit Cited

By Johnnie Douthis

Secretary Ripley recently received a letter of commendation for the Smithsonian from the American Legion praising our practice of hiring veterans. Of the new persons hired between July and December, 1975, at SI and the National Gallery of Art, 41 percent were veterans.

"The Federal City: Plans and Realities" exhibit in the Castle has been awarded the "outstanding Bicentennial planners" award by the National Capital Area Chapter of the American Institute of Planners. The exhibit was coordinated by Wilcomb E. Washburn, director of the Office of American Studies.

Secretary Ripley received the Swan Award in Nashville, Tenn., June 12 for outstanding service in the arts. Given by the Swan Ball Committee, the silver sculpture was presented at their annual benefit ball.

Dr. Clyde F. E. Roper, curator, Research Department, Invertebrate Zoology, coauthored a paper which appeared in the March 12 Science magazine. It describes how squids emit a ventrally directed downward glow of light which he believes may well serve to conceal them from predators when they are swimming in the open ocean.

Four Museum of Natural History archeologists are going to the field for summer work. Dr. Gus Van Beek has already left for his seventh year of study at Tell Jemmeh, Israel; Dr. Dennis Stanford is excavating a Paleo-Indian Mammoth Kill site in Colorado that he hopes may yield some of the earliest evidence of man in America; Dr. William Fitzhugh is continuing his archeological work off the coast of Labrador, and Dr. William Trousdale is slated to leave this month for continuing archeological work in the Sistan desert area of southwestern Afghanistan.

Dr. Henry W. Setzer, curator, Vertebrate Zoology, received a special recognition award for outstanding service. Presented by Dr. Porter Kier, director of MNH, the award was given for Mr. Setzer's supervision of the planning of the Museum's new osteo-prep laboratory building that opened recently in the east court.

Silvio Bedini, deputy director of MHT, was interviewed recently by WAMU-FM on the "Columbus and His Time" exhibit, and by National Public Radio on science in

Robert P. Multhauf, former director of MHT and presently Senior Scientific Scholar, Department of Science and Technology, has been selected by the Iowa State University Alumni Association Honors and Awards Committee to receive the 1976 Distinguished Achievement Citation in recognition of outstanding professional achievement.

John R. Kinard, director of the Anacostia Museum; Zora Felton; and Charles Mickens, Administrator at the Anacostia Exhibits Center delivered speeches to the first Annual National Black History Museums Seminar, hosted by the Anacostia Museum.

Paul Perrot, assistant secretary for Museum Programs; James Lyons, deputy director in the Office of Membership Development; and Jeffrey Stann, associate development officer also participated in the

Dr. Peter Bermingham, NCFA's curator of education, was one of the jurors for the National Education Association's Bicentennial art show in Washington.

Janet Flint, NCFA's curator of prints and drawings, was one of the jurors deciding on the art works to be purchased, with a grant from the National Endowment for the Arts, by the Montgomery County Art Center.

Richard H. Howland, special assistant to the Secretary; Abram Lerner, director of the Hirshhorn; and Wilton S. Dillon, director of Symposia and Seminars have been appointed to membership on the board of advisors of the Exhibition of African Contemporary Art which will open at Howard University next April.

Bela Demeter, has recently been elected to a two-year term as president of the American Association of Zoo Keepers.

Karen Loveland, director of Exhibit Central's Motion Picture Unit, has been awarded a leave of absence for a two-month professional internship in motion picture arts at Universal Studios beginning August 1. She will assist in the production of a new documentary drama series for network television, "Captains and Kings."

John G. Gregory, assistant director of the SI Astrophysical Observatory, was awarded a Sustained Superior Performance Award by Assistant Secretary for Science David

Fred L. Whipple, former director of SAO and now senior staff scientist, was cited for 21 years of service with SAO. And Bureau Director Awards for contributions to science were given to Luigi Jacchi, Cecilia Payne-Gaposchkin, both scientists at SAO

Eileen Ritter, museum shop designer, received an SI award June 10 for her work on the A& I Museum Shop. Miss Ritter, who developed the design and supervised construction of the 1876-style shop, was cited for contributing her "good taste, imagination and knowledge of architecture to the making of a museum shop now praised by many . . . on time and at great savings to the Institu-

New Appointments

## Correll Named To Science Post At Bay Center

Associate Director for Scientific Programs medicine and other programs. at the Chesapeake Bay Center for Environmental Studies. He will be responsible for the planning, supervision and coordination of scientific programs and will supervise the compilation and storage of all research data acquired in the Rhode River ecosystem

Barbara McCoy, first woman in the "trades" at SI, received a certificate of training from Employee Counseling and Development Officer James Pearson at the National Zoo. A painter-helper at the Zoo, she served on the janitorial force for one year before enrolling in the three month training

Suzanne Kennedy is the second veterinarian selected for the internship and training program at the National Zoo. She





Dr. David L. Correll has been named will assist the Zoo's veterinary staff in clinical

Alastair G. W. Cameron, associate director for Planetary Astrophysics, and professor of Astronomy at Harvard University, has been named chairman of the Harvard Department of Astronomy. He was also elected to membership in the National Academy of Sciences.

James Moran of the Radio Astronomy Division at CFA received the Naval Research Laboratory's Research Publication Award for a recent paper.

A. Edward Lilley, Associate Director for Radio Astronomy at CFA has been named Corresponding Member of the International Academy of Astronautics.

Also at CFA, John B. Wood was awarded the National Academy of Science J. Lawrence Smith Medal for his "highly influential works over the past decade." Owen Gingerich was awarded the American Philosophical Society's John F. Lewis Prize for his paper presented at the Copernicus Symposium.

Chester Henderson has joined the staff of the Office of Equal Opportunity as Upward Mobility Coordinator. He will advise SI supervisors and managers on the feasibility of upward mobility programs in their areas and assist them in developing full formal written programs.



NEW ACQUISITION - Brooke Hindle, Director of the National Museum of History and Technology, shows the recently acquired campstool used by George Washington to Ann McClellan, Special Assistant for Product Development, and T. Ames Wheeler, Treasurer. The funds for purchasing the campstool were generated largely by the Smithsonian Product Development program.

### Benefit Auction Earns \$100,000 For Cooper-Hewitt Museum

The Smithsonian's Cooper-Hewitt Museum of Decorative Arts and Design realized more than \$100,000 at its third annual benefit auction May 25 in the garden of the Carnegie Mansion in New York.

The funds, said Director Lisa Taylor, will provide "the final money needed to complete the Carnegie Mansion renovation" for the opening of the Smithsonian's newest major museum on October 7.

Despite weather chilly enough to require topcoats, more than 1,200 persons gathered in a large tent set up in the Carnegie garden for the auction, which saw nearly all 362 items donated for the event sold

Bringing the best prices were a Will Barnet oil and watercolor of a nude in a tree, which went for \$1,800, a pair of Louis XV armchairs which went for \$1,200, an Aubrey Beardsley design for a book illustra-

## SI 'Actors' Star In Film of '1876'

"Celebrating a Century: The Philadelphia Exposition," a half-hour documentary film marking the Bicentennial, has been produced by the Office of Exhibits Central using a cast of over 250 Smithsonian staff members, including Secretary Ripley in 1876 period dress.

The film is intended for release on national television, for school circulation, and exhibit abroad, according to Director Karen Loveland, chief of the Exhibits Central Film Unit.

motion picture, Ben Lawless, sought to portray with complete historical accuracy the events surrounding the opening of the Philadelphia Centennial Exposition by President Ulysses S. Grant on May 10, 1876.

Involved in the extensive research that went into the production were MHT Director Brooke Hindle, Deputy Director Silvio Bedini, and Curators Robert Vogel and Robert Post.

The 281/2-minute color film was shot entirely on location at the Smithsonian. Many scenes featured the new Centennial exhibit in the reopened A&I Building as background.

The documentary is narrated by James Whitmore. Composer Oscar Brand wrote the original musical score that was orchestrated in an arrangement by Ron Frangipane. The U.S. Marine Band plays the authentic musical score just as it was performed at the Centennial ceremonies.

Color transparencies of individual cast members will also be available, according to Loveland.

David Vassar was assistant producer and Milton Sink edited the film. John Hiller was director of photography. The film was financed by the National Science Foundation and Smithsonian.

tion which went for \$1,000, and a George II walnut mirror which sold for \$950.

All of the articles sold at the auction, which was conducted by the staff of Sotheby Park Bernet, were donated for that purpose; nothing from the collections was offered, Mrs. Taylor noted.

But, she added, "our appeal for donated objects resulted in our acquiring some excellent objects for the permanent collections," including a child's chair and an art nouveau tea caddy.

Mrs. Taylor explained that all items donated for the auction were screened by a committee of antiquarians and dealers in fine objects and "if the donated object was found to be of museum quality, we asked the donors for permission to hold the object for the collections."

The Cooper-Hewitt collection, one of the world's distinguished groups of drawings and prints, textiles, wallpaper and decorative objects, was turned over to the Smithsonian in 1968.

The Carnegie property, home of industrialist and philanthropist Andrew Carnegie, was given to the Smithsonian in 1972 as a permanent home for the Cooper-Hewitt Museum, and is being renovated to house the collections.



Lisa Taylor, director of the Cooper-Hewitt Museum, with daughter Laurie, at preview of the benefit auction in the Carnegie Man-

### Handicapped Visitors Can Enjoy Museum

The National Air and Space Museum is developing programs which will make exhibits meaningful and insure accessibility to handicapped individuals. Groups such as the National Federation of the Blind, the National Association of the Deaf, and the National Association of the Physically Handicapped have helped to plan the programs.

Although not all the programs are in full operation for NASM's opening, every effort has been made to make the building barrier-free.

Wheelchairs will be available on request, and for those people with limited head movement, specially designed clamp-on mirrors for wheelchairs will be available on request.

For deaf visitors, the Museum is producing written scripts or abstracts of major audiovisual presentations. These written materials may have photographic margin annotations as needed.

Interpreters may be provided for major films and lectures, and NASM has a special teletype machine to permit tour monitors and other personnel to communicate by telephone with deaf visitors who have similar teletype equipment.

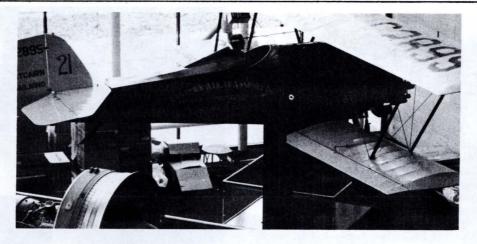
Cassette tours of a limited number of galleries will be available to blind visitors, and these will supplement the audio portions of audiovisual presentations in the galleries. Booklets of raised line drawings of selected exhibits will be loaned along with the cassette tours in the Museum.

Large print, braille and cassette versions of the Museum brochure, including raised line maps of the Museum, will be available for distribution.

NASM guides will provide special tours for the handicapped, on a group or individual basis. Sign language tours will be offered for the deaf and "explorer kits" of touchable items will be available for blind visitors.

#### HAPPY B-DAY AMERICA

Check your cash register receipt from the new Museum of Natural History West Court staff dining room. Items are listed in blue, on white paper, of course, and topped off with a big red "Happy Birthday America."



## NASM Docents Ready To Fly

By Anna Reed

Her interest in the NASM docent program and her desire to learn more about flight will result in at least one woman getting a set of wings as well as a diploma for her recent graduation from the Museum's docent program.

When she solos, Jane Ward will join the many male, and at least a dozen female docents, who already hold licenses.

Mrs. Ward and 222 other docents and rovers at NASM will have completed an orientation session which met an average of one day a week for five-and-a-half months.

Twenty-three docents came to the facility from the old NASM quarters, to join new recruits in the recently concluded orientation program tracing Smithsonian involvement in aero- and astronautics from the late 19th century to the present.

The docent program has inspired many volunteers to make significant contributions to the quality of tours they will conduct. Under the leadership of Carol James, docents who conducted tours in the old Air and Space Museum designed lesson plans for the new docent class.

To make the tours more interesting to the public, veteran docents encouraged reliance on NASM's library as a source for human interest stories about the artifacts on display.

In April 1975, Mary Lou Luff and Susan Pierce originated a program designed for handicapped visitors. Mrs. Luff enrolled in a six-month sign language class and became known as the "sign language docent."

The women have also developed tactile aircraft models for use by blind museum visitors.

Both programs have been so well received that John Whitelaw, NASM executive officer, encouraged the women to share what they had originated with museum officers attending the recent American Association of Museums convention in Washington.

Docents and rovers, selected by interview from several hundred applications, have many different interests in air and space. Many have spouses who are officials at NASA, FAA, and in the military. Some are involved in the air or space program, but give their evenings to the museum. Several are employed by airlines, including one pilot who flies regularly into Washington, and devotes one day a week to volunteer at NASM.

R. Lynn Bondurant, Jr., education officer for NASM's Presentation and Education Division, says that docents will not give tours but will act as rovers until fall when the number of requests for school tours increases. The function of a rover is to humanize the museum by providing help and information whenever it is needed.

When the tours start in the fall, each docent will be assigned a particular area of the museum he or she has been studying in detail. Volunteering a half-day per week, a docent can expect to give as many as two one-to one-and-a-half-hour tours in "his" or "her" area.

Nancy Murphy, education specialist and coordinator for the docent program, looked for many qualities during docent selection interviews. Emphasizing that an interest in air and space was an important qualification, she said that the docent applicant had to agree to give one year to the program before being considered.

#### NASM Move: A Feat in Itself

By Linda St. Thomas

Anyone who has ever moved can sympathize with the work crews who spent one full year placing air- and spacecraft in the new National Air and Space Museum.

On June 1, 1975, the first artifact, a Douglas World Cruiser, was moved into the building through a specially built 30- by 20-foot door. One year later to the day, the final large artifact, a V-2 rocket, was put into place and the cranes were moved out.

"The installation of the Skylab Orbital Workshop in the Space Hall was one of our most dramatic moments," recalled Walter Boyne, curator of Aeronautics.

The skylab arrived in three segments from Huntsville, Ala., via an inland waterway barge. As a crowd of NASM staffers looked on, the Skylab's top two segments were joined and lifted by a crane so that the bottom section could slide underneath.

The 52-foot spacecraft cleared the ceiling by a predicted one-quarter inch, but as Space Hall Curator Walter Flint recalled, "We sweated every centimeter of that."

The installation of the Saturn V F-1 engine was not so breathtaking to watch, but neither did it snap in place. Because the weight is concentrated at one end of the engine, it was difficult to balance. So it was inverted and lifted to the second floor where it was attached to a special fitting in the Apollo to the Moon Gallery.

"The hanging aircraft presented a different problem," said Mr. Boyne. "All aircraft have certain strong points from which they may be suspended and, in turn, our steel trusses in the ceiling have designated hanging points.

"The trick is to match the hanging points and end up with an aircraft facing the right direction, at the proper angle and at the correct distance from the floor."

The age of an aircraft such as the Kitty Hawk Flyer caused still other complications. "Even though the Flyer groaned a bit, it turned out to be very sturdy," Mr. Boyne said.

In managing the movement of all aircraft and spacecraft, Mr. Boyne worked with a team of NASM staffers led by E. J. Thomas, Ed Chalkley, and Al Bachmeier, along with Frank Murray and his staffs from C. W. Young Co. and United Rigging Co.

"Everyone was so caught up in the museum and its artifacts that we ended up with riggers and crane operators concerned about the design of galleries," recalled Mr. Boyne. "There was even a touch of sadness when the last crane pulled out of NASM."

## Library Offers Vast Collection

By Kathryn Lindeman

Far more extensive than the collection housed in the Arts and Industries Building, the new National Air and Space Museum Library is a treasure trove of old and new volumes and documents about aviation and spaceflight.

Directed by Bureau Librarian Catherine D. Scott, the collection moved last July to its home in the new building, where it was combined with portions of the collection which had been stored in Washington and Alexandria warehouses.

The NASM Library, a unit of Smithsonian Institution Libraries directed by Russell Shank, evolved from the Historical Research Center of the Museum. Organized formally as a library in 1972, the collection had previously consisted largely of historical books and journals donated by the Institute of Aeronautical Sciences.

In August of 1975, one month after moving into the new building, and pulled together and inventoried for the first time, the NASM Library opened to public and staff.

Many unique items from the warehouses came to light. One such find was a 1,500-piece aeronautical sheet music collection of Bella C. Landauer containing such favorites as Come With Me, Josephine, in My Flying Machine, and her collection of children's books, including an original Tom Swift series and Peter Parley's early children's books.

The Landauer collection is only a small part of the important historical collection donated by the Institute when it merged with the American Rocket Society to become the American Institute of Aeronautics and Astronautics.

William A. M. Burden donated his collection on early Russian rockets, as well as a group of first editions on early ballooning.

Another significant donation was the collection of systems engineering support

documents on manned space flight, space books, and related scientific works released by the National Aeronautics and Space Administration from the Bellcom Technical Library.

Aeronautics enthusiast Mrs. Gardner H. Fiske recently gave the library a rare Italian book of color prints by Leopoldo Galluzzo. Published in 1836, the prints illustrate a fantasy about the first excursion to the moon.

The Library's rare book room is named for Admiral DeWitt Clinton Ramsey, one of the first naval pilots of World War I, who later became Commander-in-Chief of the Pacific Fleet.

The oldest volume in the Ramsey room, published in London in 1683, is A Modest Vindication of the Hermite of the Sounding Island, a parody on "how the Hermite made him an engine and flew to Lisbonia in the Realm of Porto Gallia."

Early publications on ballooning include a 1784 first edition by Vincenzo Lunardi about the first aerial voyage in England, and another by David Bourgeois concerning Pitatre de Rosier, the first human to ascend in free flight. Published in 1784, the book contains De Rosier's autograph, making it even more valuable.

Also in the collection is a very rare book by Edmond C. Genet, *Memoirs on the Upward Forces of Fluids*, the first book published in this country on a technical aeronautical subject. The 1825 volume includes an outline for the first aeronautical patent registered in the United States.

An Eccentric Excursion to the Chinese Empire, published in 1843, and housed in the Ramsey Room, is an unusual folding game board which uses walking, steam, flight, and rail, as methods to proceed through the

As librarians catalogued the collection, they discovered a letter from Rudyard Kipling about kites and air flight, in which he describes an imaginary airship in the form of a "kite-winged boat for skimming over the sea"

On the subject of kites, Kipling added, "... I have had rather a lengthy tho amateur experience in India where it is the national sport in the back of the country I hail from."

Kipling even predicted that by the year 2000 large airships would be traveling between America and Europe.

The library has one of the 150 copies printed of Amelia Earhart's book 20 Hours, 40 Minutes: Our Flight in the Friendship. The NASM copy is autographed, and pressed inside the front cover is the small flag she carried with her in 1928 when she became the first woman to fly across the Atlantic.

An autographed copy of Charles Lindbergh's We is one of the first 100

These are only a few of the rare items in the library's total collection of 22,000 books, 4,600 bound periodicals, and 500,000 technical reports. The collection is augmented by gifts from individuals and institutions, as well as by budgeted acquisitions.

The library houses more than just print material. Its shelves contain more than 1,000 archival motion pictures as well as 800 audio tapes, including one of Anne Morrow Lindbergh reading from her book, North to the Orient, and Colonel Lindbergh reading from The Spirit of St. Louis.

The Museum's historical archives containing 19,000 photographic and biographical files, are another part of the library's collection. More than 600,000 black-and-white photographs and drawings depict all aspects of aviation and astronautical history.

Microfilm is another part of the collection. German and Japanese documents captured during World War II, and history record cards of U. S. military aircraft, mostly from World War II, which no longer appear on Government rolls, are just two kinds of microfilm records owned by the library.

#### New Research Lab To Open at NASM

The Smithsonian's newest research facility is buried deep within NASM's massive marble and glass walls in modest offices and laboratories situated next to the library at the southwest corner of the third floor.

It is the Center for Earth and Planetary Studies, directed by an American of Egyptian descent, Dr. Farouk El-Baz, a lunar geologist long associated with studies of the lunar environment for the Apollo program.

The Center's approach is consistent with the Smithsonian's 130-year tradition of collection-based research, for its basic material is one of the world's most complete collections of photographs of the Moon taken by unmanned probes and by Apollo astronauts.

The Center has bulging files of photographs of the Earth shot from orbit, and is rapidly assembling new files of Mars and Mercury photographs.

Dr. El-Baz and a global team of 34 scientists continue to study color and infrared photographs, motion picture film, and data from the Apollo-Soyuz Test Project of last year.

The scientists so far have confirmed the existence of mysterious internal or subsurface ocean waves off the Spanish Coast near Gibralter; have gained new understanding of fault lines which likely will be useful in predicting earthquakes, and have discovered patterns in the Earth's desert sands which have striking similarity to patterns on Mars.

NASA's Atlas of the Moon made extensive use of the Center's collection of photographs of the lunar surface. Dr. El-Baz has been helping select features to be named on the Moon as a member of a special task group of the International Astronomical Union.