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DEPARTMENT OF THE INTERIOR AND RELATED  
AGENCIES APPROPRIATIONS FOR 1976

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HEARINGS  
BEFORE A  
SUBCOMMITTEE OF THE  
COMMITTEE ON APPROPRIATIONS  
HOUSE OF REPRESENTATIVES  
NINETY-FOURTH CONGRESS  
FIRST SESSION

SUBCOMMITTEE ON THE DEPARTMENT OF THE INTERIOR  
AND RELATED AGENCIES

SIDNEY R. YATES, Illinois, *Chairman*

GUNN MCKAY, Utah  
CLARENCE D. LONG, Maryland  
FRANK E. EVANS, Colorado  
JOHN P. MURTHA, Pennsylvania  
ROBERT B. DUNCAN, Oregon

JOSEPH M. McDADE, Pennsylvania  
RALPH S. REGULA, Ohio

J. DAVID WILLSON and BYRON S. NIELSON, *Staff Assistants*

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Mr. BILLINGTON. It indicates that Mr. Hoopes presented it to us about a week or so ago, but it could mean that our fellows aren't among those 60,000.

Mr. REGULA. Are these copies from your shop?

Mr. BILLINGTON. These are more or less presentations.

Mr. REGULA. They are your library copies?

Mr. BILLINGTON. Yes, sir.

Mr. REGULA. So the cards would be indicative of the activity within your shop?

Mr. BILLINGTON. No, I wouldn't say that, sir. They would show whether or not the books were actually taken out of the library and taken home.

Mr. YATES. Mr. Billington, thank you very much for a good presentation.

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MONDAY, APRIL 7, 1975.

### SMITHSONIAN INSTITUTION

#### WITNESSES

S. DILLON RIPLEY, SECRETARY

ROBERT A. BROOKS, UNDER SECRETARY

CHARLES BLITZER, ASSISTANT SECRETARY, HISTORY AND ART

DAVID CHALLINOR, ASSISTANT SECRETARY, SCIENCE

JULIAN T. EUELL, ASSISTANT SECRETARY, PUBLIC SERVICE

PAUL N. PERROT, ASSISTANT SECRETARY, MUSEUM PROGRAMS

RICHARD L. AULT, DIRECTOR, SUPPORT ACTIVITIES

T. AMES WHEELER, TREASURER

JOHN F. JAMESON, ASSISTANT TREASURER (PROGRAMING AND BUDGET)

MICHAEL COLLINS, DIRECTOR, NATIONAL AIR AND SPACE MUSEUM

SUSAN HAMILTON, BICENTENNIAL COORDINATOR

THEODORE H. REED, DIRECTOR, NATIONAL ZOOLOGICAL PARK

PORTER KIER, DIRECTOR, NATIONAL MUSEUM OF NATURAL HISTORY

Mr. YATES. The committee will be in order.

We have before us today the witnesses for the Smithsonian Institution.

We have our good friend Mr. Dillon Ripley, Secretary; Robert A. Brooks, Under Secretary; Charles Blitzer, Assistant Secretary, History and Art; David Challinor, Assistant Secretary, Science; Julian T. Euell, Assistant Secretary, Public Service; Paul N. Perrot, Assistant Secretary, Museum Programs; Richard L. Ault, Director, Support Activities; T. Ames Wheeler, Treasurer; John F. Jameson, Assistant Treasurer, Programing and Budget;

Mr. Michael Collins—

Mr. RIPLEY. He is in session with another committee. He had this prior commitment but he will make himself available, if necessary.

Mr. YATES. That is fine. We have Susan Hamilton, Bicentennial Coordinator. How are you getting along?

Mrs. HAMILTON. Very fine.

Mr. YATES. And we have Mr. Theodore H. Reed, Director, National Zoological Park.

Mr. Ripley, do you have a statement?

## PROGRESS OF THE INSTITUTION DURING PAST DECADE

Mr. RIPLEY. Realizing time is of the essence, I would be glad to summarize my statement briefly. I wish to assure you, it is a pleasure to appear once again before the subcommittee on behalf of the Smithsonian Institution and to extend best wishes to its distinguished new Chairman, as well as to its other members.

In 1974 I concluded ten years as administrative head of the Institution and summarized some of my thoughts on that occasion with the brief report, "Statement by the Secretary," which I submit herewith. This report documents the notable and measured successes of the Institution through these years, none of which would have been possible without the interest and support of our congressional committees, and particularly our appropriations subcommittees. This period has seen not only continued support for ongoing Smithsonian programs and activities, but also the establishment of our affiliate, the Woodrow Wilson International Center for Scholars and also our sister organizations, the Endowments for the Arts and for the Humanities. We rejoice in this support, believing that all of us are united in a common cultural enterprise.

I thought it appropriate at the end of 10 years to write this year of the extraordinary outpouring of interest there has been in these 10 years in the arts and culture on the part of the Federal Government.

## NOTABLE EVENTS OF THE PAST YEAR

As far as our opening statement is concerned, I speak of several notable events of the past year, most of which I believe this committee is familiar with. You are aware of the Dibner Library, the Hirshhorn Museum and Sculpture Garden and the Eisenhower Institute for Historical Research which is an outgrowth of congressional action in 1961. Congress set up the Institute for the study of war and peace and contributions made by the armed forces of this country.

Mr. YATES. How successful is that research?

Mr. RIPLEY. It just started this year.

Mr. YATES. We can look forward to a period of peace?

## REQUESTED INCREASE FOR FISCAL 1976

Mr. RIPLEY. We can look forward to it in the future. Considering all appropriation accounts, our requested increase for fiscal year 1976 is \$4.9 million or only five percent over the estimated total of 1975. Within the six appropriations accounts, there are increases requested in three accounts.

Our budget reflects, for instance, the development of a special program for the Bicentennial which, as you know, Mr. Chairman, this committee has endorsed and supported since the sixties, in our case, since 1965 when I first spoke of it before Chairman Denton. In addition, it reflects a phased program for the master plan for the renovation of the zoo. Renovation is now proceeding on schedule. As you remember, Vietnam war expenditures brought a halt to this project in the sixties.

Funds are also included for the completion of construction of the Air and Space Museum. We plan to move into the building this sum-



mer and open on schedule July 4th next year. The major increase in our budget is in the salary and expenses account, about \$8.7 million. These funds are allocated over some 50 museums, galleries, the zoo, research laboratories, and supporting units. We will be turning to each one of these line items as we go along with our testimony before you. We believe we can justify this increase. It reflects what we feel we really need.

In any case, about \$3.5 million of this increase of \$8.7 million will allow us to meet our public commitment to opening the Air and Space Museum and to presenting a wide array of programs for the Bicentennial. About \$2.7 million will be applied to carefully selected research and exhibit projects, to museum collection care and improved accessibility, to the maintenance and protection of our buildings, and other facilities and to management services. Finally, \$2.5 million is required simply to meet higher costs resulting from legislated pay increases, utilities and shipping rate hikes. I need not speak of our concern on the inflationary rate of these uncontrollables. We have a \$70,000 increase for the Science Information Exchange. In addition, the special foreign currency program budget, which is substantially decreased from previous years' funding, will be used for two general purposes—to sustain the effort to preserve the Temples of Philae in Egypt and to continue a program of grants to institutions for field research in those countries where excess local currencies are available.

In our account for construction and improvement for the zoo, we request \$9.5 million. We feel we will be able to maintain the excellent momentum already taking place in the modernization program and will have very much to offer the public by next year.

For restoration and renovation of buildings, we are seeking a bare bones appropriation of \$1½ million. We have tidied this and made it as modest as we can, considering the number, age, size, and variety of our buildings.

Finally, the appropriation request for construction of the National Air and Space Museum is \$3 million to conclude liquidation of the contract authority for that building, some \$4 million less than fiscal 1975.

Mr. EVANS. May I pose a question there?

Mr. YATES. You may.

#### COSTS AND COMPLETION DATE FOR THE NATIONAL AIR AND SPACE MUSEUM

Mr. EVANS. What are the estimates, costs, and target date for completion?

Mr. RIPLEY. We are within the appropriation and on schedule.

Mr. EVANS. What do you attribute that to?

Mr. RIPLEY. A contract manager who has been riding herd on every detail every day.

Mr. EVANS. Is this a different management approach?

Mr. RIPLEY. It is an improvement to what I know of the construction of buildings. It is the same as the National Gallery's project where they have a contract manager and it certainly helps to keep things tidy.

Mr. EVANS. Is the new Gallery of Art building progressing on schedule as budgeted?

Mr. RIPLEY. No; that is largely due to the complexities of the construction. It is an architectural building of enormous complexity. This has greatly impeded the construction. The Air and Space Museum is a sort of large rectangular envelope. It is just right for an air and space museum.

Mr. EVANS. Thank you, Mr. Chairman.

#### BUDGET ESTIMATE FOR TRANSITION PERIOD

Mr. RIPLEY. Our budget estimate which we consider as mandatory for the transition period, covering a quarter of a fiscal year, represents about 27 percent of the fiscal 1976 estimate. The deviation from 25 to 27 percent in those budget figures is essentially due to the fact that this period coincides with the time of maximum impact in the Bicentennial summer, when we will be caring for a very enlarged public visitation.

With this brief summary and the papers I have submitted which I hope the committee will have time to take note of, I conclude my opening statement.

Mr. YATES. Thank you very much.

#### PREPARATIONS FOR THE BICENTENNIAL

Over the weekend I was busy reading many of your publications. I found particularly appropriate the peroration of your address "On Museum Objects, Truth and Education." The conclusion of this reads as follows:

You stated: "If the Smithsonian is to increase knowledge in the next 25 years, let us join with others in using the Bicentennial observance as a means of reviving interest in the truth as expressed in objects. Let us continue our pursuit of the unfashionable by the unconventional. Let us relive the American experience to remind us of our hard-won birthright and to point the way to the enjoyment of our rights as citizens of the world. In that world's only environment, our temporary home, our sole stopping place short of the stars. Let us also join with others in pioneering studies on the creation and capturing of interest, on studies in cognition, on the ability to learn effectively, so that all of us, men and women of a country in which we believe truth still resides, can eventually achieve the age-old dream of our land, to be qualified through education for the enjoyment of our rights and for the performance of our duties throughout life."

I found that a good statement about what the purpose of the Bicentennial should be. You are to be congratulated on it. The Smithsonian, I have a feeling, is taking a lead in the Bicentennial. As a matter of fact, I do not find many programs as advanced as the Smithsonian's. It is an excellent program. I worry about the Bicentennial because we had before us the American Revolution Bicentennial Administration and they said that next year we will have twice the number of visitors to Washington as we usually have, putting us in the neighborhood of 35 million to 40 million people. Of course, the attraction of the Smithsonian Institution brings people to the Capital. I asked them the question, "Where are we going to house the people?" They had

no answer for it. Mr. Ripley, have you given any consideration to this problem? It is not really your job but you are going to make it very attractive for people to come here.

#### PARKING FACILITIES FOR VISITORS

Mr. RIPLEY. We have been on the membership of several commissions. As recently as January of this year, I wrote a little editorial for our magazine saying we are kind of like the congenial host standing on the front stairs, waiting for the visitors to come. I visualize there will be a blue haze of smog and throngs of people trying to get here, held in the incredible traffic jams we can envisage occurring at that time. We have expressed our need to, among others, the Interior Department. In fact, we have assisted them with surveys as to our need for off-Mall parking and all the options people need, people like Mr. and Mrs. America coming here in campers and cars, who want to see Washington. I continue to hope somehow in our marvelous muddling-through way, it will work out. But we are not, so far, pleased ourselves as to the alternatives. We feel they have been lost in committee. So often nothing really very much happens.

We will have 400 or 500 spaces which we can offer by that time because our National Air and Space Museum will be finished. Its basement will have several hundred spaces which will be available for the public; and, of course, the Kennedy Center will have parking. We have urged the Park Service to consider temporarily converting the West Potomac Park, which is a polo field. Let us agree that motor transportation facilities are inadequate but the fact remains by next summer people will still be coming here by motor car. The many bus systems which have been projected will not be effective if they do not have satellite parking areas. There is no expectation at this point that there will be sufficient satellite parking.

I do feel personally frustrated, because I have dreamed of this Bicentennial and what it can do for America. I believe this is an important re-evocation of the principles for which we stand. Therefore, I think the people, Mr. and Mrs. America, should be helped when they come here.

#### PARKING ON THE MALL

Mr. YATES. We join with you in that hope and we hope the others are doing as well as the Smithsonian in preparation for the Bicentennial observance.

Let us go to the area on the Mall where the Park Service wants to ban parking. Assistant Secretary Reed indicated he was not retreating at all in connection with your protest and that they proposed to remove two inside roads and return them to pedestrian walkways. He indicated there has been a legal challenge involving the preparation of an environmental impact statement. They have gone ahead with the statement but say it is a plan which was approved by the National Capital Planning Commission years ago.

Tell us why you're so vehement and concerned in your protest. Why are you so concerned as to that proposal?

Mr. RIPLEY. I am very much in favor of the greening of the Mall and I always have been. I was a member of the original Mall Com-

mission as far back as 1966. It was an offshoot of the Pennsylvania Avenue Commission. I joined enthusiastically in the idea of greening the Mall. I also joined in the survey of parking problems. Now the commitment made at that time by Mr. Hartzog, then Director of the Park Service, was that we would attempt to secure underground parking. If planning and construction for underground park had been started in the mid-sixties, there is no doubt but that everybody would be delighted at this point. It would have solved something regardless of the eventual fate of automobiles.

As time went on, increments in inflation seemed to make underground parking unreasonable. The fact that a new theory came in under the Nixon administration that satellite parking was more desirable meant that no one made any initiative about underground parking with the exception of the Smithsonian. So instead of having 9,000-plus parking spaces which we might have had, had all the commitments come into play in 1966, we hope to have some 400 to 500 under the Air and Space Museum.

None of the satellite parking alternatives have been enacted. We are unable to find out why. The only firm alternative offered by the Park Service is in regard to the RFK Stadium, in Southeast Washington. This stadium has a large commitment for parking, but, of course, in off-season periods only. The Park Service proposed minibuses to go back and forth. The specter of 137,000 people in more than 35,000 cars coming in 1 day and hoping to find any parking space in the parking lot around the RFK Stadium, presuming the baseball season is not on, seems to be rather bleak.

Other alternatives would have been to continue plans for areas in West Potomac Park and Bolling Field, provided the stricture can be relaxed, and other areas such as the Visitors Center and our own Zoological Park. Somehow or another, all these suggestions have never been pulled together and it has never been possible for the Smithsonian to speak up with sufficient voice to be able to remind constantly the Metropolitan Council of Governments, the Capital Planning Commission, and the various large major Government agencies, Commerce, Interior, and so on, that this was, in fact, the case. We have simply been going around in a revolving door making small noises about yes, we are all for greening the Mall, but only with rational substitutes, without getting anywhere.

Mr. YATES. Is this the basic responsibility of the National Capital Planning Commission?

Mr. RIPLEY. It seems to be tangled but I would say it is the basic responsibility of the National Capital Planning Commission. I will not say, Mr. Chairman, that I have ever been noted to be a Cassandra and I refuse to take that position, but I just hope enough people will be able to come here to see our splendid events.

#### PUBLIC VISITATION DURING THE BICENTENNIAL PERIOD

Mr. YATES. I see you have attracted 16 million visitors a year.

Mr. RIPLEY. The figures go up and down. By next year, we hope to have a counting system in order to monitor the number of people in any one building at any one time, so we can direct them. We believe



that as many as 20 million persons may come to Washington just during those 5 months in the summer and they will come in equivalent numbers of cars, I am sorry to say.

Mr. YATES. Will the Smithsonian be able to accommodate all the visitors?

Mr. RIPLEY. We believe we will be able to accommodate them. We will provide information centers, and printed materials in five languages, a variety of guards, security, lost and found facilities, and rest-rooms. It will be sort of like a world's fair with the horrendous number of people who will be upset and children lost. Alarm bells will ring because too many people have leaned on a case with an alarm bell in it. We will be needing extra personnel temporarily but all these extra personnel will be phased out, following the Bicentennial.

That need is described under the Bicentennial program section of our budget on page 81.

Mr. YATES. Does your budget provide enough funds to take care of the additional requirements?

Mr. RIPLEY. It is a little less than we had proposed due to contingencies and the OMB feeling that we have to cut down. However, we feel as a barebones budget we can do the job.

#### FINANCIAL STATUS OF UNITED STATES MUSEUMS

Mr. YATES. There are many increasing demands on the Federal Government for additional financial support to the various museums throughout the country.

Have museums fallen on hard times?

Mr. RIPLEY. I am not aware of the dimensions of the problem but it is true that with the recession, the diminution of grants, and the accompanying mood caused by shrinking investment portfolios, that museums are feeling the pinch in the same way colleges and universities are.

Mr. YATES. I had the impression that so many universities and colleges looked to the Smithsonian for guidance and leadership.

Mr. RIPLEY. I believe this is true and I do believe we have a great deal of information. I do not have it at my fingertips but I am sure Mr. Perrot does.

Mr. YATES. How are they surviving?

Mr. PERROT. They are having great difficulties, both financial and programmatic. We do not have a total national figure of what might be called the indebtedness of the profession as yet. But this is something the American Association of Museums and the National Endowment for the Arts are trying to establish. Within a few weeks a report from NEA is expected which will help define the problem. Museums have not coordinated their accounting procedures in such a way as to be able to compare on a national basis what their assets are and what their liabilities might be. This is something the Association is studying as well.

#### USE OF PUBLIC VERSUS PRIVATE FUNDS

Mr. YATES. The Smithsonian enjoys the position of having both private and public funds. How do you determine which activity should be funded privately or by public funds?



Mr. RIPLEY. Innovative programs requiring research initiatives which we deem to be outside the bricks and mortar for maintenance-like activities and the administration which supports those activities are funded with our private budget. We try quite strictly, within our own accountability to the Regents and our auditing procedures, to maintain this rule of thumb year by year. Particular research initiatives of the Smithsonian are accomplished through private funds while for the maintenance and subsistence of the Institution as a whole, we seek funds from Congress. Congress, of course, is our parent because the District of Columbia had no State government. In the same way, the great museums in New York, such as the Metropolitan and Natural History Museum, receive bricks and mortar funds from the city. We are not in that sense unique for our position in Washington. But large institutions of comparable nature, are largely dependent on State funds, for maintenance of the collections and the buildings.

#### SOURCES AND EXPENDITURE OF PRIVATE FUNDS IN FISCAL 1974

Mr. YATES. What was the total amount expended from private funds in fiscal year 1974?

Mr. RIPLEY. Mr. Wheeler has it at his fingertips. We have a summary at the end of the budget justification presentation.

Mr. WHEELER. Total expenditures including grants and contracts, were about \$27 million, which includes a good deal of funds for our so-called revenue producing activities such as the magazine costs and costs of goods sold in our shops, et cetera. Of that, \$10 million was from grants received mostly from Federal agencies and foundations.

Mr. YATES. What is the nature of the contract work? How much did you receive from other Federal agencies?

Mr. WHEELER. An amount of \$9,996,000 was received primarily for specific research in astrophysics and biology. NASA is a large part of that supporting our astrophysical research at Mount Hopkins and Cambridge.

Mr. YATES. It was very close to \$10 million.

Mr. RIPLEY. Yes, sir.

#### PRIVATE CONCESSIONS

Mr. YATES. You talked about cost of doing business and so forth. Do you operate your own stores?

Mr. RIPLEY. The major concession we have that I can recall is for food. We propose the parking would be administered by a concessionaire in the new Air and Space building in the same way it is at the Kennedy Center. We also have one bookstore, a carousel, and a Post Office, which is a "concession" of the U.S. Postal Service.

Mr. YATES. What happens to the proceeds from these activities?

Mr. WHEELER. Concessions are one of our sources of income. In other words, we have a net income from the magazine, the shops and from the food concessions, the carousel, and parking. They became a part of our overall private funds used to support activities such as a good part of the Chesapeake Bay Center. The Anacostia Museum was started with private funds. Other new ventures of that sort. In fact, the magazine itself was one of the major activities started with private unrestricted funds.

This year, but mostly in the next fiscal year, money will be devoted, as we have written to this committee, to the west court construction in the Natural History Building. For the first time, we will be able to contribute toward construction of education and restaurant facilities in our museums.

#### DIBNER LIBRARY

MR. YATES. You have talked about the recent acquisition of the Dibner Library. In a recent letter to the Regents you indicated that you are looking for a highly qualified rare book librarian to take charge of the collection. Have you found one yet?

MR. RIPLEY. I do not believe we have. We have been in consultation with all the major libraries, including the Library of Congress, who understands our acquisition of this library.

MR. YATES. What are the terms under which the library will be operated by the Smithsonian?

MR. RIPLEY. A collection has been given to us and it will be incorporated into the Smithsonian libraries which were envisaged in the establishment of the Smithsonian.

#### PIONEER FOUNDATION

MR. YATES. You also talk about the Pioneer Foundation to promote the publication and distribution of books. How comprehensive is this Pioneer Foundation?

MR. RIPLEY. It is a small foundation set up with a board of directors of which my predecessor, Dr. Carmichael, was one. It was deemed they would make funds available to the Smithsonian with a kind of restricted purpose bill as it were, saying what we should do at this time. As I recall we have received few funds from it.

MR. YATES. What kind of books have been published by it?

MR. RIPLEY. I would have to supply that for the record. This is something I have not had any particular activity in.

MR. YATES. I am intrigued by it just the same. Please provide the information for the record.

[The information follows:]

#### BOOKS PUBLISHED WITH ASSISTANCE FROM THE PIONEER CORPORATION

*Moses Mendelsohn* by Dr. Alexander Altmann, University of Alabama. *Control Theory in Psychology* by Paul Sites, Dunellen and Co.

#### TRAVELING EXHIBITION SERVICE

MR. YATES. You have a traveling exhibition service called SITES. Can you tell us how that is going?

MR. RIPLEY. Mr. Perrot can tell you.

MR. PERROT. It was started on the private side of the institution over 20 years ago and received its first Federal funds in 1973. SITES was created to circulate exhibits and do so under the most economic conditions while attaining the highest quality possible. SITES was intended to be self-supporting but in recent years it was found the kind of exhibitions which the institution either prepared itself or obtained for circulation, could not be rented at a fee low enough to allow smaller

institutions to take advantage of them. As a result, in recent years we asked for Federal funding and this is again included in our budget. In addition to its regular traveling exhibitions, SITES is organizing a series of special exhibitions for the Bicentennial based on Smithsonian collections. Finally, with the assistance of the American Revolution Bicentennial Administration, exhibitions are being prepared abroad for circulation in this country. If you wish, I can submit a list of countries which have been approached and which have expressed an interest in participating in this program. This year \$99,000 was contributed for this program by ARBA. In fiscal 1976 the budget is expected to be about \$115,000.

Mr. YATES. Did the Smithsonian have anything to do with the Jefferson and Franklin exhibits?

Mr. RIPLEY. We were very pleased Charles Eames was selected. He is a favorite of ours. We were very disappointed that we were not invited over to Paris to see it.

Mr. YATES. I share that disappointment. We were not invited, either.

#### HORTICULTURAL SERVICES

In this Bicentennial booklet you discuss your horticultural services. Who is in charge of that?

Mr. AULT. That is my responsibility.

Mr. YATES. How much is it going to cost to operate your greenhouse?

Mr. AULT. \$12,000 a year rental.

Mr. YATES. Is that reasonable?

Mr. AULT. We think so.

Mr. RIPLEY. It is a big installation at the Soldiers' and Airmen's Home.

Mr. AULT. This is across from Catholic University. We acquired five greenhouses and a large head house which make up about 2 acres plus part-time usage of an additional 5 acres.

Mr. YATES. Do you take over the people who are operating it?

Mr. AULT. No, sir, except for the greenhouse manager whom we hired on a contract basis, we have the people in our groundskeeping group right now.

#### CONSOLIDATION OF FACILITIES

Mr. YATES. I notice there is an effort to consolidate the Smithsonian buildings and facilities. The purpose is to reclaim space on the Mall by relocating several service activities now on the Mall so that there is economy and efficiency of operation. Can you tell us about that?

Mr. BROOKS. We have acquired space at 1111 North Capitol Street. We have been able to terminate or will shortly be able to terminate our leases at four GSA owned or operated facilities and consolidate them into this one building. It will also house certain activities from Mall space. We are getting it at a lower cost per square foot than we would if we had to stay in the GSA-leased buildings and we are reducing total costs by some \$256,000 a year. This means we do not have to come here for an increase in our rental expenditure.

Mr. EVANS. Are these buildings which you own or which you lease from GSA?

Mr. BROOKS. These are buildings which are leased.

Mr. EVANS. Would you also comment on the parking facilities for your people?

Mr. BROOKS. We have a parking area at 1111 North Capitol Street, Mr. EVANS. It is included with the rental, providing about 75 parking spaces.

Mr. EVANS. How many employees will be working there?

Mr. BROOKS. When the facility is fully operational about 95. They will require about one-third of the available parking spaces. We will also be able to allow additional employees working downtown to have parking space there.

Mr. RIPLEY. Through carpool or shuttle bus service.

Mr. BROOKS. This plan fits in with the Bicentennial development of the South Yard, the quadrangle south of the original Smithsonian Building, which will reduce the parking space available.

Mr. EVANS. Does your cost savings also include new fixtures you will have to have? You spoke of a figure which will be saved.

Mr. BROOKS. That is the rental figure. We will this year have to put in some money, about \$200,000, for moving expenses and for some overlapping rental. We have some places where we cannot get out immediately. We will have additional costs for one time. We will absorb those this year. Next year we hope to be able to continue again without asking for an increase.

Mr. EVANS. Thank you, Mr. Chairman.

#### EISENHOWER INSTITUTE FOR HISTORICAL RESEARCH

Mr. YATES. You have mentioned the Eisenhower Institute. How much money do you intend to allocate for this Institute and what is its purpose?

Mr. RIPLEY. The Eisenhower Institute was incorporated under the National Armed Forces Museum Advisory Board Act of 1961. As the prospects of developing a large outdoor museum declined over the years since 1962, the theme incorporated in the concept of a research study center seemed far more attractive and viable to the Advisory Board than any other. It gradually came to the point of this committee deeming that the Eisenhower Institute as they named it, would be the most seminal part of the entire Armed Forces concept. Mr. Blitzer has been participating in the setting up of this Institute.

Mr. BLITZER. In answer to your question, the expenditures are now being absorbed by the National Museum of History and Technology.

Mr. YATES. At what level?

Mr. BLITZER. Less than \$50,000. We have in our base this year \$146,000 which appears under the program heading "National Armed Forces Museum Advisory Board." That Advisory Board's duties are to advise the Regents on matters dealing with the Armed Forces, to report back to the Regents as to the possibility of a military museum and to run a research center, the Eisenhower Center. Those are its purposes.

We decided the outdoor museum idea should be shelved. It is no longer part of our Bicentennial program. We simply could not find a place to do this. What we are proposing to do is make these funds available for the same general activities, in the MHT.



## BUDGET ESTIMATE FOR CONSTRUCTION OF AIR AND SPACE MUSEUM

Mr. YATES. You are familiar with the GAO's report to Congress on February 24 on the major civil acquisitions, which indicates the cost estimate of \$41,900,000 exceeds your previous estimate by \$2,400,000 or 6 percent. In response to Mr. Evans' question, you stated there was not an overrun. How does the GAO arrive at that conclusion?

Mr. BROOKS. A 1962 estimate for construction of the National Air and Space Museum, which was prepared without benefit of detailed planning, was \$39.5 million. Soon thereafter, in 1963, it was refined to an estimate which is essentially the one we have today. In order to build the building at the cost estimated in 1963 at \$41.9 million, we had to, in effect, redesign the building. That has been done. The building has been reduced in size and scale. That is why we say based on that first firm estimate, we are within the original estimate for the museum.

Mr. YATES. One of my colleagues, who had gone through the building, indicated the walls were so thin he felt somebody with a karate background could put his fist through the marble.

Mr. RIPLEY. I hope not. I am not aware. Mr. Collins will be prepared to speak to this matter.

## DENTZEL CAROUSEL

Mr. YATES. Mr. Ripley, I wonder about the Dentzel carousel which you wish to install on the Mall. Is there a campaign going on to collect money for the purpose of installing the Dentzel carousel?

Mr. RIPLEY. As far as I know, Mr. Chairman. We haven't forgotten it. This is a hope of ours that we will be able to restore this carousel.

Mr. YATES. Where on the Mall do you propose to place it?

Mr. RIPLEY. We have a very successful carousel there at present, which we charter each year. It's a private operation and one that works very successfully. Of course, it's a matter of delight and charm to the children who go in the museum adjacent to it. It's right in front of the Arts and Industries Building.

Mr. YATES. Where is the present carousel?

Mr. RIPLEY. It is in front of the Arts and Industries Building, that old sort of circus tent building of brick which was built for the Centennial.

Mr. YATES. This is on the Mall side?

Mr. RIPLEY. Just next to it on the Mall side.

Mr. YATES. I remember that. This is where you propose to place the Dentzel carousel?

Mr. RIPLEY. Yes, sir. We have received so far an income of \$6,268 from contributions to the Dentzel carousel. I had been hoping that I could get some of the good ladies who were involved with the beautification campaign of a few years ago in Washington to get interested in support of this, but the last 2 or 3 years, of course, have not been encouraging to private donations of this sort.

All of this fund has now been expended. It's our hope that with time we will be able to install this carousel and to operate it year-round under a weather-secure enclosure. It's extremely attractive, principally because it would be adjacent to a museum that caters to young people.



I have enjoyed riding on our present carousel two or three times a year. It makes me feel more in the mood. I urge members of the committee if they would like to come and ride on it.

#### FREEDOM TRAIN

Mr. YATES. Let's discuss the Freedom Train. I ask you about an article that appeared in the Washington Post, Monday, March 10 of this year, in which it's indicated that, "The Natural History Director, Mr. Porter Kier, wrote the Freedom Train he would withhold materials for the museum until the uncertainties listed by Chairman Henry Reuss of Wisconsin, about the financial condition of the Train, and whether it has official support as a Bicentennial event, had been clarified." Can you tell us about that controversy?

Mr. RIPLEY. May I suggest Dr. Kier is here. He would perhaps like to comment.

Mr. YATES. Dr. Kier, can you tell us about the Freedom Train letter and why you are not letting it have the artifacts?

Mr. KIER. We are now, sir. I received that letter from the Congressman. I thought there were enough doubts raised in that letter that I should wait until it was cleared up.

Mr. YATES. OK.

Mr. KIER. The matter was cleared up.

Mr. YATES. Have you lent them the articles that were originally contemplated?

Mr. KIER. Most of them, but not all of them. A few of them were too fragile to be lent to a moving train.

Mr. YATES. Such as what?

Mr. KIER. They were mainly Indian artifacts, headdresses, and things like that that are quite fragile.

Mr. YATES. That controversy is now settled; is it?

Mr. KIER. Yes, sir.

Mr. YATES. And the Freedom Train will move out with the Smithsonian objects?

Mr. KIER. Yes, sir.

#### EFFECTS OF DECENTRALIZATION

Mr. YATES. During fiscal years 1974 and 1975 you transferred various centrally administered functions to certain museums and galleries to administer directly. What has been the result of these transfers? Do you feel the operations of your programs have been improved as a result of this decentralization?

Mr. BROOKS. May I speak to that, Mr. Chairman?

Mr. YATES. You may, Mr. Brooks.

Mr. BROOKS. We believe that the transfer of these functions, which principally consist of exhibits functions, elementary and secondary education, printing funds for publications, building services, photo services, registrarial functions and others, have resulted in a substantial improvement in the ability of the director to manage his own activity in a museum or in a major research bureau.

We have had a situation in the past where the director was not responsible really for too many of the functions that went on in his

own house. We feel that there has been substantial improvement in the quality of the way in which these funds are expended, for people and services, by putting them under the control of people who are ultimately responsible for the operation.

Mr. YATES. What has happened to the costs? Have they increased or decreased as a result of the transfers?

Mr. BROOKS. We cannot trace any increases to the specific decentralization of these costs. We cannot trace any decreases to it. We do have increased requests in some of these areas in this budget. That is not because of the decentralization but rather because of the need to improve our services in this area to meet certain standards or to improve them in an overall program way.

Mr. YATES. What controls do you have now? Do you have any supervisory controls?

Mr. BROOKS. As part of our budget preparation, Mr. Chairman, we have what we call the base analysis of our total program each year, going back to the complete expenditures of the Institution, both on the public and the private side, for all of these functions. We examine them very carefully from that point of view before we even consider what additional resources may be necessary.

Mr. EVANS. Have you had any increased hiring as a result of it?

Mr. BROOKS. As a result of decentralizing, no, Mr. Evans, we have not. We have had, as I indicated, increased requirements and increased hiring, but not because the functions are decentralized. We deliberately avoided decentralizing functions where we would have to multiply the people in order to provide adequate service. For example, we decentralized to some degree the function of minor repairs, carpentry, et cetera. We did not decentralize the job of plumbing repairs because we simply don't have enough plumbers. If we did that, we would have to hire more plumbers in order to go around. So we kept the central plumbers' shop.

#### EFFECT OF PERSONNEL CEILING

Mr. YATES. We have asked several of the agencies which appear before us about the effect that personnel ceilings imposed by OMB have had upon their operations. Can you tell us whether your operations have been hurt by personnel ceilings?

Mr. BROOKS. We did have a very stringent personnel ceiling imposed, Mr. Chairman, back in 1972. That was a rather painful experience. It took us, interestingly enough, about 3 years to recover in terms of being able to gear up to hire people once the personnel ceiling was lifted. I would say we are coming out of that now. We do not anticipate that the personnel ceilings that we have at this moment from OMB will give us a problem this year, unless, of course, they are changed.

#### EXECUTIVE SALARY CEILING

Mr. YATES. What effect has the freeze on executive salaries had upon your operations?

Mr. RIPLEY. It has made it almost impossible to hire certain people.

Mr. YATES. Could you tell us in what way that is happening? Do you want to amplify that?

Mr. RIPLEY. For example, if you wish to replace, as we have, the directors of the museums because current directors are going back to their research, retiring, or something of this sort, you then go out to find a comparable person. In our case you would go to a university, normally. Probably we would look for somebody who is at the relative status of a dean. That is someone who has advanced up through the ranks of professor to a higher administrative role where he is maybe still in the department as a professor but also has administrative experience.

In one particular case that I can think of offhand, but would prefer not to name the persons, we asked two men to come to be director of one our museums. One was a dean in the Midwest and one was a dean in the East. The dean in the East was immediately made provost of his university at a salary of something in the neighborhood of \$46,000 or \$48,000.

Mr. YATES. It sounds like a plot.

Mr. RIPLEY. It wasn't on our part, but they certainly wanted to keep him. So it showed he was a good man.

Mr. YATES. Yes.

Mr. RIPLEY. The other man was already receiving \$42,500 or something of this sort. We were held to a \$36,000 ceiling. So when he said he had 15,000 students and a budget which was somewhere in the neighborhood of \$30 million for his deanery, we realized that we were just being outclassed, and that has happened.

Mr. YATES. How many such instances are there in your experience over the last year?

Mr. RIPLEY. I was thinking in this one particular case of two. I don't know whether Mr. Blitzer or Mr. Challinor can remind me of more.

Mr. BLITZER. I can think of the same two. Can I add one thing? In commenting on this last year, I said that so far the problem was simply in persuading people to come in competition with other museums and universities and libraries. I sense that if this goes on much longer, it's going to be also a problem of keeping them. I was talking to one of our museum directors yesterday who is being wooed beyond belief by a university. I simply had to say, "There is nothing I can do about money. There is really very little else. If you love the place, stay; otherwise, goodbye."

Mr. YATES. I know.

Mr. RIPLEY. We have just lost another director for partially the same reasons. In this case he was, as you say, wooed away with a very substantial increase to a State government where he now is part of the cabinet of that State.

Mr. YATES. It sounds like Connecticut.

Mr. RIPLEY. It's in the Far West. There he is doing a major job. Again, with good people, you can't always keep them.

#### NEED FOR 282 PERMANENT POSITIONS

Mr. YATES. You are requesting 282 additional permanent positions in fiscal year 1976. Why do you need so many?

Mr. BROOKS. I will speak to those specifically, Mr. Chairman. Of the 282 new positions that we are seeking in fiscal year 1976, over half, or

145, are for the needs of the Air and Space Museum. We are opening a new building there. We have a large part of the curatorial, research and exhibit staff on board already. The new positions are largely custodial and protection people who are needed in order to man and staff this type of building.

The other 137 are more broadly diffused over the Institution. But here again the largest numbers of people are in the custodial, maintenance, and protection areas to a total of some 82 out of the 137. Here we are attempting to arrive at certain standards of security and of custodial care and maintenance which Mr. Ault will talk about in detail. The balance are very widely spread in terms of research, exhibition personnel, conservation and preservation, and positions in the archival and documentary areas.

#### INCREASE IN VANDALISM DURING PAST YEAR

MR. YATES. Can you tell the committee what has been the experience with vandalism this past year? Is it decreasing or increasing over previous years?

MR. RIPLEY. Mr. Ault, could you speak to that?

MR. AULT. Yes. It has been increasing at a slower rate than last year, Mr. Chairman.

MR. YATES. Kind of like inflation.

MR. AULT. This is heartening to us. We are never going to be satisfied until we can stop it completely.

MR. YATES. What is the nature of the vandalism that occurs?

MR. AULT. For the most part, sir, the things that have increased the so-called cases of vandalism in just the past 6 months have been visitations to the Hirshhorn Museum, our newest and very spectacular museum.

MR. RIPLEY. The nearness of the exhibits to the people creates strong temptations. The fact they are all at waist height tempts visitors to touch them, and they break fragile things without meaning to.

We also had a considerable increase in thefts from research areas and laboratories, presumably by visitors, but in any case the security problem of trying to keep people from stealing cameras and typewriters and things that actually are personal property, is getting worse.

MR. AULT. This is particularly true in the nonpublic areas.

MR. YATES. In the nonpublic areas?

MR. RIPLEY. Yes. They have to have passes, but people may slip by sometimes without a pass.

MR. YATES. Mr. McKay?

MR. MCKAY. It seems to me in the retail business that they found, aside from shoplifters, they were losing considerably from their own employees. Have you found some of that among your employees?

MR. AULT. We are looking for that, frankly, Mr. McKay, and trying to curb that.

MR. MCKAY. The Federal Government has found that especially on military bases, where people walk off with pockets full of bolts and all sorts of things they are working with daily.

MR. AULT. We have very stringent procedures whereby our people going in and coming out of buildings are required to submit their



parcels to inspection. This is for all of our own people, from the Secretary right on down, in an effort to deter this and to detect any cases of actual theft.

Mr. MCKAY. Have you found anything of any substance among your employees?

Mr. AULT. Occasionally we have, but it's discouraging at best, if somebody is really bent on getting something out of a building.

Mr. MCKAY. You feel it's more the outsiders than insiders?

Mr. RIPLEY. We wish we knew more. I don't think our security system is good enough in this respect. I don't know how you make a perfect security system. I am not downgrading our security system, but it just doesn't produce enough results.

Mr. AULT. Percentage-wise, sir, we show a commendable diminishment. A 51-percent increase in total crimes last year over the previous year is down to a 4-percent increase this year.

Mr. RIPLEY. Of course, with a large number of visitors you get both advantages and disadvantages. You get tremendously increased wear and tear and miscellaneous vandalism. But sometimes an exhibit hall that is absolutely crowded is relatively secure. It's more likely to be the one that has only two or three people in it where a theft or vandalism incident can happen.

#### INSURANCE FOR EXHIBITS AND COLLECTIONS

Mr. DUNCAN. Do you insure all these exhibits?

Mr. RIPLEY. No.

Mr. DUNCAN. You don't?

Mr. RIPLEY. When borrowing objects or exhibits, we carry insurance or we work out insurance programs. But we do not insure our own objects that are on exhibit.

Mr. DUNCAN. So if I break a piece of bronze that is 3,000 or 4,000 years old, who bears that loss?

Mr. RIPLEY. We generally must then take it into our shop and try to repair it. That is pretty much all we can do.

Mr. DUNCAN. If it's an accidental breakage, you don't make any attempt to recover that, do you?

Mr. RIPLEY. I don't think we could really carry any insurance. Furthermore, the national collections are really not insurable, as I recall.

Mr. DUNCAN. You have an item on page E-1 which is entitled "Insurance, Claims, and Indemnities," item 42. It doesn't look very big. I guess it was \$1,000 in 1974.

Mr. JAMESON. It is partially tort claims that have been settled. If a visitor has an accident to his person or to his vehicle we may settle a small claim. We settle that claim out of that budget.

Mr. DUNCAN. You don't insure that loss at all? You are just self-insured there?

Mr. JAMESON. Yes, sir.

Mr. DUNCAN. Why is it that your collections are not insurable? Doesn't the New York Museum, for instance, insure their collections or the Chicago Institute?

Mr. RIPLEY. I can't answer about large municipal or other organizations, but as I understand it, Mr. Duncan, the national collections are



not insured on the implication that by being in these buildings of ours if there is destruction by accident, such as a fire, we will come and report this to the Congress. Is that right?

Mr. WHEELER. Essentially.

Mr. DUNCAN. I thought you said they were not insurable.

Mr. RIPLEY. Because of the history of the Smithsonian, we feel that this is our tradition. Furthermore, they are not insurable because in all likelihood we couldn't possibly carry the kinds of insurance necessary.

Mr. DUNCAN. It may be cheaper to be a self-insurer. I am not arguing that.

Mr. WHEELER. Federal funds cannot be used for insurance as such on our own collections. We do insure collections which are loaned to us or we insure collections which are loaned to others when they are no longer in our possession. We do insure some things, like our computer up in Cambridge at the Astrophysical Observatory. That is insurable because it was purchased in effect with private funds.

#### VALUE OF NATIONAL COLLECTIONS

Mr. YATES. How do you appraise some of your objects?

Mr. RIPLEY. That is another thing.

Mr. YATES. I would think the value of some of the things, for example, the ancient objects, would be incalculable because they are so valuable.

Mr. DUNCAN. Then you could insure on an agreed value.

Mr. RIPLEY. We don't do this in the Smithsonian.

Mr. YATES. I don't think you can agree upon the value of some of the things.

Mr. RIPLEY. And there is no replication.

Mr. YATES. You can, I would think, with contemporary art objects but I think that some of the antiques and ancient things you have are just of incredible value.

Mr. DUNCAN. There is insurance which is written which is called agreed value and you don't bother about the market price of objects.

Mr. YATES. For some of these objects I think the insurance companies will need a subsidy from the Government to pay it off.

Mr. MCKAY. At least they would request it.

Mr. RIPLEY. Would you like me to provide you, Mr. Duncan, with something specific?

Mr. DUNCAN. If you run across it, but please don't spend any taxpayer's money to have someone run it down.

Mr. RIPLEY. No.

#### BOARDS AND COMMISSIONS

Mr. YATES. Dr. Ripley, you list 13 boards and commissions which advise the Institution on various activities. Would you place in the record at this point a list of the names of the members of these boards and commissions.

[The information follows:]

## Smithsonian Boards and Commissions

Advisory Board of the Cooper-Hewitt Museum of Decorative Arts and Design

Cass Canfield, Jr.	Jean Pennybacker
Albert L. Edelman	Mrs. Howard Sachs
Sidney Gruson	Emily Stillman
Thomas E. Murray II	Robert C. Weaver
Ex officio: Secretary of the Smithsonian Institution	
Honorary: Margaret Carnegie Miller	

Advisory Council for the National Museum Act

William T. Alderson	T. Miake
Charles E. Buckley	Armintha Neal
W. D. Frankforter	Paul N. Perrot
Lloyd Hezekiah	Barnes Riznik
Lawrence J. Majewski	Frank Taylor
Giles W. Mead	Vernal T. Yadon

Archives of American Art Board of Trustees

Henry DeF. Baldwin	Mrs. E. Bliss Parkinson
Irving F. Burton	Mrs. Dana M. Raymond
Edmond duPont	Mrs. William L. Richards
Joel Ehrenkranz	Chapin Riley
Joseph H. Hirshhorn	Stephen Shalom
James Humphry III	Mrs. Otto L. Spaeth
Milka Iconomoff	Edward M. M. Warburg
Gilbert H. Kinney	George H. Waterman III
Howard W. Lipman	Founding trustees:
Harold O. Love	Lawrence A. Fleischman
Russell Lynes	Mrs. Edsel B. Ford
Robert L. McNeil, Jr.	E. P. Richardson
Abraham Melamed	
Mrs. Alfred Negley	
Ex officio: Secretary of the Smithsonian Institution	
Ex officio: Assistant Secretary for History and Art	

Freer Visiting Committee

Mrs. Jackson Burke	John M. Rosenfield
Kwang-chih Chang	Laurence Sickman
Marvin Eisenberg	Hugh Scott
Katherine Graham	John Thacher
Charles A. Greenfield	

Hirshhorn Museum and Sculpture Garden Board of Trustees

H. Harvard Arnason	George Heard Hamilton
Leigh B. Block	Daniel P. Moynihan
Theodore E. Cummings	Taft B. Schreiber
Anne d'Harnoncourt	Hal B. Wallis
Ex officio: Chief Justice of the United States	
Ex officio: Secretary of the Smithsonian Institution	

National Air and Space Museum Advisory Board

James L. Collins	Robert H. Scarborough
Edward S. Fris	Willis H. Shapley
William D. Houser	Honorary: Olive Ann Beach
Gustav Lundquist	William E. Hall
M. R. Reilly	Edwood R. Quesada
Ex officio: Secretary of the Smithsonian Institution	

National Armed Forces Museum Advisory Board

Robert C. Baker	Earl Warren
Milton G. Baker	Secretary of Army
John Nicholas Brown	Secretary of Navy
Alexander P. Butterfield	Secretary of Air Force
William H. Perkins, Jr.	
Ex officio: Secretary of Defense	
Ex officio: Secretary of the Smithsonian Institution	

National Board of the Smithsonian Associates

Harry Hood Bassett	William A. Hewitt
William Blackie	Lewis A. Lapham
John W. Brooks	Frank Y. Larkin
Richard P. Cooley	George C. McGehee
Joseph F. Cullman 3rd	Mrs. Robert S. McNamara
Harry B. Cunningham	Ruben F. Mettler
Paul L. Davies	Roger Milliken
Leonard K. Firestone	Charles M. Pigott
Charles T. Fisher III	Mrs. Malcolm Price
G. Keith Funston	Francis C. Rooney, Jr.
Alfred C. Glassell, Jr.	Merritt Kirk Ruddock
Mrs. David L. Guyer	Thomas J. Watson, Jr.
Ben W. Heineman	James O. Wright
Henry J. Heinz II	

National Collection of Fine Arts Commission

Elizabeth Brook Blake	Ogden M. Pleissner
Thomas S. Buechner	S. Dillon Ripley
H. Page Cross	Harold Rosenberg
David E. Finley	Charles H. Sawyer
Lloyd Goodrich	Mrs. Otto L. Spaeth
Martin Friedman	George B. Tatum
Walker Hancock	Otto Wittman
Barlett H. Hayes, Jr.	Honorary members:
August Heckscher	Alexander Wetmore
Thomas C. Howe	Paul Mellon
Jaquelin H. Hume	Stow Wengenroth
David Lloyd Kreeger	Andrew Wyeth
Henry P. McIlhenny	
Ex officio: Director, Hirshhorn Museum and Sculpture Garden	

National Portrait Gallery Commission

Whitfield J. Bell, Jr.	Robert L. McNeil, Jr.
John Nicholas Brown	Andrew Oliver
Ralph Ellison	Jules D. Prown
David E. Finley	E. P. Richardson
Wilmarth Sheldon Lewis	Robert Hilton Smith
Ex officio: Chief Justice of the United States	
Ex officio: Secretary of the Smithsonian Institution	
Ex officio: Director of the National Gallery of Art	

Smithsonian Council

Roger D. Abrahams	Andre Schiffrin
George A. Bartholomew	Cyril Stanley Smith
Archie F. Carr, Jr.	Stephen E. Toulmin
Carl W. Condit	Barbara W. Tuchman
Camille W. Cook	William Von Arx
Fred R. Eggan	Honorary members:
Murray Gell-Mann	H. Harvard Arnason
Peter C. Goldmark	Muriel M. Berman
Frank B. Golley	Herman R. Branson
Philip Handler	Donald S. Farnar
David Hawkins	Anthony N. B. Garvan
Nathan I. Huggins	Jan LaRue
James L. Liverman	Clifford L. Lord
Giles W. Mead	Charles D. Michener
Ruth Patrick	Peter M. Millman
Norman Holmes Pearson	George C. Seybold
Gordon N. Ray	John D. Spikes
Philip C. Ritterbush	Warren H. Wagner, Jr.
Harold Rosenberg	Rainer Zangerl

Smithsonian Foreign Currency Program Advisory Councils

## Archeology and Related Disciplines Advisory Council:

Klaus Baer	Henry S. Robinson
Joseph W. Elder	Kennedy Schmertz
William Fitzhugh	Bernard Wailes
Iwao Ishino, Observer	

## Biological Sciences Advisory Council:

Edwin H. Colbert	Robert F. Inger
Kenneth W. Cooper	Watson M. Laetsch
John F. Eisenberg	Duncan M. Porter, Observer
Peter W. Frank	Kennedy Schmertz
Jerry F. Franklin, Observer	

## Astrophysics and Earth Sciences Advisory Council

Felix Chayes	Thornton Page
Henry Faul	Kennedy Schmertz
Paul Hodge	Victor Szebehely
William H. Klein	Louis Walter
William Melson	

Smithsonian Science Information Exchange Board of Directors

Robert A. Brooks	S. Dillon Ripley
Lee G. Burchinal	Charles W. Shilling
David Challinor	Alan D. Ullberg
David F. Hersey	T. Ames Wheeler
R. W. Lamont-Havers	

MR. YATES. How are these 13 boards and commissions funded? Who pays their expenses?

MR. RIPLEY. As I recall, none of these boards or commissions are reimbursed for anything more than travel if they come to a meeting.

MR. YATES. And you reimburse them?

MR. RIPLEY. We may, yes.

MR. YATES. Out of your travel funds?

MR. RIPLEY. Yes, I believe we may. But we often do not receive any requests from them. Most of them are people who do not apparently require it.

MR. WHEELER. That is correct. We have very few requests for reimbursement.

MR. RIPLEY. This is because many of them are local. It's also because we try to schedule a meeting so if someone is coming here, for example, for a National Academy of Sciences meeting, we can have them stay over another day.

MR. YATES. Can you place in the record the amount you spent for this purpose last year?

MR. RIPLEY. For the purpose of meetings of commissions or for the travel?

MR. YATES. For the reimbursement for expenses.

[The information follows:]

*Reimbursement to members of Smithsonian Boards and Commissions in fiscal year 1974*

Advisory Board of the Cooper-Hewitt Museum of Decorative Arts and Design .....	0
Advisory Council for the National Museum Act .....	\$3,883
Archives of American Art Board of Trustees .....	0
Freer Visiting Committee .....	0
Hirshhorn Museum and Sculpture Garden Board of Trustees .....	2,030
National Air and Space Museum Advisory Board .....	0
National Armed Forces Museum Advisory Board .....	0
National Board of the Smithsonian Associates .....	0
National Collection of Fine Arts Commission .....	3,479
National Portrait Gallery Commission .....	244
Smithsonian Council .....	7,670
Smithsonian Foreign Currency Program Advisory Councils .....	2,800
Smithsonian Science Information Exchange Board of Directors .....	0
Total .....	20,106

MR. DUNCAN. Do you get all of them together once a year for a big conference?

MR. RIPLEY. No. It would be impossible. It would be desirable, but impossible. I am sure, Mr. Duncan, you are aware of the difficulty of getting 10 busy people together.

MR. DUNCAN. I wondered because on page i you talked about a Belmont conference and then you talked about a Council of Directors and administrative officers conference.

MR. RIPLEY. This, of course, is easier because it's in-house. That is, the Belmont conference which has now met twice under Mr. Brooks sponsorship, has been essentially composed of directors and other senior persons in the Institution itself. We have simply arranged a mutually convenient time to meet at Belmont for a period of about 2 days.



Mr. DUNCAN. Are those boards and commissions useful?

Mr. RIPLEY. Yes, intensely so. I believe in the principle of self-examination and of ad hoc opinions because I spent, I suppose, 18 years as a professor where we did so much of that. I think it's terribly useful to have the outside looking in and the inside looking out. We find that they are very good.

#### USE OF PRIVATE AUDITORS

Mr. DUNCAN. Would you yield for another question, Mr. Chairman?

Mr. YATES. Of course.

Mr. DUNCAN. Is that the reason you use outside private auditors? I am kind of curious. I am new on the committee.

Mr. RIPLEY. Auditors have been traditional with the Institution since the beginning. The original charter of the Institution required the Executive Committee of the Regents to act as their own auditors. As I recall, since somewhere in the beginning of this century we have had outside independent auditors.

#### AUDITS BY THE GENERAL ACCOUNTING OFFICE

Mr. DUNCAN. Are you also audited by GAO?

Mr. RIPLEY. We are audited by GAO as well, yes. It was, of course, because of the funds appropriated to the Institution. The Regents had their own board to audit the trust accounts. Then, subsequently, they arranged for private auditors to audit the endowed and other private funds.

Mr. DUNCAN. Is that something that is no longer necessary, in view of the GAO audits?

Mr. RIPLEY. We like it because it reflects the nature of the Institution to have separate audits of our two types of funds. The GAO, as far as I know, approves of this. It has been traditional with us.

Mr. DUNCAN. How much does that audit cost? Does anybody know offhand?

Mr. WHEELER. Mr. Chairman, the private funds audit costs us a little over \$17,000 this year. Next year it will be something over \$20,000.

Mr. DUNCAN. Are they only auditing the private end of it?

Mr. RIPLEY. Just the private end.

Mr. DUNCAN. GAO does not audit the private end of it?

Mr. RIPLEY. No, but they normally have access to information as needed.

Mr. YATES. Do I understand from your reply to Mr. Duncan that GAO audits you annually?

Mr. RIPLEY. No.

Mr. YATES. It doesn't?

Mr. RIPLEY. No.

Mr. YATES. You have this private firm auditing you annually and GAO does spot audits in case some question arises?

Mr. RIPLEY. Right. They have done this in the past and they will continue to do it. In effect, the audit of our Federal funds is accomplished through the procedure that we adopt of internal audit and sub-

mission to the Office of Management and Budget and the Congress of how we use the money that we have as Federal funds. Grants and contracts are also audited by a Government agency.

Mr. DUNCAN. I thought GAO regularly audited all Government organizations. I didn't think it was done annually, but I thought periodically.

Mr. BROOKS. In theory they do but they have not done a regular audit of the Smithsonian for at least 10 years.

Mr. RIPLEY. They have done several spot audits.

Mr. YATES. Just to see whether the Institution is operating properly?

Mr. DUNCAN. So GAO hasn't been there for 10 years and Peat, Marwick & Mitchell only audits the private sector. In effect, you haven't had any audit on your public funds for 9 years?

Mr. RIPLEY. I believe the last GAO audit was for fiscal year 1968 and fiscal year 1969 and we also have internal audits which are all available as part of our records.

Mr. DUNCAN. But no outside?

Mr. RIPLEY. The private funds have always traditionally been audited by private auditors.

#### OFFICE OF AUDITS

Mr. YATES. I notice that you have an Office of Audits.

Mr. RIPLEY. We do. That is what I call internal. We brought this into being about 5 years ago I think because of a congressional suggestion that our business and our activities were sufficiently large that we should have more efficient internal audit. The Congress appropriated money to support this internal audit function, which I must say has worked marvelously. We are very enthusiastic about it.

Mr. YATES. Are your audits submitted for GAO scrutiny?

Mr. BROOKS. They are available on request, Mr. Chairman.

Mr. YATES. Has the form of your audit been approved by GAO?

Mr. BROOKS. I will have to supply that for the record, Mr. Chairman. I believe that it has.

[The information follows:]

#### INTERNAL AUDIT

The Smithsonian Office of Audits conducts internal audits of all Smithsonian activities in accordance with the principles, standards, and concepts of internal auditing prescribed by the U.S. General Accounting Office.

GAO does not officially approve the form of internal audits. During the course of their audits, GAO reviews the internal audit system of organizations being audited, and uses reports prepared by the internal audit staff. If the internal audit system or audit reports are deficient, GAO comments on this fact in their report.

During recent GAO audits of Smithsonian operations, GAO reviewed the audit reports issued in the last 5 years by the Smithsonian Office of Audits. The GAO audit reports on these Smithsonian operations were silent as to the Smithsonian internal audit activities.

## INTERNAL AUDIT PROCEDURES

Mr. RIPLEY. I think that the internal audit procedures are the same as in the regular Government accounting auditing process which is, of course, that normally these large Government bureaus do follow continual internal audit procedures which are always available to GAO.

## CATALOG OF COLLECTIONS

Mr. YATES. The Library of Congress, of course, has fantastic reference services. It has card catalogs, tapes, film, and other compilations of its holdings. Does the Smithsonian have any kind of catalog as to what it has in its collections and what is available to outside scholars or to the general public?

Mr. RIPLEY. Yes, we began automating that information, as I recall, about 1966 with a request to this committee for an automatic data processing facility, over some objections, because I think at that particular time the Congress itself had not been completely won over to the concept of ADP. We began a rather innovative program first in the area of the Natural History collections and we were able to demonstrate that, through this retrieval process, we could perform functions for other agencies of Government and interested persons with extraordinary rapidity. We still continue that. We still budget for it and we still ask for increments on a phased basis so as gradually to incorporate all of our records in this manner and to make them comparable.

You can imagine, this is an immensely complicated procedure and has taken a phased series of budget requests for us to achieve. We do have an Information Systems Division which is in direct charge of these kinds of cataloging functions.

The catalogs that I grew up with as a curator were simply written catalogs like large ledger books in which there was a listing by number of every item. I well recall testifying to this committee that in 1943, when sonar had been developed for submarines, President Roosevelt sent over a request to my predecessor to find out where the snapping shrimp occurred in the North Atlantic, we had no funds and it took six yeomen borrowed from the Navy 6 months to produce a map of where the snapping shrimp could be located because, as it turned out, they made exactly the same noise as the pulse of the submarine's propeller.

Mr. YATES. Really!

Mr. RIPLEY. Now we could produce the same information we believe in as many minutes within our own competence.

## CURRENT STATUS OF CATALOGING EFFORTS

Mr. EVANS. How far along are you in this cataloging?

Mr. RIPLEY. The natural history and history and technology collections have been completed in certain areas and in particular the natural sciences. Some of the art collections in the National Collection of Fine

Arts and in the Portrait Gallery are completed. The register of all known examples of American art work, and so on, we hope will be largely completed by the Bicentennial.

Mr. EVANS. You have some 70 million items at the Smithsonian.

Mr. RIPLEY. Yes.

Mr. EVANS. How many of those have been processed?

Mr. RIPLEY. I couldn't give you an estimate out of hand because many of them, for example, such as entomology, are in lots of 10's or 15's, or in locality lots, and things of that sort or in archeology in lots or trays or shards of pottery from Yucatan, things of this sort.

Mr. EVANS. Do you count that as one item?

Mr. RIPLEY. If it's a lot, we count it as an item. But if in other cases they belong to different kinds of pots and have been added up in increments of a collection we might count them all as individual items.

I think Dr. Kier will support me when I say that we are well in hand in the Natural History Museum in this data retrieval technique of cataloging objects and in one or two of the art museums, but we still have a long way to go in others. Is that right, Porter?

Mr. KIER. Yes, sir, that is correct. We have a long way to go, but it's getting cheaper all the time. It now costs less to put it on the computer than it did to do it by hand.

Mr. EVANS. How many years do you have ahead of you before you finish?

Mr. KIER. Sir, never. We will never get them all in because we keep adding new things.

Mr. RIPLEY. You get so many more whales' teeth or so many more sediment specimens and things of that sort. Each year almost 900,000 more objects are added to the natural history collections, for example.

#### ACCESSIBILITY OF COLLECTIONS

Mr. YATES. Suppose Mr. Duncan wanted to see the 10 ants you were talking about. How would he go about finding them?

Mr. RIPLEY. I would be glad to take him along.

Mr. YATES. Where is that?

Mr. RIPLEY. It's on the second floor on the west side of the Natural History Building.

Mr. YATES. Does that mean that every potential scholar must come to your office and ask you to take him there?

Mr. RIPLEY. No, sir. I happen to know something about entomology and would be very interested in doing that.

Mr. YATES. Suppose a visiting scholar comes to Washington and he is interested in 10 fire ants that you may have?

Mr. RIPLEY. We get thousands of inquiries, of course, usually by letter. If he is a scholar and it's his field, he will write in and he will either know somebody in the department or he will write to Blank, the director of the museum, and then we will write back. We answer 15,000 or more of these kinds of requests every year. Then he will write back and a date will be set and he will come in.

I just set up a date today for a man to come and look at loons eggs to study the configuration of eggshells which we talked about in this



committee, about changes caused by DDT and the thinning of the shells. Now with the banning of pesticides in certain water areas, the population of birds is coming back.

Mr. YATES. Do you have loons eggs over a period of years to show what the different configurations are?

Mr. RIPLEY. I had to find out. I was sure we had some loons eggs, but I wasn't sure we had any from New England from where this man wanted to see them. It turns out we do have.

Mr. YATES. That is good.

Mr. DUNCAN. That is on a computer, is it?

Mr. RIPLEY. A great deal of that is. For example, the bird collections are on computers as birds, but I am not sure about the eggs. I think the eggs are all on ADP.

Mr. DUNCAN. At least this is what you are working toward?

Mr. RIPLEY. Yes, they are all on ADP.

#### SCIENCE INFORMATION EXCHANGE

Mr. DUNCAN. Is your Science Information Exchange also a computerized list of research programs that may be going on throughout the country and the world?

Mr. RIPLEY. That is right. This is now becoming enormously important. I am personally very pleased because there were a number of years when I first came here when the committee and Government agencies used to question the importance of keeping up this data retrieval system on current research in various areas. Now it's coming into its own.

Mr. DUNCAN. Are you in the focal point for such an operation or are there others doing this?

Mr. RIPLEY. We are probably the most important source in biomedicine and in cancer research; we have just been provided by the National Cancer Institute, which is part of NIH, with a grant to take over the supervision of information retrieval on cancer research. Fortunately we can extend out into the world because several years ago we started trying to get international input on these areas.

On water resources we produced in 2 days for the President's then Science Advisor a documentation of all the water resource research and studies in the United States.

Mr. DUNCAN. Is the Library of Congress doing this too?

Mr. RIPLEY. No. We wouldn't be doing it if they were.

Mr. DUNCAN. As far as you know, you are the focal point at least within the Federal Government for this type of project?

Mr. RIPLEY. For the Federal Government. We started this during the war, about 26 years ago, as I recall. We have been building up. What is so great is that it's like a library catalog. We have gotten a backlog, so that it's all taped now so that we can get the material out.

Mr. DUNCAN. I think it's a matter of concern, and always has been to me, not that there is anything wrong with having two people working in the same field, but at least each one of them to the extent possible ought to know what went on before so they can build on what has already been done.

Mr. RIPLEY. Absolutely.

Mr. DUNCAN. I can remember going to the South Pole. You may recall through the Interior Department we financed that operation down there. I found machines out there just as noisy as they could be. I said, "What are they doing?" I think they were counting mesons and just pouring out bushels and bushels of tape. I tried to find out what happened to all that tape. Nobody really knew. They speculated it might have ended up in some sort of depository in Australia, but no one really knew. It concerns me greatly that we are spending huge sums of money on research and never really realizing anything from it because it gets lost.

Mr. RIPLEY. There is a good chance that our information retrieval service could tell you now whether there is a project going on at the moment which is counting these or not.

Mr. DUNCAN. Apparently it's a superb place to count them. I have no objection to counting them.

#### RELEVANCE OF DATA BANK TO STATES AND MUNICIPALITIES

Mr. RIPLEY. Beyond that, my responsibility would end. For example, in the environmental area, more and more with the Federal revenue sharing, this is becoming a problem for States and municipalities across the country. This kind of data bank that we have, about what kind of research is going on in environmental matters is going to be of enormous importance to the States because if, for example, Missouri wants to start certain kinds of water studies they should jolly well find out whether or not it's being done in South Carolina. The way they can do it is to let us know and we will tell them.

#### IMPORTANCE OF BASIC RESEARCH

Mr. DUNCAN. Are your own research programs essentially basic research? Are you doing applied research too?

Mr. RIPLEY. We do essentially basic research, and always have. There are ever so many examples right in the Smithsonian of where basic research suddenly turned out to be vital. For example, weather. Weather was discovered by the Smithsonian back in the 1840's. Out of that came the Weather Bureau, when it spun off and became very important. Aeronautics was largely discovered in the Smithsonian.

Mr. DUNCAN. Basically there is a specific task, something that we know we need, a machine to accomplish a purpose, that basically would ordinarily not come to you even though whoever took that would doubtless have to build on the basis of research which you and others have put together?

Mr. RIPLEY. Yes. For example, at the moment the work that we have been doing in studying solar radiation in the blue spectrum, that is in the ultraviolet, has turned out to be extremely interesting to people who are concerned about certain kinds of cancers. Skin cancer is an example. This, of course, has something to do with the magnetosphere and the upper atmospheric levels and the incidence of clouds, particle deposition and decline in certain kinds of chemicals at those levels.

A great deal of this information is a byproduct of the research on solar radiation which began with us in 1906 or 1907 and was incorpo-

rated into a bureau known as the radiation biology laboratory, I think in 1928 which is still going on very productively in this area. Here all of a sudden is a strongly applied byproduct of that.

#### RESEARCH ON AERONAUTICS AND THE WEATHER

MR. EVANS. You said you discovered weather and that you discovered aviation. I wonder, for purpose of clarifying the record, if you would elaborate.

MR. RIPLEY. Aeronautic research largely began in the aeronautical laboratory which was set up in the Smithsonian around the turn of the century. Its direct descendant was the National Advisory Committee for Aeronautics, which came into being I think in 1913 and of which my then predecessor, Charles Walcott, a geologist, back then was the President and which spun off into NASA in about 1958 as I recall.

MR. EVANS. Is there any connection between your discovery and the Wright brothers?

MR. RIPLEY. The Wright brothers were going on a parallel course and all that happened to us was we inherited the Wright brothers' plane finally after some discussion through the work of Charles G. Abbot, who was then the head of the Smithsonian.

MR. EVANS. You said you discovered weather.

MR. RIPLEY. The weather phenomenon in the middle of the last century was something that was totally incomprehensible. Like the work of God, the weather came and went. The first Secretary of the Smithsonian, Joseph Henry, a physicist, became enormously interested in trying to get people to correlate weather phenomena around the United States, first by letter, then by Western Union when telegrams came in, assisted by the railroads going out and having Western Union signals, and so on, associated with them. Every day he would pin up on the front door of the Smithsonian castle a chart showing weather predictions. There was no television. This was in 1850. He included many ecological and environmental phenomena which were unfortunately lost in 1869 when, I think, the Weather Bureau received all of this bulk of material. He, in effect, started the Weather Bureau.

#### RELEVANCE OF CERTAIN RESEARCH PROJECTS

MR. DUNCAN. The message from my constituency, of course, is that they want to cut Government spending in every area. One of the most pregnant areas for the development of this theory is the lists that are periodically put out of research projects.

For example, the research program on snapping shrimp of the North Atlantic would not have very much appeal in the State of Oregon unless you could relate it to something pragmatic or practical which came from it as you have just done for us. I assume likewise some of these you recite on pages A-18 and A-19 are very valuable. I assume that we should know that there is a second probable black hole in the constellation Circinus but I don't think anybody in Oregon is very much interested in that.

MR. RIPLEY. I think you have to take each one of these in its particular spectrum of concern.

Mr. DUNCAN. We are looking for a lot of black holes. We also have one in the constellation Cygnus.

Mr. RIPLEY. Right. Astrophysics and astronomy are something which again the Smithsonian has been a pioneer in, in which we have very large support from NASA and which we continue in conjunction with Harvard at the Harvard Observatory and the Smithsonian Observatory up in Cambridge. I think you can find great difficulty in demonstrating to some of your constituents what the significance is.

Mr. DUNCAN. They are even worse in Utah.

Mr. RIPLEY. We are working on problems of great black holes, of meson analysis as you cite in the Antarctic, and so on. I think, however, that in each particular case after we give a demonstration we could give you back an answer that the results of this are probably going to have an incalculable effect on the knowledge of the universe, if anybody cares about the universe.

Mr. DUNCAN. Or if it's relatively as important this year as eating or getting some jobs and getting sawmills working again. Everything is relative.

Mr. RIPLEY. Everything is relative, and of course, everybody's individual pay check is the most important thing to them because mama says, "Where is the sugar and how are we going to go out and meet the bills for the furniture and how am I going to buy food for the young?" It is not snapping shrimp but the young which concern them.

#### TITLING OF RESEARCH PROJECTS

Mr. DUNCAN. Mr. Chairman, just a couple of comments, if I may. I think the naming or the titling of these projects is terribly important. I remember the loyal minority, when I was here before, objected to a study going on somewhere on the psychology of the Douglas-fir. I for some reason had happened to run across this. I knew it wasn't right. I asked him finally how he spelled psychology, and I shouldn't have because it embarrassed him. It was on the *physiology* of the Douglas-fir, which is an entirely different thing.

My second comment is induced because I read just the other day a very valuable and interesting piece that some doctors in Oregon are doing. Open-heart surgery was either discovered or developed in Oregon. The work on open-heart surgery was a very practical scientific research program from which immediate results can be seen. These doctors, at some great exercise of effort, have traced back the number of other discoveries that were essential before the open-heart surgeons at the University of Oregon could finally take the final step and open up a man's heart while he was still alive and fix it and sew it back together again. It traced really all the way back to Aristotle in some instances.

In that process, they described the very basic research that was done with absolutely no idea that what was discovered in that particular effort was ultimately going to be usable. It's a very valuable piece. I would like to at least put a short summary of it in the record at this point.

[The information follows:]



(Summary of "Ben Franklin and Open-Heart Surgery" by Julius H. Comroe, Jr., and Robert D. Dripps. From "Circulation Research," vol. 35, November 1974.)

In 1966, President Lyndon Johnson said, " \* \* \* A great deal of basic research has been done \* \* \*, but I think the time has come to zero in on the targets by trying to get our knowledge fully applied \* \* \*. We must make sure that no lifesaving discovery is locked up in the laboratory."

Most scientists are convinced that basic undirected research is essential to the prevention, diagnosis, and treatment of disease, and most scientists can support their convictions with dramatic examples. (X-rays, blood groups, heart catheters, freeze drying, Rh factor in blood, monitoring blood oxygen.)

Project Hindsight, commissioned by the Department of Defense in 1966, offered the following conclusions on how various military weapons came to be developed: (a) Contributions of university research were minimal; (b) scientists contributed most effectively when their efforts were mission oriented; (c) lag between initial discovery and final application was shortest when scientists worked in areas targeted by his sponsor.

This report was countered with several carefully prepared case studies.

Comroe and Dripps became convinced it was more important to do research on research, on the process of discovery, than it was to continue with ongoing research.

They wanted to learn how clinical advances came about that directly prevented disease, cured or arrested disease, or decreased suffering and prolonged useful life. They chose to study advances in cardiovascular and pulmonary medicine and surgery since 1945, and formulated three goals:

A. Did cardiac surgeon take a giant leap up the front of the mountain, or did he walk up the back? They took a retrospective approach—what had to be learned before the next step could follow? What had to be learned before the operation could become a routinely successful procedure?

B. If he walked up the back to or almost to the top, who built the steps and why? Was cardiac surgery their target? How and why was each study done? How many studies were undirected and produced knowledge now essential but initially unrelated to its present clinical use? How many studies were mission oriented specifically to prevent or cure one disease? How many were reports of advances in engineering that created or improved needed instruments, apparatus, or techniques? How many key, decisive studies were designed by commissions or supported by contracts?

C. Tell the public and especially the maker of public policy how he got there. What the public does not know is that tens, hundreds, and thousands of studies, stretching back over decades or centuries, contributed to any one step up the mountain. Another problem with public understanding of science is that some of the great advances have been around so long they've become a part of everyday life: for example, fire, wheel, electricity, flush toilet, penicillin.

What is needed is far more general understanding of how science progresses, of the tortuous paths from distant, unrelated points of departure that converge to bring us where we are.

An excerpt from the article follows:

(3) Tell the public and the makers of public policy what we have learned.—The public usually knows only the final product of research and development, because it is easy to identify and publicize. And, as a rule, the public tends to link the name of one man with one discovery, for example, the radio with Marconi or the airplane with Wright. What the public does not know is that 10s, 100s, and 1000s of studies, stretching back over decades or centuries, contributed to any one step up the mountain. For example, table 2 lists the word electrocardiography. The public knows ECG, but it does not connect the ECG with studies by Benjamin Franklin, the colonies' foremost scientist, who learned in 1752 that naturally occurring lightning and electricity stored in a battery (initially a Leyden jar) are one and the same or with studies by Galvani and Volta, whose curiosity about "animal electricity" in the late 1700's led to the science of electrophysiology and also to the intensely practical development of the storage battery; or with studies by Keith, Flack, His, Tawara, and Purkinje, who learned how the impulse that sparks the heartbeat originates in the sinoatrial node and spreads to the atria and the ventricles; or with studies by Waller

and Einthoven, who developed the ECG at the end of the nineteenth century; or with work by Sir Thomas Lewis, who used the ECG extensively as a physiological and diagnostic tool to learn much of what we know of normal and abnormal rhythms of the human heart, or with research by Wilson, who used the ECG in 1930 to diagnose myocardial infarction.

Another problem with public understanding of science is that some of the great advances have been around so long that they've become part of everyday life. Who today thinks of fire, or the wheel, or electricity, or the flush toilet as the product of truly creative minds? Who today still thinks of penicillin as a wonder drug? Now it's something—like toothpaste—that you buy at a drug store. The public has long forgotten that the discovery of penicillin first required the development of whole new sciences of microscopy, microbiology, infectious diseases, and pharmacology.

Cardiac catheterization is now an everyday routine test. Physicians and patients think of it only in terms of a patient lying on a hard table with a long plastic tube in his heart. What a cardiac catheterization laboratory actually needs and uses besides a patient, a catheter, a cardiologist, and a nurse is shown in figure 3. The public forgets or was never told that cardiac catheterization is not a procedure that stands alone; its use depends on many advances in the basic sciences, in clinical investigation, in engineering, and in industrial development.

In 1969, Robert Berliner said: "Above all we have an enormous job of education to do. We need far more general understanding of how science progresses, of the tortuous paths from distant, unrelated points of departure that converge to bring us where we are. When the press conference is held to announce the current achievement we need less emphasis on wild speculation about unforeseeable applications and far more on the roots in the past. We need emphasis not only on the giants on whose shoulders we have stood, but on the contributions of unsung investigators too numerous to mention. We should have the equivalent of a brief 'commercial' before each therapeutic measure, each dose of vaccine, each effective drug: 'This is made possible by the research of Whozis and So and So; we trust you will find it effective and remember what research has done for you.'"

CONGRESS OF THE UNITED STATES,  
HOUSE OF REPRESENTATIVES,  
COMMITTEE ON APPROPRIATIONS,  
Washington, D.C., May 9, 1975.

HAROLD E. ROBINSON,  
Portland, Ore.

DEAR MR. ROBINSON: Thank you for sending me your views on Government-supported research and let me apologize for the delay in answering your letter. In the course of opening an office, hiring and breaking in a new staff and keeping up with enormous amount of legislative work that is part of this job, we have not been getting all the mail answered as quickly as I would like.

This is an issue that I have had to wrestle with as a legislator both at the State and Federal level. I have had to justify programs in Government-supported research with strange exotic and ridiculous titles. Any one who reads that the Government is spending \$6,000 to study Polish bisexual frogs, for example, must wonder if the Government is just looking for ways to waste money.

Actually, the Polish frog study could produce important advances in the science of genetics that could lead to cures for presently incurable diseases and it is financed with Polish currency that we cannot spend outside of Poland.

The point is that apparently insignificant discoveries can lead to major scientific breakthroughs. That is why the Government helps to fund basic and applied research. I am enclosing a page from an article on open heart surgery that illustrates the tortuous paths that lead to most scientific advances.

Thank you again for your patience.

Sincerely,

ROBERT B. DUNCAN, *Member of Congress.*

Mr. YATES. You are really addressing your remarks to Assistant Secretary Challinor. We have discussed these things with him for a number of years. We have asked him time and again to defend the

funds that are expended for his projects. Would you like to address yourself to this for a moment, Mr. Challinor?

Mr. CHALLINOR. Mr. Chairman, I think what Congressman Duncan has pointed out is terribly important, namely, the titles of these research projects. They are written, of course, for their colleagues in their respective sciences. These are published generally in bibliographies. They will thumb through the bibliographies and find out what pertains to the research they are doing. They are not written for the layman. That is why they seem so esoteric and ridiculous.

I believe it was last year at his hearing that I put in the title of Einstein's paper on relativity and the paper in which Alexander Fleming had described his discovery of penicillin. The titles per se, which I can dig out here if it's worth it, were very esoteric and could be subject to ridicule by anybody who wanted to take the trouble to do so.

I think all we can do is begin with any titles that you find here for the benefit of the chairman who has to defend this on the floor that he isn't quite clear on, and we will be happy to explain in layman's language what the people are doing. That is part of our job.

Mr. YATES. You better do it for all of them, Mr. Challinor.

Mr. EVANS. Would the chairman yield there?

Mr. YATES. Yes.

#### ARTICLE BY PAUL HARVEY ON FEDERALLY FUNDED RESEARCH PROJECTS

Mr. EVANS. Mr. McKay of Utah has an article which I think has a collection of past interesting research subjects.

Mr. YATES. I don't know that any of them pertain to your field.

Mr. MCKAY. We might ask them to provide for the record at least which of these are funded by this Agency. The article is by Paul Harvey.

For example, here is \$375,000 for the study of the frisbee.

Mr. YATES. That is Defense.

Mr. MCKAY. \$121,000 to find out why people say ain't; \$37,000 for a potato chip machine for the Moroccans; \$117,000 in wages for the Board of Tea Tasters; \$68,000 for the Queen of England for not planting cotton on her plantation in Mississippi; \$14,000 for the Ford Motor Co., for not planting wheat; \$2 million for Yugoslavia's Marshal Tito for purchasing of a yacht.

Let's get down to some others. \$80,000 for a zero gravity toilet for the space program; \$23,000 for environmental testing of the same; \$6,000 to study Polish bisexual frogs.

Mr. RIPLEY. That is one of ours. That is the first one I recognize.

Mr. MCKAY. That is the first one you recognize? That is pretty good. How do you explain that?

#### STUDY ON POLISH BISEXUAL FROGS

Mr. CHALLINOR. The Polish frogs project has now received hard dollar support. I am happy to report from a foundation.

Mr. MCKAY. So we can phase that one out?

Mr. CHALLINOR. That is phased out.

Mr. YATES. What was the purpose of it?

Mr. CHALLINOR. The purpose of this was that a particular kind of frog has a fascinating genetic makeup. This frog lives in Poland and under certain conditions it can change its sex. Certain fish can change sex under certain conditions we know.

Mr. RIPLEY. And certain Amphibia, too.

Mr. CHALLINOR. Yes, genetic makeup attributes to these sex changes. This is again very basic research. As for the practical applications of this, God knows what they might be. In this case, this particular amphibian had an odd genetic makeup that allowed it to change sex under certain conditions. That is what the scientists were studying. \$6,000 worth of zlotys is a pretty small investment since the taxpayer had already spent the hard dollars for this back in the 1950's. And it could be spent only with the approval of the Polish Government, I might also add.

Mr. YATES. What purpose was served by the research?

Mr. CHALLINOR. It was a genetic study to understand the X and Y chromosomes that determine sex in Amphibia and all vertebrates.

#### NEED FOR PUBLIC UNDERSTANDING

Mr. DUNCAN. The only distinction I see in the statement you made about the titles selected by Fleming and Einstein for their research papers is that neither of them were asking for public support in the presentation of their papers for their projects. They were not appealing to their colleagues for financial support. That just reemphasizes what I think is so important with respect to the names that you put on these bloody things.

Mr. McKAY. I think that is true, and people need to see some. If you can get an explanation to them sometimes, if it isn't too lengthy, they will understand in some cases. But when you are dealing with taxpayers' dollars and when there is unemployment and all of these things, priorities begin to be changed very quickly.

Mr. DUNCAN. The explanations never catch up to the article you have in your hand.

Mr. RIPLEY. That is true.

Mr. McKAY. That is right. For example, here is \$85,000 to learn about the cultural, economic, and social impact of rural road construction in Poland. That wouldn't be one of yours; would it?

Mr. CHALLINOR. I think that was one of ours, however, in Yugoslavia, not Poland. The project never really developed and was abandoned.

Mr. RIPLEY. We have got foreign currencies to spend and the problem is how do you spend them.

In our particular case, Mr. McKay, we have an advisory committee that judges each one of these projects on its scientific merits just the same way Mr. Einstein, who applied for his grant to a government supported institute in Germany, had an advisory committee to decide whether Mr. Einstein's research had any possibility of getting anywhere.

I think you will find at least a kind of buffer in this process, in that a scientific analysis of each one of these projects has been made. Whether it's in zlotys or rupees, we have the same ad hoc outside committees judging these projects.



Granted that the distinguished Mr. Harvey who appeals to the common man can cite that, talking about transsexual frogs because it sounds slightly sexy and therefore exciting and therefore naughty in the American ethics. But granted he could cite that, we can give you the background of why it was done.

#### ADDITIONAL PROJECTS NOTED IN ARTICLE

Mr. MCKAY. You look at these. He has a whole list of them: \$20,000 to study the blood groups of Polish zlotnika pigs; \$5,000 to learn about Yugoslavian intertidal hermit crabs. Is that one of yours?

Mr. RIPLEY. Yes, sir.

Mr. CHALLINOR. Yes, but it was never funded.

Mr. MCKAY. I think we talked about that one last year.

Mr. YATES. Wasn't Mendel's research in genetics on fruit flies?

Mr. RIPLEY. Yes, sir.

Mr. CHALLINOR. Yes; and the garden pea.

Mr. RIPLEY. Gregor Mendel was on peas. Later on he got into chickens. But Thomas Hunt Morgan was on fruit flies.

Mr. YATES. It would seem to me that the description of that experiment would certainly have aroused the suspicions of a number of people. I think there was some good that came out of these experiments, wasn't there?

Mr. RIPLEY. I believe so.

#### JUSTIFICATION OF RESEARCH PROJECTS

Mr. MCKAY. I am wondering, Mr. Chairman, if we couldn't have him compile something on this for the record.

Mr. CHALLINOR. We have this in the record.

Mr. MCKAY. But it's a fairly lengthy explanation.

Mr. RIPLEY. If you could come up with the title you used here about the fruit fly and then bring a result. It's more easily understood, if we had a list that could compile that size of a page in the answer [indicating]. It won't be in detail, but we can go back to the record for the detail. It becomes a very quick answer to a lot of these questions.

Mr. CHALLINOR. We have this for one paragraph each for every single project we are funding. I believe this has already been submitted to the committee. If you don't have it, I can submit it again.

Mr. RIPLEY. Mr. McKay is suggesting we could use some classic examples of this as backup.

Mr. MCKAY. I don't mean on the whole thing, but if we could take some just as ridiculous titles as we see here and say, OK this is what happened, and the result was this. It's an easy way to get answers to people who think it's silly.

Mr. DUNCAN. You have a public relations staff, don't you?

Mr. RIPLEY. Not properly. We have a public affairs branch but they are not really in that business.

Mr. DUNCAN. That ought to go to Paul Harvey too, so hopefully it would get some circulation. I should think he would be interested in it.

[The information follows:]

## PRODUCTIVE RESEARCH WITH OBSCURE TITLES

## PRODUCTIVE RESEARCH WITH OBSCURE TITLES

"Anatomy of the Monocotyledons" by E. S. Ayensu. This book contains accounts of pure research studies on yams, particularly of the starch grains in the tubers and other vegetative organs. It has contributed substantial information to the identification of the 13 out of over 200 species of yams that form the chief plant source of sapogenic precursors of cortisone and steroidal hormones. These are chemical compounds used as bases for the preparation of over 80 percent of all the birth control pill brands on the markets here and in other parts of the world.

"Bromeliad Malaria" by Lyman B. Smith. The general taxonomic studies of the pineapple family resulted in the identification of malaria-carrying mosquitoes breeding exclusively in the treetops in the natural tanks in the rosettes of epiphytic bromeliads. This situation makes malaria control much more difficult than in the case of ground-breeding mosquitoes. In Trinidad in the cocoa plantations, it was possible to kill the bromeliads by selective spraying, but more recently in southern Brazil, the rugged nature of the terrain made the problem much more complex. The author's contribution was the identification of the species of bromeliads so that time and money could be concentrated on the elimination of the very few that were primarily responsible as mosquito hosts.

## RESEARCH ON VERTEBRATE AND INVERTEBRATE COMMUNICATIONS

Mr. DUNCAN. One more question and then I will quit. Would you please tell me about vertebrate and invertebrate communications that you mention on page A-37?

[The information follows:]

## VERTEBRATE AND INVERTEBRATE COMMUNICATIONS

The National Zoo considers the study of vertebrate communications (odors, gestures, noises) most important since it is a key component in the reproductive behavior of their animals. The more we understand of this process the better success we expect to have in breeding captive rare and endangered species. Comparative studies of invertebrate communications help in understanding the same process in higher animals.

## CONTINUED LISTING OF PROJECTS IN ARTICLE

Mr. MCKAY. Here is \$20,000 to investigate the cockroach; \$5,000 for the analysis of violin varnish. That might fit into the Smithsonian's activities. There is \$15,000 to find out how fishing boat crewmen cause conflict in Yugoslavian peasant towns; \$5,500 for the genius who wrote the poem, "light."

Mr. YATES. That is the Endowment for the Arts.

Mr. MCKAY. \$19,000 for the the HEW Department to find out why children fall off tricycles; \$2,000 to train 18 Good Humor peddlers; \$70,000 to study the smell of the perspiration given off by Australian Aborigines; \$28,000 for odor-measuring machines for above project; \$17,000 for a drycleaning project.

That is enough.

Mr. YATES. This is something the committee encounters every year. Every year, while we appreciate the need for research, we try to obtain the reasons for the research in language understandable to the layman.

Mr. EUELL. As to the violin varnish, that was in respect to the Stradivarius and other fine string instruments. It seems the very famous Italian craftsmen felt that the key to the tone of the instrument was in the varnish. They kept the varnish formulas in the family. This accounts for the current effort to study these in order to recreate that kind of quality in string instruments which is diminishing at this point.

Mr. MCKAY. I think there is a very good explanation for a majority of these projects. I have a good example in my own State which will come up with the arts and humanities people more. It has to do with Dr. Tracey Hall, who invented artificial diamonds. He got the basis for that from historical research in trying to find where Solomon discovered his ores and gold, copper, or whatever, the geological atmosphere in which they were found. That gave him the key to come up with artificial diamonds for industrial purposes which was very helpful.

But if we get reports of these projects in a concentrated editorial style, it tends to cut off the edge we live with today.

#### PURCHASE OF COLLECTIONS

Mr. YATES. Let me ask you this question, Dr. Ripley. Suppose Mr. Blitzer wants to buy something for his department, a couple of paintings. Do you have funds?

Mr. RIPLEY. We have regularly appropriated funds. Also virtually all income from the Freer Endowments goes into care and exhibition of its collections, including purchases. That was in the will.

Mr. YATES. How many wills do you have?

Mr. RIPLEY. We have a great many, most of which specify the purposes for which these moneys can be expended.

#### FUNDS AVAILABLE TO THE SMITHSONIAN

Mr. YATES. How much money is made available to the Smithsonian annually?

Mr. RIPLEY. On pages E-16 through 21. You will see our restricted purpose income in 1974.

Mr. WHEELER. A total income of \$4,266,000 for restricted funds, including \$1,970,000 from gifts, \$1,750,000 from investment income and \$546,000 from other services, was realized in fiscal year 1974.

#### STATEMENT OF SMITHSONIAN ACTIVITIES

Mr. YATES. I have here a copy of "Increase and Diffusion, a Brief Introduction to the Smithsonian Institution." I was interested in that because it gives a very simple explanation for each of your activities. I think the Smithsonian is so great and diverse an institution that it is difficult to totally comprehend its activities. Perhaps you could place in the record at this point a summary of your activities.

[The information follows:]

### The Scope of the Smithsonian

The Smithsonian is both a leading research center and a vast museum complex. It attracts more than 21 million visitors yearly to its Washington facilities and also serves additional millions of museum-goers throughout the nation through its Traveling Exhibition Service. It has a catalogued inventory of more than 70 million objects and specimens, a number that is constantly being revised upward. About one percent of this inventory is on display and the rest is used for basic research.

Approximately 4,000 employees, including a staff of more than 350 professional scholars and scientists, work for the Institution.

The Smithsonian operates these major history and science museums:

- The combined National Museum of Natural History and National Museum of Man housed with certain other offices in the Natural History Building;

- The National Museum of History and Technology, and

- The National Air and Space Museum.

The Smithsonian art museums are:

- The Freer Gallery of Art on the Mall;

- The National Collection of Fine Arts and

- The National Portrait Gallery which share the old Patent Office Building in downtown Washington;

- The Renwick Gallery, a curatorial department of the NCFCA located across from the White House in Washington;

- The Hirshhorn Museum and Sculpture Garden, completed on the Mall in 1974;

- The Cooper-Hewitt Museum of Decorative Arts and Design in New York.

The National Gallery of Art, located on the Mall, is technically a bureau of the Smithsonian but is an autonomous organization operating under its own board of trustees.

In southeast Washington is the innovative Anacostia Neighborhood Museum which operates in cooperation with the local community.

In addition to museums, major Smithsonian components in the Washington area include:

- The National Zoological Park in the Rock Creek Valley area of northwest Washington.

- The Radiation Biology Laboratory in Rockville, Maryland, where the effects of solar radiation are studied.

- The Oceanographic Sorting Center which has quarters in the Washington Navy Yard.

- The Woodrow Wilson International Center for Scholars, a center for advanced study that operates under its own board of trustees.

- The John F. Kennedy Center for Performing Arts, a cultural center which operates autonomously under its own board.

In Maryland, the Smithsonian also administers the 365-acre Belmont Conference Center at Elkridge, between Washington and Baltimore, and the 2,500-acre Chesapeake Bay Center for Environmental Studies near Annapolis.

Away from Washington, Smithsonian facilities include the Smithsonian Astrophysical Observatory in Cambridge, Massachusetts, which operates major installations in other parts of the United States and field stations abroad. Centers in New York City, Boston, Detroit, and San Francisco support the work of the Washington-based Archives of American Art. An oceanographic sorting center at Salammbou, Tunisia, does work that parallels that of the sorting center in Washington. A tropical research institute is based on Barro Colorado Island in Panama. A facility at Fort Pierce, Florida provides a base for underwater oceanographic research.

The Smithsonian also conducts a wide range of programs in cooperation with other institutions, several dozen universities, and government agencies in the United States and on every continent. The Institution offers its scientific facilities and intellectual resources for research from elementary to post-graduate levels.



## ROLE OF SMITHSONIAN IN ENERGY CRISIS

Mr. YATES. I notice in your Department of Mineral Sciences that you say the Department has made major contributions in petroleum research in recent years, especially in its study of the rocks of the oceanic crust. It is stated that the sea floor is spreading causing continents on both sides of the Atlantic to drift apart.

The question which came to my mind is, what role is the Smithsonian taking in the so-called energy crisis? Have you been called upon to assist FEA, ERDA, or any of the other agencies concerned with that?

Mr. RIPLEY. As far as I know, we have not.

Mr. YATES. I know, too, that the Department of the Interior has recently formed a new organization called the Marine Mining Administration. It looks as if it would be a natural for the Smithsonian to be working with them on this. Do you not think so?

Mr. RIPLEY. Our concern has been with basaltic rocks, the earliest known rocks in the creation of the planet.

The mid-Atlantic study shows that these basaltic rocks are being brought out and deposited from the magna core of the Earth. By coming out and spreading themselves on the surface of the sea bottom, they indicate the sea is becoming wider and the continents are drifting further away. This has to do with the theory that all the continents were once joined together.

Mr. YATES. Who is in charge of the Department of Minerals?

Mr. KIER. Dr. William G. Melson.

Mr. YATES. Are you doing any studies on desalinization?

Mr. KIER. No; none at all.

Mr. YATES. Any questions before we turn to the justifications?

Mr. EVANS.

## INCREASED EXHIBITION OF ITEMS IN THE COLLECTIONS

Mr. EVANS. I would be interested in long-range plans for bringing more of your exhibits to the public view. What plans do you have?

Mr. RIPLEY. We have a new museum, the Air and Space Museum. We have plans for extending and renovating our existing museums. We have a proposal before the Congress for a museum support facility.

The question of the proportions perhaps is masked by the very thing I was referring to earlier: that is, the fact that many of these objects are not highly exhibitable. Sometimes we get letters saying, why are not the treasures of the Smithsonian lying in your basement, neglected and unvisited, made available to the citizens of Arkansas? Why do you not start a museum in Arkansas? Most of the really high quality and high style material we have is already on exhibit. So that 3 percent is not too artificial or too far away from, let us say, 10 percent or something of that sort, which would be perhaps the maximum amount—number of objects we could display effectively. Most of the material is rotated as well, it has to be cleaned and reconditioned. Much of the material in science depends on the gallery being finished and so on. Much of that material goes on exhibit and comes off again. So I would

say in those instances, we are exhibiting to the maximum the things we can exhibit.

MR. EVANS. Would it be correct to say that 10 percent of all your items is representative of 90 or 100 percent of the displayable items which you have?

MR. RIPLEY. It would be nearer than to say of 75 percent of the items only 3 percent are on exhibit. We cannot possibly put all our entomology items on display. Those are, however, really basic for research of the Department of Agriculture, with which we are collaborating in various research projects. They serve as data banks for environmental studies, if you know that the so and so insect is in such and such an area at such and such a date, then you could deduce why it is not there now.

MR. EVANS. Would it be correct to assume from your answer, you do not have enough displayable material for the museums throughout the country?

MR. RIPLEY. We do not have the items to exhibit at regional museums throughout the country. We would have to organize elaborate stratagems to furnish materials for regional museums.

MR. EVANS. So these 95 percent which you have are not displayable?

MR. RIPLEY. They often are items off the floor being refurbished, things of that sort, they all fit into categories which readily explain why we do not display them.

#### DISPOSAL PROGRAM

MR. DUNCAN. Do you have a disposal program?

MR. RIPLEY. Yes. Where there is a specialist working on a certain class of insects we would perhaps deposit with that specialist for  $x$  years on an exchange basis, temporary or permanent loan, some materials provided we have some little string out so we know where everything is. We also adjudicate whether or not certain specimens are worth keeping then we may dispose of them.

MR. DUNCAN. Do you haul them away to Goodwill or what?

MR. KIER. We swap. Some things which have not been in alcohol and are not well preserved, we actually throw away.

MR. DUNCAN. And artifacts too, which are so badly deteriorated?

MR. RIPLEY. That depends. This is where the attic syndrome comes in. You just do not want to get rid of whatever it is for you might find out later it might be useful. As Dr. Kier points out, obviously, certain materials at certain times deteriorate. Then, our consciences will let us feel we can dispose of it.

#### PROGRAMS FOR EXTENDING DISPLAY OF COLLECTIONS

MR. EVANS. We are talking about displaying as much as you can of those items which are displayable. Can you tell us as much as possible about this train and whether this is a means by which items can be taken to people?

MR. RIPLEY. I do not think the train has anything to do with us. It is under the Bicentennial Administration.

The Virginia Museum of Art has some trailer vehicles which are effective. At Yale, we developed a trailer for science exhibits which was circulated around the State. But our great thrust at the Smithsonian has been with our traveling exhibition service which was started over 20 years ago. Its purpose is to produce either with our own materials or borrowed materials an exhibition which can go to a small museum, a high school or cultural center. We have at any moment some 200 or so exhibits in preparation or circulation which are viewed by another 4 to 5 million people besides the people who actually come here to the Mall. That is a tremendous impact.

MR. EVANS. We were talking earlier as to the impact of the millions of people coming here during the Bicentennial year. It struck me that it might be worthwhile to think about a Smithsonian train which could make tours over the country.

MR. RIPLEY. We have tried, as noted on page 41, to make the broadest possible use of Smithsonian collections. We have a number of do-it-yourself exhibits, portfolios that go to communities which want them. Scholastic Magazine has helped us put these together. I have had, for example, calls from people in Georgia and they have said, "We want to have an exhibit, we do not know what to do."

We will send them one of these exhibit portfolios so they can make their own Bicentennial exhibit which is much more challenging and exciting to them.

MR. EVANS. In Lamar, Colo., it is one thing to put together things meaningful to that part of the country. In another part of the country it might be the gun that killed Abraham Lincoln, or Washington's tent.

I get from your answer, you are not very hot on the idea of a train taking exhibits throughout the country.

MR. RIPLEY. We have tried to do it but we would rather keep it here. The tent, for instance, we would rather keep here because of its fragility. Many museums are very skeptical as to lending their items because of deterioration, which is a hideous problem. We do not have enough talent to insure that we would be able to keep the things in the state our curators would like to keep them.

#### CONSERVATION NEEDS

MR. EVANS. What type of talent would you like to have over and above what you have asked for?

MR. RIPLEY. We have been largely pioneers in certain areas of conservation. We have a minimum of space; we are trying to make more space and the bill before our authorizing committees calls for a very major conservation center.

MR. EVANS. Could you in fiscal 1976, use more conservation skills?

MR. RIPLEY. Yes. The main problem there is that we have to train individuals ourselves because the conservation business is still in an apprentice stage. There are probably less than 200 able conservators in the country. It is only to the extent they are willing to come to a seminar or working session that we can get even a fragment of those people together.

Mr. EVANS. Would you have liked to have asked for more than you have in this budget?

Mr. RIPLEY. Yes.

Mr. EVANS. How many more?

Mr. PERROT. The problem goes beyond the question of dollars. It involves finding trained personnel. We would estimate we would need at least twice the number of people we have and if we had two and a half times our present budget we could start making a serious dent in the backlog. This year we are seeking four trained conservators. We are not sure we will be able to obtain them. This is a major problem.

Mr. EVANS. Do you have an apprenticeship program?

Mr. PERROT. We have a program of internships. Through the National Museum Act, we are funding the National Conservation Advisory Council, which is attempting to define the conservation needs of the country in personnel, research, facilities, and resources. At the present time, virtually every conservation laboratory is in need of additional personnel. As the Secretary said, there are probably no more than 200 trained conservators in the country. The Nation's current conservation staff is not even replacing itself, let alone meeting the demands of the backlog. About 2 years ago Dr. Robert Organ, Chief of our Conservation Analytical Laboratory, estimated we were 14,000 man-years behind. Maybe the figure is off, but it is still a staggering estimate.

Mr. MCKAY. How many training facilities are there?

Mr. PERROT. There are five: at Oberlin, New York University, Winterthur, the Fogg Art Museum, and Cooperstown. A few museums are training on an apprenticeship basis.

#### MUSEUM OF MAN

Mr. EVANS. Getting back to the study of man. What are your plans for a museum of man?

Mr. RIPLEY. We have talked about this and had debates and seminars and brought in outside advisers to discuss it. We have not moved it forward as an integral entity.

We originally began thinking about it as a kind of synthesis of all the things that were exhibited in other parts of the Smithsonian.

Our present thinking is that probably a Museum of Man per se in Washington is not really necessary. That is, you can study man in a natural history sense in the Natural History Building. You can study him in a cultural sense and an artistic sense in the History and Technology Building and the Fine Arts and Portrait Galleries, or in the sense of Oriental history and culture, in the Freer. What we would like to do, if we could possibly get authorization to use this additional land which is available next to the Air and Space Museum, is to think of it in some other terms. My own premise is that we would like to think of it in terms of public exhibitions and education of life in the 21st Century because that century is coming upon us very rapidly. We are going to have enormous demands.

Mr. EVANS. Are you thinking of another building on the Mall?

Mr. RIPLEY. No. I am thinking of a series of planted areas, small pavilions, small demonstration areas, on life support systems.



Mr. EVANS. The reason I asked is because sometime or another somebody had the idea of building another museum on the Mall for this purpose. It struck me that the Mall is getting choked to death with buildings.

Mr. RIPLEY. Yes. Except for periods like wars, when it is covered with temporary buildings, the Mall really should have more park-like space. I agree. I think the day has perhaps gone by, except for Government office buildings of very large marble construction. Perhaps we should be thinking in terms of public education of a more flexible, more fluid kind of construction. That is why, as I say, my own prejudice would be towards a very light demonstration area where we could grow, for example, some of the protein substitutes, the miracle grains, the things that obviously are going to become part of our children's everyday acquaintance.

#### ANACOSTIA NEIGHBORHOOD MUSEUM

Mr. EVANS. Again on the question of buildings, you have the Anacostia Neighborhood Museum. Is that on the same relationship with the Smithsonian, parent to child, as the others?

Mr. RIPLEY. It is part of the Smithsonian, if that is what you mean. It was started in conjunction with a local group in Anacostia who felt the need of some kind of evocation of the history and cultural importance of the area.

Mr. EVANS. Is that building owned by the Smithsonian?

Mr. RIPLEY. The building is rented by the Smithsonian. It's an abandoned movie theater which we took over. Now we have developed, with our own Federal funds augmented by private funds and grants from foundations, a design and training laboratory as an adjunct of it.

Mr. EVANS. Is the responsibility of upkeep and repair on the Smithsonian or someone else?

Mr. RIPLEY. The responsibility, as I understand it, is ours. We have perhaps not budgeted sufficient maintenance and repair. That is something that is a problem in every one of our buildings. Superficially these large buildings look very beautiful, but are constantly in need of paint, refurbishment, repair, and all the rest of the maintenance required by such heavy public use. In a tiny building it's the same. There is great public use of that building.

#### ARTICLE ON CONDITIONS AT SILVER HILL FACILITIES'

Mr. EVANS. Mr. Chairman, I have one more question that probably is something that I would want to ask other witnesses that come before us. I have in my hands a copy of a publication entitled, "Capital Comment," August 1973. The article is entitled, "Flying to the Moon." It's written by Jim Seymour, assistant editor of the Washingtonian magazine. It's extremely critical of the National Air and Space Museum. Has this article come to your attention? Are you familiar with it?

Mr. RIPLEY. I am sure I remember it in that summer. That was, I think, an extension of a number of criticisms that were raised in Congress of the condition of the collections, especially the ones at our facility in Suitland, Md. It was claimed that there was a great deal of

concern and sort of antagonism among the staff. We could not demonstrate that the staff problems existed. We could demonstrate that our conservation program on these old planes was lagging and we have made such steps as we can with funds from the Congress to try and get these ready so that we will have approximately 50 of these machines ready for the opening of the Air and Space Museum.

Mr. EVANS. If there is no objection, Mr. Chairman, I would like to have a copy of this article, coupled with the responses to the charges, in the record so that you can have a fair chance to react to the complaints that are in here.

Mr. RIPLEY. I think they have all been satisfactorily taken care of. I only wish Mr. Collins were here at the moment to substantiate that for the record.

#### COMPUTERIZED RECORDS OF COLLECTIONS

Mr. YATES. Dr. Long?

Mr. LONG. Mr. Ripley, I went through your museum sometime in the last month. Even with only three percent of your collection on display, it is mind boggling. There is so much there that I think it sort of tires you out from your thought of all of this and your incapacity to absorb it and appreciate it.

Mr. RIPLEY. Yes.

Mr. LONG. I don't know what you would do if you put the whole 70 million items on display. Your greatest limitation is the human mind and the capacity of the viewer, it would seem to me. You have computerized records of the items that are not on display or in fact the things that are on display; do you?

Mr. RIPLEY. We are constantly working on this.

Mr. LONG. So that research scholars can easily locate what they need?

Mr. RIPLEY. I have been discussing this this afternoon, unfortunately, before you came in. We have a very active automatic data processing program, which we started with the support of this committee back in 1966. We are gradually getting there, shall I say, especially in the natural history area and in some of the areas that concern painting collections. But it's an enormous phased program that requires a considerable amount of expenditure.

#### USE OF COLLECTIONS BY SCHOLARS

Mr. LONG. Do you get very many serious scholars who are making use of the museum?

Mr. RIPLEY. We do. We get thousands of inquiries and hundreds of followups in the form of visits by scholars.

Mr. LONG. Who come there to do systematic work on a Ph. D. or working on a research project?

Mr. RIPLEY. We can give you figures on the number of Ph. D.'s the number of postgraduates, the number of undergradates and the number of high school students we have had every year for the past 10 years.

Mr. LONG. I wasn't thinking so much of the degrees the people carried with it, but the system for study of what you have.

Mr. RIPLEY. We have set up a program of secondary and higher education which processes applications and we award fellowships in this connection. I believe myself, as a teacher, that there are many, many aspects of museum collections which can be greatly rewarding to either a seminar class in college or to a Ph. D. project. Whereas use of the collections used to be on a very informal ad hoc basis in the past. We have tried to encourage increased usage with our research opportunities catalog which we publish every year and send to all the universities. It describes by curator and by discipline the areas that people are working in within the Smithsonian's Museums and the possibilities that we can recommend to them of trying to get financial assistance to come. We teach seminars in conjunction with places like Johns Hopkins or the University of Maryland, in which one of our curators might be an adjunct professor. He may do the whole thing from either being on the tutorial or the Ph. D. thesis committee of a student or he may go for a term alone, as it were, and actually give a course or he may bring the class here.

WOODROW WILSON INTERNATIONAL CENTER FOR SCHOLARS

Mr. LONG. Do you have Woodrow Wilson scholarships as part of your program?

Mr. RIPLEY. Yes.

Mr. LONG. I noticed you have men like George Kennan and other scholars of great world distinction. But they are, if I am not mistaken, working in programs which don't necessarily make use of your resources. Isn't that so?

Mr. RIPLEY. To the extent that they are not particularly object-oriented, they may not go across into a collection and work with things. Of course, the purpose of the Woodrow Wilson International Center for Scholars was not specifically to enhance the collection content of the museum. It was rather to provide a place where scholars could come and utilize the resources of Washington, such as the Library of Congress, which are multifarious. They are not always fully understood abroad.

Mr. LONG. Not even by the people who work there, I might point out.

Mr. RIPLEY. Or the Archives and other great institutions right in Washington. One of the reasons for Kennan's leaving the Foreign Service Institute and coming to work with us at the Woodrow Wilson Center, which he is doing for a year tentatively and we hope longer, is because the Library of Congress still has the funding which allows it to purchase and secure all the periodicals in the Slavic area and in the area of Russian studies. Whereas the average university program, like Columbia, has fallen way down.

Mr. LONG. But in doing that, you have really gone beyond the purview of the Smithsonian as such and extended into the intellectual resources of the Washington community.

I am wondering, with such an enormous amount of resources of your own, most of which have probably not been nearly exploited, why you feel it's necessary for your particular institution to set up a program that would exploit the resources of the entire Washington community instead of leaving that to some other institution.

Mr. RIPLEY. We do it in a cooperative way. The Woodrow Wilson Center has its own board of trustees and is in effect an affiliate of ours. So that we are giving it, as it were, the benefit of our umbrella. We are doing it with full cognizance of the Woodrow Wilson Center Board of Trustees, which includes the Librarian of Congress, the Archivist of the United States, and the Secretary of State and others who are genuinely supportive. They feel that for all these years Washington has had a group of universities, a group of laboratories and great archival centers but it has never really had a way of bringing together scholars to utilize them.

Mr. LONG. I understand the need for this. I am wondering why a particular institution like the Smithsonian has taken on a program of cultivating other gardens when it can't possibly cultivate its own completely.

Mr. RIPLEY. Whether or not we can cultivate our own, we are doing our best, of course. May I point out, Mr. Long, that in the 1850's my predecessor called the Smithsonian a College of Discoveries. He said he would prefer that we not give degrees because he felt that we were concerned with the original study. He described the professor in the college as someone who was merely reading and reciting materials out of books which were revealed to him by other people who were doing research.

We have had this tradition of working both with revealed truths and also with original and basic research. We feel that the curatorial staff, whatever they are called in the Smithsonian, are the college of discoverers and able to work in intellectual discipline.

#### RATE OF GROWTH OF COLLECTIONS

Mr. LONG. Undoubtedly somebody has asked this question and you have answered it before I came in. Have you studied your rate of growth over the years, the exponential rate of growth?

I won't worry too much about the earlier years, but I am wondering what it has been in the last couple of decades because that is probably during the period when you have made the bulk of your accumulation.

Mr. RIPLEY. Actually the great leap forward was the building that was opened in 1964, the Museum of History and Technology. That building had been in the planning stage since just before World War II.

Mr. LONG. I am not talking about your building program. I am talking about the items accumulated.

Mr. RIPLEY. So often the buildings expose the items. The buildings are related to the accumulation of items.

Mr. LONG. Can you give me some idea of what your rate of growth is in items by decade?

Mr. BROOKS. In numbers of items? I would say our average growth in terms of numbers of items in the natural history collections, over the past 5 years has been about at the rate of 1.7 percent per year compounded.

Mr. LONG. 1.7 compounded?

Mr. BROOKS. Yes.



Mr. LONG. What was it the decade before that?

Mr. BROOKS. I will have to furnish that for the record.

[The information follows:]

#### RATE OF GROWTH OF THE NATIONAL COLLECTIONS

Number of objects and specimens in the collections of the National Museums, Smithsonian Institution (includes natural history and other collections):

##### *Decade 1953-63*

1953 -----	34, 764, 000
1963 -----	57, 200, 000
Increase -----	22, 436, 000

NOTE.—Increase percent: 64.3 percent or 5.1 percent per year compounded.

##### *Decade 1963-73*

1963 -----	57, 200, 000
1973 -----	70, 700, 000
Increase -----	13, 500, 000

NOTE.—Increase percent: 23.6 percent or 2.1 percent per year compounded.

Mr. LONG. I was wondering whether it's increasing or decreasing.

Mr. BROOKS. It has been decreasing slightly in the more recent years. It is not, in other words, continuing at a rate of 1.7 percent. It's down slightly.

The estimate that a group of Directors of Systematic Collections put forward as being one which would be the general experience for a systematic collection in the natural history area was somewhere between 2 and 3 percent. We are below that because we have a very large collection.

Mr. LONG. Do you happen to know what the Library of Congress' exponential rate of growth is?

Mr. BROOKS. No, sir.

#### ACCOMMODATION OF EXPANDING COLLECTIONS

Mr. LONG. For a long time it has been well recognized, I am sure you know, that libraries, all of them, are expanding at such a rapid exponential rate there is a great problem as to where to put all their materials. The libraries have been able to solve the problem by putting the materials on microfilm, which you are not going to be able to do. At least most of your collections you can't put on microfilm because they are solid three-dimensional items. Isn't that so?

Mr. RIPLEY. Yes. But in a sense we can expand on our collection by the kind of data processing in which we can code information on our collections on a compatible basis with related collections in neighboring institutions in somewhat the same way that the libraries have been trying to build up teleprocessing communications networks so that cataloguing information can be interchangeable between libraries. Then they in effect are talking about everybody's collection as one collection. We do some of that and we hope, and ambitiously so, that this Association of Directors of Systematic Collections which Mr. Brooks is talking about will be able to expand the relevance and the accessibility of the material by these stratagems.

## CONSTRUCTION OF FACILITIES

Mr. LONG. I am sure you have thought of this. What are your plans for future construction? How many buildings have you built now in the last decade?

Mr. RIPLEY. In the last decade the Museum of History and Technology has been completed, the Hirshhorn Museum has been completed, and the Air and Space Museum is under construction and will be completed next year. We have built several small facilities in Silver Hill, Md., and we have before the authorization committees bills to develop a museum support facility there which will have storage, conservation, reference, computer facilities, and some space for visitations.

## DECLINE IN GROWTH RATE OF COLLECTIONS

Mr. LONG. All of this can happen in one decade. I am trying to look down the road two or three decades or perhaps to the end of this century. What is the plan? You can't go on accumulating at the exponential growth rate at anything like you have been doing. We all know that compound growth rates put you through the ceiling.

Mr. RIPLEY. We are convinced this is going to fall off, because there will not be to a large extent as many available worthwhile objects to receive.

Mr. LONG. Why is that so? There are breathtaking new discoveries coming in all the time. I can remember in 1930 a scholar, for whom I had enormous respect at the Institute of Advanced Studies where I was at the time a member, was saying, "We have reached the end of the growth of significant new discoveries," and he really believed it. I think, since that time, there has been a whole explosion of fundamental discoveries and their applications.

Unless I misread it, I would expect new explosions. I don't believe that you run out on these things.

Mr. RIPLEY. No.

Mr. LONG. I wonder why that wouldn't present a challenge for your Smithsonian Institution.

Mr. RIPLEY. In certain areas discoveries, of course, are largely theoretical or philosophical or of another nature as distinguished from certain objects. In Natural History, for example, there has been a noticeable decline in the need to collect vertebrate animals or certain kinds of plants, simply because we now have a fairly good cross section there.

Mr. LONG. I am convinced once you have collected your vertebrate animals you have done your job. But these new things, like the atomic discoveries and so on, the first atomic plant and the type of thing that goes with that, I don't see any end to that.

Mr. RIPLEY. That largely is information, really, as distinct from objects. Again on the question of very valuable art objects, there are less and less of them coming on the market. There has been a great falling off in the acquisitions, for example, both of the Freer and the National Gallery, where I am involved, simply because there are not the objects to buy.

## STANDARDS OF COLLECTION ACQUISITION

Mr. LONG. What are your standards on purchase of various art objects and other types of objects, archeological items, and so on, that might possibly have been stolen? I was reading the other day some of the tremendous theft problems in countries like Italy, and so on, which have an indescribable cultural wealth, but a very, very serious lack of security. This stuff gets stolen at the rate of thousands and thousands every year. We only hear about an occasional great masterpiece that is stolen and held for ransom, but the thefts are just progressing at a heartbreaking rate. Part of the reason is that American museums and other collectors have been buying this stuff up and making it very profitable for the thieves to do it. What are your standards on this?

Mr. RIPLEY. The Regents have published and approved a very vigorous statement on acquisition. I would be glad, if you are interested, to furnish that for the record.

[The information follows:]

SMITHSONIAN INSTITUTION  
POLICY ON MUSEUM ACQUISITIONS

The documentary value of a museum collection is a principal criterion of its excellence, and museum accession records should therefore be of the highest order of accuracy and completeness. To this end, each object acquired should have a provenance as completely documented as possible. Objects with incomplete provenance should be acquired only when they are of exceptional rarity, and when it is reasonably certain that their origin, context, and history can be established through scholarly research. An inadequate provenance may give rise to doubt as to the licit quality of an object. Each provenance should be a matter of public record.

The Institution supports the free exchange of information and artifacts which contributes to the advancement of knowledge and promotes international comprehension and goodwill. The legitimate international transfer of natural and cultural material should be facilitated by all available means, including loans and sales, and the Institution encourages such transfers in the same manner as it now fosters international exchanges between museums. At the same time, the Institution undertakes to cooperate fully with local, state, Federal and foreign authorities and institutions in their endeavors to protect their art, antiquities, national treasures and ethnographic material from destructive exploitation. An illicit international market has contributed to the despoliation of museums and monuments, and the irreparable loss to science and humanity of archaeological remains. The Institution repudiates the illicit traffic in art and objects. Objects and specimens which have been stolen, unscientifically gathered or excavated or unethically acquired should not be made part of Smithsonian museum collections.

In consideration of this policy, the Regents of the Smithsonian Institution adopt the rules set forth below for the acquisition of art, antiquities, and other specimens. The Director of each Bureau shall be responsible for the application of the rules. Donors, vendors and correspondents will be notified of this policy.

1. Each Director of a museum or collection, before authorizing the acquisition of an object, whether by purchase, transfer, gift or bequest, has the responsibility, in good faith, to ascertain, from the circumstances surrounding the transaction, or his knowledge of the object's provenance, that the object in question was not stolen or wrongfully converted, and is not illegally present in the United States.
2. Each Director also has the responsibility to ascertain that any proposed new acquisition was not unethically acquired from its source, unscientifically excavated or illegally removed from its country of origin after the date of adoption of this policy.



3. (a) In cases of doubt, the Director should consult widely within the Institution, particularly with those scientists or curators whose interests would be affected by acquisition of the object, and with the General Counsel. Where helpful, a special panel should be created to help pass on the questions raised.

(b) In the case of a substantial proposed acquisition of foreign provenance whose acceptability is in question, the Institution will contact the competent authorities or corresponding national museums of the probable countries of origin, or the countries whose laws may be affected by the transaction, in order to determine whether the latter can advise the Institution as to the status of the object. If any such object can be demonstrated to form part of the national patrimony of another country, the Institution will take reasonable steps within its power to aid that country in its efforts to effect the object's return.

4. In case the Institution should hereafter come into possession of an object which can be shown to have been acquired, excavated or exported in violation of Rule 2 above, the Institution should proceed as appropriate in each case, to seek to return the object to the donor or vendor or to contact the competent authorities or corresponding national museum in the probable country of origin, to determine what steps might be taken best to preserve the interests of all parties.

5. The policy set forth here should be applied in determining whether to accept loans for display or other purposes.

6. The provenance of acquired objects shall be a matter of public record.

A resolution was offered and it was

VOTED that the Board of Regents approves the statement on policy of the Institution on museum acquisitions as specified above.

## ORIGIN OF COLLECTIONS

Mr. RIPLEY. This involves the very question of the provenance and authentication of objects. In the past this has been very sloppy. We have published on it ourselves, both in our reports and in the Smithsonian magazine. I believe we have taken a pretty leading cutting ax position in this. I personally disapprove enormously of the action of some people I know who have in the past in a very loose way collected and bought objects which did not have the necessary provenance and then have announced, when the government of the country involved has said they have identified this object, that they had no intention of returning it.

Mr. LONG. They played dumb.

Mr. RIPLEY. Or arrogant. We have some very healthy examples today in this country. For example, recently a museum in Philadelphia sent back a mosaic to Tunisia. One had been identified that, indeed, had gotten into dealers' hands quite illicitly. More of that should be done. I am sure that in years to come more will be done.

If there is any substantive case of this sort, there is a mechanism in our procedure for putting it to a committee to decide whether something which has been identified in one of our galleries is of such a nature and can be so defined and has a certain historical or religious value. We have run into this in connection with minority people in this country, where certain objects of a religious significance to the cultural history of those people are involved. Then these objects should be de-requisitioned, as it were.

This is a relatively new concern because classically if museums had purchase funds or acquired or were given collections, well, nobody really cared. It was a most demeaning kind of attitude assumed by the administrators or the trustees that they were the only people who had any real sense of cultural values and that this justified looting.

You remember the famous Napoleonic case when Napoleon's armies looted from all over Middle Europe and the Mediterranean, and then the curator of the Louvre was so horrified that after the Treaty of 1818 in Vienna, the allied powers sent their wagons to take all the objects back, and he kept rushing out and saying, "No; you can't take it away," and trying to hang it back on the wall again. He finally, embittered, said, "Very well, take it away, but you people have no appreciation of the cultural objects of art the way we French do." He was very distraught.

## PROCEDURES FOR DEALING WITH THEFT OF ART OBJECTS

Mr. LONG. Of course, we have police who have gotten well organized in dealing with narcotics—not as well as we wish, but at least there are police organizations for dealing with narcotics and kidnaping and all that. Is there a police organization in this country under the aegis of the FBI or what have you, which has taken any interest in the theft of art objects and the fencing of them through various museums?

Mr. RIPLEY. Through Interpol, which of course is international, there have been set up relations and contacts I believe with the FBI as well as with certain police organizations in some of the States. There is

now an attempt to keep a running commentary on this. Some of this is published in the International Council of Museums' journals and bulletins and in the UNESCO publication called "Museums." They publish a photograph and picture. As Mr. Perrot reminds me, we have just published—by we I mean the International Council of Museums—this handbook [indicating], "The Protection of Cultural Property." Of course, many important countries, countries in the developing world, are totally unable to cope with the problem because of lack of maintenance and lack of conservation efforts, lack of cataloging and susceptibility to bribery, and so on.

#### THEFT IN THE SMITHSONIAN

Mr. LONG. Is your museum a victim very much of theft?

Mr. RIPLEY. We discussed a little bit earlier the question of vandalism, which is always present and is largely, I think, inadvertent, although childish vandalism sometimes is a way of expression.

Mr. LONG. Does your budget provide for strong security?

Mr. RIPLEY. We have a strong part of our budget for protective services and we are trying with your help to build that up. We have had thefts, internal thefts—that is, thefts behind the exhibit areas—and we have a continuing problem of vandalism. But it ebbs and flows.

Mr. LONG. That is all I have, Mr. Chairman.

#### SALARIES AND EXPENSES

Mr. YATES. I would like to refer to Mr. Ripley's address "On Museum Objects, Truth and Education," from Mr. Ripley's associate, Mr. Dillion, in which he quoted Mr. Ripley in his foreword as saying that the Mall in Washington should be a place for life and laughter in addition to serious study and work.

We will insert justification pages i to vi and A-1 to A-109 at this point in the record.

[The pages follow:]

SMITHSONIAN INSTITUTIONFISCAL YEAR 1976 ESTIMATES OF APPROPRIATIONSGENERAL STATEMENTOrganization and Performance

Founded in 1846, the Smithsonian Institution is an independent establishment devoted to public education, basic research, and national service in the arts, sciences, and history. Centered on the Mall in Washington, D. C., it also operates major facilities and activities elsewhere in Washington, across the country, and overseas.

One of the world's leading research centers, the Smithsonian is also the world's largest museum complex, attracting, with the Zoo, approximately sixteen million visitors yearly as well as additional millions who view traveling exhibits. As custodian of the National Collections, it possesses more than seventy million objects and specimens, only a few percent of which are on public display while the rest are available for scholarly research by Smithsonian staff and many hundreds of visiting students, scientists, and historians each year.

The Smithsonian complex consists of ten major exhibition buildings in the fields of science, history, technology, and art; a zoological park and an animal conservation and research center near Front Royal, Virginia; a preservation and storage facility at Silver Hill, Md.; a conference center at Elkridge, Md.; two natural preserves, in Panama and on the Chesapeake Bay; the innovative Anacostia Neighborhood Museum which operates in a low-income area of the city in cooperation with the local community; an oceanographic sorting center in Tunisia, whose work parallels the programs of the Institution's oceanographic center in Washington; an observatory at Mt. Hopkins, Ariz.; and supporting administrative, laboratory, and storage areas.

A wide range of programs is conducted in cooperation with other institutions, universities, and government agencies here in the United States and on every continent. Many of the research projects in nations abroad are funded through the use of excess foreign currencies. More than 1,000 research publications, exhibit catalogues, education pamphlets, information leaflets, etc. were prepared in the past year. Other communication activities include radio, television, motion picture programs, the successful magazine, Smithsonian, which now has almost 700,000 subscribers, the Archives of American Art Journal, and the recently acquired Art Quarterly.

In FY 1976 major efforts are being directed toward completion of collections restoration and exhibits preparation required for the Institution's participation in the Washington, D. C. Bicentennial effort as well as for its contribution to commemorative activity across the Nation. A major element of the Institution's Bicentennial program is the opening of the National Air and Space Museum on July 4, 1976. In addition, high priority is being given to continuing phased implementation of the Master Plan for the improvement of the National Zoological Park's animal and visitor facilities.

Management Planning and Organizational Effectiveness

The second Belmont Conference was held in February 1974 to define goals and priorities for the coming year. Priorities established by the Conference include exhibits production (including traveling exhibits); collections acquisition and collections management, including conservation and restoration of objects; and the growth needs of the Zoo. Scientific research will also continue as a high priority of the Institution with particular importance being directed towards fellowships, distinguished curators, and project research. Other efforts have been made to strengthen and improve the information flow and decision-making processes among administrators and program and support managers. Significant among these efforts has been the creation of the Council of Directors and Administrative Officers Conference.



During FY 1974 and FY 1975, several important changes to the internal organization alignment of the Institution have been accomplished. These actions are designed to use current resources more effectively by aligning related or complementary functions or by strengthening the ability of certain major museums and galleries to administer directly key aspects of their programs. Manpower and dollar resources which are involved continue to be used for the purposes for which they were appropriated. Among the major changes are the following:

--Transfer of exhibits design, production, and associated personnel and related resources from the Office of Exhibits Programs to the museums and galleries in order to unify and strengthen the exhibit presentation function with the equally important collections management and research functions of these museums and galleries. This transfer was begun in FY 1974 and completed in FY 1975. A small Office of Exhibits Central has been retained to serve the needs of units with no exhibits capability and to provide certain specialized services for all the museums.

--Allocation among the units of printing funds formally centralized in the Smithsonian Institution Press. This will result in (1) each unit establishing the priorities for its manuscripts to be printed and (2) printing costs being shown as a function of program activity. Printing funds for certain Institution-wide publications were left with the Press.

--Transfer of custodial and minor-maintenance personnel and associated resources from the Office of Plant Services to museums, galleries, and laboratories. These transfers will give to museum, gallery, and laboratory directors responsibility for the cleanliness and appearance of their buildings and give these essential employees a closer feeling of involvement with the public service programs they are helping to support.

--Transfer of shipping funds formerly centralized in the Office of the Registrar to the units. Non-registration functions are being removed from the Office of the Registrar. This move recognizes the fact that shipping is an integral function of each museum's borrowing and lending programs and will result in the costs being shown as a function of program activity.

--Transfer of personnel and associated resources from the Office of Elementary and Secondary Education to the museums and galleries. These transfers, begun in FY 1974, and completed in FY 1975, reflect that the development of public education programs goes hand-in-hand with the planning and presentation of exhibits. This transfer will also result in the costs being shown as a function of the program activity. A small central education office will continue to coordinate the education programs in the bureaus. This central office will also serve as a liaison with local school systems and will develop special outreach projects.

--Transfer of funding for postage indicia from the Office of the Treasurer to the Office of Plant Services in order to combine all mail services in one office.

--Transfer of personnel and associated resources for the Oceanographic Sorting Centers from the Office of International and Environmental Programs to the National Museum of Natural History in order that all natural science, collection-based activities be administered by a single bureau.

--Transfer of positions and associated resources from the National Armed Forces Museum Advisory Board to the Museum of History and Technology to align the work of the Board with that of the recently established Eisenhower Institute, whose activities will center on the contributions that the Armed Forces of the U. S. have made to American society and culture.

Establishment of Position Ceiling

Over the past several years, inflation, in virtually all areas of expense, has gradually eroded the Institution's ability to fund positions for Congressionally approved programs. Additional positions have remained unfilled as program emphasis has changed or as a particular project has been completed. For the Office of Plant Services additional funds are requested in this budget to support positions which fall into the former category. In a further attempt to reflect more accurately the existing employment situation, the Institution has established the FY 1975 position total at 3,050.

For FY 1976 the Institution is requesting the following appropriations:

	1975 Appropriations	Requested 1975 Supplemental	Requested 1976 Increase	1976 Estimates
Salaries and Expenses	\$67,789,000	\$2,917,000	\$8,702,000	\$79,408,000
Science Information Exchange	1,755,000	50,000	70,000	1,875,000
Special Foreign Currency Program	2,000,000	-0-	-0-	2,000,000
Construction and Improvements, National Zoological Park	9,420,000	-0-	130,000	9,550,000
Restoration and Renovation of Buildings	1,490,000	-0-	- 23,000	1,467,000
Construction (Appropriation to liquidate contract authority)	7,000,000	-0-	- 4,000,000	3,000,000
Totals	\$89,454,000	\$2,967,000	\$4,879,000	\$97,300,000

Highlights of the budget requests are as follows:

A. Salaries and Expenses

<u>1974 Appropriation</u>	<u>1975 Estimate</u>	<u>1976 Estimate</u>
\$58,868,000	\$70,706,000	\$79,408,000

This appropriation provides for the regular operating programs in the museums, galleries, zoological park, research laboratories, and other program units; for special programs of an Institution-wide nature (such as the American Revolution Bicentennial program); and for program support activities. This funding is allocated by major groups as follows: (Organizational allocation appears on pages A-2 and A-3.)

	1975 <u>Base</u>	Requested <u>Increase</u>	1976 <u>Estimate</u>
Science	\$26,774,000	\$3,202,000	\$29,976,000
History and Art	11,484,000	824,000	12,308,000
Public Service	2,102,000	134,000	2,236,000
Museum Programs	5,329,000	423,000	5,752,000
Special Programs	5,186,000	599,000	5,785,000
Administrative and Support Activities	19,831,000	3,520,000	23,351,000
Totals	\$70,706,000	\$8,702,000	\$79,408,000

The FY 1976 budget request continues to give high priority to the effort begun last year to strengthen support staffs. This budget also addresses high priority program needs--an area for which, excluding Bicentennial commitments, no additional resources were requested for FY 1975. The effects of inflation and the importance of the program activities, both in developing a better understanding of contemporary problems (i.e. environmental and energy-related issues) as well as in fulfilling the Institution's responsibilities to basic research and public education, strongly recommend their selective strengthening.

Major purposes to be served by the requested funding increase include:

1. Program Increases (Other than Bicentennial Related): \$4,551,000

- Research - to support on-going and important new programs in the areas of tropical biology, high energy astrophysics, optical and infrared astronomy, regulatory and environmental biology, ecosystem and land-use research, and anthropology. (\$410,000)
- Collections Acquisitions - to maintain a minimum acquisition program to supplement continued and active efforts to acquire gifts to the National Collections. Purchase funds are essential to acquire particular objects to establish fully representative reference collections or to display in new exhibitions. (\$110,000)
- Collections Management - to provide additional assistance for the care of the collections which grow at a substantial rate and are utilized increasingly, and to develop and maintain programs of animal care and propagation for the living collections at the Zoo. (\$207,000)
- Exhibition - to permit refurbishment and redesign of exhibit halls as well as animal habitats at the Zoo, aimed at increasing their educational usefulness, and to expand production capability of small but innovative exhibit programs. (\$143,000)
- Education and Orientation - to provide improved tour, orientation, and other information services to museum visitors, and to relate more effectively performing arts presentations to the museums and their collections. (\$105,000)
- Conservation - to improve the capability for specialized treatment, and analytical services required to prevent deterioration and loss of the collections. (\$42,000)
- Libraries - to permit the acquisition and processing of library materials as well as the preservation and conservation of rare and valuable materials in order to serve increasing research and exhibit efforts. (\$238,000)
- Automatic Data Processing - to reduce backlogs in the application of computer technology in the scientific research, collections management, and administrative areas. (\$26,000)
- Photography - to improve production and management control of photographic services including the filing and retrieval of valuable negatives and transparencies. (\$19,000)
- Archives - to fund an oral history program designed to document the history of the Institution and to improve capabilities for processing and preparing a rapidly growing collection of documentary material on American art. (\$41,000)
- Protection - to provide adequate protection and security of buildings, exhibits, collections, and visitors. (\$775,000)

--Buildings and Facilities Management - to fund custodial, maintenance, and transportation requirements, meet increased postage costs, and improve the capability for facilities planning and costing of construction projects (\$2,273,000)

--General Administration - to provide assistance in accounting, personnel, auditing, property administration, and supportive clerical work. (\$162,000)

2. Program Increases (Bicentennial Related): \$1,641,000

--To meet the temporary need for increased maintenance, cleaning, protection, and visitor orientation services required by the larger visitor numbers and extended hours for buildings not previously open in the evenings. (\$400,000)

--To assist in the preparation and installation of exhibits for the new National Air and Space Museum. (\$1,241,000)

3. Uncontrollable Increases: \$2,510,000

--To fund the projected higher cost of current employees caused by legislated pay raises, within-grade step increases, extra work day, and Workmen's Compensation payments. (\$1,873,000)

--To assist in funding very large rate increases for steam and electricity. (\$617,000)

--To meet the increase in shipping rates for the international exchange of literary, scientific, and cultural publications. (\$20,000)

Included in the above program increases is an amount of \$166,000 for additional travel costs. Special attention is being drawn to this area because of its important relationship to the accomplishment of related program efforts. The purchasing power of travel funds in the base has continued to be eroded as a result of fare increases. Careful review is given to all travel requests and only that travel considered to be of the highest priority is approved. Purposes of travel include: 1) the accompaniment of rare objects loaned to the Institution by owners who would not lend otherwise, as well as the accompaniment of animals being temporarily relocated either for breeding purposes or due to Master Plan construction at the Zoo; 2) the management of traveling exhibitions; 3) the need to meet personally with prospective donors to review and/or encourage gifts to the National Collections; 4) regular on-site review and administration of bureaus located outside the Washington area; 5) participation in national and international conferences, lectures, and training sessions which enable participants to remain current on recent developments in their respective fields as well as to contribute to the diffusion of knowledge; 6) travel necessary to the conduct of certain research projects; and 7) review of contract performance of companies outside the Washington area (for example, the contracted exhibits production effort related to the opening of the National Air and Space Museum). One factor, in particular, has added to the rise in requested travel funds for FY 1976. That is the cost of participant travel associated with the Festival of American Folklife. It is anticipated that there will be as many as forty-five hundred participants.

It is requested that special consideration be given to increasing travel authority for the Institution to \$831,000.



B. Science Information Exchange (SIE)

<u>1974 Appropriation</u>	<u>1975 Appropriation</u>	<u>1976 Estimate</u>
\$1,695,000	\$1,805,000	\$1,875,000

The Science Information Exchange acquires, processes, stores, and provides information on research projects in progress as a service to the research community. A funding increase of \$70,000 will be used to develop and implement further the SIE machine-assisted indexing system, thereby improving input and processing time in subject areas of critical concern, and to expand efforts to encourage and provide for new state and local input into the Science Information Exchange system.

C. Special Foreign Currency Program

<u>1974 Appropriation</u>	<u>1975 Appropriation</u>	<u>1976 Estimate</u>
\$4,500,000	\$2,000,000	\$2,000,000

This appropriation will provide level funding to continue a program of grants to United States institutions for field research in those countries where "excess" local currencies are available. Research will be performed in the following general areas of Smithsonian Institution interest and competence: archeology and related disciplines, systematic and environmental biology, astrophysics and earth sciences, and museum programs. In addition, funds are included for the third of four annual payments, each of \$1,000,000 equivalent in "excess" Egyptian pounds, to UNESCO's international campaign to preserve archeological monuments in Nubia.

D. Facilities Planning, Renovation, Restoration, and Construction

<u>1974 Appropriation</u>	<u>1975 Appropriation</u>	<u>1976 Estimate</u>
\$21,860,000	\$17,910,000	\$14,017,000

--Construction and Improvements, National Zoological Park (\$9,550,000) -

Continued phased implementation of the approved Master Plan by completion of the service facility and the construction and rehabilitation of bear exhibits; continued planning for the beaver, otter, seal, sea lion, and wolf exhibits; and design and installation of exhibit, orientation, and education graphics and street furniture. In addition, a program of repairs, renovation, and preventive maintenance of Zoo facilities in Rock Creek and at Front Royal, Virginia will continue.

--Restoration and Renovation of Buildings (\$1,467,000) - Continue projects such as road improvements at the Mt. Hopkins, Arizona, Observatory, the installation of fire detection and suppression systems, renovation of the Arts and Industries Building and the south yard area, planning for a sixth floor library and research center addition to the History and Technology Building, and general repairs and improvements to buildings and facilities.

--Construction (\$3,000,000) - Appropriation to liquidate contract authority for the completion of the National Air and Space Museum.

Details on each of these operating and construction programs appear in the following sections of this budget.

SMITHSONIAN INSTITUTIONSALARIES AND EXPENSESSummary of Increase FY 1976

Appropriation, FY 1975	\$67,789,000
Proposed Pay Supplemental	2,527,000
Proposed Program Supplemental (Utility rate increase)	<u>390,000</u>
Base, FY 1975	\$70,706,000
FY 1976 Request	<u>79,408,000</u>
Requested Increase	\$ 8,702,000

Transition Period Estimate

Transition Period Request	\$22,010,000
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Page No.	Unit	1974 Actual		1975 Estimate		1976 Estimate		Analysis of Increase	
		Pos.	Amount	Pos.	Amount	Pos.	Amount	Uncontrol- lable	Program
	<b>Museum Programs</b>								
A-65	Ass't Secretary for Museum Programs	45	494	63	838	97	935	1	24
A-67	Office of the Registrar	17	231	16	195	7	202	-	10
A-68	Conservation-Analytical Laboratory	19	319	21	546	15	561	2	32
A-70	Smithsonian Institution Libraries	65	1,165	86	1,552	38	1,590	4	238
A-72	Office of Exhibits Central	51	960	50	939	33	972	50	35
A-73	Traveling Exhibition Service	5	72	6	90	2	92	-	4
A-75	Smithsonian Archives	7	157	10	169	6	175	10	6
A-76	National Museum Act	3	884	3	800	2	802	3	-37
	<b>Subtotal Museum Programs</b>	<b>212</b>	<b>4,282</b>	<b>255</b>	<b>5,129</b>	<b>200</b>	<b>5,329</b>	<b>7</b>	<b>156</b>
	<b>Special Programs</b>								
A-79	American Rev Bicentennial Program	2	1,745	2	3,827	20	3,847	-	400
A-82	Environmental Sciences Program	8	190	2	185	4	189	2	4
A-83	Major Exhibition Program	-	103	-	80	-	80	-	180
A-84	Academic and Educational Programs	10	642	11	614	6	620	11	626
A-86	Research Awards Program	-	450	-	450	-	450	-	-
	<b>Subtotal Special Programs</b>	<b>20</b>	<b>3,130</b>	<b>15</b>	<b>5,156</b>	<b>30</b>	<b>5,186</b>	<b>-</b>	<b>580</b>
	<b>Administrative &amp; Support Activities</b>								
A-87	Office of the Secretary	30	654	29	724	29	753	-	26
A-88	Office of the General Counsel	11	277	11	295	11	306	11	14
A-89	Office of the Treasurer	36	915	34	703	19	722	36	46
A-91	Office of Personnel Administration	33	535	33	615	23	638	33	658
A-92	Office of Audits	8	170	7	170	7	177	1	6
A-93	Office of Equal Opportunity	5	114	5	104	5	109	2	4
A-95	Printing and Photographic Services	37	779	39	792	24	816	40	858
A-96	Information Systems Division	18	381	23	442	19	461	25	502
A-98	Office of Supply Services	23	437	25	479	13	492	25	504
A-99	Management Analysis Office	11	190	10	207	8	215	10	222
A-100	Office of Protection Services	400	4,356	443	5,369	177	5,546	534	6,539
A-102	Facilities Planning & Eng Services	20	393	24	554	20	574	26	628
A-103	Office of Plant Services	335	7,300	280	8,250	772	9,022	320	11,092
	<b>Subtotal Admin &amp; Support Act</b>	<b>967</b>	<b>16,501</b>	<b>963</b>	<b>18,704</b>	<b>1,127</b>	<b>19,831</b>	<b>1,104</b>	<b>23,351</b>
	<b>Total</b>	<b>2,880</b>	<b>58,868</b>	<b>3,050</b>	<b>67,789</b>	<b>2,917</b>	<b>70,706</b>	<b>3,332</b>	<b>79,408</b>
								<b>282</b>	<b>6,192</b>



SMITHSONIAN INSTITUTION  
FY 1976 UNCONTROLLABLE INCREASES

The following additional funds are requested for costs that are beyond the control of the Smithsonian Institution. These increases result from law, from prevailing practices of wage setting, or from utility and shipping rate increases. A total of \$2,510,000 is required for the following increased costs.

Necessary Pay and Related Benefits.....	\$1,873,000
Utility Rate Increases.....	617,000
Shipping Rate Increases.....	20,000
	\$2,510,000

NECESSARY PAY AND RELATED BENEFITS - An increase of \$1,873,000 is required for personnel compensation and personnel benefits for the projected higher costs in FY 1976 of FY 1975 staff. These increases accrue to employees because of: legislated pay raises and within-grade step increases; an additional paid work day; and Workmen's Compensation payments. These costs are calculated on a position-by-position analysis taking into consideration approved new hires in the current year and savings from promotions, turnover, and filling of vacancies at lower grades where possible. Absorption of these costs from currently available funds seriously hurts approved program activity. First, for every \$12,000 that goes to these costs from funds already in salaries and benefits, one man-year of employment is lost. Second, if other object class funds must be applied to these costs, productive employees are left without the supplies, tools, and equipment they need to do their jobs well. Since inflation in the costs of these materials already is taking its toll, pay cost absorption would be crippling. These additional costs are divided among the following:

(1) Annualization of Legislated Pay Raises (\$827,000) - The requested essential FY 1975 pay supplemental appropriation amounts to \$2,527,000. Necessary pay of \$827,000 is required to annualize funding in FY 1976. This includes funds for the following legislated General Schedule and Wage pay raises:

--\$618,000 for the General Schedule pay raise effective on October 14, 1974 (E.O. 11811, issued pursuant to P.L. 91-656) to cover the period of costs from July 1, 1975, through October 13, 1975. Over 2,300 employees are affected by this raise which was 5.5 percent over the previous pay scale. The full-year cost of this raise in FY 1976 is calculated at \$2,054,000. Necessary pay of \$618,000 is requested to annualize funding in FY 1976 for the period July 1, 1975-October 13, 1975. (Estimated total cost \$2,054,000 minus FY 1975 supplemental of \$1,436,000 = \$618,000.)

--\$209,000 for several FY 1974-75 Washington, D. C. and other locale Wage pay raises. Prevailing practices call for the Wage pay scales in various geographical areas to be reviewed by a local Wage Fixing Authority to see how the wages paid by the U.S. Government compare to wages paid similar employees by the private sector in those geographic areas. In recent years, this comparison has been made at least yearly and several times more often. Some 623 Smithsonian Wage employees in Washington, D. C. received a 6 percent pay increase on October 27, 1974, granted under 5 U.S.C. 5341. Other Wage employees of the Institution, working in Maryland, Virginia, Arizona, New York, and the Panama Canal Zone, also received wage increases of various amounts at different times of the year. The proposed supplemental appropriation will meet the current year costs of these actions. The full-year cost of these raises in FY 1976 is estimated at \$1,300,000. Necessary pay funding of \$209,000 is sought to annualize funding in FY 1976 for the balances of the effective periods. (Estimated total cost \$1,300,000 minus FY 1975 supplemental of \$1,091,000 = \$209,000.)

The distribution of the requested FY 1975 pay supplemental appropriation by organization unit is shown on pages A-2 and A-3. Certain of these units also are requesting utility supplemental funds as explained on page A-6. Total Uncontrollable Increases are included on pages A-2 and A-3.

(2) Step Increases (\$801,000) - Necessary pay funding of \$801,000 is required in FY 1976 for General Schedule and Wage within-grade and periodic step increases. For GS employees, such increases are required by P.L. 88-426, the Government Employees Salary Reform Act of 1964. Wage employees are covered by law and prevailing practices. Such increases must be granted if employees are performing at acceptable levels of competence. The requested increase will fund the annualization of such increases granted in FY 1975 and part-year cost of new increases granted in FY 1976. Calculated on an individual position basis, in FY 1975 it is estimated that 1,776 employees will be granted periodic steps. In FY 1976 the Institution will have to annualize these costs (\$420,000) and fund the costs of 1,888 new periodic steps (\$381,000). Offsets have been made to the requested increase for turnover and promotions.

The General Schedule portion of this request amounts to \$608,000. There are over 2,300 General Schedule positions with 1,485 scheduled to receive a new within-grade in FY 1976. The Wage portion of this request is \$193,000. There are approximately 750 employees in Wage positions, of whom 403 will receive new within-grades in FY 1976.

(3) Extra Day (\$160,000) - The annual pay scale in effect in the Federal government is based on 260 paid days. FY 1976 will have 262 paid work days. Since funds are already in the base for one additional work day in FY 1975, the request is for funding for one more day.

(4) Workmen's Compensation (\$85,000) - Section 8147(b) of Title 5, United States Code, provides for payments to be made to employees for injuries and to their families in case of death. These payments are determined and made by the U.S. Department of Labor's Office of Workers' Compensation Programs. Each August, the Department of Labor bills agencies the cost incurred by their employees for the previous fiscal year. These bills are payable the next July. The Institution has placed emphasis on a safety program. One of the functions of the Office of Protection Services is to make and enforce safety regulations in the Institution. Even though various prevention activities have taken place, with the increase in employees the number of cases in FY 1974 increased to 78 as compared to 66 in FY 1973. The bill for FY 1974 (payable in FY 1976) is \$182,773. With the \$98,000 that is in the base for FY 1975, an additional \$85,000 is needed to finance this bill.

The distribution of the FY 1976 Necessary Pay components by organization units is shown on page A-8.

UTILITY RATE INCREASES - An FY 1975 supplemental appropriation of \$390,000 is requested to help cope with dramatic increases in the costs of steam for heating (supplied primarily by the General Services Administration) and electricity purchased from the Potomac Electric Power Company and similar companies in other locales of Smithsonian operations. These cost increases in FY 1975 are attributed almost entirely to substantial rate hikes, not increased usage. Energy conservation and mild winter weather in 1973-1974 and so far in 1974-1975 have helped to hold down costs. Even so, significant cost absorption will be required in FY 1975 despite the supplemental--if appropriated. This cost absorption will force the deferral to FY 1976 of essential supply replenishment, the replacement of worn-out equipment, and necessary plant maintenance. Since Smithsonian consumers of utilities may have to assist in funding their costs this year, the Institution's capability for pay cost funding is further limited.

The table on page A-9 shows the Smithsonian's Office of Plant Services expenses. This office funds utility services for buildings on and near the Mall. These figures are closely representative, however, of the similar funding problems being faced by those Institution bureaus outside of this geographical area, which budget for their own utility services. This table shows that while projected FY 1975 use of steam will increase only about 6 percent over FY 1973, costs will be up almost 87 percent. Similarly, electricity use is up about 13 percent over the same period, but costs are well over 100 percent more.

The \$390,000 will be distributed as follows:

Office of Plant Services	\$363,000
National Zoological Park	17,000
Other units	<u>10,000</u>
	\$390,000

These amounts are included in the FY 1975 supplemental column pages A-2 and A-3.

For FY 1976, an additional \$617,000 is requested to close the gap between current funding and the costs of current use and to help meet new rate increases. This amount by organization unit is shown on the "Other Uncontrollable" line in the FY 1976 justifications for those bureaus and offices affected. Other than certain new requirements separately justified, for the new National Air and Space Museum and National Zoological Park building spaces, the FY 1976 budget does not provide for increased use. Strict energy conservation measures will be continued.

SHIPPING RATE INCREASES - An amount of \$20,000 is requested to help meet shipping rate increases. The International Exchange Service is the official exchange bureau in the United States for international exchange of literary, scientific, and cultural publications. In addition, 14 Stat. 573, as amended, provides that the exchange of the United States Government publications shall be made through the Smithsonian. The major cost to this program, besides salaries, is shipping charges. Shipping rates have gone up drastically for ocean freight and shipping to the docks. Comparing the first six months of FY 1974 and 1975 shows that the cost per pound of such shipping has increased about 25 percent.

<u>July-December</u>	<u>Pounds Shipped</u>	<u>Cost</u>	<u>Cost Per Pound</u>
FY 1974	246,313	\$26,800	\$0.11
FY 1975	225,967	30,700	0.14

While improved packing methods helped to offset rate increases in prior years, additional funds are now needed to avoid curtailing the exchange of important publications.

Necessary Pay  
 FY 1976  
 (Dollars in Thousands)

Unit	Within Grades	Annual GS Raise	Annual Wage Raises	Extra Day	Total
Assistant Secretary for Science.....	2	4		1	7
National Museum of Natural History.....	114	115	11	27	267
Smithsonian Astrophysical Observatory....	16	20	3	6	45
Smithsonian Tropical Research Institute..	20	10	6	3	39
Radiation Biology Laboratory.....	13	7	4	3	27
Internat'l & Environmental Programs.....	7	6		2	15
Chesapeake Bay Center.....	4	9		1	14
National Air and Space Museum.....	30	36	1	6	73
Center for the Study of Man.....	3	10		1	14
National Zoological Park.....	75	29	58	14	176
Assistant Secretary for History and Art..	6	3		1	10
National Museum of History & Technology..	63	44	17	12	136
National Collection of Fine Arts.....	25	35	5	4	69
National Portrait Gallery.....	17	14	5	2	38
Hirshhorn Museum and Sculpture Garden....	18	19	4	3	44
Freer Gallery of Art.....	7	6	1	1	15
Archives of American Art.....	1	3		1	5
Cooper-Hewitt Museum.....	2	1		1	4
Assistant Secretary for Public Service...	2	3		1	6
Anacostia Neighborhood Museum.....	6	4		1	11
International Exchange Service.....	2	2		1	5
Division of Performing Arts.....	3	4		1	8
Office of Public Affairs.....	4	5		1	10
Smithsonian Institution Press.....	7	8		1	16
Assistant Secretary for Museum Programs..	14	3	27	2	46
Conservation-Analytical Laboratory.....	6	6		1	13
Office of Exhibits Central.....	13	19		3	35
Office of the Registrar.....	5	4		1	10
Smithsonian Institution Libraries.....	21	15		4	40
Smithsonian Traveling Exhibition Service.	2	1		1	4
National Museum Act.....	1			1	2
Smithsonian Archives.....	3	2		1	6
American Revolution Bicentennial Program.	1	8			9
Environmental Sciences Program.....	1	3			4
Academic and Educational Programs.....	3	3			6
Office of the Secretary.....	11	12		3	26
Office of the General Counsel.....	7	3		1	11
Office of the Treasurer.....	10	7		1	18
Office of Personnel Administration.....	9	9		2	20
Office of Audits.....	2	3		1	6
Office of Equal Opportunity.....	1	2		1	4
Office of Printing and Photo Services....	11	8	2	2	23
Information Systems Division.....	6	8		1	15
Office of Supply Services.....	6	5		1	12
Management Analysis Office.....	3	3		1	7
Office of Protection Services.....	120	78	1	19	218
Facilities Planning & Eng. Services.....	6	8		2	16
Office of Plant Services.....	92	11	64	16	183
Total	801	618	209	160	1788*

\* Excludes the Workmen's Compensation payment of \$85 which is not charged to bureaus. The bill is paid by the Office of the Treasurer. Total request for Necessary Pay is \$1,873.



Use-Millions of KWH for electricity and lbs. of steam  
Rate in dollars (per KWH and per thousand lbs. of steam)  
Cost in thousands of dollars

OFFICE OF PLANT SERVICES 1/  
Use and Costs of Steam and Electricity

Utility	FY 1973 Actual		FY 1974 Actual		FY 1975 - 1976 Estimate		Deficit (\$000s)
	Use	Average Rate (\$)	Cost (\$000s)	Use	Average Rate (\$)	Cost (\$000s)	
GSA steam for heating	247.4	\$2.61	\$646	219.6 <sup>2/</sup>	\$2.96	\$650	\$900
PEPCO Electricity	56.5	0.016 <sup>+</sup>	912	53.3 <sup>2/</sup>	0.022 <sup>+</sup>	1,183	1,400
Total Costs			\$1,558			\$1,833	\$3,131
							\$2,300 <sup>5/</sup>
							\$83 <sup>6/</sup>

1/ Funds steam and electricity for Smithsonian museums, galleries, and other space on and near the Mall. Cost increases resulting largely from rate hikes are closely representative, however, of similar experience of Institution activities outside of this geographical area who must fund their own utilities.

2/ Reduction from FY 1973 reflects primarily an unusually mild winter with some contribution from energy conservation measures.

3/ Increase reflects anticipated more normal winter temperatures than FY 1974 and operations of Hirshhorn Museum and Sculpture Garden.

4/ Rate announced by GSA in November 1974 but retroactive to July 1, 1974 without notice.

5/ Office of Plant Services started FY 1975 with budget of about \$2,100,000 as compared with FY 1974 actual of \$1,800,000. Additional \$200,000 reflects further absorption effort to meet needs. Note that FY 1976 costs are estimated to be \$1,300,000 over FY 1974 actual.

6/ This shortfall of funding to be met in FY 1975 by the requested supplemental (if appropriated) and by deferring to FY 1976 essential supply replenishment, replacement of worn-out equipment, and necessary plant maintenance and other program needs. This deficit in FY 1976 will be met by this office's share of the FY 1975 supplemental (\$563,000) continuing in the base plus its share of the FY 1976 Uncontrollable amount (\$538,000). Total funding of \$901,000 by these actions allows for token contribution to new rate increases. FY 1976 use and cost figures do not include new National Air and Space Museum building for comparability. The budget request for this building is presented separately.

## OFFICE OF THE ASSISTANT SECRETARY FOR SCIENCE

1974 Actual.....\$168,000  
 1975 Estimate.....\$294,000  
 1976 Estimate.....\$338,000

(Dollars in thousands)	Base	Increase	Est.
	FY 1975	Requested	FY 1976
Number of Permanent Positions...	7	0	7
11 Personnel Compensation.....	138	25	163
12 Personnel Benefits.....	12	2	14
21 Travel & Trans. of Persons...	16	5	21
22 Transportation of Things.....	4	2	6
25 Other Services.....	87		87
26 Supplies and Materials.....	17	5	22
31 Equipment.....	20	5	25
TOTAL	294	44	338
<u>Analysis of Increase</u>			
Necessary Pay.....		7	
Program Funds.....		37	

ABSTRACT - This office is responsible for overall planning, coordinating, and reviewing the progress of the thirteen science bureaus and programs within the Institution. The International Environmental Program is administered from this office. A program increase is being sought for this office in the amount of \$37,000. Necessary pay in the amount of \$7,000 is being sought for existing staff.

PROGRAM - I. Immediate Office of the Assistant Secretary for Science with 7 positions and \$208,000 advises and assists the Secretary in planning, implementing, and reviewing the progress of Smithsonian science programs. The Bureaus reporting to the Assistant Secretary for Science are the National Museum of Natural History, the Radiation Biology Laboratory, the Tropical Research Institute, the National Zoological Park, the National Air and Space Museum, the Astrophysical Observatory, the Office of International and Environmental Programs, the Chesapeake Bay Center for Environmental Studies, the Center for the Study of Man, the Science Information Exchange, and the Fort Pierce Bureau. This office is also responsible for the administration of the Research Awards, the Environmental Sciences, and the International Environmental Program.

II. International Environmental Program (IEP) - With \$130,000 transferred from the Office of International and Environmental Programs, the Office of the Assistant Secretary for Science administers the International Environmental Program. IEP is an interbureau, interdisciplinary effort aimed at studying various ecosystems in the tropics and sub-tropics. Each project is designed to be long-term (between 5 and 15 years) so that a sufficient body of all-important phenological and systematic data can be accumulated and at the same time the host nation can prepare to take over full responsibility for the project's management. Special attention is given to studying endangered species and their habitats. Nationals of the country where the research is being carried out are being involved to the fullest extent possible and every effort will be made to translate results as soon as possible into applications for the effective conservation and management of the ecosystem being studied.

The major sites chosen for work are (1) the marine ecosystem of the Galapagos Islands, Ecuador, (2) the Fly River region of Papua, New Guinea, (3) the Amazonian region surrounding Manaus, Brazil, (4) savanna and forest sites south of Maracay, Venezuela, and (5) Chitawan National Park in the Terai of Nepal. Field staff will be predominately

Smithsonian researchers from the National Museum of Natural History, the National Zoological Park and the Smithsonian Tropical Research Institute in Panama. In addition to the foreign nationals already involved, an increasing number of scientists from American universities and other research organizations are expected to participate.

JUSTIFICATION OF \$37,000 INCREASE (Research) - Term scientists (appointments limited from one to three years) as well as Smithsonian scientists will be used to pursue the studies at the various locations chosen for the International Environmental Program. Funds are requested to support this important interbureau, interdisciplinary research. An increase of \$37,000 is requested for this program.

## NATIONAL MUSEUM OF NATURAL HISTORY

1974 Actual.....\$ 8,399,000  
 1975 Estimate.....\$ 9,503,000  
 1976 Estimate.....\$10,030,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	461	19	480
11 Personnel Compensation.....	7,423	439	7,862
12 Personnel Benefits.....	639	37	676
21 Travel & Trans. of Persons...	103	2	105
22 Transportation of Things.....	21		21
23 Rent, Comm. & Utilities.....	23		23
24 Printing and Reproduction...	182		182
25 Other Services.....	703	19	722
26 Supplies and Materials.....	132	9	141
31 Equipment.....	277	21	298
<b>TOTAL</b>	<b>9,503</b>	<b>527</b>	<b>10,030</b>
<u>Analysis of Increase</u>			
Necessary Pay.....		267	
Program Funds.....		260	

ABSTRACT - The National Museum of Natural History (NMNH) serves as a center for the natural sciences. It maintains large reference collections and conducts programs of identification and documentation, research, collections management, exhibits, and education--including collaborative projects with universities and other institutions of learning. An increase of 19 positions and \$260,000 is requested for FY 1976 to meet the following support requirements: (1) Collections Management - 11 museum technicians (\$110,000) to provide additional assistance for the care of the collections which grow at a substantial rate and are utilized increasingly each year; (2) Exhibitions - 3 exhibits technicians (\$64,000) and additional funding of \$36,000 to provide for the phased modernization of exhibit halls to enhance their educational value; and (3) Buildings and Facilities Management - 2 laborers and 3 janitors (\$50,000) to provide more adequate building labor and cleaning services. An additional amount of \$267,000 is sought for necessary pay.

PROGRAM - This Museum serves as a national and international center for the natural sciences. It maintains the largest reference collections in the nation (over 60 million objects) and has the legal responsibility (20 U.S.C. 59) to serve as the ultimate Federal repository of all collections and objects of natural history, archeology, and ethnology made by agencies of the government when no longer needed by those agencies for investigations in progress. Additionally, the NMNH is the repository for numerous extremely valuable collections obtained from other sources, such as the scientific community and academic institutions, as well as many private individuals.

The scientists at the Museum conduct a broad program of basic research on man, plants, animals, fossil organisms, rocks, minerals, sediments, and materials from outer space. Their fundamental studies in systematics and biology are providing new information required for the solution of major problems of conservation, pollution, food production, improvement of medical knowledge, and for planning national and international programs leading to predictive ecology and environmental management. Scientific and technical results which flow from this scientific research are made available to others by an active and large publications program. Additionally, the Oceanographic



Sorting Center in Washington, D.C., recently reassigned to the Museum, prepares and distributes animal and plant materials to scientists from 200 agencies around the world who are concerned with marine pollution, ocean dumping, pollution monitoring, environmental prediction, and systematics studies.

Over three million people visit the Museum each year, including many thousands of school children attracted by the exhibits. A major program of exhibit improvement began in FY 1974 with the creation of the new exhibit, "Ice Age Mammals and the Emergence of Man", and the very successful Discovery Room, an area in which visitors may handle exhibits and collections. In FY 1975 major exhibits effort is being directed to the preparation of the Bicentennial exhibit "Our Changing Land" and to a new hall of ecological archeology dealing with South America titled "A Continent and its Cultures." As a part of its education program, the Museum provides assistance for elementary and secondary school groups. In addition, many members of the scientific staff participate in joint educational programs with universities by teaching courses, training graduate students, and conducting science seminars. The Museum also provides leadership in the improvement of museum techniques and collections management, especially through the application of computer technology. The cafeteria, Museum Shop, and classroom facilities now under construction in the Museum's West Courtyard with non-appropriated funds will provide major new public service opportunities.

#### JUSTIFICATION OF \$260,000 INCREASE:

Collections Management - Beginning in FY 1972 the Museum undertook a long-range program designed to correct the inefficient operations resulting from the shortage of support personnel and meager operating funds available to the scientific staff. With the support of the Office of Management and Budget and the Congress significant improvements have been made but the current status is still far short of the original objective of an average of 3 support personnel for each NMNH scientist. For the past 3 years an interim target ratio of 2 to 1 has been set. Increased funding (\$110,000) for 11 museum technicians requested in this budget will achieve a ratio of 1.80 to 1.00 bringing the Museum closer to this interim goal (see table). These additional technicians will provide laboratory and research assistance to NMNH scientists such as cleaning and collecting specimens, preparing thin sections, and dissecting animals, thereby improving the efficiency and productivity of the scientific staff. In addition, the new employees would be used to help care for the rapidly growing collections at the Museum. Real damage and loss is occurring to valuable specimens because of slowly evaporating preservative fluids, crumbling labels, and deteriorating containers. Care of these collections is of the utmost importance in order that they may be preserved for study and exhibit purposes.

#### Ratios of Man-Years of Effort Between Support and Professionals /1

<u>Fiscal Year</u>	<u>Support Staff</u>	<u>Scientists</u>	<u>Ratio</u>
1974 actual	175	111	1.58:1.00
1975 estimate	189	111	1.70:1.00
1976 estimate	200	111	1.80:1.00

/1 Ratios apply only to personnel assigned directly to science support. They exclude personnel in ADP applications, exhibits, education, and the director's office. The table also excludes Sorting Center personnel for whom data are unavailable prior to FY 1975.

Exhibitions - The Museum has planned a long-range exhibits program aimed at developing a better understanding of man's relationships to and dependence upon all other life. Most exhibits in the Museum are presently organized by scientific

disciplines and thus fail to establish properly the interrelationships between man, animals, plants, and the inorganic world. The plan to redesign and refurbish the more than 30 exhibit halls, integrating the scientific content of the halls in accordance with modern scientific practices, is projected to extend over a period of 20 years. This anticipates a design and production period of 1 1/2 to 2 years per exhibit and completion of 1 1/2 major halls a year.

During the first two years, work on the following new exhibits is planned: a hall of lunar geology which will illustrate man's new understanding of the geology of the moon, as exemplified by the rock and soil samples returned in the Apollo Program; a hall featuring living insects which will illustrate their interrelationship with animals and plants and their interactions with man; an exhibit examining origins of western civilization, focusing upon the domestication of animals and plants and the development of metallurgy in Asia Minor; and finally, an exhibit which examines the processes of organic change in the living world.

Using past experience as a guide, most halls should cost in the range of \$350,000 to \$450,000. The present exhibits base of about \$500,000, insufficient to meet anticipated costs of the new program, must also be used, in part, to continue general maintenance and upgrading of existing exhibits. An additional \$100,000 and 3 exhibits technicians are requested to create a sufficient level of funding in the base for this long-range exhibits program.

Buildings and Facilities Management - In FY 1976, the Bicentennial year, the National Museum of Natural History expects an approximate doubling in its number of visitors. An increase to 6 million visitors per year will place an exceedingly heavy burden on an already understaffed building management force. A study determined that the force should include a minimum of 78 positions to provide adequate service for public and employee use of the building. Even with increased resources in FY 1975, the buildings management staff will not exceed 61. The requested sum of \$50,000 will be used to employ 5 additional custodial personnel and purchase necessary supplies and materials to improve this situation and to provide cleaner and better maintained facilities for visitors and employees.

## SMITHSONIAN ASTROPHYSICAL OBSERVATORY

1974 Actual.....\$3,207,000  
 1975 Estimate.....\$3,402,000  
 1976 Estimate.....\$3,716,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	64	5	69
11 Personnel Compensation.....	1,682	133	1,815
12 Personnel Benefits.....	145	12	157
21 Travel & Trans. of Persons...	71		71
22 Transportation of Things.....	55		55
23 Rent, Comm. & Utilities.....	286		286
24 Printing and Reproduction...	21		21
25 Other Services.....	311	69	380
26 Supplies and Materials.....	95	15	110
31 Equipment.....	229	85	314
32 Lands and Structures.....	507		507
TOTAL	3,402	314	3,716
<u>Analysis of Increase</u>			
Necessary Pay.....		45	
Program Funds.....		269	

**ABSTRACT** - The goal of the Smithsonian Astrophysical Observatory (SAO) is to increase and diffuse knowledge about the Earth and the astronomical universe. Heavy emphasis is placed on both observational and theoretical research in astronomy, based on the principles of physics and chemistry. In addition to its headquarters and laboratories at Cambridge, Massachusetts, SAO facilities include a multi-purpose observatory at Mt. Hopkins, Arizona; a world-wide network of associated field stations which observe artificial satellites and comets; and a network of automatic stations in the midwestern United States which photograph meteors.

An increase of 5 positions and \$269,000 is requested for FY 1976 to meet scientific program needs and to provide general administrative and support services. Specifically: (1) Research - \$125,000 for laboratories and \$44,000 for the visiting scientist and postdoctoral programs; and (2) General Administration - 5 positions and \$100,000 for field, personnel, payroll, and property management purposes are requested. An additional \$45,000 is sought for necessary pay.

**PROGRAM** - Two scientific problems drive the research program at SAO. One is the evolution of matter, starting with the explosive beginnings of the universe 20 billion years ago. After the formation of galaxies and stars, some matter collapses into unusual objects, like quasars, neutron stars, and black holes. The extreme physical conditions found in these objects test fundamental principles of physics, including Einstein's Theory of Relativity and modern theories of elementary particles. By studying the evolution of stars and galaxies, SAO contributes to basic physical theory.

The other problem concerns cosmic matter that has cooled to the point that molecules and solid particles form. The condensation of materials accompanying the formation of a star like the Sun results in the formation of planets and, ultimately, in the emergence of life. By studying the Earth, the solar system, and cool matter in space, SAO contributes to an understanding of the processes leading to the origin of life in the universe.

Progress toward the solution of these problems is achieved by a variety of different approaches. Study of matter under extreme conditions can be approached through high-energy astrophysics, optical and infrared astronomy, and solar and stellar physics, while the study of molecules and solid particles can be approached through optical and infrared astronomy, radio astronomy, planetary sciences, and geoastronomy. Atomic, molecular, and radiation physics, as well as theoretical astrophysics, underlie both approaches. Each approach requires specific research tools. For example, high-energy astrophysics is based on observations made by rocket, balloon, and satellite-borne telescopes to detect x-rays and gamma rays from space, while atomic, molecular, and radiation physics are studied by using ground-based laboratories and computers. In addition to its headquarters and laboratories at Cambridge, Massachusetts, SAO facilities include a multi-purpose observatory at Mt. Hopkins, Arizona; a world-wide network of associated field stations which observe artificial satellites and comets; and a network of automatic stations in the midwestern United States which photograph meteors.

The Observatory is now completing its second year of operation as a partner, together with the Harvard College Observatory, in the Center for Astrophysics. The Center comprises a number of research divisions, which emphasize the different approaches described above. The Center has conducted a study of its operations in FY 1974 and is pursuing a development plan for the five years 1975 to 1979. The budget request is based on that plan. The Center's plan emphasizes an increase in the collaboration between Harvard and Smithsonian, which in the past has enhanced the effectiveness of SAO by bringing talented students and young scientists from physics, astronomy, chemistry, and geology into the research program.

The plan requires that specific objectives be met - i.e., the development of laboratories and research capabilities that meet critical deficiencies in the current program. In each case, the objective is to provide a resource, either in instruments or in personnel, that will increase the effectiveness of research efforts already underway by filling an important gap. A number of programs that have achieved their objectives are being phased out in order to free additional resources toward this end.

While it is impossible to predict beforehand the specific results of research, one can plan the programs (including manpower, equipment, and operations) necessary to give significant scientific results and, through the conduct of periodic reviews, determine the effectiveness of the Observatory's programs and operations. SAO has adopted the establishment and operation of these programs as its management objectives.

In the course of this review, a number of programs have been phased out, in order to provide additional resources to higher priority programs. However, some of the resources released by this action have been required to cover increased costs in rent, utilities, and communications.

JUSTIFICATION OF \$269,000 INCREASE (Research and General Administration):

High Energy Laboratory - As a fundamental part of its objective of maintaining a nationally significant program in high energy astrophysics to permit studies of matter under extreme conditions in the cosmos, it is essential that SAO establish a laboratory for the conduct of experimental research in high energy astrophysics. Although x-ray astronomy is based on space-borne telescopes, a laboratory is critically needed to facilitate the development, testing, and calibration of instruments for rocket and satellite missions. The laboratory will also be used to conduct research on critical materials and for the development of x-ray detectors. Funds (\$80,000) sought in FY 1976 will permit the design, development, and construction of the x-ray source; the design and development of x-ray detectors; and the design and evaluation of a 70-foot long vacuum pipe.

Optical and Infrared Laboratory - SAO must expand its laboratory capabilities in support of its two major goals in optical and infrared astronomy. SAO, in collaboration with the University of Arizona, is developing a unique facility in the large multimirror telescope (MMT) and has demonstrated a strong capability to utilize a balloon-borne infrared telescope in collaboration with Harvard University and the University of Arizona. These telescopes as well as SAO's existing ground-based instruments require the continuing development of new detectors and instrumentation in order to realize their full scientific potential. Funds (\$45,000) sought will be used for electronic and optical equipment required in the assembly and testing of optical and infrared instruments.

Visiting Scientist and Postdoctoral Programs - In order to strengthen the scientific programs at SAO and, at the same time, to increase the availability to the entire scientific community of the specialized facilities of the Observatory, a program of visiting scientists and postdoctoral fellows is being developed in cooperation with Harvard College Observatory (HCO). Participants are chosen on the basis of their scientific excellence, their ability to utilize the Center's resources, and their contribution to its objectives. Out of more than 250 postdoctoral candidates, the Center was able to support 6 (4 by HCO and 2 by SAO). Ultimately, the Center will have about 6 visiting scientists and 12 postdoctoral fellows at one time, supported equally by HCO and SAO. In FY 1976, \$44,000 is requested to support 2 additional postdoctoral fellows and 1 or 2 visiting scientists, depending on the length of their stay at the Center.

General Administrative and Support Services - In FY 1975, the first step was taken to correct the imbalance that has developed over the past several years between SAO's Federally funded and grant and contract funded general administrative and support activities. About \$100,000 were approved for this purpose. This was approximately half the amount requested and is far short of what is needed to correct the imbalance and thus provide adequate administrative and support personnel for Federally funded research programs. In total, approximately 25 positions and \$500,000 are required. As a further step towards solving this problem, 5 additional positions and \$100,000 are requested in FY 1976. Trained and capable administrative and support personnel, now supported by grant and contract funding, will be hired to fill these positions. These positions include: 2 positions and \$52,000 for facilities management at the Mt. Hopkins Observatory (a field manager and a support supervisor); and 3 positions and \$48,000 for general administration, which include a personnel assistant, payroll administrator, and property administrator.

#### Highlights of SAO Research Results

##### FY 1974

- Publication of Blanketed Model Atmospheres for Early Type Stars, a companion volume to the previously published Telescope Catalog, representing an analysis of the Telescope data as applied to stellar theory.
- Publication of 1973 Smithsonian Standard Earth (III), the latest calculation of the earth's shape and size with respect to gravitational variation and a uniform network of geodetic positions.
- The first identification of a probable "black hole" in the constellation Cygnus.
- Detection by means of radio observations of the basic organic hydrocarbon radical, methylidyne, in the tail of Comet Kohoutek. (Jointly discovered with astronomers from the Harvard College Observatory who were supported in part by the National Science Foundation.)



--Development of two separate but related theories concerning the creation and evolution of the moon which involves the probable breakup, capture, and later recombination of the primordial lunar body by the earth.

--Recognition and description of the peculiar orbital properties of the Mariner 10 spacecraft which allowed a second fly-by mission to the planet Mercury.

#### FY 1975

--First publication of major results from the ultraviolet and x-ray experiments aboard Skylab by Harvard and Smithsonian scientists revealing, among other new findings, the presence of coronal holes.

--Discovery of a second probable "black hole" in the constellation Circinus.

--Discovery by means of radio observations of molecular ethanol in interstellar space. (Jointly discovered with astronomy groups at the University of Maryland, National Radio Astronomy Observatory, National Bureau of Standards, in Australia, and at the University of Chicago. The SAO effort was cooperative with Harvard College Observatory astronomers supported in part by the National Science Foundation.)

--Completion of the telescope mount for the Multiple Mirror Telescope.

--Co-sponsorship of International Astronomical Union Colloquium 26: "On Reference Coordinate Systems for Earth Dynamics", Torun, Poland, which attracted more than 100 scientists from 20 countries.

--Flight aboard a joint American-Dutch satellite of an x-ray experiment designed to map and study x-ray sources.

--Confirmation, through precise orbital determinations, that a newly discovered object near Jupiter is actually the 13th Jovian satellite.

--Discovery of a second celestial source of high-energy gamma rays in the constellation of Centaurus.

--Development of a new theory of the molecules observed in comets, based on rapid chemical reactions.

--Begin construction of the MMT telescope shelter atop Mt. Hopkins.

#### FY 1976 (Expected)

--Flight of a rocket probe experiment to test the equivalence principle of Einstein's Theory of Relativity.

--Flight of a spacecraft-to-spacecraft doppler tracking experiment aboard the Apollo-Soyuz space mission that is intended to study small-scale structures in the earth's gravitational field.

--Begin installation of the MMT telescope atop Mt. Hopkins, Arizona.

--Preparation of the x-ray experiments designed to fly aboard the High Energy Astronomy Observatory satellite series.

--Participation by the Smithsonian's world-wide satellite tracking network in NASA's Earth and Ocean Applications Program.

## SMITHSONIAN TROPICAL RESEARCH INSTITUTE

1974 Actual.....\$1,002,000  
 1975 Estimate.....\$1,181,000  
 1976 Estimate.....\$1,332,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est FY 1976
Number of Permanent Positions...	60	4	64
11 Personnel Compensation.....	835	90	925
12 Personnel Benefits.....	112	16	128
21 Travel & Trans. of Persons...	35	12	47
22 Transportation of Things.....	6	2	8
23 Rent, Comm. & Utilities.....	36	12	48
24 Printing and Reproduction....	1	2	3
25 Other Services.....	85	1	86
26 Supplies and Materials.....	49	16	65
31 Equipment.....	22		22
TOTAL	1,181	151	1,332
<u>Analysis of Increase</u>			
Necessary Pay.....		39	
Other Uncontrollable.....		7	
Program Funds.....		105	

**ABSTRACT** - The Smithsonian Tropical Research Institute (STRI) conducts advanced studies in ecology, behavior, and evolution of tropical organisms and manages related programs in the areas of education and conservation. The tropics contain the greatest diversity of life on this planet; as such they offer the biologist the best natural laboratory for studying the interrelationships of life on earth. Panama further offers its unique zoogeographic characteristics--a landbridge between the terrestrial life forms of the two continents and a barrier to the marine life of two oceans.

In FY 1976, four additional positions and increased funding of \$105,000 are sought to meet the following requirements: (1) Research - a resident naturalist (\$21,000) to be responsible for environmental monitoring and coordination of scientific activity on Barro Colorado Island; two positions, a biochemical population geneticist and a laboratory technician (\$40,000) to continue the gradual development of the Institute as a primary center for tropical studies; and funds in the amount of \$14,000 to fund increased support and travel expenses and (2) Buildings and Facilities Management - a janitor/guard position (\$7,000) and an additional \$23,000 to provide maintenance and protection for the newly occupied Tivoli building, fund associated moving costs, and cover inflationary cost increases. An additional requirement of \$39,000 for necessary pay costs and \$7,000 for utility costs is requested in the Uncontrollable Section.

**PROGRAM** - The Institute provides a base of operations and an intellectual center for advanced basic studies of ecology, behavior, and evolution in the tropics. Because of the diversity of tropical organisms and the complexity of their relationships, the tropics represent one of the most interesting but poorly understood biological regions of the world. Many of the developing nations and those with the most rapidly growing populations are within the tropics, and it is here that major environmental changes are likely to occur during the next decade. Understanding and properly managing tropical environments is essential to their preservation as well as the protection of living systems elsewhere in the world. For example, the destruction of suitable winter feeding sites in Central and South America will result in the extinction of migratory birds even if their summer breeding habitats are preserved in the United States.

STRI's research stations in Panama provide immediate access to tropical, terrestrial and marine environments. These include almost 9,000 acres of forest reserve on Barro Colorado Island and the adjacent peninsulas in Gatun Lake and a two-ocean marine research capability with laboratories on the coral reef and lagoon at Galeta Point on the Atlantic Coast, and the rocky reefs at Naos Island on the Pacific Coast. A small facility in Cali, Colombia provides access to high forest plateau in the Andes. The Institute's permanent scientific staff, as well as many visiting scientists and students, conduct research in these areas as well as in other parts of Central and South America, the Pacific, Asia, and Africa, where comparative studies are clarifying the distinctive ecological relationships of the tropics.

During FY 1975 the permanent scientific staff of STRI is 14, there are 10 long-term pre- and post-doctoral students associated with STRI, and it is anticipated that the facilities will be used for shorter periods by a total of 700 visitors from all over the world. In FY 1974, 70 seminars were held and 65 scientific papers were published in the world's leading scientific journals by staff and associates. In FY 1975 a number of books will be completed and published by the STRI staff including a volume on the ecology and archaeology of the central provinces of Panama and a critical volume on the behavior of new world primates.

One of the most important responsibilities of the Institute is the support of advanced training in tropical biology. Organized teaching efforts extend beyond graduate and post-doctoral training to college and secondary schools. In addition, informal training and docent-guided tours are also offered for the general public.

#### JUSTIFICATION OF \$105,000 INCREASE:

Research - Barro Colorado Island, which is both an integral part of the Institution's Environmental Science Program and a research station used by hundreds of visiting scientists, is in need of day-to-day coordination of the scientific activities of the visiting and staff scientists. It is particularly important that someone be available to provide continuity to the research of visiting scientists. An amount of \$21,000 is requested to hire a resident naturalist who will be responsible for environmental monitoring as well as the coordination of scientific activity.

One of the problems related to the study of tropical organisms is that of sorting out the differences in closely related populations and species. The subtleties of tropical adaptations are often difficult to resolve with classical techniques of analyzing form and structure. In recent years techniques have been developed which enable biologists to analyze enzyme forms and structures and, consequently, detect subtle differences and responses in seemingly identical populations. While much research has been done on temperate organisms, there is little data on which to evaluate or compare responses of tropical organisms. An amount of \$40,000 is requested to hire a biochemical population geneticist to conduct research in this area and a laboratory technician to analyze biological material and collect data for interpretation. Support funds of \$2,000 for supplies and equipment also are requested.

The need for increased travel funds has intensified in the past year as a result of expanding research efforts and inflation. While Panama is the facilities and administrative base of the Institute, the research of most of the scientific staff is comparative, requiring field work in many places of the New World and Old World tropics. In addition, there are travel costs associated with various scientific meetings and conferences and lectures conducted by STRI scientists at U. S. universities. These trips have the dual benefits of keeping the scientists informed of new developments in their fields and of promoting interest in tropical research. An increase of \$12,000 is requested to meet these travel expenses.

Buildings and Facilities Management - In FY 1976 renovation of the Tivoli building will be completed with funds requested in the Restoration and Renovation of Buildings account. Upon the relocation of administrative and support personnel to the building, the requirement for maintenance and protection will increase. Funds are requested to hire a janitor/guard (\$7,000) and to finance moving costs and purchase necessary maintenance supplies (\$9,000).

STRI buys more than one third of its supplies and equipment in the Republic of Panama. The wholesale price index for the Republic of Panama rose 31.5 percent in the latest quarter; the rise for the same period in the United States was 19.7 percent. An amount of \$14,000 is requested to cover approximately half of STRI's inflationary costs other than utilities.

## RADIATION BIOLOGY LABORATORY

1974 Actual.....\$1,426,000  
 1975 Estimate.....\$1,542,000  
 1976 Estimate.....\$1,631,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	48	0	48
11 Personnel Compensation.....	744	25	769
12 Personnel Benefits.....	61	2	63
21 Travel & Trans. of Persons...	11	4	15
22 Transportation of Things.....	6	2	8
23 Rent. Comm. & Utilities.....	434	28	462
24 Printing and Reproduction...	13	3	16
25 Other Services.....	35	10	45
26 Supplies and Materials.....	86	10	96
31 Equipment.....	152	5	157
<b>TOTAL</b>	<b>1,542</b>	<b>89</b>	<b>1,631</b>
<u>Analysis of Increase</u>			
Necessary Pay.....		27	
Other Uncontrollable.....		28	
Program Funds.....		34	

ABSTRACT - The Radiation Biology Laboratory (RBL) studies the influences of environmental factors--light, temperature, humidity, and atmospheric content--on biological systems in order to help understand their growth and development. The marked increase in interest in environmental problems has led to many requests for the Laboratory's data. To continue this research at current levels, a support funds increase of \$34,000 is required plus \$28,000 for utility rate increases. These increases are due solely to inflationary costs of supplies, materials, utilities, and equipment. Necessary pay requirements for present staff amount to \$27,000.

PROGRAM - Light is the key controlling environmental factor for development and growth of biological systems. Storage of solar radiation as chemical energy in photosynthesis is basic for all life on earth. The utilization of this energy is regulated by subtle changing signals of light quality, duration, and intensity. A primary objective of the Laboratory is to explain the influences of the various factors in the environment--light, temperature, humidity, and atmospheric content--on growth and development and to characterize the molecular mechanisms through which these signals operate.

This aim is accomplished by studying these environmental influences on plant growth and development in the Laboratory under controlled conditions using biochemical, biophysical, and physiological techniques and then verifying the importance of these processes in nature by monitoring the natural, dynamic environment. An example of spin-off value from these measurements is the collection of ultraviolet light data useful for assessing the potential biomedical threats of change in the ozone layer of the atmosphere. Such programs of research by their very nature are long-term and require the concerted team efforts of many scientific disciplines.

The research of the Laboratory consists of three principal areas: (1) regulatory biology, (2) environmental biology, and (3) carbon-14 dating. Since its inception in 1928, the Laboratory has pioneered research into the influences on growth of the color quality of visible and near visible light, such as ultraviolet. The present experimental



program is of greater scope than in any other single laboratory in this country and perhaps in the world. The Laboratory has been credited with major contributions in the field of photobiology and several first achievements in action spectroscopy.

JUSTIFICATION OF \$34,000 INCREASE (Research Support) - The requested additional funds are needed to maintain current programs at a no-growth level. The costs for chemicals used regularly from three major manufacturers and suppliers of chemicals and supplies have increased this year by an average of 35 percent, and for general laboratory supplies by 20 percent. This trend is not expected to subside. To maintain minimal adequate levels, an increase of \$10,000 is required in other services, \$10,000 for supplies and materials, and \$5,000 for equipment.

Data from the remote stations must be transmitted to the Laboratory. In addition, to assure accurate calibration and continuous operation of these stations, staff must make site visits at least once per year. Sites are located in Barrow, Alaska; Panama; Tallahassee, Florida; and Jerusalem, Israel. To maintain these stations and analyze and produce research data requires an increase of \$2,000 for transportation of things, \$4,000 for travel, and \$3,000 for printing and reproduction.

Utility costs continue to rise exponentially. Environmental growth rooms are lighted and powered electrically. Electric costs alone increased 44 percent last year, even though an effective program of energy reduction for the Laboratory as a whole was achieved. Funding of \$28,000 to maintain current programs is included in the Uncontrollable section.

#### Major Accomplishments in FY 1974

Scanning radiometers, instruments for measuring and monitoring discrete bands of ultraviolet energy from the sun and sky, have been developed and constructed. Ultraviolet measurements using these instruments are of particular interest in the health sciences. There are, for instance, data which implicate ultraviolet fluctuations in the frequency of incidence of skin cancer. Three such monitoring stations are now operating. Two more will be completed by the end of the fiscal year. The resulting data are being published.

Another important factor in solar irradiance measurements is the primary standard to which all measurements are referred. A symposium was held at RBL this year, at which 23 international authorities presented papers on methods of evaluation and inter-comparison. The resulting RBL publication is expected to become a reference standard in this field.

Blue light is known to initiate the biosynthesis of yellow pigments, such as the vitamin A precursor, B-carotene. The biochemical pathway for the control of synthesis of these vitamin precursors is being studied, and four new mutants that can produce yellow pigments in the dark have been induced by ultraviolet irradiation. These mutants are powerful tools in characterizing the biochemical pathways and should provide information which would allow control of the synthesis of these vitamin precursors.

## OFFICE OF INTERNATIONAL AND ENVIRONMENTAL PROGRAMS

1974 Actual.....\$910,000  
 1975 Estimate.....\$571,000  
 1976 Estimate.....\$586,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	25	0	25
11 Personnel Compensation.....	452	14	466
12 Personnel Benefits.....	39	1	40
21 Travel & Trans. of Persons...	13		13
23 Rent, Comm. and Utilities...	34		34
24 Printing and Reproduction	12		12
25 Other Services.....	13		13
26 Supplies and Materials.....	5		5
31 Equipment.....	3		3
<b>TOTAL</b>	<b>571</b>	<b>15</b>	<b>586</b>
<u>Analysis of Increase</u>			
Necessary Pay.....		15	
Program Funds.....		0	

**ABSTRACT** - The Office of International and Environmental Programs (OIEP) oversees the International Activities Program and the Center for Short-Lived Phenomena and coordinates research on the environment abroad. No program increase is sought for FY 1976. Necessary pay in the amount of \$15,000 is sought for existing staff.

**PROGRAM** - Reorganizations implemented in FY 1974 resulted in the creation of the OIEP. The Office of Environmental Sciences, without the Oceanographic Sorting Centers in Washington and Tunis, was combined with the Office of International Activities. The Oceanographic Sorting Centers were placed in the National Museum of Natural History and the International Environmental Program was placed directly under the Office of the Assistant Secretary for Science.

The newly established OIEP oversees the International Activities Program and the Center for Short-Lived Phenomena and, in addition, coordinates research on the environment abroad for improved understanding of natural systems. A four-year study of water-borne diseases in the Lower Mekong River has been completed. A single-year study of the postimpoundment ecological analysis of a reservoir on the Nam Ngum River and another reservoir on the Volta River (Ghana) will be completed during FY 1975. Similar ecological studies of two major lakes in Yugoslavia are still underway. In addition, OIEP cooperates with the Peace Corps in planning and staffing volunteers in environmental and natural resources programs in developing countries. Volunteers skilled in environmental and biological sciences are recruited for two-year assignments in projects operated by host governments or international organizations. Over 400 volunteers, selected from among the 2,000 applicants to this program, have been placed in environmental assignments in 45 countries. The program is supported under a contract with the Peace Corps.

The International Activities Program administers the Smithsonian Special Foreign Currency Program (SFCP) and the International Liaison Section. The SFCP supports museum programs, scientific and cultural research, and related educational activities in six countries where the United States owns local currencies in "excess" of its needs as determined by the Treasury Department. More than 230 institutions in 34 states and the District of Columbia have benefited from the Program, which in FY 1974 supported 170 projects involving approximately 300 American and 150 foreign investigators. An appropriation of \$2.0 million "excess" foreign currency is requested for FY 1976. This

amount includes \$1.0 million for research projects and \$1.0 million for the third of four annual contributions through UNESCO to Egypt for the preservation of the monuments at Philae.

The International Liaison Section has been created to meet the need for effective coordination of the Smithsonian's increasing international activities, especially those related to the Bicentennial. Responsibilities include coordination of Smithsonian activities abroad with the State Department, participation in Subcommittees for Education and Culture and for Science and Technology that form part of the newly established Bilateral Commissions between the United States and several countries in the Mideast, contact with foreign governments for research and travel permits, assistance to the Folklife Festival program for foreign performing arts groups, and coordination of requests for foreign exhibits.

The Center for Short-Lived Phenomena operates a global environmental alert network for rapid communication of scientific data on biological and geological environmental events of short duration to scientists and officials with monitoring responsibilities.

Included in the CSLP's program are: the International Student Alert Network which now includes more than 60,000 students in over 1,000 high schools and universities in the United States and in 18 foreign countries, and an International Pollution Alert Network which involves more than 800 professional environmental monitoring programs in more than 60 countries. The Center's reports make it possible for scientists to conduct research while short duration events are occurring. The first world directory of environmental monitoring organizations was compiled by the Center under a United Nations contract.

## CHESAPEAKE BAY CENTER FOR ENVIRONMENTAL STUDIES

1974 Actual..... \$344,000  
 1975 Estimate..... \$443,000  
 1976 Estimate..... \$539,000

(Dollars in thousands)	Base	Increase	Est.
	FY 1975	Requested	FY 1976
Number of Permanent Positions...	18	4	22
11 Personnel Compensation.....	303	74	377
12 Personnel Benefits.....	26	7	33
21 Travel & Trans. of Persons...	6		6
23 Rent, Comm. & Utilities.....	32		32
24 Printing and Reproduction...	2		2
25 Other Services.....	25	8	33
26 Supplies and Materials.....	34	5	39
31 Equipment.....	15	2	17
TOTAL	443	96	539
<u>Analysis of Increase</u>			
Necessary Pay.....		14	
Program Funds.....		82	

**ABSTRACT** - The Chesapeake Bay Center for Environmental Studies (CBCES) is a natural area for research in complex land-water relationships and for use in creating public awareness and understanding of ecological systems as they may be affected by economic and social change. The FY 1976 budget shows an increase of 4 positions and \$82,000 to provide the following program and support needs: (1) Research - a scientific program coordinator (\$40,000) to give unified direction to ecosystem and land use research; (2) Education and Public Orientation - an education assistant (\$12,000) to conduct workshops, conferences and tours; and (3) Buildings and Facilities Management - a maintenance worker and a custodian (\$20,000) and \$10,000 for supplies, services and equipment for the care of the Center's property. An additional amount of \$14,000 is needed for necessary pay.

**PROGRAM** - The Chesapeake Bay Center is a 2,500 acre area located on the Chesapeake Bay, seven miles south of Annapolis, Maryland, about equidistant from Baltimore and Washington. It was established in 1965 for the purpose of creating scientific and education programs in the environmental sciences leading to a more complete understanding of complex natural relationships and the proper balance of land-water uses as they relate to human health and welfare. The development of these programs was made possible by the acquisition (with non-appropriated funds) of a land-water unit large enough to include a full range of forests, marshes, fields, and agricultural areas. Taken together, these form the mosaic of land uses characteristic of the mid-Atlantic region since settlement. The area is ideal for study of the results of man's past and present activities as vital components of interacting physical and biological systems. Thus, the Center provides a living museum of contemporary and historical significance, a primary resource for teaching and research on complex living systems. It is the largest facility in the nation available for the study of land-water (estuarine) relationships.

The research program is being conducted in conjunction with Federal agencies and universities and is a long-term effort to understand the functioning of terrestrial and estuarine ecosystems. Current research is focused on the Rhode River and its watershed. Estimates are being made of the amounts of nitrogen and phosphorus received by Rhode River from rainfall, surface runoff, and the adjacent waters of Chesapeake

Bay. Measurements are also being made of the amount of bacterial and sediment loading to Rhode River from land runoff on over five square miles of watershed. The extent of nutrient uptake and sediment and bacterial trapping by estuarine marshes is also being measured. These contemporary studies are linked to an intensive analysis of land use changes which have occurred in Rhode River watershed since the time of first settlement. The objective of this research is to determine the effect of changing land use patterns on terrestrial and estuarine ecosystem processes.

Education programs are based on the Center's environmental research activities and are intended to serve youth and adult groups. Activities include workshops and conferences for a variety of citizen groups in order to provide information on the planning and management significance of regional ecosystem research. There are joint efforts with other academic and private institutions in promoting adult outdoor environmental education. The Center serves as a regional clearing house and implementation center for nationally significant outdoor biology education projects. It conducts regional school-tour programs and out-of-school environmental education experiences for children, and research and education training for high school and college students.

JUSTIFICATION OF \$82,000 INCREASE - The Center carries out much of its work on short-term grants and contracts from government and private sources. Appropriated funds have been used to manage the facility and to assure the continuity of what must be long-range research studies.

Research - The CBCES is presently conducting a major project in ecosystem research focusing on the relationship between watershed land runoff and its impact on the estuarine environment. This is the largest such project presently being conducted on an estuarine system in the United States. Overall supervision and direction of this project is needed to ensure the close collaboration among participating scientists necessary for quantitative ecosystem analysis. For this function \$40,000 is requested to fund a scientific program coordinator and provide a small amount of data processing support.

Education and Public Orientation - In FY 1975, a full-time education specialist was added to the Center's staff to supervise and coordinate public education programs. As a result, demands for adult workshops and programs and visits by metropolitan area elementary and secondary schools have substantially increased. Moreover, the new education building at the CBCES (constructed with non-appropriated funds) has made available indoor facilities for a wide variety of education activities. Currently, it is not possible to meet these demands and in calendar year 1974, the Center was forced to reject some 35 requests from elementary and secondary schools for tours and programs. To meet this need a full-time education assistant is requested (\$12,000). This should enable a doubling of the Center's capability for conducting education programs and meet projected demands through FY 1976.

Facilities Support and Maintenance - Based on the projected use of the Center's new education building, a full-time custodian will be needed. Also, one additional position is required to serve in general maintenance of the Center's property and facilities and tend a series of stream weirs that have been constructed on the Center's property to measure and record five separate parameters of rainfall washing over the Rhode River watershed and carrying nutrients into the Chesapeake Bay. These two positions will cost \$20,000. Supplies, materials, services, and equipment needed for the maintenance of buildings and other property require an additional \$10,000.



## NATIONAL AIR AND SPACE MUSEUM

1974 Actual.....\$2,632,000  
 1975 Estimate.....\$4,034,000  
 1976 Estimate.....\$5,537,000

(Dollars in thousands)	Base	Increase	Est.
	FY 1975	Requested	FY 1976
Number of Permanent Positions...	165	65	230
11 Personnel Compensation.....	2,151	453	2,604
12 Personnel Benefits.....	187	38	225
21 Travel & Trans. of Persons...	11	12	23
22 Transportation of Things.....	10		10
23 Rent, Comm. & Utilities.....	10		10
24 Printing and Reproduction....	17		17
25 Other Services.....	1,112	865	1,977
26 Supplies and Materials.....	325	60	385
31 Equipment.....	211	75	286
TOTAL	4,034	1,503	5,537
<u>Analysis of Increase</u>			
Necessary Pay.....		73	
Program Funds.....		1,430	

**ABSTRACT** - The National Air and Space Museum (NASM) was created to memorialize the national development of aviation and space flight; collect, preserve, and display aeronautical and space flight artifacts of historical significance; and serve as a repository for documentary and artistic materials related to air and space. An increase of \$1,430,000 and 65 positions is requested to provide the necessary manpower and other objects of expense to prepare exhibits and programs for the opening of the new NASM building on July 4, 1976. Specifically, these increases are: (1) Custodial staff - 57 positions (\$315,000) and support funds (\$45,000); (2) Presentations and Education - 3 positions (\$49,000) and support funds (\$55,000) to assist in the development and preparation of spacearium/planetarium shows; (3) Exhibits production - 4 positions (\$45,000) and support funds (\$862,000) to assist in the preparation and installation of exhibits; (4) Administration - 1 position (\$9,000) to assist with the clerical workload; (5) Preservation and Restoration - Support funds (\$50,000) to move artifacts from Silver Hill, Maryland, and place them in the new museum. Necessary pay in the amount of \$73,000 is requested for existing staff.

**PROGRAM** - The new NASM building is expected to be a major feature of the Bicentennial celebration, dedicated to communicating the history, science, and technology of flight in ways understandable to the public, and to recognizing and celebrating the leadership role that America has played in the advance of air and space achievements.

The principal effort of the NASM will continue to be directed towards the opening of the new museum building on July 4, 1976. This building will embody 25 major exhibition galleries and 2 large presentation centers. Total exhibit and presentations space will be approximately 250,000 square feet.

The following list shows the 25 halls that are expected to be in the completed building. Titles are tentative but indicate the themes of the exhibits.

National Air and Space Museum  
Major Exhibition Halls

Vertical Flight and Rotary Wing Flight	Life in the Universe
Air Transportation	Satellites and Space Probes
Earliest Birds	Earthbound Benefits From Flight
Kitty Hawk Flyer	Sea-Air Operations
Index Exhibit	Understanding Air and Space
Large Space Vehicles	Technology and Materials
History and Technology of Space Flight	World War II Aviation
General Aviation	Lighter Than Air
Exhibition Flight	World War I Aviation
Air Traffic Control and Navigation	Significant Aircraft and Spacecraft
Earth Flight Environment	The X Airplanes
Trophy Hall	Flight to the Moon
Space Flight Environment	Air and Space in the Arts

To date, five of the core exhibits have been completed and tested in the Arts and Industries Building. These prototype halls have featured advanced presentation techniques which have been extremely well received. A major objective of this prototype exhibit program has already been met, that is, the development of a superior exhibits design and production staff and the construction of a production facility at Silver Hill. Successful planetarium shows have been running in the 30-foot domed Experimentarium which was constructed to test programs and equipment and to develop a staff for the new Spacearium. All shows and equipment will be revised for incorporation into the 70-foot dome Spacearium with its more sophisticated, computerized star projector and supporting audio-visual equipment. A first film for the theater has been written and is now awaiting production.

The restoration and installation of the full-sized air and space craft now in storage at Silver Hill will continue to provide the artifacts needed for the new building exhibits. Of the approximately 60 aircraft that are planned to be exhibited in the new building, 35 are now ready with the remaining 25 in various stages of restoration. The percent completion for the various space artifacts planned to be exhibited is approximately the same.

JUSTIFICATION OF \$1,430,000 INCREASE - FY 1976 marks the final period to complete the opening exhibits and presentations and ready the museum for the public. The detailed gallery designs and presentations produced in FY 1975 are to be fabricated and installed with FY 1976 funds. Complicated electromechanical and audio-visual equipment for exhibits and the planetarium must be installed, tested, and made operational. Programs must be developed for the theater and planetarium. The building must be made habitable. Aircraft and spacecraft, which have been restored over the past three years, must be moved from the Silver Hill facility to the building for placement in exhibit areas. Specifically the increase is requested for:

Exhibits Production - As planned, all 25 exhibition galleries will open to the public when the museum opens. Exhibit galleries are in design and production, each covering an important facet of the total history, science, and technology of flight. By the opening date, 40 to 50 percent of the space in the various galleries will contain long-term exhibit units, and the remaining space in the galleries will show educational interim installations such as labeled aircraft and spacecraft. In addition to new exhibit design and production in FY 1975, NASM will redesign 4 exhibit galleries that had been prototyped in temporary facilities for trial and evaluation. This redesign will make it possible to install these exhibitions in the new building, modified to reflect lessons learned during the trial runs. Additionally, eleven new exhibits are being researched and designed, using both staff and outside contracts. These exhibits will be fabricated and installed in the building during FY 1976.

Four additional exhibits personnel (\$45,000) (four electronic technicians, two of whom have electromechanical backgrounds) will be required to assist in the design, installation, test and operation of a wide assortment of slide and motion picture projectors; \*apc decks; visitor participation units; electrical dioramas; special lighting effects; TV units; and other such complicated electronic systems found in modern museums. Funds (\$850,000) are necessary for the supporting services, supplies, materials and equipment to construct and install permanent exhibitions in 5 of the 15 galleries that will contain long-term exhibits. This increase will provide NASM with the ability to open with approximately 50 percent of the permanent exhibits in place. Without it, only 30 percent of the museum's galleries will be complete. Travel funds (\$12,000) are needed to oversee exhibits production.

Presentation and Education Division - Three personnel, an education and information specialist, a planetarium production specialist and a planetarium presentation specialist (\$49,000) are required to work with the current staff in preparation and production of planetarium shows and the development of educational programs using the planetarium and theater facilities and other museum resources. Funds are also requested to purchase special equipment, supplies, and materials (\$55,000).

Preservation and Restoration - The entire staff of the Preservation and Restoration Division will be involved in the moving and installing of major artifacts into the new building. Sixty-eight aircraft and seventy-five major space artifacts will be displayed to the public, either singly or as components of exhibit units. Seventy-five of these artifacts will be hung from the ceilings of the various exhibition halls. In addition, 4 missiles, Jupiter C, Vanguard, Scout, and Minuteman 3, will be placed upright in the Space Hall. Funding (\$50,000) is necessary to provide special handling equipment, material and the temporary services of professional riggers to assist the NASM staff in moving and mounting these artifacts.

Building and Facilities Management - In FY 1976 the janitorial functions were decentralized and each museum was given the responsibility and manpower to maintain its own facilities. NASM received a skeleton force and funds to support the staff for the last quarter of FY 1975 (during the period the NASM moves into the building). To supplement the present staff and make the building ready for the public, an additional 52 janitors and laborers and 5 supervisors are required plus funds to annualize the 25 positions authorized in FY 1975 for one quarter (\$315,000) and funds (\$45,000) for supporting supplies, materials and equipment.

Administration - An additional clerk-stenographer (\$9,000) is required to assist with the increase in clerical tasks in the museum

CENTER FOR THE STUDY OF MAN

1974 Actual.....\$293,000  
 1975 Estimate.....\$322,000  
 1976 Estimate.....\$385,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	11	1	12
11 Personnel Compensation.....	233	31	264
12 Personnel Benefits.....	20	3	23
21 Travel & Trans. of Persons...	7	12	19
23 Rent, Comm. & Utilities.....	3		3
24 Printing and Reproduction...	2		2
25 Other Services.....	51	17	68
26 Supplies and Materials.....	1		1
31 Equipment.....	5		5
TOTAL	322	65	385
<u>Analysis of Increase</u>			
Necessary Pay.....		14	
Program Funds.....		49	

**ABSTRACT** - The Center for the Study of Man (CSM) has several anthropological and human science programs: continued development of the Encyclopedia of North American Indians; sponsorship of an urgent anthropological program; coordination of international anthropological efforts on current social problems; conduct of an immigration and ethnic studies program; and an anthropological film study center. An increase of \$49,000 and 1 position is requested for the following program needs: (1) support funds (\$29,000) for Immigration and Ethnic Studies and (2) 1 position and \$20,000 for the National Ethnographic Film Center and Archive. An amount of \$14,000 is needed for necessary pay.

**PROGRAM** - The CSM coordinates research and development on a series of important anthropological programs. The American Indian Program is presently concerned primarily with the development of the 20 volume Encyclopedia of North American Indians to be published for the Bicentennial. It will contain 1,000 articles. Forty percent of the manuscripts are now complete and the development of design and specifications for printing is well along. Funds for the actual printing of the Encyclopedia are contained in the Bicentennial budget request.

Another aspect of the American Indian Program is the development of a system for providing scholarly educational materials concerning Indians to individuals, schools, and Indian communities. In addition, the Center helps to coordinate educational intercommunication among Indians themselves, with scholars, and with appropriate Government and private agencies.

As work on the Encyclopedia progresses, it becomes increasingly clear that there are dangerous gaps in the knowledge of North American Indian cultures. In particular, there is a pressing need to interview within the next few years the tribal elders who are anxious to fill in the record of their proud past. The Urgent Anthropology Program which identifies, publicizes, and finances, by means of small awards, needed research in geographical areas that are undergoing rapid environmental change as a result of urbanization, improved communications, better transportation, and other factors has been helpful in this respect. Its objective is to salvage and preserve information in selected rapidly changing areas before time and events erase our ability to understand the cultures that existed.

The American Indian program has focused particularly on bridging the gap between present-day Indians and their archeological past. Field research is being conducted in Louisiana, Mississippi, Texas, South Carolina, Georgia, Alabama, North Carolina, Arizona, Idaho, Washington, California, and South Dakota. Portions of the research which is producing chapters for the Encyclopedia are also relevant for closing the gap between past and present. For instance, a Pima Indian is carrying out a study of the history, language, songs, legends, and crafts of the Gila River Pima with funding support from the Center.

The Cross-Cultural Research Program is coordinating the efforts of numerous anthropologists and other human scientists in developing new, comparative information on population, environmental, and educational studies. Comparative research on world use of cannabis and alcohol has also been carried out.

The comparative Immigrant and Ethnic Studies Program is carrying out basic research in the United States, Canada, the circum-Caribbean area, and the Panama Canal Zone. It investigates the special conditions which stimulate immigration, assesses the contributions made by immigrants, and studies the effects of immigration on the source country and on the target country. Field research, archival research, and statistical methods are all used.

The Center has established a National Ethnographic Film Center and Archive in response to requests from a number of Federal agencies (National Science Foundation, National Endowment for the Humanities, National Institutes of Health, etc.) and from other concerned organizations and individuals. The purpose of this unit is to record, collect, and preserve the cultures of North American Indians and other peoples as recorded on film. Much of the film being collected is in great danger of destruction and the need for immediate action is clear. Initial funding for this program has been from outside sources.

#### JUSTIFICATION OF \$49,000 INCREASE (Research):

A total of \$29,000 is requested for the Research Institute on Immigration and Ethnic Studies. This money is needed for consultants, seminars, field research, and coordination of programs which the Institute is committed to in Washington, D.C., the Caribbean, and the Panama Canal Zone.

Anthropological film archives have been established as valuable national resources in a number of European countries, but there are as yet no archives or film collections in this country carrying out such a role. The Library of Congress Film Unit is confined to collecting and preserving films that have been copyrighted for commercial distribution. Since over ninety percent of all film taken by American anthropologists is not copyrighted, it therefore does not find its way into the LC archives. There is an urgent need for an archive to obtain and preserve the growing body of anthropological film in this country, much of which is being lost almost as surely as if it had never been taken. This is because the anthropologist-film maker typically exhausts his resources in making one or two short edited films out of all his footage, with a usual shooting ratio of one part used in an edited film to ten to fifteen parts unused, or out-take material, which is often just as valuable for the scientific record or educational purposes as whatever may go into an edited print. Currently, the anthropologist-film maker has no place to go for help in making research copies and in properly annotating his footage. As time goes by, master prints are cut up, film crews disband and memory fades. In this way enormous quantities of valuable footage rapidly deteriorate or are lost.

In making this request the Institution considers that it cannot be primarily responsible for field support (new filming) or duplication of research prints to be



deposited in the archive, both of which are necessary but costly operations. Rather, the Smithsonian views the principal objectives of the proposed archive and study center as follows:

- To bring together and preserve existing anthropological films and unedited footage, annotated and catalogued for maximum research and educational utility.
- To initiate, encourage and otherwise collaborate in the film documentation of naturally occurring behavior in disappearing cultures.
- To provide a study center for the research uses of anthropological film.
- To serve also as a resource for the interested general public and ethnic groups, such as American Indians, to cite one example, who are extremely interested in film records of their own past for educational purposes and for the small tribal museums now being established on many reservations.

A total of \$20,000 is requested for the Anthropological Film Study Center. This money will be used to hire a Director for the Center.

## NATIONAL ZOOLOGICAL PARK

1974 Actual.....\$4,564,000  
 1975 Estimate.....\$5,482,000  
 1976 Estimate.....\$5,882,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	<u>294</u>	<u>10</u>	<u>304</u>
11 Personnel Compensation.....	3,922	257	4,179
12 Personnel Benefits.....	323	24	347
21 Travel & Trans. of Persons...	19	2	21
22 Transportation of Things.....	8	2	10
23 Rent, Comm. & Utilities.....	240	58	298
24 Printing and Reproduction....	16	0	16
25 Other Services.....	246	3	249
26 Supplies and Materials.....	554	34	588
31 Equipment.....	152	20	172
41 Grants.....	1		1
42 Insurance Claims & Indem.....	<u>1</u>		<u>1</u>
TOTAL	<u>5,482</u>	<u>400</u>	<u>5,882</u>
<u>Analysis of Increase</u>			
Necessary Pay.....		176	
Other Uncontrollable.....		44	
Program Funds.....		180	

**ABSTRACT** - The National Zoological Park (NZN) is located on 156 acres in Rock Creek Valley and manages another 3,000 acres near Front Royal, Virginia. The Zoo exhibits a large and varied animal collection; serves the information, education, and service needs of the public; and conducts programs of research, animal health, and conservation. NZN budget requirements for FY 1976 include an additional 10 positions and \$180,000 to support current programs including: (1) Collection and Facilities Management - 4 animal keepers, 1 mechanic, and 1 exhibits specialist (\$62,000) and support funds of \$40,000 to place into service exhibit facilities now under construction; (2) Collections Management - \$20,000 to keep pace with cost increases for animal food and care; and (3) Research and Conservation - 2 animal keepers and 2 mechanics (\$43,000) and support funds of \$15,000 to sustain progress in breeding and research efforts. Further amounts of \$176,000 for necessary pay and \$44,000 for utility rate increases are requested in the Uncontrollable Section.

**PROGRAM** - In 1889, Congress established the National Zoological Park for the "advancement of science and the instruction and recreation of the people." To accomplish those purposes, the Zoo exhibits a broad variety of animals representing one of the most important collections of rare and endangered species in existence; maintains information, education, and visitor service programs for the public from all over the United States; and undertakes scientific research, including biomedical studies, for the increased understanding and healthful well-being of the animals.

The National Zoological Park is the Nation's Zoo:

--welcoming each year visitors in large numbers from every state. In 1974, visitors celebrated with Zoo staff the births of many rare and fascinating animals, including the first Indian Rhinoceros born in the Western Hemisphere. Educational programs and graphic displays enable each visitor to derive new understanding about animals of the collection and an awareness of issues relating to the interrelationships between man and animal as we share a world together.

- leading the way in enlightened collections management. The Zoo provides for each animal's physiological and psychological needs; preserves its gene pool through selective breeding efforts as the number of its kind in the wild disappears, sustains it in good health for a full and useful life demonstrating to man the character and worth of its own kind.
- sharing learning with the public, scholars, and other zoos. Basic research at the National Zoo is resulting in increased understanding of the behavior and survival strategies of diversified representatives of the animal kingdom. Biomedical studies have led to improved health of Zoo collections through early recognition and treatment of the illnesses and infirmities affecting exotic animals. The Zoo is an important resource of training for doctoral scholars observing healthy animals, and is an intern site for veterinary clinicians and pathologists who will eventually care for exotic animals in other American zoos.
- innovating strategies to aid the conservation of rare and endangered species. Efforts in 1975 include field research and development of a research and conservation center to permit pooling animals in partnership with other zoos and to provide space for more natural and successful breeding.
- developing prototype education programs for Zoo visitors and student groups.

The increasingly sensitive job of managing so complex and irreplaceable a world of animals calls on many talents and outlooks. Too often overlooked is the essential work that Zoo craftsmen perform--keeping the Zoo open, clean, inviting, and sightly. In FY 1975, training is underway to insure the continued availability of maintenance skills--electricians, carpenters, operating engineers, metalworkers, masons, painters, gardeners, and welders. Talented individuals in graphic arts and education have joined the Zoo staff to make the visitor's stay more enjoyable and illuminating. The animal keepers are receiving training so that their creative talents may keep pace with the needs of the collections. Responsive and able medical assistance is delivered by a capable staff. The curatorial and research staffs refine reproductive strategies and bring into planning new knowledge gained through research on-site and in the wild.

To continue to do the Zoo's job well and hopefully better is the goal that all of the Zoo staff members share. The Zoo's role has never been more important--to promote understanding and conservation of rare animals; to provide a wholesome, entertaining learning opportunity for each visitor; and a good home for animals of the collection.

#### JUSTIFICATION OF \$180,000 INCREASE:

Collections and Facilities Management - In FY 1976, Zoo animals and visitors will benefit from improved exhibit facilities. Key steps in their necessary sequence within the approved Master Plan for the rebuilding of the Zoo will be realized. The renovated Monkey House will be in service throughout 1976. Upgrading of the Bird House Plaza and Elephant Yards will be completed in the first half of FY 1976. The major new Lion-Tiger Complex will be completed in the last quarter of FY 1976 and opened to the public during the transitional and intensely active Bicentennial period of July-September 1976. These are among the first of a series of long needed new structures bringing the National Zoo forward in its service to the visitors and to the animal collection. Further details on the Master Plan appear in the Construction section of this budget.

To place these new facilities into service, the Zoo must:

- selectively acquire animals, including Indian Lions (*Panthera Leo indica*) and a pair of Snow Leopards (*Panthera uncia*).

- defray the travel costs of locating and moving animals.
- feed all animals adequately for essential nutritional needs.
- buy supplies and equipment needed for the best possible care of an increasingly irreplaceable collection and expanded exhibit areas.
- buy display materials and manufacture exhibits useful for visitor appreciation of animal life in the wild and in the Zoo.
- meet the part-year costs of utilities and maintenance for the new structures (the complex heating and air-conditioning systems of the Lion-Tiger Complex and Monkey House for a full year's operation will require increased energy and support costs).

An amount of \$40,000 is sought for these purposes.

Four animal keepers will care for the revised and elaborated animal collection. An exhibit specialist will produce in-cage environments and true-to-life displays that are educationally useful to Zoo visitors and encourage natural behavior on the part of the animals. A heating, refrigeration and air-conditioning mechanic will tend the complex mechanical systems added for the well being of Zoo animals and comfort of visitors. These additional staff will cost \$62,000.

Care and Management of the Collection - The National Zoo's collection in large measure must sustain itself. The Zoo is leading the way toward becoming a producer and not a consumer of animals. Since 1972, mammal births have not increased because of space shortages but the survival of newborn animals has increased from 67 to 75 percent. Bird hatchings doubled over the same span. Reptile and amphibian hatchings tripled (from 33 to 105) and the survival rate increased to 90 percent.

Such hard won success has not been accidental but has resulted from the efforts of knowledgeable curators, keepers, and health specialists. The Zoo needs to keep pace with the increasing needs for new medicines and diagnostic aids that will allow delivery of the best and timeliest treatment possible. The Zoo must meet the nutritional needs of the collection's animals. The Zoo cannot defer, delay, or avoid the costs of feeding the animals. Food costs continue to skyrocket. Even should inflationary rates begin to slacken, absolute dollar outlays for food will increase. A further \$20,000 is requested for these purposes.

Conservation and Research - The National Zoo emphasizes research and conservation efforts in order to increase man's understanding of conditions that are essential for the preservation of rare and endangered species.

Ample space for animals is being developed near Front Royal, Virginia to establish conditions for successful breeding in collaboration with other American zoos. The area also serves as an additional food source to satisfy the increasingly special and costly nutritional requisites of exotic animals. Instead of bringing hay from the Dakotas, the precise trace elements needed exist in hay fields at Front Royal. To use those unique and long-range opportunities, the Zoo must add two animal keepers, a farm equipment operator, and a plumber (\$43,000).

The Zoo must replace obsolete farm equipment, lime and fertilize fields, and maintain barns and other buildings. The continued advancement of innovative and productive research into general and reproductive behavior necessitates that the Zoo complete field studies. One focus of Zoo research is vertebrate and invertebrate communications. To keep this productive effort underway, depreciated and undependable equipment must be replaced. These needs will require an additional \$15,000.

## OFFICE OF THE ASSISTANT SECRETARY FOR HISTORY AND ART

1974 Actual.....		\$242,000	
1975 Estimate.....		\$257,000	
1976 Estimate.....		\$267,000	
(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	11	0	11
11 Personnel Compensation.....	231	9	240
12 Personnel Benefits.....	13	1	14
21 Travel & Trans. of Persons...	4		4
25 Other Services.....	4		4
26 Supplies and Materials.....	4		4
31 Equipment.....	1		1
TOTAL	257	10	267
<u>Analysis of Increase</u>			
Necessary Pay.....		10	
Program Funds.....		0	

ABSTRACT - The Office of the Assistant Secretary for History and Art advises and assists the Secretary in planning, implementing, and reviewing the progress of Smithsonian history and art programs. In addition, this office oversees the planning and coordination of the Smithsonian's Bicentennial programs and projects. Also included under this heading are the American Studies program, the Joseph Henry Papers project, and the Art Quarterly. No program increase is sought for FY 1976. An amount of \$10,000 is requested for necessary pay.

PROGRAM - I. Immediate Office: With a base of four positions and \$122,000, the Office of the Assistant Secretary for History and Art advises and assists the Secretary in planning, implementing, coordinating, and reviewing the progress of the programs of the Smithsonian history and art bureaus and offices. In addition, this office oversees the planning and coordination of the Smithsonian's Bicentennial programs and projects. The bureaus and offices reporting directly to the Assistant Secretary for History and Art are the Archives of American Art, Cooper-Hewitt Museum of Decorative Arts and Design, Freer Gallery of Art, Hillwood, Hirshhorn Museum and Sculpture Garden, National Collection of Fine Arts, National Museum of History and Technology, National Portrait Gallery, Office of Academic Studies, Office of American Studies, the Joseph Henry Papers, and the Art Quarterly.

11. Other Central History and Art Activities: The remainder of the funding identified for this office, seven positions and \$145,000, supports the American Studies program, the Joseph Henry Papers project and, beginning in 1976, the Art Quarterly. The Office of American Studies organizes and conducts a formal program of graduate education in the material aspects of American civilization, and participates in the overall program of historical, archaeological, and architectural history research at St. Mary's City, Maryland, as funded by the State of Maryland, National Endowment for the Humanities, Rockefeller Foundation, and other foundations. The Editor of the Joseph Henry Papers and his staff have been gathering and preparing for publication the manuscripts of Joseph Henry (1797-1878), the pioneer American physicist and first Secretary of the Smithsonian Institution. Volume one of a multi-volume set was published in December 1972. Volume two will be sent to the Government Printing Office early this year for publication in FY 1976. These and subsequent volumes are to be included in the documentary publications program of the National Historical Publications Commission. The Art Quarterly, probably the best and most important scholarly journal in its field in this country, will be published beginning this year by the Smithsonian Institution. Previously published by the Detroit Institute of Arts, the Quarterly exhibits a commitment to art historical scholarship of the highest quality and will lend additional strength to the public offerings of the Smithsonian's program in the arts. Through various economies and a minor reorganization of staffing patterns, this new activity will require no increase in Federal funding in FY 1976.



## NATIONAL MUSEUM OF HISTORY AND TECHNOLOGY

1974 Actual.....\$4,333,000  
 1975 Estimate.....\$5,139,000  
 1976 Estimate.....\$5,395,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	259	7	266
11 Personnel Compensation.....	4,229	192	4,421
12 Personnel Benefits.....	362	16	378
21 Travel & Trans. of Persons...	34	1	35
23 Rent, Comm. & Utilities.....	20		20
24 Printing and Reproduction....	50	15	65
25 Other Services.....	236	26	262
26 Supplies and Materials.....	100	4	104
31 Equipment.....	108	2	110
<b>TOTAL</b>	<b>5,139</b>	<b>256</b>	<b>5,395</b>
<u>Analysis of Increase</u>			
Necessary Pay.....		136	
Program Funds.....		120	

**ABSTRACT** - The National Museum of History and Technology (NMHT) is the repository of the collections documenting the historical and technological achievements of the American people. It has an active research and publication program and its exhibits receive more visitors than any other Museum in the world. The FY 1976 budget requests an additional 7 positions and \$120,000 for the following purposes: (1) Education and Public Orientation - 2 education specialists (\$25,000) and \$45,000 for program development and implementation to provide improved tour, orientation, and other information services to museum visitors and (2) Buildings and Facilities Management - 5 custodial positions (\$47,000) and \$3,000 of support to maintain building cleanliness standards. An additional amount of \$136,000 is required for necessary pay for existing staff.

**PROGRAM** - NMHT occupies a unique position among the great museums of the world. As the repository of the national collections documenting the historical and technological achievements of the American people, the Museum has responsibility for over 16,000,000 objects related to all facets of the American experience. Each of these objects must receive the highest level of professional care and preservation and must be stored and exhibited using the best techniques available.

Since opening in 1964, the NMHT has provided a variety and richness of public exhibits seen by over 60,000,000 visitors. The Museum annually receives more visitors than any other museum in the world. As the most visited museum in the world, it will be host to almost 7,000,000 visitors during FY 1975. It is anticipated that this annual attendance figure will total more than 12,000,000 by the Bicentennial year and continue at a high level.

As a center for the scholarly study of the history of American material culture and the history of science and technology, this Museum continues to support and encourage basic research and publication in many subject fields, ranging from early exploration to studies of contemporary American culture.

In FY 1975, the exhibition "Suiting Everyone," demonstrating the democratization of clothing in America, was opened with many favorable notices. Also opened were the small exhibit "California" and the temporary exhibits "The Madrid Manuscripts of

Leonardo da Vinci," featuring the newly discovered Leonardo manuscripts which have never before left Spain, "Steuben, Seventy Years of American Glass," and "Lead and Zinc Mining Scenes of the Past." "We the People," an exhibition focusing upon the distinctive political process in the United States, will also open in the latter part of FY 1975. The major exhibit effort of the Museum, as well as a major portion of the energy of the entire staff, has been applied to the two very large Bicentennial exhibitions "A Nation of Nations" and, in the Arts and Industries Building, "1876: A Centennial Exhibit." In addition, progress is being made upon "Two Hundred Years of American Banking." This year has seen not only a concentration upon exhibit production, but also a rising investment of resources and time in collections management, publications, and education and public information.

#### JUSTIFICATION OF \$120,000 INCREASE:

Education and Public Orientation - The anticipated increase in visitors during the Bicentennial years and thereafter will require special provisions for their accommodation. Present facilities for public information and education are already being utilized to their capacity. It is planned that by the addition of staff and the development of self-guided tour and orientation film and slide programs these needs can be fulfilled. Among the needs foreseen are special facilities for foreign speaking visitors, who are expected in considerable numbers, and facilities for the handicapped. Special accommodation will have to be provided also for the greatly increased number of school tours coming from all over the country and outside the United States, as well as from local schools.

An orientation program is already under planning and will be ready for implementation as soon as funding is in hand. Provisions are being made for group orientation films which will identify the subject interests and exhibits of the museum, and deal with particular aspects of American civilization as illustrated in the public exhibits. Because of the great crowds expected, other orientation facilities are being developed, in the form of rear projection slide presentations in untravelled bays of the public areas. In addition, recruitment is in progress for an education specialist to develop programs and facilities for the handicapped. Plans have been made to use senior students from local institutions for the handicapped to serve as volunteer docents in the museum, for which service they would receive curriculum credit in their institutions.

The stepped-up public orientation and education program proposed for FY 1976 will require an audio-visual specialist, who will develop scripts in cooperation with the Museum staff for orientation films and slide presentations for the general public, and a coordinator of special education programs to schedule public and special group tours, supervise a volunteer docent program, and develop specialized tour brochures. These two new positions will cost \$25,000. Other object class funds in the amount of \$45,000 will be used for consultants in communication media and special education to provide advice on museum traffic control and orientation development; equipment and supplies to maintain the program, including video tape equipment and other educational devices; the production and installation of orientation films and slide programs developed by Museum staff; and the publication of orientation materials for visitors, including brochures for the handicapped and self-guided tours for school groups.

Buildings and Facilities Management - Faced by consistently high levels of visitor attendance the Museum's FY 1975 custodial staff of 47 is already hard pressed to keep the public areas of the building satisfactorily clean. A survey of building requirements has shown a need for about 65 such positions. Much staff overtime at premium pay is required to maintain minimum upkeep standards. Furthermore, it is estimated that public use of NMHT will almost double in 1976 making this Museum's annual attendance three to four times larger than any other museum in the world. It is requested that 5 additional custodial positions (\$47,000) with \$3,000 of support funds be provided to relieve partially this situation.

## NATIONAL COLLECTION OF FINE ARTS

1974 Actual..... \$1,778,000  
 1975 Estimate..... \$2,074,000  
 1976 Estimate..... \$2,247,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	100	3	103
11 Personnel Compensation.....	1,403	91	1,494
12 Personnel Benefits.....	125	8	133
21 Travel & Trans. of Persons...	20		20
22 Transportation of Things.....	73		73
23 Rent, Comm. & Utilities.....	9		9
24 Printing and Reproduction...	52		52
25 Other Services.....	221		221
26 Supplies and Materials.....	64	24	88
31 Equipment.....	87	50	137
41 Grants.....	20		20
<b>TOTAL</b>	<b>2,074</b>	<b>173</b>	<b>2,247</b>
<u>Analysis of Increase</u>			
Necessary Pay.....		69	
Program Funds.....		104	

**ABSTRACT** - The National Collection of Fine Arts (NCFA), the oldest national collection of art, is devoted to all aspects of American art, past and present, and maintains an active program of exhibition, publication, research, and conservation in the field. In FY 1976, three additional positions and \$104,000 are requested to meet the following requirements: (1) Collections Acquisitions - funding of \$50,000 to maintain a minimum acquisition program necessary to establish fully representative collections and (2) Buildings and Facilities Management - two laborers and a painter-helper (\$30,000) and an amount of \$24,000 for custodial and maintenance supplies and materials to clean and maintain adequately NCFA facilities. Necessary pay funds of \$69,000 are sought.

**PROGRAM** - This major collection of American art, the origins of which go back to the 1830's, was uncatalogued and ill-housed until the present facility was opened in the former Patent Office in 1968. The growing collection of some 17,000 works is now registered on computer and arranged, either in carefully planned galleries or in systematic storage, so that every work is available for public pleasure or scholarly study. About 1,700 works are on loan to public offices in the Washington area. Exhibitions are presented in the United States and abroad, and an active program of education is maintained for the schools and the general public.

In FY 1975, seventeen new exhibitions were presented by the NCFA. Of these, three were cooperative efforts with other institutions and fourteen were designed and produced by the museum. These included "American Art in the Barbizon Mood," "Man Made Mobile: The Western Saddle" (at the Renwick Gallery), "Academy: The Academic Tradition in American Art" and smaller exhibitions featuring one artist, such as Chaim Gross and Ilya Bolotowsky. Exhibitions were accompanied by authoritative publications prepared by the museum. Some eighteen separate publications were issued. All galleries devoted to contemporary art were reinstalled, and two galleries formerly devoted to borrowed works of Winslow Homer were installed with paintings and sculpture from the museum's collection. The two galleries devoted to landscape painting were reinstalled. In addition to the above, NCFA's Office of Exhibitions Abroad had a total of eight exhibitions circulating outside the United States.

The very active education program was expanded to offer further activities for school children and the public. Some 17,700 public school children attended sessions within the museum, and many others were reached in the schools themselves. This department also supervised fifty junior and senior high school students who participated in a junior intern program and seventeen college students who worked in a similar program. Thirty-eight museum interns were introduced to museum practices through on-the-job training.

JUSTIFICATION OF \$104,000 INCREASE:

Collections Acquisition - The National Collection of Fine Arts is, aside from its other functions, a museum of record. Its permanent collection strives to represent a cross section of American art of all periods and types, and special attention has been given to those aspects of art that might otherwise be overlooked in the changing fashions in taste. The effort has been to represent each significant American artist by a group of studies, as well as completed works, in order to record both the artist's creative procedure and his ultimate achievement. *Care has been taken to concentrate particularly on artists not already well represented in other national collections.* In the past year the museum purchased, among other works, paintings by excellent but little-known American painters working in Italy in the mid-nineteenth century (Walter Gould, George Loring Brown, William Carlton), works of two "self-taught" mid-western painters of the last century (Walter Griswold, Charles Brickey), a painting by the rarely represented painter and sculptor William Rimmer, and representative works of young contemporary artists. Most accessions come by gift - about 900 works a year including graphic works and studies - but if the proper historical and aesthetic balance is to be maintained and the collection is to be of service to future generations, a judicious program of purchase must complement the carefully screened donations. Because of rising costs in all areas of the museum's activities, it has been increasingly difficult to maintain the necessary minimum acquisition program. Major works, priced on the market today from \$150,000 and up cannot be considered for purchase on NCFA's present acquisitions budget of \$50,000, or even on the proposed budget of \$100,000; nevertheless, it is important to acquire such necessary works as can be afforded whenever possible. An increase of \$50,000 is requested simply to keep the acquisition program current.

Buildings and Facilities Management - The NCFA building management staff maintains its portion of the Fine Arts and Portrait Galleries building, the Renwick Gallery, and the Barney House. At the present time, the staff includes only two laborers for all three buildings and these laborers must also perform as supplementary custodial helpers. In order to be responsive to fifteen departments and offices and to the needs of the three buildings involved, the addition of two new laborers and a painter-helper (\$30,000) is requested. The painter-helper is especially important because the Fine Arts and Portrait Galleries building and the Renwick Gallery have been open to the public for six and three years respectively, and continual painting refurbishment is now necessary in order to maintain the visual standards and preventive maintenance programs of both museums. NCFA further requests \$24,000 for building management supplies and materials to operate at an acceptable level. With higher visitor levels anticipated during the Bicentennial and thereafter, these necessary support activities must be provided for adequately.

NATIONAL PORTRAIT GALLERY

1974 Actual.....\$1,246,000  
 1975 Estimate.....\$1,544,000  
 1976 Estimate.....\$1,686,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	71	3	74
11 Personnel Compensation.....	1,015	62	1,077
12 Personnel Benefits.....	89	6	95
21 Travel & Trans. of Persons.....	16	3	19
22 Transportation of Things.....	14		14
23 Rent, Comm. & Utilities.....	8		8
24 Printing and Reproduction.....	2		2
25 Other Services.....	121	4	125
26 Supplies and Materials.....	57	10	67
31 Equipment.....	217	57	274
42 Insurance Claims & Indemnities.	5		5
<b>TOTAL</b>	<b>1,544</b>	<b>142</b>	<b>1,686</b>
<u>Analysis of Increase</u>			
Necessary Pay.....		38	
Program Funds.....		104	

ABSTRACT - The National Portrait Gallery (NPG) was established in 1962 as a free public museum for the exhibition and study of portraits depicting men and women who have made significant contributions to the history, development, and culture of the people of the United States. In FY 1976 an increase of 3 positions and \$104,000 is requested to meet the following program requirements: (1) Collections Acquisitions - funding of \$50,000 to assist the Gallery in acquiring the collections necessary to fulfill its assigned responsibilities and (2) Buildings and Facilities Management - an additional \$54,000 to provide an electrician's helper, two janitors, and materials and services necessary to support Gallery operations and to maintain the historic building housing the Gallery in view of significantly increasing attendance, especially during the Bicentennial celebration and following the opening of Metro. An increase of \$38,000 in necessary pay is also requested.

PROGRAM - The National Portrait Gallery is the only national museum of American history that tells the history of the United States primarily in terms of the men and women who made that history. The portraits of these men and women are crucial documents of historical evidence and bear strong witness to the roles these people played in the American experience.

The Gallery's activities include: (1) the expansion and care of its collections; (2) public education through the exhibition of the permanent collection and specially organized temporary exhibitions; (3) the preparation and national distribution of scholarly and popular publications related to these exhibitions; and (4) the compilation of a definitive catalogue of American portraits, constituting a unique information resource in the areas of American history and biography, art, and iconography.

Attendance at the Fine Arts and Portrait Galleries during FY 1974 was in excess of 329,000, an increase of 30 percent over the previous year. In addition, three times as many young people and adults were served by the Gallery's education department during FY 1974 as in FY 1973, (33,000 versus 11,000). These trends have continued in the current year.



One hundred eleven portraits were added to the collection in FY 1974 and 1975. Sixty-six were acquired by purchase, including the only known life portrait of Frederick Augustus Muhlenberg, the first Speaker of the House of Representatives; John Trumbull's portrait of John Jay; a full-length cabinet-size portrait of John Marshall; a portrait of Dolley Madison; and busts of Abraham Lincoln and of Ralph Waldo Emerson.

Among the gifts were portraits of Richard Henry Lee by Charles Willson Peale, of Gouverneur Morris by James Sharples, William Lloyd Garrison by Anne Whitney (a plaster bust), and Andrew Carnegie--all the gifts of descendants. In addition, Mr. and Mrs. Paul Mellon presented a magnificent collection of 761 portraits engraved by C.B.J.F. de Saint Memin depicting important Americans from all walks of life, including Thomas Jefferson, Meriwether Lewis and William Clark, Paul Revere, Oliver Hazard Perry, and Mother Seton.

From June 14th to November 17th the Gallery presented the Nation's first Bicentennial exhibition entitled, "In the Minds and Hearts of the People: Prologue to the American Revolution, 1760-1774", consisting of 65 paintings and over 250 associative objects borrowed from collections in the United States and abroad. A second major exhibition, "American Self-Portraits" on view from February 1 to March 15, 1974, contained 109 paintings by American artists from colonial times to the present. Single-room exhibitions were installed with the Gallery's Saint Memin collection and a selection of portraits and letters of American artists from the holdings of the Archives of American Art, entitled "From Reliable Sources". In addition, several small exhibitions featuring portraits of selected individuals were organized.

With a goal of establishing a definitive collection of prints of notable Americans, the Gallery hired an assistant curator to organize and expand its holdings of 38,000 portraits in this medium.

In September, assisted by a grant from the National Endowment for the Humanities, the Gallery began a multi-year effort to publish in micro-film and selected letter press editions the papers of Charles Willson Peale, the American artist and scientist who was one of the most notable contributors to the early cultural history of the nation.

#### JUSTIFICATION OF \$104,000 INCREASE:

Collections Acquisition - In FY 1976, the Gallery is requesting additional funding of \$50,000 to increase its budget for acquisitions. The permanent collection of the Gallery presently consist of only 748 portraits, of which 439 were acquired by gift. During the past three years the acquisitions budget has averaged \$185,000, which has not been sufficient to add all the portraits not available by gift that the NPG Commission deemed desirable. To redirect funds from other areas would seriously detract from the Gallery's essential research, publication, exhibition, and educational programs. A large number of significant portraits still remain in private hands. Although some of these will surely come to the Gallery as gifts, many will have to be acquired by purchase. It is critical that sufficient financial resources be available when such occasions arise lest portraits of those Americans who must be represented in the national collection find a permanent home elsewhere.

Buildings and Facilities Management - The balance of the request is for staff and materials necessary to operate the historic building housing the Gallery. During FY 1974 and 1975 the Gallery has been preparing for the first public use of areas on the first and third floors of the building, adding 10,000 square feet of exhibition space. Two janitors are required to help maintain these areas on a seven-day a week basis and to accommodate the increased number of visitors expected during the Bicentennial celebration and following the opening of Metro. In addition, an electrician's helper is required to assist with the complex re-lighting necessary with each changing exhibit

(including meeting the special lighting requirements for a variety of associative materials which enhance exhibitions of portraiture); to support lectures, slide presentations and other special events; and to keep the electrical systems of the building in peak condition. The cost of these 3 positions is \$30,000. An additional amount of \$24,000 is required to purchase custodial materials in view of both increasing use of the building and inflated costs, and to purchase electrical supplies, paint, building materials, and shop tools and equipment so that the mechanical staff can maintain the building and fully support the expanded activities of the Gallery. A properly supplied staff can provide mechanical and custodial support for the Gallery at a considerable savings over the cost of contracting for such services.

HIRSHHORN MUSEUM AND SCULPTURE GARDEN

1974 Actual.....\$1,326,000  
 1975 Estimate.....\$1,557,000  
 1976 Estimate.....\$1,625,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	83	0	83
11 Personnel Compensation.....	926	120	1,046
12 Personnel Benefits.....	80	10	90
21 Travel & Trans. of Persons...	11	7	18
22 Transportation of Things.....	10	-5	5
23 Rent, Comm. & Utilities.....	13	-1	12
24 Printing and Reproduction....	30	10	40
25 Other Services.....	207	18	225
26 Supplies and Materials.....	48	6	54
31 Equipment.....	230	-100	130
41 Grants.....	2	3	5
<b>TOTAL</b>	<b>1,557</b>	<b>68</b>	<b>1,625</b>
<u>Analysis of Increase</u>			
Necessary Pay.....		44	
Program Funds.....		24	

ABSTRACT - Since its opening in October 1974, the Hirshhorn Museum and Sculpture Garden (HMSG) is maintaining a full and balanced program of exhibitions, educational activities, research, curatorial and technical support including conservation, registration, and publication. Visitation for the first three months totaled over 640,000 persons. The FY 1976 budget requires an additional \$24,000 for buildings and facilities management services and supplies and \$44,000 for necessary pay for the present staff.

PROGRAM - The HMSG houses a magnificent gift to the Nation of outstanding modern paintings and sculpture. While the Hirshhorn collection forms the strong core of the Museum's holdings, a continuing program of new acquisitions by gift and purchase is being pursued. In addition, a lively program of temporary exhibitions utilizing loaned materials will enhance the breadth and depth of the Museum's offerings to the viewing public. For scholars, students, museum professionals, teachers, researchers, and art publishers, the HMSG will continue to be a major source of documentation and reference in the field of modern art.

After extensive planning and implementation, a full range of museum activities, including curatorial, conservation, registration, exhibitions, and loan activities were made available to the public immediately upon the Museum's opening on October 4, 1974. Through December over 640,000 persons visited the Museum and its Sculpture Garden. Estimated public service statistics are shown in the following table:

	Estimated FY 1975 (Oct-June)	Estimated FY 1976
Museum Attendance-----	1,200,000	1,800,000
Docent Tours Conducted-----	1,080	1,600
Attendance-----	28,800	40,000
Number of Lectures & Film Showings--	176	264
Attendance-----	17,600	33,000
Number of Concerts (In coordination with Division of Performing Arts)----	4	8
Major Exhibitions Scheduled-----	1	5
Major Exhibitions in Preparation----	5	8

JUSTIFICATION OF \$24,000 INCREASE (Buildings and Facilities Management) - The increase of \$24,000 in program funds is for supplies and materials \$6,000 and other contract services \$18,000. These funds cover contract services for cleaning and caring for carpets; regular cleaning of interior court windows; and lumber and paint supplies for carpentry and paint shop, essential for building repair and maintenance. The base for these activities in FY 1975, when the Museum was open to the public for only nine months, was \$28,000. Rising prices and higher annual costs as a result of heavy public use of the Museum justify this requested increase. Included within the overall object class distribution are funding adjustments reflecting: the annualization of costs of approved additional FY 1975 positions funded on a part-year basis in that year; additional travel requirements associated with the acquisition of art by gift or purchase and the development of loan and other exhibitions; and the anticipated higher costs of printing catalogues and other publications.

## FREER GALLERY OF ART

1974 Actual.....\$274,000  
 1975 Estimate.....\$410,000  
 1976 Estimate.....\$458,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	27	1	28
11 Personnel Compensation.....	343	24	367
12 Personnel Benefits.....	30	2	32
24 Printing and Reproduction....	1		1
25 Other Services.....	15		15
26 Supplies and Materials.....	15	6	21
31 Equipment.....	6	16	22
<b>TOTAL</b>	<b>410</b>	<b>48</b>	<b>458</b>
<u>Analysis of Increase</u>			
Necessary Pay.....		15	
Program Funds.....		33	

ABSTRACT - The Freer Gallery of Art has a continuing program to search for and acquire Far and Near Eastern works of art of the highest quality and to conserve, study, and display these objects as keys to understanding the civilizations that produced them. For FY 1976 an additional 1 position and \$33,000 will be applied as follows: (1) Conservation - \$10,000 to purchase equipment for the study and preservation of art objects; (2) Collections Management and Exhibition - \$12,000 for supplies and equipment for the storage and exhibition of objects; and (3) General Administration - \$11,000 for a secretary and a temporary typist to meet a growing workload. An amount of \$15,000 is requested for necessary pay for current staff.

PROGRAM - The Freer Gallery of Art houses one of the world's most distinguished collections of Near and Far Eastern art. Included in the collections are over 12,000 works of art from China, Japan, Korea, India, and the Near East. The collection covers paintings, sculptures, and other objects in stone, wood, lacquer, jade, pottery, porcelain, bronze, gold, and silver. Items not currently on exhibition and the library of 40,000 volumes are available to students and scholars and are used extensively.

Since the founding of the Freer Gallery, its goal has been to promote greater understanding of the cultures of the Near and the Far East through programs of research, exhibition, and education. The importance of that goal has assumed special significance during the past few years when cultural exchange between the United States and the countries of the Near and the Far East has greatly expanded.

The resumption of travel to the People's Republic of China and the opening of the Chinese Archaeological Exhibition in Washington, D. C. have resulted in an extraordinary reawakening of interest in Chinese culture. Near Eastern cultures are also receiving renewed attention. There has been a corresponding increase in requests for assistance from scholars, both at home and abroad, for docent service, for lectures, and for general information. The growing number of programs in the Freer auditorium necessitated the installation of new slide projectors and a completely new sound system. In addition, a new series of regularly scheduled Gallery tours has been introduced to supplement those tours made by appointment. These actions will continue to benefit visitors to the Gallery, especially the large numbers of visitors anticipated during the Bicentennial year.



A special Bicentennial exhibition, The Arts of Asia, scheduled to open in December, 1975, will focus on 18th century artifacts from the Near and the Far East. A second major exhibition, The Arts of the Arab World, will open in May, 1975. Many items included in these exhibitions have never been shown; all have been thoroughly examined by staff members of the Freer technical laboratory.

Several pieces of essential equipment have been installed in the technical laboratory. The most extensive addition was the specially constructed x-ray chamber that expedites and enlarges the research capacities of the laboratory. The x-ray chamber complements the activities of the regular photographic laboratory, which continues to provide photographs and slides of objects in the collection.

#### JUSTIFICATION OF \$33,000 INCREASE:

Conservation - The technical laboratory is the first major installation of its kind in the Smithsonian complex. With expansion of public awareness of Gallery facilities and interest in the areas covered by the collection, the demands on the laboratory have grown. There are many pieces of equipment urgently needed.

--A 35mm camera is needed for photomicrography through a microscope acquired in FY 1973. The microscope is used for the investigation of the materials used in works of art and their deterioration, thus assisting the Gallery in carrying out its charge of protecting and doing research on the collection. Rapid and easy production of slides for research, educational, and training purposes would be possible.

--The laboratory needs a special, low voltage x-ray unit to study ceramics, lacquer work, wood sculptures, paper, and silk. These would include oriental paintings, manuscripts, and prints; and etchings, lithographs, drawings, and other works in the collection of American art. The laboratory does not currently have the ability to radiograph such items satisfactorily.

--The Gallery has a very sizeable collection of Whistler, Whistleriana, and other graphics that are much in need of treatment. A program has been launched to put all of these graphics into satisfactory condition, especially in view of the Bicentennial and plans for a major exhibition of American art from the collection in the Freer Gallery. A washing tank is necessary for such treatment.

--Conservation treatment of many objects requires continued immersion of the object in water or other liquid controlled to a particular temperature. A temperature control unit is required.

An amount of \$10,000 is required for this conservation equipment.

Collections Management and Exhibition - To continue the program of Gallery maintenance and exhibition, it is necessary to purchase glass, hardware, lumber, and other equipment to be used in the construction of cases for exhibition and storage of the collection. As the collection grows the Freer Gallery of Art has the responsibility to see that objects are cared for and properly housed and exhibited. Prices on all such materials are rising. An amount of \$12,000 is required.

General Administration - The administrative workload has expanded tremendously in the past several years and continues to grow. This has been brought on by the growth of public interest in art, and more specifically in the areas encompassed by the Gallery's collections. With the coming of the Bicentennial year and the increased utilization of all Gallery facilities, it is urgent that a secretary be provided for the administrative officer. A temporary clerk-typist also will be needed in the summer months of peak public visitation and inquiry brought on by the anticipated influx of visitors during the Bicentennial. These two new jobs will cost \$11,000.

ARCHIVES OF AMERICAN ART

1974 Actual.....\$238,000  
 1975 Estimate.....\$294,000  
 1976 Estimate.....\$337,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	<u>12</u>	<u>4</u>	<u>16</u>
11 Personnel Compensation.....	219	32	251
12 Personnel Benefits.....	19	2	21
21 Travel & Trans. of Persons...	3	2	5
22 Transportation of Things....	5		5
23 Rent, Comm.& Utilities.....	24	7	31
24 Printing and Reproduction...	12		12
25 Other Services.....	4		4
26 Supplies and Materials.....	4		4
31 Equipment.....	<u>4</u>		<u>4</u>
<b>TOTAL</b>	<u>294</u>	<u>43</u>	<u>337</u>
<u>Analysis of Increase</u>			
Necessary Pay.....		5	
Program Funds.....		38	

ABSTRACT - The Archives of American Art (AAA) is a Smithsonian facility serving academic, museum, and other scholarly interests. It preserves and makes available to students and historians the documentary resources required for research and publication on American art. An FY 1976 increase of 4 positions and \$38,000 is sought to improve the AAA in two areas: (1) Archives - 4 positions and \$31,000 for increased processing capability in the Washington center to prevent further backlogging of unprocessed and unfiled work, and for travel funds; and (2) Buildings and Facilities Management - \$7,000 to meet new rent costs. An additional amount of \$5,000 is requested for necessary pay for existing staff.

PROGRAM - The AAA assembles and preserves the personal and official records of artists, dealers, critics and art organizations and thereby encourages scholarship by giving researchers access to the primary documentation they need. These collections of papers, which range in time from the 18th century to the present and cover the entire United States, are sought out, organized, catalogued, microfilmed, and made available to qualified scholars. Several million items are now at hand in the form of letters, journals, sketchbooks, business papers, photographs, and scarce publications. New collections are constantly being received. This material is intensively used by staff and fellows from Smithsonian museums as well as by graduate students, art historians, and curators across the country. In the past few years several hundred completed books, articles, catalogues, and dissertations have acknowledged the AAA as a source of information.

The processing and chief reference center of the Archives is located in Washington, with centers in Boston, New York, Detroit and San Francisco. Each office is responsible for acquiring further collections of papers and for administering complete sets of microfilm containing all documents offered by the Archives.

The Archives also has an important oral history program, begun in 1959, comprising today more than fourteen hundred transcripts of interviews with artists, dealers, collectors, and administrators. This program is subsidized by private funds, a part of them in the form of foundation grants generated by the Archives. Private

funds are also used for the publication of Archives of American Art Journal, a quarterly periodical based on and publicizing Archives resources. The Archives anticipates income from private funds of about \$150,000 in FY 1975.

JUSTIFICATION OF \$38,000 INCREASE:

Archives - The FY 1975 appropriation has permitted initial progress in sorting and filming over 700 collections of papers acquired in previous years which had accumulated in the processing center in Washington. An additional microfilm camera was purchased, one full-time position (archives technician) was added, and two 700-hour appointments were used for processing and preparing a checklist of these collections. During FY 1976, this archives technician and renewed 700-hour appointments will continue their work of preparing the backlog of previously acquired materials for research use.

For FY 1976, the Archives requests funds and positions to prevent the increasing amount of new materials being received from becoming similarly backlogged and unavailable to scholars on a timely basis. In FY 1973 and 1974, over 100 collections of papers were acquired annually. By contrast, in just the first six months of FY 1975, over 120 new collections have been received. With four regional offices now in full operation and pursuing further important collections, a similar increase for FY 1976 can be anticipated. To cope adequately with these new materials, the Archives requests that its current staff of six archives aides be increased by an additional four for \$29,000.

The collection of this unique documentary material on American art requires Area Directors to travel, seeking out on a wide regional basis the living artists, relatives, and associates of deceased artists who have in their possession papers and other material needed by scholars. To pursue this basic collecting activity, the Archives requires an increase of \$2,000 in travel funds for FY 1976.

Building and Facilities Management - The Archives regional offices are experiencing cost inflation in their support activities. The Boston office, formerly rent-free, is now being charged a rental fee to offset heating and maintenance expenses. The New York office rent will again be raised this year. The cost of communications has been increased already this year. An increase of \$7,000 is required to offset this support problem in the regional offices.

## COOPER-HEWITT MUSEUM OF DECORATIVE ARTS AND DESIGN

1974 Actual.....\$174,000  
 1975 Estimate.....\$209,000  
 1976 Estimate.....\$293,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	11	5	16
11 Personnel Compensation.....	160	43	203
12 Personnel Benefits.....	14	3	17
21 Travel & Trans. of Persons...	1	1	2
23 Rent, Comm. & Utilities.....	30	20	50
26 Supplies and Materials.....	4	17	21
TOTAL	209	84	293
<u>Analysis of Increase</u>			
Necessary Pay.....		4	
Program Funds.....		80	

**ABSTRACT** - The Cooper-Hewitt Museum of Decorative Arts and Design is one of the world's most distinguished repositories of decorative arts and design. The collection currently numbers over 100,000 objects ranging from textiles, drawings, wallpaper, furniture, and jewelry to glass, ceramics, and silver. In FY 1976 an increase of 5 positions and \$80,000 is sought for Building and Facilities Management and related supplies. Necessary pay in the amount of \$4,000 is sought for existing staff. Under the heading "Office of Protection Services" funds are sought for the Cooper-Hewitt protection force.

**PROGRAM** - The Cooper-Hewitt Museum is the only museum in the United States devoted exclusively to the study of historical and contemporary design. The collections currently span 3,000 years and include over 100,000 objects. Its textile collection is internationally known, its drawing collection is the largest in the United States, and its wallpaper collection is the largest in the world. In addition, the Museum contains fine examples of furniture, glass, ceramics, silver, metalwork, lighting fixtures, jewelry, and other decorative objects. In recent years categories of architecture, urban planning, and industrial design have been added. The collection is supported by one of the finest and most complete decorative arts and design libraries in the country. The library encompasses a reference library, a rare book library (25,000 volumes), picture archives of over 1 1/2 million items, and special archives on color and light, patterns, materials, symbols, sensory and technological data, interiors, advertising, design theses and typography.

In 1965, the Board of Regents of the Smithsonian Institution authorized the Secretary to negotiate with the Trustees of the Cooper Union for the transfer to the Smithsonian of the collections of the Cooper Union Museum in New York City. An agreement for the transfer of the Museum was subsequently signed on October 9, 1967.

In the years since acquiring these great decorative arts and design collections, the Smithsonian has sought to solve three closely related problems with respect to the operation of the Cooper-Hewitt Museum. The first of these was to define the scope of the program for the new museum. The second was to locate a suitable home in New York City. The third was to raise funds, both for operations and for necessary construction.

The Museum was originally intended by its founders, the Misses Sarah, Eleanor, and Amy Hewitt (granddaughters of Peter Cooper) to be a resource for students and practitioners of design. It was to serve as a repository of information about, and

examples of, design of all sorts through the ages. They intended that it should be an active institution and that all its collections should be easily accessible to professionals in the field of design as well as to the general public. By the time the Smithsonian acquired the Museum, however, much of this original vision had been lost and the Museum had tended to become a rather rarefied collection of decorative art objects appealing primarily to a small number of connoisseurs.

The scope of the program has been redefined. After a number of conferences and discussions including the Museum staff and other Smithsonian staff, it was agreed that the Cooper-Hewitt Museum should revert to its origin and become a national museum of design. Building upon its excellent collections, and particularly upon its unequalled archives of illustrative materials, the Museum intends to make use of appropriate modern technology--including computers, holography, and other forms of data storage and retrieval--to achieve this objective. This renewed determination to serve society by serving the design profession in the broadest sense is in keeping with the traditions of the Museum and of the Smithsonian.

Concurrent with program development, the Institution was also engaged in a search for suitable quarters for the Museum in New York City. On January 27, 1972, the Carnegie Corporation of New York gave the Regents of the Smithsonian the Andrew Carnegie Mansion, the adjoining Miller House, and the grounds comprising the entire block from 90th to 91st Streets on Fifth Avenue. The Smithsonian engaged an architectural firm to prepare a master plan for the ultimate use of the entire property, as well as a phased plan for the remodeling of the Carnegie Mansion to permit its use as a museum. In August 1974, the Institution signed a contract financed by \$1,150,000 in private funds for the first phase of reconstruction of the Mansion. This contract will finish the public exhibition areas (with the exception of floor coverings); install necessary heating, ventilating, and air-conditioning equipment; create the shaft for a new elevator; complete one of the study floors; and do necessary work in the nonpublic spaces in the basement. It is estimated that additional private funds in the order of \$200,000 will be required to finish all work required for public museum use. The first phase of the renovation program is projected to be completed in December 1975, followed by a public opening in 1976. A picture of the Cooper-Hewitt Museum is shown on page A-54.

Fund raising for the Cooper-Hewitt has been a continuing preoccupation of both the Museum and the Smithsonian and has produced impressive results. In the period 1969-1974, more than \$1,100,000 (including interest) has been raised from private donors, corporations, foundations, and other organizations to meet operating expenses. This was in addition to the funds raised for renovation. Furthermore, the Museum has received \$400,000 to meet the costs of an opening exhibition in its new quarters.

As far as Federal funds are concerned, the Smithsonian adopted the principle that the programs of the Cooper-Hewitt should be operated with non-appropriated funds, and that appropriated funds should insofar as possible be limited to the protection and preservation of collections and property. Over the past three years, support funds appropriated for such purposes have permitted maintenance of a minimal program at the Cooper-Hewitt, in anticipation of its reopening as a fully operating museum. In FY 1973, the Smithsonian received 9 positions and \$85,000 for the Cooper-Hewitt Museum. These positions, requested as part of the Buildings Management Department, were for guards, custodians, and mechanics. In FY 1974, as a part of a general reorganization these positions and the dollars now related to them were transferred directly to Cooper-Hewitt. Made available at the same time were positions and dollars to assist in administration and registration. The 11 positions currently at Cooper-Hewitt are for 3 administrative, 2 registration, and 6 buildings and facilities management staff. In addition, the Smithsonian Institution Libraries provides routine library assistance to the Cooper-Hewitt from its resources. It is intended that Federal expenditures will continue to be limited to the purposes stated above.

During the last year, objects from the collection were included in exhibitions at twenty-three institutions including the Metropolitan Museum, National Gallery of Art, Baltimore Museum, and the Art Institute of Chicago. The Museum organized a major exhibition of drawings, textiles, and wallpapers entitled "The Art of Decoration,"



which opened at the Victoria and Albert Museum in London and was later shown at the Brooklyn Museum. An exhibition of Winslow Homer watercolors and drawings from the Cooper-Hewitt collection travelled to London following its showing at Columbia Museum of Art and the Telfair Academy. In addition, benefit exhibitions of paintings by Thomas Moran and Frederic Church were held in leading New York galleries. Work on ten further exhibitions is currently in progress.

JUSTIFICATION OF \$80,000 INCREASE (Buildings and Facilities Management) - The Cooper-Hewitt Museum, when it re-opens in 1976, will be open to the public six days a week with expected attendance of 250,000 visitors per year. The Museum in its present closed down state has a maintenance and trade staff of 5. It is proposed that this staff be increased to 10 to provide adequate care for the 20,000 square feet of public space, 12,000 square feet of semi-public study and library space, and 46,000 square feet of garden. This increase of 5 positions and related funds for supplies and materials would provide a minimum work force to maintain the property at minimum acceptable standards. The indoor space includes parquet floors, boiserie, and ornamental plaster ceilings which present special maintenance problems. The garden will include flower beds, trees and bushes, grass and gravel which must be kept in order throughout the year.

## OFFICE OF THE ASSISTANT SECRETARY FOR PUBLIC SERVICE

1974 Actual.....\$181,000  
 1975 Estimate.....\$209,000  
 1976 Estimate.....\$215,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	10	0	10
11 Personnel Compensation.....	180	6	186
12 Personnel Benefits.....	15		15
21 Travel & Trans. of Persons...	4		4
25 Other Services.....	4		4
26 Supplies and Materials.....	3		3
31 Equipment.....	3		3
TOTAL	209	6	215
<u>Analysis of Increase</u>			
Necessary Pay.....		6	
Program Funds.....		0	

ABSTRACT - The Office of the Assistant Secretary for Public Service guides and supports the public service units in the development of programs to advance the Institution's objectives in education and information. No program increase is requested for FY 1976. Funds in the amount of \$6,000 are sought for necessary pay.

PROGRAM - The primary functions of the Office of Public Service are to stimulate, to coordinate, and to supervise the steadily increasing activities of the Smithsonian's educational and public service components. These include the unique experimental efforts of the Anacostia Neighborhood Museum; the many-faceted work of the Division of Performing Arts in synthesizing and presenting to the American public across the nation the historical and continuing development of the American aesthetic experience; the programs of the Office of Elementary and Secondary Education to make the Smithsonian's facilities and collections accessible and pertinent to visiting school children; the development of interdisciplinary symposia and seminars to enable leading scholars and specialists from the world community to examine themes of common concern conducted by the Office of Smithsonian Symposia and Seminars; the dissemination of Smithsonian research and interests through the Smithsonian Press and the Smithsonian Magazine; the organization and conduct of meaningful adult and teenage educational presentations by the Smithsonian Associates; and an active public affairs operation including production of a commercial television series and audio-visual educational materials, dedicated to keeping Americans currently informed of the educational programs and exhibits available to them at or through the facilities of the Smithsonian Institution.

ANACOSTIA NEIGHBORHOOD MUSEUM

1974 Actual.....\$317,000  
 1975 Estimate.....\$423,000  
 1976 Estimate.....\$469,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	19	2	21
11 Personnel Compensation.....	266	33	299
12 Personnel Benefits.....	23	3	26
21 Travel & Trans. of Persons...	2		2
23 Rent, Comm. & Utilities.....	47		47
24 Printing and Reproduction....	21		21
25 Other Services.....	36		36
26 Supplies and Materials.....	23	10	33
31 Equipment.....	5		5
TOTAL	423	46	469
<u>Analysis of Increase</u>			
Necessary Pay.....		11	
Program Funds.....		35	

ABSTRACT - The Anacostia Neighborhood Museum provides a personal and educational museum experience for audiences unaware of or unaffected by major museum resources. An increase of \$35,000 is requested in FY 1976 to meet the following program requirements: (1) Exhibitions - an exhibits specialist (\$13,000) and an additional amount of \$10,000 for exhibits supplies and materials such as masonite, lumber, plexiglass, and photographic supplies to expand exhibit production capability and assist in production of Bicentennial-related exhibits and (2) Buildings and Facilities Management - a general maintenance worker (\$12,000) to establish at the Museum the capability for proper and efficient repair and maintenance of an expanding number of facilities. An additional amount of \$11,000 is also being sought for necessary pay.

PROGRAM - The Anacostia Neighborhood Museum (ANM) was established to reach out to new audiences who are unaware of museum resources, physically too far from them, or, as inhabitants of low-income population density centers, do not see the interest or relevance of museums. By linking its research, exhibits, and education directly to the needs of the community, the ANM has assured a fresh, nontraditional approach to the role of the museum. The Museum is a combination of many things. It serves as a meeting place, a performing arts center, a recreation facility, and an arts and crafts workshop. It offers learning experiences through changing exhibits on subjects relevant to the community. Two major exhibits to be produced in FY 1975 are: "The Message Makers," an indepth survey of the communications media and its effects on the lives of black people, and "East Bank Anacostia," an art exhibition featuring artists in Anacostia and Northeast Washington.

In addition to educational opportunities offered at the Museum itself, such as guided tours of museum exhibits and various workshops, demonstrations, and seminars, the Museum also has developed educational resources that are available to schools, churches, and community organizations on a loan basis. These resources, which focus on urban concerns and the history and culture of people of African descent, include portable exhibits, speakers, demonstrations, and small educational kits.

JUSTIFICATION OF \$35,000 INCREASE:

Exhibitions - Since its establishment, the Museum has developed a small but effective exhibits program. There is currently a staff of four responsible for the design, production, and installation of exhibits in the Museum. While the exhibits produced by this staff have received much recognition and acclaim, both from within and outside the community, their numbers have been limited. Two recent developments have provided the opportunity to increase both the number of exhibits and the audiences to whom they are presented. One of these developments involves the newly completed exhibits design and production laboratory, which, in addition to serving, with foundation fund support, as a facility for training minority museum technicians, will also provide much needed space and equipment for exhibits design and production. Furthermore, with funds requested under the Bicentennial heading, three special Bicentennial exhibits will be produced. These Bicentennial exhibits will be displayed at the Museum and will be circulated throughout the country in the form of traveling exhibits. With the new availability of space and the impetus of the Bicentennial effort, the Museum has an opportunity as well as an immediate need to increase its exhibit production capability. An increase of one position, an exhibits specialist, (\$13,000), and \$10,000 for support costs of exhibit supplies and materials are requested.

Buildings and Facilities Management - The ANM has never had a full-time general maintenance worker to provide day-to-day maintenance and repair services. With the completion and use of the new exhibits design and production laboratory, Anacostia personnel will be located at three different facilities, further emphasizing the need for a carefully developed and applied program of facility upkeep. One position and \$12,000 are requested to assure proper maintenance and repair of these facilities, including, when necessary, the refurbishment of office furniture and the repair of minor office machines.

## INTERNATIONAL EXCHANGE SERVICE

1974 Actual.....\$175,000  
 1975 Estimate.....\$187,000  
 1976 Estimate.....\$212,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	9	0	9
11 Personnel Compensation.....	119	5	124
12 Personnel Benefits.....	10		10
22 Transportation of Things.....	50	20	70
26 Supplies and Materials.....	7		7
31 Equipment.....	1		1
TOTAL	187	25	212
<u>Analysis of Increase</u>			
Necessary Pay.....		5	
Other Uncontrollable.....		20	
Program Funds.....		0	

ABSTRACT - Through the International Exchange Service, public and private institutions in the United States exchange publications with organizations in other countries. This includes the exchange of the official United States publications, including the daily issues of the Federal Register and the Congressional Record, the weekly issues of the U. S. Patent Specifications, as well as private publications such as medical and dental texts. No program increase is sought for FY 1976. Funds in the amount of \$5,000 are requested for necessary pay for existing staff. Also \$20,000 for shipping rate increases is requested in the Uncontrollable Section.

PROGRAM - In 1849, the Smithsonian Institution established a system for the exchange of Smithsonian publications with the learned societies of other countries. This program was so successful that later it was expanded to other American organizations. The Exchange's responsibilities were formalized when the Brussels Convention of 1886 was adopted by the United States, and the Smithsonian Institution became the official exchange bureau in the United States for the international exchange of literary, scientific, and cultural publications. In addition, a Resolution to provide for the Exchange of certain Public Documents (14 Stat. 573, as amended) provides that the exchange of the official United States publications shall be made through the Smithsonian Institution. In FY 1974, approximately 2.5 million publications were transmitted to over 100 countries for exchange documents.



## DIVISION OF PERFORMING ARTS

1974 Actual..... \$422,000  
 1975 Estimate..... \$371,000  
 1976 Estimate..... \$402,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	10	1	11
11 Personnel Compensation.....	233	25	258
12 Personnel Benefits.....	20	3	23
21 Travel & Trans. of Persons...	16		16
22 Transportation of Things....	2		2
23 Rent, Comm., & Utilities....	2		2
24 Printing & Reproduction.....	4	1	5
25 Other Services.....	78	1	79
26 Supplies and Materials.....	12		12
31 Equipment.....	4	1	5
TOTAL	371	31	402
<u>Analysis of Increase</u>			
Necessary Pay.....		8	
Program Funds.....		23	

**ABSTRACT** - The Division of Performing Arts (DPA) has primary responsibility for the production and presentation of all live performance events of the Smithsonian Institution and its museums, with an emphasis on programs that relate to and enhance museum collections and that deal with our national aesthetic expressions. The FY 1976 budget seeks an increase of 1 position (\$20,000) with support funds of \$3,000 to establish an educational program. Funds (\$8,000) are also sought for necessary pay costs.

**PROGRAM** - DPA is the primary planning, producing, and supervising organization in the Smithsonian for all public performances. Its Federal appropriation provides for central administration and direction and funds for some program development with most of its activities produced with other appropriated and non-appropriated funds. Annually, it presents the Festival of American Folklife, which has become the largest summertime event in the Nation's Capital, and a number of special series and individual events during the winter months. During the 1973-1974 season, some 15,000 people attended concerts offering a range of creative musical expressions from baroque to bluegrass and jazz. Most concerts were preceded by free public workshops. A new recording program instituted by the division issued a historic first, the Smithsonian Collection of Classic Jazz, a boxed, six-record set including 85 selections from 17 record companies. Receiving critical acclaim, the Collection has now had several printings. The Smithsonian Resident Puppet Theater, one of two continuously operated puppet theaters in the country, attracts several thousand visitors each week to its shows. The carousel and an original old-time popcorn machine contribute to a lively mall. Performing Arts shares the American experience in its many creative forms with people across the nation through the Touring Performance Service, offering performances not available through commercial management to museums, colleges, universities, and cultural centers. The 1973-1974 season saw 51 performances in 23 states. Some one million persons were attracted to the 1973 and 1974 Festivals of American Folklife featuring a new site, the Mall's Reflecting Pool, an expanded schedule, and new themes leading to a season-long Bicentennial Festival in 1976. The Smithsonian is joined by the National Park Service as a co-sponsor.

In an effort to accommodate a program of such magnitude, the Division has narrowed its focus in other areas, and re-directed efforts and funding. Programs curtailed or transferred to other organizations include the American College Theatre Festival, the Indian Awareness program, and some of the Mall-based programs. Programs retained and in

some instances augmented by this review include the Division's Jazz series, which is now directing an oral history of jazz in cooperation with the National Endowment for the Arts, and an organized tour program of foreign folk performers in 48 or more appearances throughout the United States in cooperation with the American Revolution Bicentennial Administration.

JUSTIFICATION OF \$23,000 INCREASE (Education and Public Orientation) - The DPA has a responsibility to educate the attending public to the nature of these performing events and their relationship to the museums of the Institution. The need for a unified, thoughtful, well-planned educational program is strong, but the Division has been able to provide only minimal service. Requests for assistance from other museums, educational institutions, and other interested organizations go largely unanswered due to lack of staff and an adequate educational program. Availability of information to the public on the Division's activities is sporadic and insufficient. The need to unify the outdoor Festival of American Folklife, particularly the Bicentennial event, with the collections indoors at the Museums has long been recognized; but without planning, thought, and production, this need has been poorly met. The FY 1976 budget attempts to rectify the situation with the establishment of an education specialist (\$20,000) with \$3,000 of program funds. This position would serve as a focal point for an educational program relating all Divisional presentations--Jazz, winter programs, Folklife Festival, and Bicentennial Festival--to each other and to the Smithsonian Institution's museums and collections.

## OFFICE OF PUBLIC AFFAIRS

1974 Actual..... \$396,000  
 1975 Estimate..... \$307,000  
 1976 Estimate..... \$317,000

(Dollars in thousands)	Base	Increase	Est.
	FY 1975	Requested	FY 1976
Number of Permanent Positions...	15	0	15
11 Personnel Compensation.....	223	9	232
12 Personnel Benefits.....	19	1	20
21 Travel & Trans. of Persons..	1		1
24 Printing and Reproduction...	52		52
25 Other Services.....	9		9
26 Supplies and Materials.....	1		1
31 Equipment.....	2		2
TOTAL	307	10	317
<u>Analysis of Increase</u>			
Necessary Pay.....		10	
Program Funds.....		0	

**ABSTRACT** - The Office of Public Affairs is responsible for communication of information about the Smithsonian and its programs to the public through various media--radio, television, newspapers, popular and scientific periodicals, press releases, documentary films, and general information and visitor orientation pamphlets and other items. No additional program funds are requested in FY 1976. Necessary pay in the amount of \$10,000 is sought for current staff.

**PROGRAM** - The Office of Public Affairs serves millions of museum and gallery visitors annually, as well as the general public, through the communication of factual and educational data about the Smithsonian and its programs. A wide array of communications media is used: radio, television, newspapers, popular and scientific periodicals, press releases, documentary films, the Smithsonian Calendar of Events, Dial-A-Phenomena, Dial-A-Museum, and general information pamphlets and publications. Included in its presentations are the Torch newspaper, Research Reports, and the "Radio Smithsonian." The Office of Public Affairs also administers the Office of Special Events, which assists with exhibition openings, seminars, meetings, and special activities held in Smithsonian facilities in Washington, D.C.

In FY 1974 and continuing in FY 1975, the Smithsonian has been working with a television producer to bring to commercial television a series on the Smithsonian. The first special "MONSTERS: Mysteries or Myth" was aired December 1974. The documentary made especially for television had the highest rating for such a film ever shown, a Nielson rating of 31.2 which means 44 percent of the television viewing audience was watching this show. The second special "Flight: The Sky's the Limit" was shown in late January. The third in the series is to tell the story of the Hope Diamond, now part of the Smithsonian's collections.

SMITHSONIAN INSTITUTION PRESS

1974 Actual.....\$800,000  
 1975 Estimate.....\$605,000  
 1976 Estimate.....\$621,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	27	0	27
11 Personnel Compensation.....	496	15	511
12 Personnel Benefits.....	43	1	44
21 Travel & Trans. of Persons...	2		2
24 Printing and Reproduction....	55		55
25 Other Services.....	4		4
26 Supplies and Materials.....	3		3
31 Equipment.....	2		2
<b>TOTAL</b>	<b>605</b>	<b>16</b>	<b>621</b>
<u>Analysis of Increase</u>			
Necessary Pay.....		16	
Program Funds.....		0	

**ABSTRACT** - The Smithsonian Institution Press is responsible for the editing, design, production, and distribution of printed material produced by historians, scientists, and curators. Included in this work are multi-volume monographs, eight scientific series, exhibit catalogues for the several museums, education pamphlets, and information leaflets. No additional program funds are requested in the FY 1976 budget. Funds in the amount of \$16,000 are sought for necessary pay.

**PROGRAM** - Press publication activity is a fundamental extension of the work of the Smithsonian's basic research laboratories. Necessary for ecological and agricultural advancement and other basic and applied studies by researchers, these reports are distributed to major libraries and scientific institutions in all 50 states and many foreign countries. The Press edits manuscripts and issues contracts for the printing of exhibit catalogues, education pamphlets, and informative leaflets for the many millions of visitors to the Smithsonian each year. The Press reviews each manuscript submission for editorial content and completeness, quality of typing, illustrations, etc. before acceptance. Inadequately prepared manuscripts (i.e. those that would be too costly to edit or manufacture) are not accepted for publication. Finally, the Press furnishes the Institution with a variety of necessary manuals, reports, and directories, including copies of Congressional materials and reports from Government agencies.

In FY 1975, most of the printing funds (except for those used for certain Institution-wide publications, such as the Smithsonian Year) that previously had been spent directly by the Press for the printing of bureau and office research reports and exhibit catalogues were allocated directly among those units. This will result in each such unit paying for its own printing. Resulting benefits include (1) each unit establishing the priorities for its manuscripts to be printed and (2) printing costs being shown as a function of program activity. Since the legal authority to purchase printing with Federal funds rests with the Press, it will continue to process printing requisitions.

OFFICE OF THE ASSISTANT SECRETARY FOR MUSEUM PROGRAMS  
AND  
OFFICE OF MUSEUM PROGRAMS  
1974 Actual.....\$ 494,000  
1975 Estimate.....\$ 935,000  
1976 Estimate.....\$1,005,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	63	1	64
11 Personnel Compensation.....	719	54	773
12 Personnel Benefits.....	62	5	67
21 Travel & Trans. of Persons...	12		12
22 Transportation of Things.....	2		2
23 Rent, Comm. & Utilities.....	7		7
24 Printing and Reproduction....	12		12
25 Other Services.....	78	3	81
26 Supplies and Materials.....	19	5	24
31 Equipment.....	24	3	27
TOTAL	935	70	1,005
<u>Analysis of Increase</u>			
Necessary Pay.....		46	
Program Funds.....		24	

**ABSTRACT** - The Assistant Secretary for Museum Programs oversees and reviews the Institution's museum and exhibition activities, with special emphasis on developing exhibits, surveying visitor reactions to the Institution's services, assessing the effectiveness of educational programs, and providing advice, technical assistance, and documentary resources to other museums.

The South Group Buildings Manager, now under the Office of Museum Programs, has the responsibility for custodial maintenance of the Arts and Industries Building, the Smithsonian Institution Building, and the temporary Air and Space Building.

An increase of one position and \$24,000 is requested for Building and Facilities Management - an electrician (\$13,000) and funds for related custodial services, supplies and materials, and equipment. An additional amount of \$46,000 is being sought for necessary pay for the entire office.

**PROGRAM - I. Assistant Secretary for Museum Programs** - With 18 positions and \$378,000 the Office of the Assistant Secretary for Museum Programs administers, oversees, and reviews the Office of Museum Programs, Office of the Registrar, Conservation-Analytical Laboratory, Office of Exhibits Central, Smithsonian Institution Archives, National Museum Act, Smithsonian Institution Libraries, Smithsonian Institution Traveling Exhibition Service, and the South Group Buildings Manager. In addition, this office works with museum professionals and their associations and organizations to increase the effectiveness of museums in the performance of their scholarly and public education functions. The Office of Museum Programs is an aggregate of programs responsible for the coordination of activities related to training in museology and museography and the development of new techniques related to museum administration and practices. Presently, the Office maintains three major programs--the Museum Workshop Program, the Conservation Information Program, and the Psychological Studies Program.

The Museum Workshop Program offers workshops, seminars, and training courses to any individual gainfully employed by a museum. Each workshop, taught by Smithsonian staff, is devoted to specific methods or problems. Enrollment is limited, and



instructors try to concentrate on the particular needs of each participant. Special attention is usually given to the problems of the small museum's budget, services, and facilities. In 1975 approximately 16 three-day to one-week workshops will be offered. Subjects include: financial management, the training of docents, and insurance. Special attention will be given to the needs of minorities, particularly American Indian communities which have museum or museum-related facilities but face a serious shortage of trained personnel.

The Conservation Information Program is designed to make the knowledge and facilities of the Smithsonian accessible to as large an audience as possible. The program acquaints small museums, interested organizations, and individuals with selected theoretical and practical principles currently practiced in the field of museum conservation. This information--in the form of video-taped programs and slide lectures accompanied by tape commentaries--is lent, free of charge, to all who request it. To date, the Conservation Information Program, in cooperation with the Smithsonian Institution Conservation-Analytical Laboratory, has produced 4 slide presentations on the curatorial care of objects, and 10 more are being prepared during the next year. Some selected subjects include: dry methods in the cleaning of prints, drawings, and manuscripts; proper mounting and matting of drawings and manuscripts; proper mounting and matting of paper; the protective lining of a wooden storage drawer for textiles and costumes; and the wet cleaning of antique cotton, linen and wool.

The Psychological Studies Program studies the effectiveness of exhibits and visitor reaction to them. Types of studies include basic research on museums as learning and teaching environments; the evaluation and effectiveness of various exhibition techniques, including assessment of push-button devices and audio-visual adjuncts; the effect of noise and crowds on visitor comprehension; and problems of orientation. A major monograph, The Measurement and Facilitation of Learning in the Museum Environment, was published in FY 1975, and at least two other studies are expected to be completed in FY 1976.

II. South Group Buildings Manager - With 45 positions and \$557,000 in FY 1975, the South Group Buildings Manager's office plans and supervises the cleaning, maintenance, and servicing of occupants in primarily the Smithsonian Institution and Arts and Industries Buildings. This involves the daily cleaning of all office, exhibition, and laboratory space; moving services as renovation work on the Arts and Industries Building progresses and offices must be relocated to make way for planned construction; and the transportation of objects or equipment as required.

JUSTIFICATION OF \$24,000 INCREASE (Buildings and Facilities Management) - When the renovation of the Arts and Industries Building is completed, four major exhibition halls will be reopened to the public. In recent years exhibition space in this building has been put to other uses. With the installation of the 1876-Centennial Exhibition this building will once again become a major public museum. One electrician (\$13,000) and \$11,000 for custodial services, supplies and materials, and equipment are requested to help maintain the reopened building.

## OFFICE OF THE REGISTRAR

1974 Actual.....\$231,000  
 1975 Estimate.....\$202,000  
 1976 Estimate.....\$212,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	16	0	16
11 Personnel Compensation.....	147	9	156
12 Personnel Benefits.....	12	1	13
21 Travel & Trans. of Persons...	1		1
25 Other Services.....	3		3
26 Supplies and Materials.....	6		6
31 Equipment.....	33		33
TOTAL	202	10	212
<u>Analysis of Increase</u>			
Necessary Pay.....		10	
Program Funds.....		0	

**ABSTRACT** - Since the 1880's, the Office of the Registrar has served as the Registrar for the National Museum of Natural History (NMNH) and the National Museum of History and Technology (NMHT). Registration at the Smithsonian is undergoing modernization and decentralization. The Central Registrar will guide decentralization and provide continuing assistance to all bureaus in modernization of registration systems. No program increase is sought for FY 1976. Necessary pay in the amount of \$10,000 is sought for existing staff.

**PROGRAM** - This Office was established in the 1880's to handle the traditional tasks of shipping and documenting accessions primarily for the NMNH and NMHT collections. Registration at the Smithsonian is now undergoing modernization, rationalization, and decentralization. Modernization includes streamlining of manual systems for control of the National Collections, and computer applications where useful and efficient. Rationalization includes removal of extraneous functions from the Central Registrar's Office; mail services were transferred to the Office of Plant Services in FY 1974 and public inquiry was transferred to the Office of Public Affairs in FY 1975. Decentralization is aimed at giving each museum or gallery its own registration capability, a necessity for effective registration given the diversity of collections and activities of these bureaus. This Office will be retained as a Central Registrar to guide decentralization, provide continuing assistance to bureaus in modernization of their systems, and, most important, to guide development of a Smithsonian-wide information system for effective intellectual integration of the National Collections.

From a total FY 1975 budget of \$202,000, \$95,000 is projected for operation of the Central Office and the balance will be made available to NMHT and NMNH for their continued registration/shipping functions. Decentralization should be completed physically and organizationally during FY 1975, but modernization of registration systems and creation of effective information systems is an on-going project. The result of this program will be registration services much more responsive to bureau needs, and a vastly improved information system at the Institutional level.

During FY 1974, the Central Registrar continued to act as registrar for the NMHI and NMNH; the office handled a total of 1,627 new accessions (598,628 specimens) in NMNH and 764 new accessions (116,556 items) in NMHT. The Central Registrar also continued to administer shipping transactions for most Smithsonian bureaus, as well as the public inquiry function.

CONSERVATION-ANALYTICAL LABORATORY

1974 Actual.....\$319,000  
 1975 Estimate.....\$561,000  
 1976 Estimate.....\$606,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	21	2	23
11 Personnel Compensation.....	321	41	362
12 Personnel Benefits.....	27	4	31
21 Travel & Trans. of Persons...	10		10
23 Rent, Comm. & Utilities.....	1		1
25 Other Services.....	20		20
26 Supplies & Materials.....	12		12
31 Equipment.....	170		170
TOTAL	561	45	606

Analysis of Increase

Necessary Pay.....	13
Program Funds.....	32

ABSTRACT - The Conservation-Analytical Laboratory (CAL) advises on the suitability of buildings' environmental conditions for objects displayed or stored. It examines and treats objects for their protection and preservation, analyzes objects for basic research data of interest to scientists and historians, and conducts training programs in association with Conservation Information Programs. The FY 1976 budget proposes an increase of \$32,000 for 2 new positions and program funds to continue the phased development of the Laboratory's capability to respond to the conservation needs and analysis and treatment of objects. An amount of \$13,000 is requested for necessary pay for current staff.

PROGRAM - The Conservation-Analytical Laboratory was established in 1963 to serve the museums of the Smithsonian Institution. Staffed by conservators and scientists, it ascertains and advises on the suitability, for artifacts displayed or in storage, of environmental conditions found in the buildings and suggests remedial action if necessary. Based upon examination or analysis, advice is given to curatorial units on conservation procedures for specific objects. Objects which cannot be treated locally, which present special problems, or require more specialized equipment than is available in these units, are treated in this central laboratory.

Analyses of objects or their materials (e.g. pigments, fibers, alloys, or corrosion products) by advanced instrumentation serve to determine appropriate conservation procedures or to provide museum archaeologists and historians with basic research data concerned with dates, attribution, and ancient production methods. Commercial products proposed for prolonged contact with artifacts (or fumigants used in storage) are examined for suitability.

To improve services to the bureaus, the Laboratory has purchased extensive equipment including: thermoluminescent dating equipment which will be used to date ceramics; a memory board for the dedicated Nova 1012 Computer which extends its capability to do analytical computations; and a videotype word-processor to increase output from a single typing position.

For conservation or other staff in the bureaus there are regular lectures. Technical information on specific subjects is made available as audio tapes and tape-slide lectures through Conservation Information Programs.

JUSTIFICATION OF \$32,000 INCREASE (Conservation) - Museums serve a unique role in that they are the primary guardians of the evidence of man's cultural development from the earliest times onward. Museum collections, including artifacts, specimens, and works of art, are primary resources in the functions of exhibit display and research. Museums must be able to transmit to future generations the heritage which previous civilizations have left. For a substantial part of the objects in museum collections this is not likely to occur if greater attention is not given to the needs of conservation. Every material ages and that age brings disintegration. During the last millenia the external factors accelerating this process of decay have been virtually entirely natural in their causes. But over the last century and a half, man has contributed and accelerated this process with the increasing pollution of his urban and industrial society. As a result, objects which under different conditions could have remained sound for decades, or even centuries, are now crumbling. Conservation of the collections requires constant attention to environmental conditions in the buildings and other specialized treatment (including fumigation) to forestall deterioration and decay.

Restoration without a deep understanding of materials' properties and styles is not a complete solution. If it does not affect the causes, it may be worse than nothing. Causes of the decay must be understood. Fundamental research has to be done on the properties of materials; new techniques must be experimented with; and, particularly, new substances used for conservation or repair must be carefully tested to make sure that they will not, now or in the foreseeable future, react adversely with the materials that they are intended to consolidate, or behave towards the objects in a fashion comparable to the pollutants in the air.

The conservation program of the Smithsonian is inadequate to these needs. It must be strengthened both in individual bureaus and in the central Conservation-Analytical Laboratory. Successful conservation efforts in the bureaus require knowledgeable personnel capable of recognizing and correcting specific local conservation problems and treating those items not requiring specialized treatment by the central laboratory.

Accessions of artifacts number about 130,000 a year. Proper treatment of these objects alone is well beyond the present capability of the Institution's facilities. Thirty-two man years of work each year is estimated to be required for new objects exclusive of the needs of hundreds of thousands of deteriorating objects already in the collections. Conservation and analytical work is detailed and painstaking. During FY 1974 despite disruption preparatory to rebuilding, 167 requisitions for 330 objects or samples were completed by CAL for 45 divisions of 17 bureaus. A paintings conservator was added to the staff of the laboratory in FY 1975 to conserve paintings and three dimensional objects of art of historical value in the National Collections.

In FY 1976, the Laboratory requests two additional conservators (\$32,000) to assist with conservation effort.

## SMITHSONIAN INSTITUTION LIBRARIES

1974 Actual.....\$1,165,000  
 1975 Estimate.....\$1,590,000  
 1976 Estimate.....\$1,868,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	86	4	90
11 Personnel Compensation.....	1,029	83	1,112
12 Personnel Benefits.....	95	7	102
21 Travel & Trans. of Persons...	10	6	16
22 Transportation of Things....	2		2
23 Rent, Comm. & Utilities.....	12	5	17
24 Printing and Reproduction....	60	35	95
25 Other Services.....	44	82	126
26 Supplies and Materials.....	101	25	126
31 Equipment.....	237	35	272
<b>TOTAL</b>	<b>1,590</b>	<b>278</b>	<b>1,868</b>
<u>Analysis of Increase</u>			
Necessary Pay.....		40	
Program Funds.....		238	

**ABSTRACT** - The Smithsonian Institution Libraries provides basic library and information services required by the research, exhibits, and administrative programs of the Smithsonian Institution. In FY 1976 an increase of 4 positions and funding of \$238,000 is requested to meet the following needs: (1) to purchase necessary library materials (\$60,000); (2) to preserve and conserve materials, including the valuable Dibner Library collection recently received as a gift by the Institution (2 positions and \$71,000); (3) to develop computer cataloguing in order to improve the timeliness and efficiency of the Libraries' operations (1 position and \$33,000); (4) to complete cataloguing of the National Air and Space Museum library collection (1 position and \$68,000); and (5) to increase travel allowance to service bureau libraries (\$6,000). An amount of \$40,000 is requested for necessary pay.

**PROGRAM** - The Smithsonian Institution Libraries consists of a central library and 15 branch and bureau libraries providing support to the research, exhibit, educational, and administrative staffs of the Institution and to visitors by acquiring, cataloguing, binding and preserving books and other library materials, and by providing circulation and research services based on these collections. The Libraries' collections have achieved national significance in natural history, American ethnology, fine arts, and the history of science, American technology, and culture.

Recently, the largest single private library on the history of science and technology in the world was given to the Smithsonian by Bern Dibner. This extraordinary collection contains more than 25,000 rare books and other material including several hundred books printed before 1501. A conservative estimate of the present value of this collection is ten million dollars. The gift will enhance both the Libraries' and the National Museum of History and Technology's collections.

JUSTIFICATION OF \$238,000 INCREASE (Libraries):

**Acquisitions** - The library collections of the Smithsonian Institution are indispensable tools to the research, exhibits, and public service activities of the Institution. Severe inflation combined with additional library support to programs in the Institution has slowed improvements in the Libraries' ability to meet the needs of the Institution. Inflation, which was anticipated at 11 percent in FY 1974, was actually 30-35 percent for books and journals. When the effect of inflation is



considered, the current book dollar is worth only 59 cents, based on the July 1973 dollar. In effect, the purchasing power of the Libraries book budget of about \$200,000 has been cut by 40 percent as compared with 18 months ago. An increase of \$60,000 for FY 1976 is requested to enable the Libraries to restore some purchasing power for essential library materials.

Conservation and Preservation - It is estimated that almost 12,000 journal volumes in the natural history collections require rebinding. At least 20,000 leather-bound volumes require similar treatment. One position (\$17,000) and \$20,000 for contract binding and preservation are requested for FY 1976. This is an increase of 40 percent above funds available for these purposes in FY 1975. Even this increase, however, will not permit the Libraries to bind all newly acquired materials much less reduce backlogs of materials now on the shelves.

The Dibner Library is one of the world's outstanding collections in the history of science and technology. The collection requires the attention of a rare book specialist (\$17,000). An amount of \$17,000 for care of the collection is also requested.

Computerized Cataloguing - The Libraries is involved in an experiment with other Federal libraries to test the effectiveness of cooperative computer cataloguing. Preliminary evaluation of the system suggests that the Libraries will benefit in savings both in processing time and costs of cataloguing. Records of 60 percent of materials purchased by the Libraries are found in the joint computer data base. Catalogue cards are received by the Libraries within 10 days of on-line placement of the order. This compares with an average of three months which is required to prepare catalogue cards using manual cataloguing techniques. Cataloguing productivity has increased 30 percent in the first quarter of FY 1975 as compared with the same period of FY 1974 with no more application of staff. Full cataloguing, however, is only one means of gaining intellectual access to and control of library materials. Further improvements, such as automated serials control and computer-printed lists of materials received, must be developed in order to improve timeliness and reduce costs. An amount of \$25,000 is requested for computer costs, and one position (\$8,000) is requested to support these activities.

National Air and Space Museum Library Preparation - In 1976, as part of the Smithsonian Institution's Bicentennial program, the new National Air and Space Museum will open. Of the 20,000 titles in the NASM Bureau Library, approximately 12,000 titles are not catalogued and are therefore difficult to use. The Libraries gives high priority to cataloguing the entire NASM collection for the opening of the Museum.

Studies indicate that approximately 2,000 of the NASM uncatalogued titles can be found in the computer data base. The remaining titles, however, will require application of other cataloguing techniques. The Libraries' cataloguing staff cannot process the NASM volumes in a single year and continue to catalogue new materials acquired. In order to expedite the cataloguing of a major portion of the NASM material, \$60,000 is requested to catalogue approximately 10,000 volumes by contract, and one position (\$8,000) is requested to perform related processing activities in-house.

Travel - The Libraries has administrative responsibility for bureau libraries in the Canal Zone (Smithsonian Tropical Research Institute), in New York City (Cooper-Hewitt Museum), and in Cambridge, Massachusetts (Smithsonian Astrophysical Observatory). Proper servicing of these libraries requires travel by Washington staff and the staff of the bureau libraries. In addition, the gift of the Dibner Library will require frequent trips to Connecticut by Libraries staff to select materials for the collection. Furthermore, the Libraries has become involved in international library and documentation activities. A principal means of professional development for the 32 professionals on the staff takes place on the national level, and frequently involves travel to seminars and conferences. These factors, in combination with increased travel costs, create serious deficiencies in the Libraries' travel allowance (\$10,000 in FY 1975). An increase in the Libraries' travel allowance of \$6,000 is requested to enable the Libraries to administer effectively bureau libraries outside of the Washington, D. C. area and to enable participation in international activities and in essential professional and staff development activities.

## OFFICE OF EXHIBITS CENTRAL

1974 Actual.....\$ 960,000  
 1975 Estimate.....\$ 972,000  
 1976 Estimate.....\$1,007,000

(Dollars in thousands)	Base	Increase	Est.
	FY 1975	Requested	FY 1976
Number of Permanent Positions...	50	0	50
11 Personnel Compensation.....	822	32	854
12 Personnel Benefits.....	70	3	73
21 Travel & Trans. of Persons...	6		6
23 Rent, Comm. & Utilities.....	4		4
24 Printing and Reproduction....	5		5
25 Other Services.....	15		15
26 Supplies and Materials.....	30		30
31 Equipment.....	20		20
<b>TOTAL</b>	<b>972</b>	<b>35</b>	<b>1,007</b>
<u>Analysis of Increase</u>			
Necessary Pay.....		35	
Program Funds.....		0	

**ABSTRACT** - The Office of Exhibits Central (OEC), working in close collaboration with museum scientists, curators, and historians, prepares exhibits and related products for those museums, programs, and other offices not having their own in-house capabilities. OEC also provides specialized exhibit assistance to other bureaus and offices. No program increase is requested for this office. Necessary pay in the amount of \$35,000 is sought for existing staff.

**PROGRAM** - The Office of Exhibits Central provides design, production, installation, and maintenance services to those museums, programs, and other offices of the Institution not having their own in-house capabilities for this work and provides the following exhibit assistance to other museums whose programs do not require or allow full-time staffing and/or establishment of shop facilities. Consultation as well as job performance is available in the following specialized areas: label editorial services, exhibition lighting, exhibit motion picture production, audio-visual installation and maintenance, freeze-dry taxidermy and the services of models, plastics, and restoration laboratories (specializing in fluid, thermo-setting, and reinforced plastics used in museum applications).

OEC also provides and coordinates training in exhibition media and techniques with the Office of Museum Programs and is developing programs to research, design, develop, evaluate, and communicate new exhibition techniques, systems, and procedures of value to the museum community.

During the first half of FY 1975, the OEC completed 89 exhibit and exhibit-related projects for 16 separate Smithsonian "clients" and provided consultant service to three museums outside the Institution. At the same time, 60 projects--long and short term--remained active on OEC schedules. Major OEC effort in the past 18 months has been devoted to providing assistance and/or full-program performance for the following exhibitions and activities: new exhibits for the Smithsonian Crypt, off-Mall bureaus, and the Commons cases in the Smithsonian Institution Building; the opening exhibitions at the Hirshhorn Museum; the Panda House exhibits and a Map-Directory with the National Zoological Park (NZP); a traveling exhibition "ZOO/100" with both the NCP and the Traveling Exhibition Service; and over 30 projects for Traveling Exhibition Service including several exhibitions produced in multiple editions. Models, plastics, and restorations were produced for the "Discovery Room" and "Ice Age Mammals" for the Museum of Natural History as well as "Suing Everyone" for the Museum of History and Technology.

SMITHSONIAN INSTITUTION TRAVELING EXHIBITION SERVICE

1974 Actual.....\$72,000  
 1975 Estimate.....\$92,000  
 1976 Estimate.....\$96,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	6	0	6
11 Personnel Compensation.....	54	4	58
12 Personnel Benefits.....	4		4
21 Travel & Trans. of Persons...	3		3
22 Transportation of Things.....	14		14
25 Other Services.....	17		17
<b>TOTAL</b>	<b>92</b>	<b>4</b>	<b>96</b>
<u>Analysis of Increase</u>			
Necessary Pay.....		4	
Program Funds.....		0	

**ABSTRACT** - The Smithsonian Institution Traveling Exhibition Service (SITES) provides carefully selected, well-designed, and widely circulated traveling exhibits covering a diversified range in the fields of art, design, science, technology, history, and education. These exhibits include not only Smithsonian exhibits, but also those organized and lent by numerous Government agencies and individuals and organizations throughout the world. No program increase is sought for FY 1976. Necessary pay for existing staff in the amount of \$4,000 is requested.

**PROGRAM** - SITES, which has been in continuous operation for 23 years, is the only nation-wide organization circulating exhibitions of an interdisciplinary curriculum serving specialized and general museums, galleries, and educational and cultural organizations throughout the nation and is the sole official agency of the U. S. to circulate official exhibitions from abroad. The non-Federal operating budget for FY 1975 is \$195,000, not including a projected \$330,000 of special purpose gifts, grants, and contracts and \$306,000 from Smithsonian Bicentennial program funds.

Approximately 5 million people view SITES exhibitions annually (upwards of 625 installations viewed by an average of 8,000 each). The Federal appropriations for this activity have enabled exhibition rental fees to be kept lower than would otherwise be possible. In FY 1973, exhibitions renting for over \$200 numbered 72, while those costing under \$200 numbered 29. In FY 1974, the first year the beneficial effect of the Federal appropriation was felt, the split was 52-52. In FY 1975, those renting for under \$200 will rise to 68 and those over \$200 will be 49. The lower rental fee enables smaller institutions to have access to exhibits.

Major progress is being made in developing the educational potential of SITES' shows. Now, more than ever before, exhibit workbooks and program suggestions are being developed to expand the benefit and worth of each show for exhibitors.

Two major programs have been undertaken by SITES to enhance Bicentennial opportunities for SITES' exhibitors. The first is directed toward making Smithsonian expertise and objects available nation-wide. The second is a means for the United States to host large exhibitions of foreign-origin during the Bicentennial. These two programs join SITES' basic program of 117 shows in circulation. Eventually, the

two new programs will double the total number of shows available. Special Bicentennial appropriations to the Smithsonian have made the first new program possible; a contract with the American Revolutionary Bicentennial Administration has enabled the second program to begin.

Number of Bookings Each State  
(July 1, 1974 - December 31, 1974)

Alabama	7	Montana	0
Alaska	2	Nebraska	3
Arizona	3	Nevada	0
Arkansas	7	New Hampshire	9
California	23	New Jersey	14
Colorado	10	New Mexico	4
Connecticut	4	New York	59
Delaware	7	North Carolina	4
District of Columbia	9	North Dakota	1
Florida	17	Ohio	16
Georgia	3	Oklahoma	4
Hawaii	1	Oregon	4
Idaho	2	Pennsylvania	18
Illinois	21	Rhode Island	1
Indiana	18	South Carolina	11
Iowa	8	South Dakota	0
Kansas	17	Tennessee	12
Kentucky	3	Texas	39
Louisiana	7	Utah	3
Maine	3	Vermont	1
Maryland	8	Virginia	10
Massachusetts	17	Washington	6
Michigan	9	West Virginia	10
Minnesota	19	Wisconsin	13
Mississippi	13	Wyoming	0
Missouri	20		

Partial Listing of Available or Scheduled Exhibits

Exhibits Based on Smithsonian Collections

Suiting Everyone  
 American Agriculture: A Continuing Revolution  
 The Men and Machines of American Journalism  
 The Photographer at the Frontier  
 Prints from Wood  
 And the Band Played On.....  
 In the Minds and Hearts of the People  
 Blacks in the Westward Movement

Other Exhibits

Hey, Look at Me (D.C. Children's Art)  
 Solar Energy  
 Australia Goes Metric  
 Man in His Environment  
 In Quest of Cockabooey  
 Great American Scream Machine  
 (Roller Coaster)  
 Lion Rugs From Fars

## SMITHSONIAN ARCHIVES

1974 Actual.....\$157,000  
 1975 Estimate.....\$175,000  
 1976 Estimate.....\$191,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	10	0	10
11 Personnel Compensation.....	138	15	153
12 Personnel Benefits.....	12	1	13
21 Travel & Trans. of Persons...	2		2
25 Other Services.....	8		8
26 Supplies and Materials.....	4		4
31 Equipment.....	11		11
<b>TOTAL</b>	<b>175</b>	<b>16</b>	<b>191</b>
<u>Analysis of Increase</u>			
Necessary Pay.....		6	
Program Funds.....		10	

ABSTRACT - The Smithsonian Archives is the official memory of the Institution and a valuable research resource for scholars working in the history of American science and in the history of the cultural institutions which are under Smithsonian care. The Archives currently has control over six million documents and is developing intellectual control over several million additional documents held in research and curatorial areas.

The FY 1976 budget request proposes a program increase of \$10,000 to fund an oral history program designed to document the history of the Smithsonian Institution. An amount of \$6,000 is sought for necessary pay for existing staff.

PROGRAM - The Smithsonian Institution holds a unique collection of museum objects and archives for research and exhibition. Natural history specimens, art objects, and other collections are interpreted by archival documentation which supplements and explains them. Archival records of the Smithsonian's activities also attract historians and other scholars interested in science and art in the nation's capital from the 1830's to the present. Some six million documents are now in the central archives, while approximately ten million more under the care of the Archives remain spread throughout the Institution.

The Smithsonian Archives strives to achieve intellectual control over the vast and dispersed archival resources of the Institution amounting to several million documents. In calendar year 1974 the Archives completed records surveys of the National Museum of Natural History, the National Museum of History and Technology, and the Smithsonian Astrophysical Observatory. Systematic records retention schedules are being implemented for those bureaus; and an institution-wide records management program was started. Computerized control of archives was extended; and microfilming of the Institution's main accession file continued. Accessions totalled over one million documents, including the central files of the United States National Museum, 1902-1935; and the papers of A. Remington Kellogg, H. Helm Clayton, and Austin H. Clark.

JUSTIFICATION OF \$10,000 INCREASE (Archives) - The Smithsonian Archives has developed an oral history program designed to document the history of the Smithsonian Institution and the history of the natural sciences in America. In order to continue and expand the program an oral historian and clerk-typist are needed half-time to conduct and transcribe the interviews.



## NATIONAL MUSEUM ACT

1974 Actual.....\$884,000 /1  
 1975 Estimate.....\$802,000  
 1976 Estimate.....\$767,000

(Dollars in thousands)	Base	Increase	Est.
	FY 1975	Requested	FY 1976
Number of Permanent Positions...	3	0	3
11 Personnel Compensation.....	55	-11	44
12 Personnel Benefits.....	5	- 1	4
21 Travel & Trans. of Persons...	14	- 1	13
23 Rent, Comm. & Utilities.....	5	- 4	1
24 Printing and Reproduction....	6	- 3	3
25 Other Services.....	3	2	5
26 Supplies and Materials.....	2	- 1	1
31 Equipment.....	2	- 1	1
41 Grants.....	710	-15	695
TOTAL	802	-35	767
<u>Analysis of Increase</u>			
Necessary Pay.....		2	
Program Funds.....		-37	

**ABSTRACT** - The National Museum Act is a technical assistance program granting funds for specific proposals which advance the museum profession at large through training, research, publication, or professional assistance. Through these programs, museum personnel have the opportunity to receive training which was not available previously. A slight decrease from 1975 is due primarily to programmatic adjustments and reduced requirements for various services, supplies, and equipment. A net saving of \$35,000 is projected.

**PROGRAM** - Public Law 93-345, approved July 12, 1974, reauthorized appropriations for the National Museum Act through FY 1977 and funding of \$1,000,000 to the Smithsonian Institution each year. Of this amount, \$800,000 was appropriated for FY 1975. Particular concern is expressed in the legislation for the needs of conservation in training, research, and coordination.

Funds appropriated to the Smithsonian Institution for the implementation of the National Museum Act are made available, through grants and contracts, to museums, professional associations, and universities. Such funding is determined by the National Museum Act Advisory Council appointed for this purpose by the Smithsonian Institution. The membership of the Advisory Council encompasses the principal museum disciplines-- art, science, and history--and is broadly representative of all regions of the United States. The Council advises and assists the Secretary in determining priorities and assessing the quality of programs seeking support under the Act.

In the first half of FY 1975, 123 applications have been received. Only programs which demonstrate to the Advisory Council careful structure and sound administration receive support. The major aim of the National Museum Act is to provide opportunities for professional enhancement and research which can be demonstrated to be of usefulness

/1 Includes \$100,000 each transferred to the National Endowment for the Arts and the National Endowment for the Humanities as required by PL 91-629. PL 93-345 eliminates this fund transfer requirement..

to museums. Through November 1974 a total of 32 projects have been approved in the amount of \$325,000. The balance of this year's appropriation will be awarded at the March and June 1975 meetings of the Advisory Council. Grants awarded to date include: 12 travel fellowships to museum professionals to study techniques in museum management and programs; 5 awards for stipend support in college and university museum training programs; 13 grants to support short-term seminar/workshop training programs; and 2 special projects.

In the second half of FY 1975 new programs relating to conservation training and research were introduced. The staffs of the National Museum Act and of the Office of Museum Programs work closely with the National Conservation Advisory Council, funded by the Act, whose aim is to assess the nation's needs in conservation training, research, facilities, and the requirements that could be served by the creation of regional conservation centers. Particular emphasis is being given in these studies to define what form a "National Institute for Museum Conservation" might take, and whether such an organization could adequately serve the nation's needs.

JUSTIFICATION OF \$37,000 DECREASE - The decrease in travel, part-time services, and equipment result in an overall budget adjustment of \$37,000. The impact of the total reduction upon grants is expected to be nominal.

SMITHSONIAN INSTITUTION SPECIAL PROGRAMS

These special programs make use of total Institutional resources, including staff research competence, collections, and space for exhibits, to produce outstanding scholarship, exhibits and other presentations, and additional opportunities for public education. These special programs include:

- The American Revolution Bicentennial Program which will advance the Institution's efforts to celebrate and portray "The American Experience," the first two-hundred years of American history and what they may mean for the future.
- The Environmental Sciences Program which is designed to shed light on complex biological processes that need to be better understood before solutions to national ecological programs can be determined.
- The Major Exhibition Program which funds the design and production of exhibits of unusual national significance and timeliness.
- The Academic and Educational Programs offices which conduct interdisciplinary seminar series, coordinate educational programs for students at the elementary and secondary school level, and provide opportunities for outstanding pre- and post-doctoral investigators from across the nation to work under the supervision of the Institution's professional staff.
- The Research Awards Program which enables the Institution to fund especially meritorious studies through a competitive selection process.

Full descriptions of these programs appear in the following sections of this budget.

AMERICAN REVOLUTION BICENTENNIAL PROGRAM

1974 Actual..... \$1,745,000  
 1975 Estimate..... \$3,847,000  
 1976 Estimate..... \$4,256,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	2	0	2
11 Personnel Compensation.....	671	381	1,052
12 Personnel Benefits.....	50	38	88
21 Travel & Trans. of Persons..	105	94	199
22 Transportation of Things....	49	54	103
23 Rent, Comm. & Utilities.....	7	9	16
24 Printing and Reproduction...	430	184	614
25 Other Services.....	2,063	-377	1,686
26 Supplies and Materials.....	243	97	340
31 Equipment.....	215	-65	150
42 Insurance Claims & Indem....	14	-6	8
<b>TOTAL</b>	<b>3,847</b>	<b>409</b>	<b>4,256</b>
<u>Analysis of Increase</u>			
Necessary Pay.....		9	
Program Funds.....		400	

ABSTRACT - In less than three months, the official observance of America's 200th anniversary begins. At the Smithsonian, the date will be marked by the opening, on April 19, 1975, of the National Portrait Gallery's Bicentennial exhibition, "The Dye Is Now Cast: The Road to American Independence 1774-1776." The Institution, as a result of the continuing encouragement and support of the Congress since 1965, is well prepared for the Bicentennial period. Its program, under the general theme of The American Experience, includes twenty-three separate projects involving fifteen bureaus or divisions. Within the next eighteen months in Washington, thirteen major exhibitions and the new National Air and Space Museum will have opened. Some two hundred traveling exhibitions will be circulating throughout the country, and major scholarly publications in the fields of anthropology, art, and history will be published. Finally, during the summer of 1976, millions of visitors to Washington will see the Festival of American Folklife. The individual projects are now all in the final phases of production, and there is no increase in program funds required to complete these projects as scheduled. However, an increase of \$400,000 in temporary program costs is requested to cover the non-recurring expenses of essential, temporary personnel and supplies to meet the demands of increased visitor loads during the peak spring and summer months of 1976. Necessary pay in the amount of \$9,000 is also sought.

PROGRAM - The American Experience - FY 1976 Request:A New Museum

The National Air and Space Museum\*

Exhibitions in Washington

A Nation of Nations (National Museum of History and Technology)	\$540,000
Ecology 200 - Our Changing Land (National Museum of Natural History)	--
1876 - A Centennial Exhibition (Arts and Industries Building)	360,000
Revolutionary Period Exhibitions (National Portrait Gallery)	150,000

Exhibitions in Washington (Cont.)

America as Art (National Collection of Fine Arts)	\$ 65,000
Americas and Symbols in the City (Renwick Gallery)	99,000
The World's Artists and America* (Hirshhorn Museum & Sculpture Garden)	--
Arts of Asia* (Freer Gallery of Art)	--
The Federal City (Smithsonian Institution Building)	50,000
	<u>\$1,264,000</u>

Traveling Exhibitions

Information and Exhibit Systems	\$380,000
Object-oriented Exhibitions (Smithsonian Institution Traveling Exhibition Service)	200,000
Exhibits Design and Production Laboratory (Anacostia Neighborhood Museum)	50,000
	<u>\$630,000</u>

Festival

Festival of American Folklife	\$1,000,000
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Major Scholarly Projects

Inventory of American Paintings Before 1914 (National Collection of Fine Arts)	\$119,000
Catalogue of American Portraits* (National Portrait Gallery)	--
Bibliography of American Art (Archives of American Art)	45,000
Encyclopedia of North American Indians (Center for the Study of Man)	300,000
Sternwheeler Bertrand (National Museum of History and Technology)	75,000
The United States in the World (International Conference - Smithsonian Institution, American Studies Association, American Council of Learned Societies)	60,000
Kin and Communities: The Peopling of America* (Smithsonian Institution, American University)	--
	<u>\$599,000</u>

Support

Visitor Orientation and Services for the Bicentennial Year	301,000
General Administration	84,000**
Protection	314,000
Buildings and Facilities Management	64,000
	<u>\$ 763,000</u>
TOTAL	<u>\$4,256,000</u>

\*Not funded by Bicentennial appropriation.

\*\* Includes necessary pay for temporary staff assigned to all projects.

JUSTIFICATION OF PROGRAM - A full description of the Smithsonian's Bicentennial program, project by project, is included in the supplement to this budget. FY 1976 will be the Smithsonian's final year of intensive effort toward realization of the Institution's Bicentennial program. As the projects, most of which are above and beyond the normal level of operations, are completed, the need for these special funds will decrease accordingly in FY 1977.

In this critical period leading to the timely openings of all Bicentennial exhibitions in Washington, D.C., and the preparation of most of the traveling exhibitions



as well as an expanded Festival of American Folklife, the largest need is for temporary manpower. Staffing considerably beyond normal level is essential to achieve increased production while maintaining the Smithsonian's regular program. An amount of \$1,140,000 is requested for such personnel, and \$1,686,000 for contractual services to accomplish needed work outside the Institution's capability. Funds will be used for temporary help in exhibits installation, Folklife Festival site construction, preparation of catalogues and other materials for publication, and general management and coordination. In addition, temporary guards and maintenance personnel will be hired during the peak spring and summer months in 1976 to meet the demand of larger crowds and extended hours of Smithsonian buildings not previously opened in the evenings.

An amount of \$614,000 is requested for printing and reproduction. Half of this funding will support the continued composition process and printing of the twenty-volume Encyclopedia of North American Indians. The remaining funds will support the printing of seven major catalogues and additional educational materials and publications related to the Bicentennial exhibitions, as well as visitor orientation and information brochures.

For all projects, additional supplies and materials are needed. Borrowed objects for exhibitions must be transported to Washington, D.C. and insured. Special equipment must be acquired for use in exhibitions, for the Festival presentation, and for crowd control. Funding of \$617,000 is requested for these purposes.

Finally, \$199,000 is requested for transportation of persons. More than one-half of this request is for the final research phases and for participant-travel required for the Festival of American Folklife. Another one-fourth will support travel costs for participants in the International Bicentennial Conference, "The United States in the World". These are one-time non-recurring costs. The remaining funds will support research, travel required to maintain the security of borrowed objects, and the management of traveling exhibitions.

ENVIRONMENTAL SCIENCES PROGRAM

1974 Actual.....\$190,000  
 1975 Estimate.....\$189,000  
 1976 Estimate.....\$193,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	2	0	2
11 Personnel Compensation.....	112	4	116
12 Personnel Benefits.....	10		10
21 Travel & Trans. of Persons...	14		14
25 Other Services.....	36		36
26 Supplies and Materials.....	7		7
31 Equipment.....	10		10
TOTAL	189	4	193
<u>Analysis of Increase</u>			
Necessary Pay.....		4	
Program Funds.....		0	

**ABSTRACT** - The Environmental Sciences Program (ESP) was established in FY 1971 to provide coordinated environmental research at the Smithsonian. A plan has been developed to assemble and analyze biological and physical data on specific important ecosystems to predict the consequence of environmental change. Two Smithsonian research facilities, the Smithsonian Tropical Research Institute (STRI) in Panama and the Chesapeake Bay Center for Environmental Studies (CBCES), are the principle sites being used to carry out these studies. No program increase is requested in FY 1976. Funding in the amount of \$4,000 is sought for necessary pay.

**PROGRAM** - The Environmental Sciences Program administers a long-range, multi-bureau study of natural fluctuations in several different ecosystems. The Smithsonian is particularly suited to undertake this type of research as a result of the range of disciplines represented in the various bureaus, its large collections of plants and animals with detailed distribution and abundance data, and its control over permanent and protected field-research sites in both temperate and tropical zones. Staff resources consist of specialists from several Smithsonian science bureaus--STRI, CBCES, the Radiation Biology Laboratory, the National Museum of Natural History, and the National Zoological Park, as well as from several universities.

A study is now being conducted in three contrasting environments: a tropical forest on Barro Colorado Island, an intertidal coral reef at Galeta Point (both STRI reserves in Panama) and a temperate estuary and its watershed in the Rhode River (CBCES). At each site, a number of physical, chemical, and biological factors which vary with time and which together indicate stability, predictability, and variability of each environment are routinely measured. During FY 1974 special attention was given to evaluating results and casting preliminary models of the data. The first data bank report displaying monitoring results for calendar year 1973 has been published. The 1974 results are now in preparation. A heavy emphasis was placed in 1974 and will continue to be placed in 1975 upon systems analysis of the data and construction of biological models. The ESP is not independent of other research at the various sites. It supplies environmental data to other projects and uses data collected by them. This cooperation is essential because the range of subjects being studied demands an interdisciplinary approach.

## MAJOR EXHIBITION PROGRAM

1974 Actual.....\$103,000  
 1975 Estimate.....\$ 80,000  
 1976 Estimate.....\$260,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	0	0	0
21 Travel & Trans. of Persons...		3	3
22 Transportation of Things....		3	3
25 Other Services.....	73	181	254
41 Grants.....	7	-7	
TOTAL	80	180	260
<u>Analysis of Increase</u>			
Necessary Pay.....		0	
Program Funds.....		180	

**ABSTRACT** - The major permanent exhibitions of the Smithsonian Institution are nationally and internationally recognized as among the best examples of public communication and education in the museum world. The Major Exhibition Program has as its purpose the production of such exhibitions that will supplement the regular exhibits programs of the museums. The "Benefits from Flight" exhibit was initially designed in FY 1974 with design continuing in FY 1975. An increase of \$180,000 is sought in FY 1976 to complete this exhibit which will be displayed in the new National Air and Space Museum building.

**PROGRAM** - The "Benefits from Flight" exhibit will present the many benefits that have accrued to man and society since the advent of powered flight. The scope of this exhibition has been broadened, from the earthbound benefits of space flight alone, to encompass the consequences of air and space flight which have emerged over the course of this century. The development of this exhibit has required a substantial research effort intended to assess critically the scientific, technological, economic, historical, and social dimensions of selected benefits. That research, now in the process of completion, has combined the resources and talents of the Smithsonian curatorial staff, two graduate students supported by Smithsonian cooperative fellowships, and three contracted non-profit research firms. With the impending completion of documentation, the level of research effort has gradually decreased. Concomitant exhibit design has begun in coordination between the curatorial and design staffs of the Smithsonian and an outside design firm. Production will begin in early fiscal 1976.

The thematic structure of the hall, mirrored in its preliminary design, establishes the relationships among air and space research, development and operations, and the persons to whom the results of these activities accrue.

The most significant benefits which have emerged in the historical development of air and space are those directly associated with flight: high-speed personnel transportation, staple supply and disaster relief, airborne defense and reconnaissance, satellite monitoring of earth conditions and resources, relay of information, and basic scientific knowledge. Our view also includes the broader social impact: flight in the arts and in popular culture, flight as a homogenizing and educating influence, and flight as a source of entertainment, for example.

The high technology associated with, and nurtured within, the aerospace industry has been and continues to be adapted to serve many other needs of our society. The exhibit will also explain how these needs are met through the transfer of aerospace technology to ground-based applications in medical, transportation, public service, managerial, and manifold other segments of society.

**JUSTIFICATION OF \$180,000 INCREASE (Exhibits)** - FY 1976 will be the year for fabrication and installation of this exhibit. This will be the final installment on this exhibit. With the \$183,000 already obligated, this major exhibit will cost a total of \$443,000.

## ACADEMIC AND EDUCATIONAL PROGRAMS

1974 Actual.....\$642,000  
 1975 Estimate.....\$620,000  
 1976 Estimate.....\$626,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	11	0	11
11 Personnel Compensation.....	164	6	170
12 Personnel Benefits.....	13		13
21 Travel & Trans. of Persons...	6		6
23 Rent, Comm. & Utilities.....	3		3
24 Printing and Reproduction....	27		27
25 Other Services.....	401		401
26 Supplies and Materials.....	4		4
31 Equipment.....	2		2
TOTAL	620	6	626
<u>Analysis of Increase</u>			
Necessary Pay.....		6	
Program Funds.....		0	

ABSTRACT - A major Smithsonian objective is to make its resources for learning available to the formal education community and to the general public. These efforts take the form of programs in higher education, advanced studies, and offerings at the elementary and secondary education level. No program increase is sought for FY 1976. Funds in the amount of \$6,000 are sought for necessary pay for the existing staff.

PROGRAM - Since 1965 as a major part of its higher education programs the Smithsonian has offered fellowship support to 228 Ph.D. candidates and to 221 post-doctoral investigators to enhance their ability as scholars and teachers through collaboration and study with the Institution's research staff. Over 498 undergraduate and first and second-year graduate students have been offered the opportunity to consult the Institution's research staff and collections for short periods. Administered by the Office of Academic Studies, these opportunities are extended both to strengthen the research capabilities of the Smithsonian and to make available to the scholarly and scientific community the Institution's specialized resources. Its effectiveness derives from close cooperation with the nation's universities and colleges, which welcome opportunities for their students to receive specialized Smithsonian training that their own facilities cannot provide.

The Office of Smithsonian Symposia and Seminars is responsible for the Smithsonian's International Symposia Series, its biennial program of public activities centering on a single theme of contemporary importance, from which are published the collected original papers presented and other relevant materials. In 1974 The Cultural Drama: Modern Identities and Social Ferment was published. This was based in part on the fourth International Symposium held in 1970. Scheduled for publication in spring 1975 is The Nature of Scientific Discovery, based on the fifth symposium held in April 1973. The office now is planning the sixth and seventh in the symposia series, both under the Bicentennial program. "Kin and Communities: The Peopling of America" will be held in June 1976 to coincide with the opening of the Festival of American Folklife and in liaison with "A Nation of Nations," a Smithsonian Bicentennial exhibit. This symposium will reflect on the role of family institutions and communities in shaping the nation during its first two hundred years and as continuing links to African, Asian, European, and other cultures which have enriched American civilization. "The United States in the World," planned as the seventh symposium, will be held in September 1976. It will

provide an examination by scholars and writers (including about 200 from other countries) of the far-reaching influences of the American synthesis of Old World cultural patterns, including those of the American Indians, and the interaction between the mosaic culture of the U. S. and other societies.

The Office of Elementary and Secondary Education coordinates the education programs which are now located directly in the museums. The office prepares publications, audio-visual aids, and other educational materials, directed at pre-college students and their teachers. It also serves as the liaison between the Smithsonian and the D.C. Metropolitan area schools, conducting workshops for over two thousand area teachers in FY 1975. The office is active with area schools in developing special outreach projects. FY 1975 brought the development of outreach kits with both Fairfax County, Virginia and Montgomery County, Maryland teachers. Through regularly scheduled training activities, assistance is provided to the Smithsonian docent program with particular emphasis on teaching methodologies.



## SMITHSONIAN RESEARCH AWARDS PROGRAM

1974 Actual.....\$450,000  
 1975 Estimate.....\$450,000  
 1976 Estimate.....\$450,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	0	0	0
41 Grants.....	450	0	450
TOTAL	450	0	450
<u>Analysis of Increase</u>			
Necessary Pay.....		0	
Program Funds.....		0	

**ABSTRACT** - The Research Awards Program finances special research projects which cannot be supported from the regular budgets of the bureaus. Since 1966, 280 proposals have been funded through this program, and more than 200 publications which are directly related to the research have been produced. No program fund increase is being requested for FY 1976.

**PROGRAM** - Prior to FY 1966, the Smithsonian received funds from the National Science Foundation (NSF) for special research projects of individual staff members. In 1964, the Congress prohibited the NSF from making grants for scientific research to other Government agencies. The NSF instituted a further limitation that it would no longer make grants to any agency or institution receiving direct Federal appropriations. The Research Awards Program was begun in FY 1966 by an appropriation of \$350,000 to the Smithsonian Institution for the purpose of financing new or continuing research projects formerly eligible for support from NSF.

Proposals are submitted each year by members of the Smithsonian Institution staff to support new and innovative research. All proposals have undergone a careful scientific or scholarly review in their respective bureaus before they are reviewed by an advisory committee of scientists from outside the Institution. Projects are selected on the basis of their showing an imaginative and exciting approach to research and scholarship efforts that could not normally be carried out with regularly budgeted departmental funds.

The work supported by the Research Awards Program is often the best of the Institution's productivity and the reason for acquiring professional staff of the highest competence and imagination. Further, the program provides an opportunity for researchers to engage in collaborative field research with colleagues located in other institutions. Many opportunities for participation in expeditions and other field projects would be lost were it not for the Research Awards Program providing funding assistance. Some recent accomplishments of this research are: better understanding of the nature of volcanic eruptions; help in unraveling the very early history of the earth through work on the chemistry and mineralogy of ancient rocks discovered in West Greenland; and possible improvement of the local food supply in developing countries as a result of the identification of a specialized bee necessary for effective pollination.

In FY 1975, members of the Smithsonian staff again submitted proposals for funding up to three years in order to provide for better stability, continuity, and planning of research. Of the sixty-one proposals received for FY 1975 amounting to \$1,316,402, forty were funded in the amount of \$450,000. It is intended that the program will operate at this level in FY 1976.

## OFFICE OF THE SECRETARY

1974 Actual..... \$654,000  
 1975 Estimate..... \$753,000  
 1976 Estimate..... \$779,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	29	0	29
11 Personnel Compensation.....	572	24	596
12 Personnel Benefits.....	49	2	51
21 Travel & Trans. of Persons..	8		8
23 Rent, Comm. & Utilities.....	17		17
24 Printing and Reproduction...	2		2
25 Other Services.....	71		71
26 Supplies and Materials.....	18		18
31 Equipment.....	16		16
TOTAL	753	26	779
<u>Analysis of Increase</u>			
Necessary Pay.....		26	
Program Funds.....		0	

**ABSTRACT** - The Office of the Secretary is responsible for planning, implementing, and reviewing the progress of all Smithsonian operations. No program increase is sought. An additional amount of \$26,000 is being sought for necessary pay for current staff.

**PROGRAM** - I. Immediate Office of the Secretary including Secretary's Files and Office of the Under Secretary: With 18 positions and \$490,000 the Office of the Secretary plans, implements, and reviews the progress of all Smithsonian operations.

11. Other: The remainder of the funding identified for this office, 11 positions and \$289,000 support the Director of Support Activities, the Travel Services Office, and the Curator of the Smithsonian Institution Building.

The Director of Support Activities directs and reviews the Support Activities Group. This group includes the Office of Personnel Administration, Office of Equal Opportunity, Office of Supply Services, Information Systems Division, Management Analysis Office, Office of Protection Services, Office of Facilities Planning and Engineering Services, Office of Plant Services, Office of Printing and Photographic Services, and Travel Services Office.

The Travel Services Office assists official Smithsonian travelers in developing domestic and foreign travel plans, estimating costs, and planning the most economical routing in keeping with Government and Smithsonian Institution regulations.

The Curator of the Smithsonian Institution Building is responsible for the exhibits in this old building and the furnishing of the public and office spaces in the style furniture that was in vogue at the time of its construction.

OFFICE OF THE GENERAL COUNSEL

1974 Actual.....\$277,000  
 1975 Estimate.....\$306,000  
 1976 Estimate.....\$331,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	11	0	11
11 Personnel Compensation.....	263	10	273
12 Personnel Benefits.....	23	1	24
21 Travel & Trans. of Persons...	8		8
23 Rent, Comm. & Utilities.....	3		3
25 Other Services.....	3	12	15
26 Supplies and Materials.....	3	1	4
31 Equipment.....	3	1	4
<b>TOTAL</b>	<b>306</b>	<b>25</b>	<b>331</b>
<u>Analysis of Increase</u>			
Necessary Pay.....		11	
Program Funds.....		14	

ABSTRACT - The Office of the General Counsel (OGC) is responsible for all Smithsonian legal matters. These legal matters combine those arising from the operations of a university-like, charitable corporation with those common to Government organizations. An increase of \$10,000 is requested to meet the need for outside legal counsel for advice on legal problems of Smithsonian units located in geographical areas beyond Washington, D.C., and \$4,000 is requested for the continued legal education of staff attorneys through attendance at legal seminars and for necessary legal reference services and texts. An additional \$11,000 is sought for necessary pay for existing staff.

PROGRAM - The OGC serves as counsel to the Board of Regents, the Secretary, and the staffs of bureaus, programs, and support offices of the Institution on the legal adequacy of proposed administrative actions and decisions and on the resolution of legal problems arising from operations. As such, the scope and volume of the OGC's workload parallel the direction of and developments in the diverse programs of the Institution. The legal problems combine those arising from the operations of a university-like, charitable corporation with those common to Government organizations, and include: the limitations and obligations of Smithsonian operations in relation to the functions, authorities, and regulations of Government entities; legislative review, drafting, and liaison; the uses and restrictions of trust funds; litigation; application of judicial decisions and executive branch directives and regulations; contract negotiation; tort claims and settlements; Federal and State excise, sales, and gift taxes, deductions, and exemptions; patents and trademarks; copyrights; review of transfers by gift, loan, purchase, or bequest; and many areas of international law.

JUSTIFICATION OF \$14,000 INCREASE (General Administration) - With the increase of activity at a number of units located outside the Washington Metropolitan area (such as the Smithsonian Astrophysical Observatory in Cambridge, Massachusetts, the Smithsonian Tropical Research Institute in the Canal Zone, and the Mount Hopkins Observatory in Tucson, Arizona), it has become necessary to secure the assistance of counsel in these localities to advise on problems involving applicable local laws. In addition, there is a need for specialized advice on such matters as international trademarks and the use of the Smithsonian name. Based on current experience it is estimated that \$10,000 will be necessary for this purpose in FY 1976. A further increase of \$4,000 for support costs is requested to allow staff attorneys to keep abreast of the law through attendance at law seminars and to allow the addition of pertinent reference material to the OGC law library.

## OFFICE OF THE TREASURER

1974 Actual.....\$915,000  
 1975 Estimate.....\$722,000  
 1976 Estimate.....\$871,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	34	2	36
11 Personnel Compensation.....	536	45	581
12 Personnel Benefits.....	45	89	134
21 Travel & Trans. of Persons...	3		3
23 Rent, Comm. & Utilities.....	94	15	109
24 Printing and Reproduction...	10		10
25 Other Services.....	17		17
26 Supplies and Materials.....	15		15
31 Equipment.....	2		2
TOTAL	722	149	871
<u>Analysis of Increase</u>			
Necessary Pay.....		103	
Program Funds.....		46	

**ABSTRACT** - The Office of the Treasurer provides financial management assistance and technical services to the Smithsonian. The postage indicia costs previously reflected in this office's budget are now shown (as of July 1, 1974) under the Office of Plant Services.

An increase of 2 positions and \$46,000 is requested to meet the following support needs: 1 position (\$20,000) to aid in the conversion from a manual to a computerized accounting system; 1 position (\$11,000) to assist in financial and reporting efforts directed towards the Bicentennial and other special programs; and an amount of \$15,000 for the rental of automated data entry, photocopier, and telecopier equipment and for the cost of computer usage. In addition, \$103,000 is requested for necessary pay, \$85,000 of which is for Workmen's Compensation payments.

**PROGRAM** - The Office of the Treasurer is composed of the Treasurer's immediate office, the office of programming and budget, the accounting division, and the grants and insurance administration division.

The immediate Office of the Treasurer provides overall direction for financial planning, budgeting, investment policy, accounting, reporting, and insurance, grant, and contract administration.

The accounting division is responsible for developing, implementing, and maintaining financial accounting and payroll systems; performing financial analyses and reporting; and operations including payroll, accounts payables and receivables, and related data processing.

The office of programming and budget is responsible for the planning, formulation, and agency-level presentation of estimates to the Office of Management and Budget and the Congress, and the execution and review of the Institution's Federal budget. It also prepares non-appropriated fund budgets for presentation to the Treasurer, Under Secretary, Secretary and Board of Regents and monitors their execution during the year.

The grants and insurance administration division which is financed with non-appropriated funds is responsible for the administration of contracts and grants from other institutions and agencies and for the administration of risk management programs.

JUSTIFICATION OF \$46,000 INCREASE (General Administration) - Accounting transactions continue to increase as the level of office and bureau activities increase and diversify. To cope with a rising workload, the accounting division has taken many actions to improve efficiency and effectiveness. For example, in FY 1975, the division put into operation a direct key-to-disk automated data entry system for use in vouchering and paying accounts. Its installation culminated several months of systems analysis and design, including integration with the Smithsonian's central computer, equipment selection, and orientation and training of employees. The division has also been successful in persuading frequent vendors to consolidate many separate billings per month into a single bill. These two innovations have resulted in the elimination of repetition in handling payment documents, reduction of volume and errors, and faster payment of invoices. Furthermore, the division has established a system of employees' time and attendance reporting which eliminates the bi-monthly keypunching of over 3,000 time cards. The new system utilizes an optical mark scanner to record special light sensitive pencil insertions. Incidence of error has been markedly reduced.

Nevertheless, to realize the full capabilities of the newly installed equipment, all segments of accounting operations must be reviewed and additional applications devised to achieve further automation. A systems accountant (\$20,000) is requested to provide combined technical and procedural support in order to: identify the accounting routines in need of automation; develop systems to effect automatic scheduling, projection, and accrual functions; integrate these systems with the Institution's central computer; and write an operations handbook on resulting updated procedures.

Smithsonian special programs, including the upcoming Bicentennial effort, require almost continual support from the accounting division to handle increased transactions, vendor inquiries, and requests for customized reports by offices and bureaus. For example, the several thousand expected participants in the summer-long Bicentennial Folklife Festival will generate many payment and accounting transactions. A technician (\$11,000) is sought to oversee the day to day financial activities of these special programs and to assist the requested systems accountant in installing accounting systems innovations.

An amount of \$5,000 is requested for automated data processing, photocopier, and telecopier equipment rental. An additional amount of \$10,000 is sought to meet the rising cost of computer paper and usage.



## OFFICE OF PERSONNEL ADMINISTRATION

1974 Actual..... \$535,000  
 1975 Estimate..... \$638,000  
 1976 Estimate..... \$658,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	33	0	33
11 Personnel Compensation.....	546	18	564
12 Personnel Benefits.....	47	2	49
21 Travel & Trans. of Persons...	3		3
23 Rent, Comm. & Utilities.....	6		6
25 Other Services.....	31		31
26 Supplies and Materials.....	4		4
31 Equipment.....	1		1
TOTAL	638	20	658
<u>Analysis of Increase</u>			
Necessary Pay.....		20	
Program Funds.....		0	

**ABSTRACT** - The Office of Personnel Administration develops and implements policy on matters related to manpower planning and managerial development. No increase in program funds is requested for FY 1976. Funding in the amount of \$20,000 is sought for necessary pay for existing staff.

**PROGRAM** - Among the services provided by the Office of Personnel Administration are manpower analysis, recruitment and placement, compensation programs, consultant services, training and career development, employee relations, labor-management relations, and special responsibilities in assuring equal opportunity. In addition, the Office bears responsibility for the implementation of new laws or policy, such as the Fair Labor Standards Act, Public Law 93-259.

In FY 1975, each of the major program areas has experienced an increase in activity deriving from the general growth of the Institution. Over 1,000 personnel actions (promotions, separations, within-grade increases, appointments, etc.) are processed each year. Major efforts have been directed towards the negotiation of a labor relations contract, staffing and placement for the new Hirshhorn Museum and improvement of recruitment procedures for guard positions. In addition, emphasis is being placed on updating personnel policies and procedures and expanding career opportunities for employees through increased specialized training. In FY 1975, approximately 30 in-house training classes will be offered in typing, shorthand, the role of supervisors in equal employment opportunity, sexual assault prevention, secretarial and telephone techniques, dealing effectively with people, and executive development. More than 900 employees are anticipated to participate in these courses. In addition, approximately 950 employees are expected to attend courses in all areas of employee development offered by other organizations and institutions.

OFFICE OF AUDITS

1974 Actual.....\$ 170,000  
 1975 Estimate.....\$ 177,000  
 1976 Estimate.....\$ 197,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions..	7	1	8
11 Personnel Compensation.....	156	18	174
12 Personnel Benefits.....	14	2	16
21 Travel & Trans. of Persons..	5		5
25 Other Services.....	1		1
26 Supplies and Materials.....	1		1
<b>TOTAL</b>	<b>177</b>	<b>20</b>	<b>197</b>
<u>Analysis of Increase</u>			
Necessary Pay.....		6	
Program Funds.....		14	

**ABSTRACT** - The Institution's size, diversity, and variety of funding sources create a large volume of essential auditing assignments. Since its establishment, the Office of Audits has made important contributions to effective management. An increase of one position and \$14,000 will improve the office's capability to reach its goal of a readit every five years. An amount of \$6,000 is needed for necessary pay.

**PROGRAM** - The Office of Audits, established in FY 1970, is responsible for performing all internal auditing functions of the Smithsonian Institution. In order to ensure the utilization of effective management practices, it is the policy of this office to audit all principal programs, including administrative, financial and supporting programs, during each five-year period. Recent audits have included the National Museum Act, the Exhibits activities in the bureaus as well as Exhibits Central, the Travel Services Office, Chesapeake Bay Center, and the Smithsonian Tropical Research Institute. The results of these audits have been some monetary savings (applying the automatic pay feature to teleticketing and savings on car rentals), to better management, and improved procedures.

**JUSTIFICATION OF \$14,000 INCREASE (General Administration)** - With more than fifty Federal operating units, programs, and staff offices, several major appropriation accounts (totalling over \$92 million in FY 1975), and several private activities and a wide variety of other funds, there is a large volume of auditing to be done. With the current staff of 7 auditors, it will take another two years to complete the first audit cycle of all principal Smithsonian programs. Therefore, instead of reauditing every five years, the office will be on a seven-year cycle. It is estimated that it would take a total of ten auditors to enable the five-year readit program to become a reality. An additional auditor (\$14,000) is requested to help meet this total staff requirement.

## OFFICE OF EQUAL OPPORTUNITY

1974 Actual.....\$114,000  
 1975 Estimate.....\$109,000  
 1976 Estimate.....\$170,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	5	2	7
11 Personnel Compensation.....	97	36	133
12 Personnel Benefits.....	9	3	12
21 Travel and Trans. of Persons.	1	1	2
23 Rent, Comm. & Utilities.....		1	1
24 Printing and Reproduction....		2	2
25 Other Services.....	1	17	18
26 Supplies and Materials.....	1		1
31 Equipment.....		1	1
TOTAL	109	61	170

Analysis of Increase

Necessary Pay.....	4
Program Funds.....	57

ABSTRACT - The Office of Equal Opportunity; (OEO) works to assure equality of opportunity in employment and in all policies and practices of the Institution. Several current programs involve the development and better utilization of the skills of minority employees, an improved communication system for handling grievances, improvement of women's career advancement opportunity and an upward mobility program. A program increase of 2 positions and \$57,000 is requested to further implement these programs. An amount of \$4,000 is being requested for necessary pay.

PROGRAM - The Equal Opportunity Program, established by Executive Order 11246 and further implemented by the "Equal Employment Opportunity Act of 1972," enacted as Public Law 92-261, requires the Smithsonian to conduct a positive action program which will provide true equality in all Smithsonian employment practices. It is the responsibility of the Office of Equal Opportunity to conduct such a program. Three major efforts currently underway include counseling, upward mobility, and the equal employment status of women.

The counselor program provides a channel through which employees may raise questions, discuss grievances, and receive resolutions of problems on an informal basis. Twenty-five permanent employees with other assigned duties have been trained as part-time equal employment counselors who assisted 162 persons in FY 1974.

The upward mobility program strives to ensure each employee the opportunity to seek and achieve his highest potential and productivity in employment situations with special emphasis being focused on employees at the lower levels of employment. Innovative ideas concerned with minority group training at the lower grade levels to correct inadequate education are currently being applied in several museum and support organizations. Additionally, within the upward mobility program is the overseeing of civil rights compliance with direct assistance programs and contracts and grants to ensure that the recipients practice equal opportunity. Six upward mobility programs are now operating in the National Museum of Natural History, Office of Plant Services, Protection Services, the Freer Gallery, National Air and Space Museum, and the National Museum of History and Technology.

The women's coordinator program functions as the principal advisory service to management on all matters pertaining to the equal employment status of women. A Women's Week was held in FY 1974 and FY 1975. Additionally, a women's orientation training activity was presented at the Smithsonian Astrophysical Observatory as an augmented feature to the guidance and operational facilities available to the Smithsonian Women's Council.

The 16 point program coordinator (again a regular employee who has accepted extra duties) serves as the focal point within the Smithsonian for advising agency management and the Director of OEO on the special employment concerns of Spanish-speaking citizens, assists in assessing the Spanish-surnamed employment situation, and participates in eliminating systemic barriers for Spanish-speaking citizens.

The OEO provides heads of bureaus, offices, and major organizations statistical reports on the racial and sex composition of respective work forces. Areas are noted that are out of balance and assistance is given to correct such situations, including the development of goals in areas where imbalance is reflected.

JUSTIFICATION OF \$57,000 INCREASE (General Administration):

An Institution-wide upward mobility program is needed to provide greater opportunities to the Institution's employees in dead-end or otherwise unsatisfying jobs. Presently upward mobility programs are operating in six bureaus, but these programs are offering this training to only nine employees. An upward mobility coordinator and an assistant (\$35,000) are needed to develop the Institution-wide plan, have it approved by the Civil Service Commission, and implement the plan. During the operational phase of this program, each of the employees will oversee the training of 35 to 40 employees. The program as it is now envisioned will include both on the job training and class work. Each program will be three years and during this time the OEO staff will counsel the employee, follow up with the on the job supervisors and evaluate both the training and the trainee. Funds are requested to finance training at non-Smithsonian facilities and to finance on-site education opportunities for this program (\$10,000).

Funds in the amount of \$12,000 are requested for other programs of this office. These funds will be used to enlarge the women's program, train additional counselors as well as replacement counselors, and for computer reports needed by both Smithsonian officials and the Civil Service Commission.

## OFFICE OF PRINTING AND PHOTOGRAPHIC SERVICES

1974 Actual.....\$779,000  
 1975 Estimate.....\$816,000  
 1976 Estimate.....\$858,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	39	1	40
11 Personnel Compensation.....	545	39	584
12 Personnel Benefits.....	44	3	47
21 Travel & Trans. of Persons...	2		2
23 Rent, Comm. & Utilities.....	8		8
24 Printing and Reproduction...	26		26
25 Other Services.....	60		60
26 Supplies and Materials.....	107		107
31 Equipment.....	24		24
TOTAL	816	42	858
<u>Analysis of Increase</u>			
Necessary Pay.....		23	
Support Funds.....		19	

**ABSTRACT** - The Office of Printing and Photographic Services is the Institution's central office for technical advice, guidance, and production in all matters concerning photographic, duplicating, and in-house printing services. The office coordinates photographic and printing activities and supplies technical support to the curatorial, scientific, technical, and administrative staffs. It also provides photographs, slides, and transparencies with lectures to the general public, schools, research foundations, educational publications, other museums, and government agencies. A support increase of 1 position, an assistant to the director (\$19,000), is requested in FY 1976. An additional \$23,000 is sought for necessary pay.

**PROGRAM** - The Office of Printing and Photographic Services (OPPS) provides photographic, printing, and other reproduction services. Its services are in support of research, collections management, and public education. Photographic services include studio and on-site photography, photographic copy restoration, processing and printing, filing and retrieval of negatives, preparing responses to public inquiries, and filling orders.

Printing and reproduction services include the production of certain exhibits catalogues, education pamphlets, and informative leaflets. In addition, OPPS prints and reproduces a variety of manuals, reports, specimen labels, and administrative directives. These services are accomplished by utilizing in-house multilith, photostatic copier, and letterpress equipment.

**JUSTIFICATION OF \$19,000 INCREASE** - The consolidation of the Office of Photographic Services and the Duplicating Section in FY 1974 has resulted in increased emphasis on scheduling, production, quality control, and personnel and space management. Serious backlogs currently exist, however, in the photographic library and processing units resulting in delays in filling staff and public orders. These backlogs and delays result from the absence of written production schedules and procedures and from a deficient system of filing and retrieval of valuable negatives and transparencies.

An assistant to the director (\$19,000) is requested to establish and maintain a positive system of production control and to draft and implement policies and procedures on proper care, storage, and retrieval of negatives, transparencies, and other photographic material.



## INFORMATION SYSTEMS DIVISION

1974 Actual.....\$381,000  
 1975 Estimate.....\$461,000  
 1976 Estimate.....\$502,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	23	2	25
11 Personnel Compensation.....	378	35	413
12 Personnel Benefits.....	32	3	35
21 Travel & Trans. of Persons...	2		2
23 Rent, Comm. & Utilities.....	5		5
25 Other Services.....	37	2	39
26 Supplies and Materials.....	2	1	3
31 Equipment.....	5		5
TOTAL	461	41	502
<u>Analysis of Increase</u>			
Necessary Pay.....		15	
Program Funds.....		26	

**ABSTRACT** - Computer specialists, mathematicians, statisticians, and support personnel of the Information Systems Division (ISD) participate in the development and application of mathematical techniques such as statistical analysis, mathematical modeling, data reduction and cluster analysis, for research projects and automated administrative and collections management systems. An increase of 2 positions and \$26,000 is requested in FY 1976 to meet the following support needs: (1) an additional mathematician (\$12,000) and support funds (\$1,000) to meet an increasing demand for mathematical and statistical analysis assistance by curators and researchers in the areas of historical, biological, chemical, and geological research; and (2) a computer specialist (\$11,000) and support funds (\$2,000) to permit expanded use of ADP in the collections management and administrative areas. An additional amount of \$15,000 is requested for necessary pay.

**PROGRAM** - Computer specialists, mathematicians, and support personnel in ISD work with curators, historians, scientists, and management personnel to apply mathematical techniques to research problems and to develop automated administrative and collections management systems. Approximately 75 percent of the Division's resources are being expended in support of research and collections management while the remainder is used on management support functions. Work performed by ISD contributes annually to producing information that is published in approximately 100 scientific publications.

Presently, to reduce development costs, scientific and collections management computer programs are being developed that can be utilized in many areas with minor modifications. The Division maintains a computer program library containing 350 active programs and is currently serving researchers, curators, and administrators throughout the Institution. The Smithsonian's main collections management system, SELGEM, has been distributed to 54 universities, government agencies, and other museums, representing valuable assistance to those institutions.

JUSTIFICATION OF \$26,000 INCREASE (Automatic Data Processing):

Scientific Research Applications - An increasing demand for mathematical and statistical analysis assistance by curators and researchers in the areas of historical, biological, chemical, and geological research has placed current resources under a

constant strain. Seven departments in the National Museum of Natural History and ten other bureaus are major users of these resources. Projects vary from the application of mathematical/statistical techniques to solve day-to-day research needs, to reducing large quantities of data from the electron microprobe equipment, to portraying research information in a graphic form. During FY 1976, the present staff of 4 will be involved with projects such as those concerned with ecological studies in temperate, semi-tropical and tropical regions of the world, analyses of ocean crust data, and modeling of terrestrial and lunar geology with data from joint American-Soviet scientific satellite missions.

The Institution initiated a study several years ago to develop data for a five-year ADP plan for the planning and efficient allocation of resources. This plan, which is updated annually, is based upon historical experience and projected needs in all areas of ADP usage. Based upon the recent update, a backlog of five man-years of effort is projected for FY 1976 in the area of research applications. Since it is estimated a mathematician can complete approximately two projects per month, this backlog is equivalent to approximately 120 projects. Backlogged projects will extend across the entire museum complex from art and anthropology to zoology. Additional staffing of 1 mathematician (\$12,000) and support funds of \$1,000 for equipment, supplies, training and computer time will reduce the projected backlog for FY 1976 to 4 man-years.

Collections Management and Administrative Applications - The SELGEM system is rapidly becoming recognized as a standard for the computerized management of collections. Current SELGEM development is centered on reducing processing costs and extending application of the system throughout the various museums to provide automated retrieval and indexing of data pertaining to the National Collections. Results benefit the professional staff by providing catalogues, cross-referencing indices by categories, correlation of data, better inventory control, and a future vehicle for responding to technical and non-technical queries by the research community or general public. Automated files now permit curators, researchers, and scientists to analyze, present, and interpret their data in ways that were impractical with manual files. The system also allows for an economical means of exchanging data via magnetic tape without physically transporting specimens or visiting other locations. In FY 1976, 7 man-years of effort is available for systems analysis, computer programming, program maintenance, documentation, and customer liaison in the collections management area.

To date approximately 2,000,000 specimens have been indexed into 292 distinct collections management files and 260 various processing requests are performed monthly against those files. From past experience it is estimated that 30 to 35 percent of a computer specialist's time is devoted to continual maintenance and liaison once a project is considered in production. Based upon the aforementioned five-year resource study a backlog of 4 man-years is projected for the collections management applications in FY 1976.

Administrative applications of ADP resources involve areas such as payroll, personnel, libraries, accounting, supply, public service, and plant and protection services. The 6 man-years of effort available to the above areas for systems analysis computer programming, program maintenance, documentation, and customer liaison, is projected to result in a 3 man-year backlog of work by FY 1976. Of major concern is the Institution's need to expand the use of ADP to energy conservation, facilities management, remote job entry processing, source data automation, teleprocessing, and security. The application of ADP to these areas will be of benefit to the entire Institution.

Staffing of 1 computer specialist (\$11,000) and support funds of \$2,000 for equipment, supplies, training, and computer time is requested to assist in reducing the backlogs in the collections management and administrative areas.

## OFFICE OF SUPPLY SERVICES

1974 Actual.....\$437,000  
 1975 Estimate.....\$492,000  
 1976 Estimate.....\$504,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	25	0	25
11 Personnel Compensation.....	310	11	321
12 Personnel Benefits.....	25	1	26
21 Travel & Trans. of Persons...	2		2
23 Rent, Comm. & Utilities.....	10		10
24 Printing and Reproduction...	1		1
25 Other Services.....	9		9
26 Supplies and Materials.....	132		132
31 Equipment.....	3		3
TOTAL	492	12	504
<u>Analysis of Increase</u>			
Necessary Pay.....		12	
Program Funds.....		0	

ABSTRACT - The Office of Supply Services procures supplies, materials, contractual services, and equipment for Smithsonian activities. No increase in program funds is sought for FY 1976. Funding in the amount of \$12,000 is sought for necessary pay for existing staff.

PROGRAM - The Office of Supply Services procures supplies, materials, contractual services, and equipment for research, curatorial, exhibit preparation, and other Smithsonian activities. It stocks and issues office and other supplies required in daily management operations and serves as a central receiving unit for the Institution. It operates a property management program, obtaining excess property in lieu of new procurement whenever possible. This Office also maintains all property records and schedules and oversees periodic inventories to insure adequate control, accountability, security, and utilization of equipment. In FY 1974, an estimated 500 contracts valued in excess of \$10,000,000 and approximately 8,700 procurement actions valued in excess of \$14,000,000 were handled by this office. Present information indicates an appreciable increase in workload in FY 1975.

MANAGEMENT ANALYSIS OFFICE

1974 Actual.....\$190,000  
 1975 Estimate.....\$215,000  
 1976 Estimate.....\$222,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	10	0	10
11 Personnel Compensation.....	184	6	190
12 Personnel Benefits.....	16	1	17
23 Rent, Comm. & Utilities.....	7		7
24 Printing and Reproduction....	1		1
25 Other Services.....	5		5
26 Supplies and Materials.....	2		2
TOTAL	215	7	222
<u>Analysis of Increase</u>			
Necessary Pay.....		7	
Program Funds.....		0	

ABSTRACT - The Management Analysis Office (MAO) performs a wide range of general management staff assistance and advisory services related to museum, research, and support operations in the Smithsonian. No program fund increase is requested for FY 1976. Necessary pay in the amount of \$7,000 is sought.

PROGRAM - Under the executive direction of the Director of Support Activities, the Management Analysis Office is responsible for assisting in the development, recommendation, and implementation of effective business administration and management improvement programs.

The Management Analysis Office provides management with a continuing appraisal of the written directives. MAO is responsible for the overall development and administration of the directives management system through which proposed Smithsonian procedures and policies are reviewed, coordinated, and approved by the Secretary before being disseminated and implemented.

The Office provides management advisory services; makes studies and special surveys for the evaluation and analysis of management problem areas. Management consultants provide specialized information to aid Smithsonian staff managers in such areas as the development of organizational, functional, staffing, and flow charts; planning and development of internal procedures; and implementation of management improvement programs.

The Management Analysis Office provides for the administration and management of a comprehensive and economical forms program for internal and external operations of the Smithsonian's various programs.

## OFFICE OF PROTECTION SERVICES

1974 Actual.....\$4,356,000  
 1975 Estimate.....\$5,546,000  
 1976 Estimate.....\$6,539,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	443	91	534
11 Personnel Compensation.....	4,698	755	5,453
12 Personnel Benefits.....	404	67	471
21 Travel & Trans. of Persons...	4		4
23 Rent, Comm. & Utilities.....	1		1
25 Other Services.....	300	80	380
26 Supplies and Materials.....	60	91	151
31 Equipment.....	79		79
TOTAL	5,546	993	6,539
<u>Analysis of Increase</u>			
Necessary Pay.....		218	
Program Funds.....		775	

**ABSTRACT** - The Office of Protection Services (OPS) is responsible for the protection, security, health, and safety programs of the Institution. An increase of \$775,000 and 91 positions is requested to enable this office to fulfill its current responsibilities and to meet the increased responsibilities for two new museums. The areas covered by this requested increase are: (1) National Air and Space Museum - 55 guards (\$86,000) to protect the Museum as it readies for public opening, support funds of \$87,000, and \$202,000 for annualization of positions filled in FY 1975; (2) Cooper-Hewitt Museum - 14 guards (\$104,000) for three quarters of the year, support funds of \$14,000, and \$32,000 for security systems; and (3) Overall Protection and Support - 20 guards and 2 investigators (\$212,000) and support funds of \$38,000 to provide more adequate protection coverage for existing museums. An amount of \$218,000 is also sought for necessary pay.

**PROGRAM** - OPS has direct responsibility for protection, security, health, and safety for Smithsonian installations in the Mall vicinity, and policy responsibility for the entire Institution. The National Zoological Park has its own police and safety staff. Over the past four years, the gross area for which OPS has direct responsibility has increased by nearly one million square feet to a total of some four million square feet.

In FY 1975, several new facilities were added to the Institution for which OPS has protection and safety responsibilities: the new National Air and Space Museum, the Anacostia Museum's exhibit training facility, and the off-Mall consolidated service center on North Capitol Street replacing several other spaces not all of which were under Smithsonian protection. In addition, the Hirshhorn Museum and Sculpture Garden opened to the public in October, 1974. The public response to this art gallery has exceeded all expectations: during the first weekend alone, more than 30,000 people viewed the gallery's paintings and sculptures. Visitation through December 1974 totaled over 640,000 persons. This heavy response required OPS to provide guard resources originally planned for other museums.

While the number of misdemeanor and felonious incidents increased by 51 percent from calendar year 1972 to 1973 (232 as compared to 351), the increase from 1973 to 1974 was only 2 percent (351 as compared to 358). While the number of crimes against



the person (robbery, assault, sex offenses) increased by 87 percent from 1972 to 1973 (38 as compared to 71), the increase from 1973 to 1974 was only 1 percent (71 as compared to 72). The success in significantly lowering the rate of increase can be attributed in part to strategic plainclothes patrol of high crime areas and timely on-scene investigation of reported offenses. Additional training in the police field has resulted in more professional response by all protection officers and a higher resolution of incidents.

A pilot program for training protection officers for canine patrol service is underway. This program was begun without an increase in manpower. Canine-handling officers were drawn from the ranks of guards and policemen already on board. This program, which has proven highly successful among police units, is being modified for museum security with an anticipated result of further crime reduction and better utilization of manpower. The dogs, which are being trained to "sniff-out" both fires and stay-behinds after closing hours, are being donated to the Institution by private citizens.

The health and safety unit, which works closely with the security operations, is moving toward full compliance with Public Law 91-596 (Occupational Safety and Health Act of 1971). The unit also works with other units in coordinating construction and exhibition projects to ensure compliance with appropriate codes and regulations. During the first five months of FY 1974, the two Smithsonian health units served 8,297 people. During the same period of FY 1975, the three units served 8,989 people. The health units, during the fall and winter, conducted a campaign to encourage employees to have their blood pressure checked.

#### JUSTIFICATION OF \$775,000 INCREASE (Protection):

National Air and Space Museum - The initial increment of 30 positions for NASM protection will be hired in the last quarter of FY 1975. An additional amount of \$202,000 is required for annualization of funds for these positions. The final increment of 55 positions (bringing to 85 the total protection force) is requested for filling during the last quarter of FY 1976 (\$86,000). Support costs of \$87,000 cover purchase and maintenance of uniforms and purchase or rental of necessary security and protection equipment.

Cooper-Hewitt Museum - The Cooper-Hewitt Museum is scheduled to open in January, 1976. A total of 14 guards, including 2 supervisors, is required for three quarters of the year to protect the museum as the renovation nears completion, valuable objects are moved into the museum, and the museum opens to the public (\$104,000). Necessary support funds (\$14,000) as well as funds for rental and maintenance of security systems (\$32,000) also are requested.

Overall Protection and Support - An additional 22 positions (\$212,000) are requested to help fill the gap between the number of protection officers required for current museum, gallery, and other space and the number of positions currently available. Support funds of \$38,000 also are requested.

Manpower and budget requirements for guarding are based on the designation of "posts." A post may be either one point (e.g. an entrance to a museum) or an area, varying in size, based upon: the use of the area; the value of objects on display; the vulnerability of those objects to damage, theft, and vandalism; and the effective field of vision of the guard assigned to that post. The number of guards required to man one post may vary from one (the post must be manned 8 hours a day, five days a week) to five (the post must be manned 24 hours a day, 7 days a week). If all 91 positions requested in this budget are approved, it will bring the OPS total to 534. This will still leave OPS approximately 140 positions short for manning all currently designated posts. The shortage of 140 positions represents approximately 84 unmanned posts.

## OFFICE OF FACILITIES PLANNING AND ENGINEERING SERVICES

1974 Actual.....\$393,000  
 1975 Estimate.....\$574,000  
 1976 Estimate.....\$628,000

(Dollars in thousands)	Base FY 1975	Increase Requested	Est. FY 1976
Number of Permanent Positions...	24	2	26
11 Personnel Compensation.....	427	47	474
12 Personnel Benefits.....	37	7	44
21 Travel & Trans. of Persons..	11		11
24 Printing & Reproduction....	6		6
25 Other Services.....	83		83
26 Supplies & Materials.....	6		6
31 Equipment.....	4		4
<b>TOTAL</b>	<b>574</b>	<b>54</b>	<b>628</b>
<u>Analysis of Increase</u>			
Necessary Pay.....		16	
Program Funds.....		38	

**ABSTRACT** - The Office of Facilities Planning and Engineering Services (OPFES) provides professional and technical services including planning, design, engineering, and project management for construction, alteration, improvement, and major repair programs required by the Smithsonian's physical plant and operational needs. An increase of 2 positions and \$38,000 is requested for necessary planning and construction cost estimating. A further \$16,000 is needed for necessary pay.

**PROGRAM** - Since its establishment as a separate entity in mid-FY 1974, OPFES has developed as a professional organization offering planning, design, engineering, and construction management services. During FY 1975 it is providing technical and/or supervisory services for more than 300 projects. These include repair, renovation, alteration, and construction jobs in Washington, D. C., New York City, Maryland, Arizona, and Panama. Major projects are the renovation of the Arts and Industries Building and the Carnegie Mansion, renovation of storage and service facilities, construction related to Bicentennial exhibits, planning for a museum support facility, and development of public cafeteria and education facilities in the Natural History Building.

**JUSTIFICATION OF \$38,000 INCREASE (Buildings and Facilities Management)** - The large number of buildings comprising the physical plant, many of which are old and of historical significance, require constant inspection, repair, and renovation work for their protection, for the safeguarding and exhibition of museum collections, and for the safety and accommodation of staff and visitors. Other projects, supportive of research and education efforts, add to the facilities planning and engineering workload. Effective design, engineering, and cost estimating are essential to accomplish projects on time, that meet objectives, and are within available funds. Two additional positions are required to augment the current technical and professional staff. A planner/designer (\$24,000) is needed to identify and spell-out the most efficient and effective methods for facilities development and utilization that will meet program objectives while maintaining historical accuracies and aesthetics. A second engineer/estimator (\$14,000) is required to develop and project construction costs. Accurate estimating and forecasting on a large number of diverse projects are most important in the changing and unsettled construction market.

## OFFICE OF PLANT SERVICES

1974 Actual.....\$ 7,300,000  
 1975 Estimate.....\$ 9,022,000  
 1976 Estimate.....\$11,092,000

(Dollars in thousands)	Base	Increase	Est.
	FY 1975	Requested	FY 1976
Number of Permanent Positions...	<u>280</u>	<u>40</u>	<u>320</u>
11 Personnel Compensation.....	3,727	525	4,252
12 Personnel Benefits.....	319	45	364
21 Travel & Trans. of Persons...	6		6
23 Rent, Comm. & Utilities.....	4,058	1,454	5,512
24 Printing & Reproduction.....	3		3
25 Other Services.....	328	10	338
26 Supplies & Materials.....	506	25	531
31 Equipment.....	75	11	86
<b>TOTAL</b>	<u>9,022</u>	<u>2,070</u>	<u>11,092</u>

Analysis of Increase

Necessary Pay.....	183
Other Uncontrollable.....	538
Program Funds.....	1,349

ABSTRACT - The Office of Plant Services (OPLANTS) operates, maintains, and repairs ten museum and art gallery buildings and a number of other work and collections storage areas. It provides utilities, transportation, mail, telephone, and horticultural services in support of research, exhibit, education, and other public programs. An FY 1976 budget increase of \$1,349,000 is sought for the following Buildings and Facilities Management requirements: (1) National Air and Space Museum - 25 new positions, approximately 17 man-years, (\$197,000), and annualization of 5 positions (\$40,000) to operate, maintain, and provide communications and transportation services to the new building plus \$838,000 for the annual costs of utilities and telephone services; (2) General Mechanical Maintenance and Services - \$150,000 for 15 positions required for preventive and corrective maintenance of a valuable physical plant with \$46,000 for supplies, services, and equipment; and (3) \$78,000 to fund postal costs. An amount of \$183,000 is needed for necessary pay for present staff. An additional \$538,000 to fund higher utility rates is requested in the Uncontrollable Section (page A-5).

PROGRAM - OPLANTS operates, maintains, and repairs the Smithsonian's physical plant. This includes approximately four million square feet in 10 museums and art galleries. Services are provided also to other work and storage areas including space in leased facilities. Operational responsibilities for utilities funding and management include large and complex air-conditioning, heating, and ventilating systems and electric or electronic environmental controls and systems for the protection of buildings, visitors, natural history specimens, paintings, sculpture, and objects of American history and technology. Trade and craft assistance, such as carpentry, painting, and electrical work, is provided to hundreds of research projects, exhibition installations, and special public events every year. Packing, crating, warehousing, and moving services are provided for museum objects and collections.

Communications responsibilities include the management and funding of telephone installations and services handling some 250,000 long distance (FTS) and 1.4 million local calls annually and processing 850,000 pieces of outgoing mail and delivering 2.6 million pieces of incoming mail each year. Transportation services cover maintenance, repair, and operation of about 50 vehicles. OPLANTS also provides horticultural services to 75 acres of grounds and to building interiors.

A new management services concept has been instituted which covers effective and efficient work control and coordination, a vital part of work management. New supply procedures will improve the requisition, receipt, handling, storage, inventory, and issuing of approximately 10,000 line items. Inspection efforts will enable OPLANTS to identify and validate its backlog of essential maintenance and repair work and to improve custodial services. OPLANTS is also in the process of installing computer-monitored power management systems to control electricity consumption and maintain levels of use below surcharge levels by carefully switching equipment on or off.

JUSTIFICATION OF \$1,349,000 INCREASE (Buildings and Facilities Management):

National Air and Space Museum - The National Air and Space Museum is scheduled for staff occupancy in the last quarter of 1975. In July 1976, after the public opening, workload calculations have shown that OPLANTS will require a total of 55 positions to operate and maintain heating, air-conditioning and humidity control systems; follow a preventive maintenance program on all installed mechanical equipment; provide telephone operator services; transport personnel and material; and handle mail and messenger services. In FY 1975, 5 mechanics were approved for one quarter to take over operations of the utilities systems. An amount of \$40,000 is required to annualize the funding of these five mechanics in FY 1976. In FY 1976 an additional 25 positions (\$197,000) will be required to operate the physical plant on a minimum scale and provide other support such as mail, messenger, telephone, and transportation services. Funds in the amount of \$838,000 are needed to pay the annual cost of utilities and communications. The remaining 25 positions will be requested in FY 1977 when the museum will be opened to the public.

General Mechanical Maintenance and Services - Several million square feet of space in buildings ranging in age from brand new, as in the case of the Hirshhorn Museum to well over 100 years old, as in the cases of the Smithsonian and Fine Arts and Portrait Galleries Buildings and wear and tear from some 15 million public visits create special maintenance and service problems. Additional air-conditioning, heating, and electrical systems for all Smithsonian buildings as well as expanded exhibit spaces have resulted in greater demands on trade, craft, and custodial personnel. Furthermore, reviews of the condition of the physical plant are disclosing that while building exteriors and public and work spaces may appear to the casual viewer as being in excellent condition, there are extensive requirements for preventive and corrective maintenance of plumbing, heating, electrical, and air-conditioning systems as well as routine care of roofs, masonry, and painted surfaces. These problems compound as new buildings are added since deterioration begins immediately. Prompt attention avoids future major costs.

Inflation in the costs of building supplies, materials, services, and equipment has eroded purchasing power for required staffing levels. Fifteen mechanic, trade, and craft positions cannot be funded and therefore have been dropped. For FY 1976, an amount of \$150,000 is requested to fund 15 replacement positions and thus expand the present level of preventive and corrective maintenance work to protect a physical plant valued at several hundred million dollars in replacement costs. Support cost funding of \$46,000 for building supplies and related items also is requested.

Postal Services - Continuous reviews, samplings, and tight controls are placed on mail services and use. These include restrictions on air mail service, consolidations of mailings, reviews of mailing lists, and use of proper mail classes. Yet interest in the Smithsonian continues to grow as evidenced by frequent newspaper coverage of events and a large number of public inquiries seeking information on research, exhibition, education, and other activities or asking for objects to be identified by the curatorial staff. This public interaction is sure to grow during the Bicentennial celebration period. About \$400,000 is now available to meet postage costs. A further \$78,000 is requested in the FY 1976 budget with no easing of control measures.

SALARIES AND EXPENSES

FY 1976 Estimate and July 1 - Sept. 30, 1976 Period

<u>Activity</u>	<u>FY 1976 Estimate</u>	<u>July 1 - Sept. 30, 1976 Estimate</u>
1. Science	\$29,976,000	\$ 8,184,000
2. History and Art	12,308,000	3,443,000
3. Public Service	2,236,000	623,000
4. National Museum Programs	5,752,000	1,443,000
5. Special Programs	5,785,000	1,639,000
6. Administrative and Support Activities	<u>23,351,000</u>	<u>6,678,000</u>
Totals	\$79,408,000	\$22,010,000



## SMITHSONIAN INSTITUTION

## SALARIES AND EXPENSES

For necessary expenses of the Smithsonian Institution, including research in the fields of art, science, and history; development, preservation, and documentation of the National Collections; presentation of public exhibits and performances; collection, preparation, dissemination, and exchange of information and publications; conduct of education, training, and museum assistance programs; maintenance, alteration, operation, and protection of buildings, facilities, and approaches; not to exceed \$100,000 for services as authorized by 5 U.S.C. 3109; purchase or rental of two passenger motor vehicles; purchase, rental, repair, and cleaning of uniforms for employees; ~~\$67,789,000~~

\$79,408,000

*Provided*, That funds appropriated herein are available for advance payments to independent contractors performing research services or participating in official Smithsonian presentations.

For "Salaries and Expenses" for the period July 1, 1976, through September 30, 1976, \$22,010,000.

(20 U.S.C. 41 et seq.; Department of the Interior and Related Agencies Appropriation Act, 1975.)

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**STANDARD FORM 300**  
July 1964, Bureau of the Budget  
Circular No. A-11, Revised.  
300-101

SMITHSONIAN INSTITUTION  
SALARIES AND EXPENSES

PROGRAM AND FINANCING - TRANSITION PERIOD  
(in thousands of dollars)

Identification code 32-50-0100-0-1-503	19 actual	19 estimate	19 estimate
	July 1 - Sept. 30, 1976		
<u>Program by activities:</u>			
1. Science.....	8,384		
2. History and Art.....	3,443		
3. Public Service.....	623		
4. National Museum Programs.....	1,443		
5. Special Programs.....	1,639		
6. Administrative and support activities.....	<u>6,678</u>		
Total program costs, funded	22,210		
Change in selected resources (undelivered orders).....	<u>- 200</u>		
10 Total obligations.....	22,010		
<u>Financing:</u>			
40 Budget authority (appropriation)	<u>22,010</u>		
<u>Relation of obligations to outlays:</u>			
71 Obligations incurred, net.....	22,010		
72 Obligated balance, start of period..	20,598		
74 Obligated balance, end of period....	<u>- 18,988</u>		
90 Outlays.....	<u>23,620</u>		

GPO: 1964-O-737-488

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(Mono cast: 4.9)

## Justification for Transition Period

The period July 1 - September 30, 1976, represents the second half of peak Bicentennial presentation activity with all program and support units in the Washington, D.C. area--some 10 major museums and art galleries, the National Zoological Park, and supporting service units--heavily committed to meeting and responding to a heavy public visitation which will have needs for information, orientation, custodial services, protection, and safety. Reflecting the unusual public service requirements of this period, the budget estimates for the following six component activities range from 25 percent to 29 percent (the average is 27 percent) of their FY 1976 estimates.

Science.....\$8,184,000

The estimate for the science activity is 27 percent of the FY 1976 budget level and will be used to fund 10 major organization units. It includes the programs of the National Air and Space Museum (opening to the public in its new building on July 4, 1976), the National Zoological Park with major new public attractions, such as the lion and tiger exhibit, and the National Museum of Natural History with special Bicentennial displays and new public cafeteria and education facilities.

The budget estimate also provides for continuing programs of research, documentation, and education in anthropology, including American Indian studies, astrophysics and earth sciences, and temperate and tropical biology which will result in new understanding of man, his natural surroundings, and their relationships. Museum collections will be curated and preserved for study and important natural areas in Panama and on the Chesapeake Bay will be maintained and protected for use by staff and visiting students and scholars.

History and Art.....\$3,443,000 .

About 28 percent of the FY 1976 estimate also will be productively applied to the important cultural resources represented by six museums of art, history, and technology including the National Museum of History and Technology, Freer Gallery of Art, National Collection of Fine Arts, National Portrait Gallery, Hirshhorn Museum and Sculpture Garden, and the Cooper-Hewitt Museum. Related archival and scholarly efforts will be continued. Collections will be documented, given proper care, and put to effective use in responding to public inquiries and providing the basis for a wide variety of publications by staff and outside users. All museums will be in full operation with an outstanding array of exhibitions, related presentations and supportive orientation, education, and tour activities. Special school service and outreach efforts will be available.

Public Service.....\$623,000

Public service activities, particularly the Anacostia Neighborhood Museum with its new exhibits training and production laboratory for underprivileged and underutilized persons, the Division of Performing Arts which presents the Folklife Festival, and the Office of Public Affairs, will be very much involved in the Bicentennial effort. The international exchange of publications and the editing, design, and production of Smithsonian research reports and catalogues will be continued during this period. The transition period estimate is 28 percent of the FY 1976 budget estimate for these activities.

National Museum Programs.....\$1,443,000

During this period important behind the scenes support activities and services to the national museum community will be sustained. The requested funding is 25 percent

of the FY 1976 level. The Conservation Analytical Laboratory will study museum objects and undertake preventive and remedial measures to guard against their deterioration and loss. Public inquiries to the Smithsonian's Archives and Libraries will rise with the influx of visitors and generally heightened interest in American history, technology, and cultural achievements. The Traveling Exhibition Service will be circulating several hundred exhibits across the nation. Grants to the museum profession for training, research in conservation and other techniques, for the preparation of technical publications, and for related purposes will be provided under the National Museum Act.

Special Programs.....\$1,639,000

Transition period funding at 28 percent of the FY 1976 estimate is required primarily to present and support special Bicentennial efforts, most notably during this period, the actual operations of the summer-long Festival of American Folklife on the Washington Mall and the printing of the landmark Encyclopedia of North American Indians. Savings will be realized from the completion of the Major Exhibition Program project for the National Air and Space Museum in FY 1976. Pre- and postdoctoral fellowships, research grants for significant investigations, and special environmental studies will be continued.

Administrative and Support Activities.....\$6,678,000

Central administration and direction and associated professional and technical support from legal counsel; financial, personnel, and procurement management; auditing; data processing; equal opportunity development; and plant engineering services will be continued at FY 1976 estimated levels. Protection, custodial, and buildings maintenance activities will be strongly in demand as a result of Bicentennial visitation. The budget estimate is about 29 percent of the overall FY 1976 estimate reflecting this peaking of summer activity.

## UNCONTROLLABLE INCREASES

Mr. YATES. You are requesting an increase of \$2,510,000 for so-called uncontrollables. If you exclude pay increases from this amount, the majority of the increase is for utility and shipping rate increases.

What are the cost factors involved in these increases and what energy saving measures has the Institution taken to minimize energy costs?

Mr. AULT. We initiated a program of conservation in 1973 before the letter from then President Nixon urging all agencies to do so. We have intensified since then as evidenced by our receipt of an award from the FEA. We have reduced our building temperatures to 68 in the wintertime and increased to 78 in the summertime.

Mr. YATES. Have you considered changing the hours?

Mr. AULT. We have considered whether we should not continue the extended hours this summer. However, we have to consider, too, the impact on the numbers of people who visit our museums during those hours. Last year there were some 730,000 people who visited the institution during the extended hours.

Mr. YATES. I think it would be a loss to the millions of Americans who come to the Nation's Capital.

You are requesting an increase of \$85,000 for workmen's compensation for payments to employees for injuries and to their families in case of death. This increase is a result of the number of cases in fiscal year 1974 increasing to 78 as compared to 66 in the previous fiscal year.

What are the reasons for this increase and what efforts are you making to improve this statistic?

Mr. AULT. I would have to submit that for the record, Mr. Chairman. The safety program of the Institution has not deteriorated.

Mr. YATES. You have a pretty significant increase, I wondered what the reasons were. You may place that in the record.

[The information follows:]

## REASONS FOR INCREASED PAYMENT TO WORKMEN'S COMPENSATION

The increase of \$85,000 in workmen's compensation benefit payments for fiscal year 1974 over those paid in fiscal year 1973 is attributable mainly to the higher salary levels which form the basis for compensation, mandatory cost-of-living increases, and the continuing increased cost of medical care. The Smithsonian did experience an increase of 19.6 percent in the number of accidents in fiscal year 1974 over fiscal year 1973, 51 to 61 accidents, but we feel this was due more to the increase in the number of employees on board and the improvement in our accident reporting procedures rather than to a deterioration of the Institution's safety program. We also feel, while it is difficult to prove, that the recent legislative changes which now permit employees to receive certain credits for unused sick leave at the time of their retirement are directly related to the increase in claims, and therefore cost. All of these factors have led to this increase in benefit payments.

We are currently evaluating our safety program in an effort to identify any current operating weaknesses. Special safety programs are being instituted in those units within the Institution which historically have a high percentage of accidents. Increased safety inspections and more use of protective clothing are also ways we are attempting to reduce our accident rate and cost. In short, we are making every effort to provide an effective program for the elimination of occupational injuries and illnesses to our employees.



Mr. YATES. Have there been any job-related deaths during the year?

Mr. AULT. I can think of none which were job-caused. We lost a number of people, but their deaths were not related to the job.

Mr. YATES. Did you open any additional operations during the year so that there would be a natural growth because of the increased size of your activities?

Mr. AULT. We opened the Hirshhorn Museum.

Mr. YATES. Nobody stumbled over any sculptures?

Mr. AULT. We did have one case as a matter of fact, from a person tripping over a sculpture.

Mr. YATES. Have you been sued?

Mr. AULT. That came under the Tort Claims Act. That was a person from the public.

Mr. YATES. Have you been sued?

Mr. RIPLEY. I am not aware. We concluded a tort claim for a child who fell from a set of steps at the Natural History Museum 2 years ago.

#### ENVIRONMENTALLY RELATED PROGRAMS

Mr. YATES. There are a number of your programs which are environmentally related; the Tropical Research Institute, Office of International and Environmental Programs, Chesapeake Bay Center, the Environmental Sciences Program and the International Environmental Program.

Can you describe for the committee how these programs differ in focus and the requirement to have separate and distinct organizational units?

In what specific ways does the International Environmental Program accomplish results that the Chesapeake Bay Center, Oceanographic Sorting Centers, and the Tropical Research Institute collectively cannot accomplish?

Mr. CHALLINOR. What we have done in these programs is to divide the work between the individual bureaus. The Museum of Natural History, for example, deals 90 percent with the environment. Ten percent might deal with minerals. The Tropical Research Institute, in Panama, is concerned with environmental research and education as is the Chesapeake Bay Center here in Maryland. These bureaus do their research on a long-term basis on a very basic kind of work and they are concerned in large measure with monitoring the environment and how it is changing over long periods of time.

Mr. YATES. Is there enough environment for all these four agencies to take care of?

Mr. CHALLINOR. There is. They are all separate programs and described in our budget justifications. Then, we do have an environmental science program operated from my office. My office administers a relatively modest program of about \$185,000 on long-term environmental comparative monitoring to learn how tropical and temperate environments differ. There is no overlap with other bureaus. In the Museum of Natural History, their environmental work is predicated on taxonomy and evolution of plants and animals. One way we avoid overlap is through the Science Information Exchange to which the Secretary has already referred. All the research we are doing is

plugged into that computer and we know pretty well what other agencies are doing by referring to that computer ourselves. So there is relatively no overlap.

Mr. YATES. You are requesting an increase of \$37,000 for the Office of the Assistant Secretary for Science. What are the details?

Mr. CHALLINOR. We want this to support scientists in-house as well as visiting scientists to work in five different areas of the world, all in the program where we are trying to get some understanding of the environmental problems which are crying for solution, because these are in areas of great population explosion. This \$37,000 will be used for support of travel and stipend support for outside scientists to work with ongoing projects which the science bureaus of the Smithsonian are already working on.

Mr. YATES. How much will be for travel?

Mr. CHALLINOR. \$5,000 of the increase.

#### ENDANGERED PLANT STUDY

Mr. YATES. You have a responsibility now with respect to the endangered and threatened plant species which is also a responsibility of the Fish and Wildlife Service. Is there duplication?

Mr. CHALLINOR. We were asked by Congress to furnish a report which has been delivered to the appropriate committee. That has been completed, we are through with our assignment with the delivery of that to this committee.

Mr. YATES. It was just handed to me.

Mr. RIPLEY. It went up to the Congress.

Mr. YATES. How much did the list cost?

Mr. CHALLINOR. About \$50,000.

Mr. YATES. Are all the endangered plant species included?

Mr. CHALLINOR. It is a composite work by all the major herbariums and museums interested in that field. They had input in that. I think that is about as definitive a list as exists of the rare and endangered plants of this country. That will now be used by the Department of the Interior and Agriculture and those Federal agencies which have to determine legislation in protecting them.

Mr. YATES. Since this is a continuing process, should not this list be changed and brought up to date from time to time?

Mr. CHALLINOR. The Department of Botany in the Museum of Natural History will continue to work on this.

#### NATIONAL MUSEUM OF NATURAL HISTORY

Mr. YATES. A program increase of \$260,000 and 19 positions is requested for the National Museum of Natural History. What is the need for the additional 19 positions?

Mr. CHALLINOR. Eleven are technicians and support people for the scientists. We are trying to bring our ratio to a 2 to 1 ratio.

The reason for this request is that we now have highly paid scientists spending a large portion of their time in certain disciplines doing routine work, such as preparing slides for microscopic inspection of specimens. The Government, therefore, is not getting its money's worth from these people because they have to spend so much time in relatively

routine work which could be better done by technicians. On A-14 you can see how we are trying to approach this 2-to-1 ratio; 11 people is what we feel we can best accommodate during this fiscal year.

Mr. YATES. You mention that your objective is an average of three support personnel for each NMNH scientist. What judgments did you make to determine that three support personnel are necessary for each NMNH scientist? How does this ratio compare to the ratios in universities?

Mr. CHALLINOR. It depends on how much money the universities can squeeze from the trustees.

Mr. YATES. Your current ratio is 1.80 to 1. Is this ratio valid considering the fact that the ratio excludes support personnel in ADP, exhibits, education, and the Director's office?

Mr. CHALLINOR. We believe it is a valid ratio.

#### EXHIBIT HALL IMPROVEMENT

Mr. YATES. You plan to redesign the more than 30 exhibit halls "integrating the scientific content" to show the interrelationships between man and his environment. The project is projected to extend over a 20-year period.

How much will that cost?

Mr. CHALLINOR. We figure based on current costs, about \$350,000 to \$450,000 per hall over a 20-year period, we think we can bring the museum back up to the standard it had when it first opened. Many of the exhibits in the museum have been there since the museum first opened to the public almost two generations ago.

#### ACQUISITION PROGRAM

Mr. YATES. I am told it is almost impossible to compile an exhaustive entomological collection, because the variety of insects is too great and their rates of evolutionary or adaptive change too rapid. I wonder how you limit, and more importantly, focus and direct, your acquisitions—both in this division and others?

Mr. CHALLINOR. First, it would be determined by the scientist on the museum staff and the specific groups on which they are working. Occasionally, a group might come up that is not being worked on, and if there is money available, that collection could be purchased or traded for. You have to be somewhat opportunistic as collections become available. A great deal of the collections in the museum on entomology are made by the curators themselves in the field.

#### ASTROPHYSICAL OBSERVATORY

Mr. YATES. You are requesting a program increase of \$269,000 and five positions to meet the needs of the Smithsonian Astrophysical Observatory in fiscal year 1976. Will you please explain your needs in this regard?

Mr. CHALLINOR. The Astrophysical Observatory has been expanding rapidly. Five of these positions are for research support and general administrative needs. One of the things we have found is that our own auditors have told us that the number of people we are support-

ing with overhead funds has now gotten out of skew. The work they are doing is connected with providing the support for the Astrophysical Observatory's complex federally-funded research programs.

Mr. YATES. Part of the money goes to the joint Center for Astrophysics. Is Harvard making contributions?

Mr. CHALLINOR. Yes; but you must keep in mind that the purpose of the Center is to provide a means of coordination using the scientific talents of each, with each paying his own way. That means, for instance, that we pay them rent as well as a prorated share of such items as utilities, since we are located on their property.

Mr. YATES. You are requesting funds to develop, test, and calibrate instruments for rocket and satellite missions at the High Energy Laboratory. Is this not more properly the work for NASA or NASA contractors; in particular, the Jet Propulsion Laboratory (JPL) in Pasadena? Also, under that item, what will the "70 foot long vacuum pipe" be used for?

Mr. CHALLINOR. NASA does not have the facilities to calibrate these instruments. They have to go out and contract with universities or anybody who has scientists to do this. The Smithsonian in Cambridge has the lab facilities and scientists who are qualified to design this sophisticated sort of equipment. NASA comes to us for this. Our problem is to keep these people aboard between the requests of NASA; in other words, keep an ongoing core staff to respond to the demands and requests of NASA.

Mr. EVANS. When you do something for NASA, do you charge them?

Mr. CHALLINOR. Yes; we do this on a contract basis.

#### TROPICAL RESEARCH INSTITUTE

Mr. YATES. A program increase of \$105,000 and four positions are requested for the Smithsonian Tropical Research Institute. Briefly describe the requirements necessitating this increase.

Mr. CHALLINOR. We need four people to monitor a program we have been running for several years. We are looking for a lab technician and a geneticist as well as a janitor for our facility on Barro Colorado, an island about 10 square miles in the middle of Gatun Lake in Panama.

Mr. YATES. This Institute has done a tremendous amount of research. Can you point to anything concrete which has come from it?

Mr. CHALLINOR. We have been able to isolate some of the phenomena, so that we should be able to determine what sort of organisms might get through a sea-level canal if the two oceans were suddenly joined after being isolated by the Isthmus of Panama. This is a national barrier. The oceans have been isolated for 3.5 million years. The freshwater lock system keeps organisms from going back and forth. I could go into detail on what we have learned, but it would be easier to furnish that for the record.

[The information follows:]

#### RESEARCH AT THE SMITHSONIAN TROPICAL RESEARCH INSTITUTE

1. The Smithsonian Tropical Research Institute (STRI) studied the biology of the sea star, the crown of thorns starfish, an important predator of corals, and the biology of the venomous sea snake *Pelamis*. Both are absent in the Atlantic



and may pose a problem should the present canal be modified to allow their entry in to the Caribbean. STRI studies were able to define the possible effects of this event.

2. Studies on the natural behavior of primates conducted at STRI enabled medical researchers to establish colonies of these monkeys in the United States so they can be used for medical research without the deleterious ecological effects of collecting large numbers from the forests of Colombia and Brazil. These countries are now restricting the export of their monkeys.

3. STRI monitors populations of certain North American hawks, the entire population of which migrate through Panama. The fluctuation in numbers between years is a very sensitive indicator of the "state of health" of the pesticide-loaded environment of North America.

4. STRI studied the responses of tropical corals to oil pollution.

#### CHESAPEAKE BAY CENTER

MR. YATES. What is the additional workload that justifies an additional \$82,000 and four positions for the Chesapeake Bay Center for Environmental Studies?

MR. CHALLINOR. We are looking for a scientific coordinator. We also need an education assistant. That center is subject to tremendous pressure from the school systems. Two laborers are needed to help us maintain that area. To date, we have had between 800 and 1,000 teachers and somewhere between 20,000—30,000 children come through the Center. We have trained environmental educators. This is probably the largest unspoiled or unstressed plot of land between Baltimore and Norfolk on the west shore of the bay. There are 2,500 acres, all of which were acquired by the Smithsonian's private funds. The area itself is large enough so that even if it were to be developed at some point right up to the edge of our reserve, we could still carry on the kind of research we have been doing.

MR. YATES. What universities are affected?

MR. CHALLINOR. University of Maryland, Johns Hopkins. We are working on nonpoint source pollution. We are now able to tell people if you put 200 pounds of an ammonium sulphate in a given watershed we can tell you how soon the nitrogen from that fertilizer will get to the estuary. The University of Maryland needs information in determining what density of development the zoning boards can reasonably apply.

MR. RIPLEY. I believe the Virginia Marine Institute is also a collaborator.

MR. CHALLINOR. It is a member of a consortium.

MR. YATES. Do the agencies and universities with whom this center works, make any financial contribution?

MR. CHALLINOR. Only in time. We have a grant of a million and a quarter dollars from the National Science Foundation to the consortium, a portion of which, about a quarter of a million dollars, is actually spent at the Chesapeake Bay Center.

#### CENTER FOR THE STUDY OF MAN

MR. YATES. You are requesting a program increase of \$49,000 and one position for the Center for the Study of Man.

MR. CHALLINOR. That position is for a director of the National Anthropological Film Center. We are furnishing space and we are now



seeking a salary for the director next year. The Anthropological Film Center contains film from all over the world of cultures fast disappearing. We need a place to store the film where it will not deteriorate.

Mr. YATES. I notice you are working on the Encyclopedia of North American Indians. What cooperation do you have with the Bureau of Indian Affairs?

Mr. CHALLINOR. They have helped us in supporting Indians working at the National Anthropological Archives at our Museum of Natural History. It has been modest, but it does exist.

Mr. YATES. How many Indians are employed on the project?

Mr. CHALLINOR. There are in the vicinity of 10 to 12. These are mostly scholars who are writing parts of the text of the Encyclopedia of North American Indians which we are now working on.

Mr. YATES. Does the American Film Institute do work similar to your anthropological film center?

Mr. CHALLINOR. The American Film Institute does not deal in ethnological files and has no resource for duplicating.

#### NATIONAL ZOOLOGICAL PARK

Mr. YATES. You are requesting a program increase of \$180,000 and 10 positions for the National Zoological Park. Describe the requirements for this increase?

Mr. REED. We are requesting six new positions for animal management, four keepers for the monkey house, the elephants and the birds. This amounts to only two and two-thirds positions being filled, when you consider a 365-day year which we have. They will augment the present keeper force in these new facilities. There is one heating and air-conditioning mechanic we are requesting primarily to augment the present work force in the new lion and tiger facility and one exhibit specialists which will increase our capacity for educational graphics for the public.

Mr. YATES. I should congratulate you upon the birth of the first Indian rhinoceros born in the Western Hemisphere.

Mr. REED. We do not believe in population control of rhinoceroses. We are also asking for two additional animal keepers for the Front Royal Conservation and Research Center as well as a mechanics maintenance worker, a plumber and one farm equipment operator.

Mr. YATES. Mr. Reed, as you are aware the enactment of the Endangered Species Act has caused some concern among zoo keepers. What is your thinking on this?

Mr. REED. I think it is a good and needed law but I do not quite agree with the way it is being enforced or some of the regulations which are coming out. I cannot disagree in principle but in details, I am opposed to some of the actions of the Interior Department. They seem to be arbitrary and terribly bureaucratic. They do not take into consideration the fact that the zoos as a profession are supporting them and zoo personnel are basically honest men. We are not a contributor to the extinction of animals. We are a minor source of them coming into the country. I basically agree with the act, then I turn around and disagree with details.

Mr. RIPLEY. The enforcement is very bureaucratic. It is done without sensitivity. This is something of great concern to zoo management. There has to be an interplay. It is being enforced somewhat like the Volstead Act.

Mr. YATES. You and I are the only ones who remember about the enforcement of the Volstead Act.

#### NATIONAL AIR AND SPACE MUSEUM

I see Mr. Collins has arrived.

Mr. COLLINS. Mr. Chairman.

Mr. YATES. You are requesting a program increase of \$1,430,000 and 65 positions for the National Air and Space Museum. Would you place in the record a listing by title, grade, and job description of the 65 new positions that you are requesting?

[The information follows:]

#### NATIONAL AIR AND SPACE MUSEUM, NEW POSITIONS—FISCAL YEAR 1976

Number	Grade	Title
1	GS-13	Education and information specialist.
1	GS-9	Spacearium assistant.
1	GS-7	Do.
2	GS-7	Electronic technician (audio-visual repairs).
2	GS-7	Electronic technician (general).
1	GS-5	Clerk-stenographer.
1	WS-2	Janitor foreman.
4	WL-2	Janitor leader.
4	WG-3	Laborer.
48	WG-2	Janitor.

#### HUGHES FLYING BOAT

Mr. YATES. You have recently acquired the Hughes flying boat. What are the details you have reached with GSA and the Summa Corp. for the plane? Is this the wooden one?

Mr. COLLINS. Yes, the so-called spruce goose. We acquired title to it from the General Services Administration.

Mr. YATES. How much did you pay for it?

Mr. COLLINS. We paid nothing. It was given to us as being surplus to the Government's needs. Then we made an agreement with the Summa Corp. whereby we would exchange the flying boat for a smaller airplane which we wanted even more than the flying boat, the H-1 Racer, plus the difference in appraised value between the two machines.

Mr. YATES. Are you getting both?

Mr. COLLINS. We have already gotten the cash balance between the two. We expect delivery of the small airplane, the H-1 Racer within about a month. We have now held in abeyance the matter of our taking a small portion of the flying boat due to objections from citizen groups, and so forth, out on the west coast who decided that perhaps they can come up with a better solution. If they can, we don't want to be responsible for chopping the whole thing to bits if they can find a decent home for it. So that portion of the agreement is being delayed.

## INSTALLATION OF EXHIBITS IN NEW MUSEUM

Mr. YATES. Your justification says that the Air and Space Museum will be completed by June 1975. Your projected opening date is July 4, 1976. This will allow you 13 months to prepare the museum for opening. Is this enough time?

Mr. COLLINS. Yes, it is, Mr. Chairman.

Mr. YATES. I am told that you are only going to have approximately 50 percent of the permanent exhibits in place by that time. Is that because you just can't do it any faster?

Mr. COLLINS. We have two factors. One is time and one is money. The total amount we are asking for will simply not fill 100 percent of the halls with what we would consider to be core exhibits. If we were asking for the full amount, I am not sure we would have time or staff enough to do a good job between now and then. So we think the best thing to do is to fill 40 or 50 percent of the halls with really first-class exhibits, and fill the remainder of the space with exhibits of lesser quality, ones we still will be proud of, and then over the next 2 fiscal years bring them all up to snuff.

## OPERATIONAL COSTS AFTER OPENING

Mr. YATES. Can you tell the committee what the operational cost of the museum is likely to be after it's opened?

Mr. COLLINS. I would expect we would hold it at about the present level of funding for fiscal years 1977 and 1978, so that we might complete those halls that I mentioned before. Then have it drop down somewhat.

## PARKING IN THE NEW MUSEUM

Mr. YATES. How many parking places will you have at the museum?

Mr. COLLINS. We will have 500 parking spaces.

Mr. YATES. How many will be available for employees of the museum?

Mr. COLLINS. One hundred, Mr. Chairman.

Mr. YATES. What will it cost to park and how will you discourage other Federal employees from using your spaces?

Mr. COLLINS. I don't know. We have to undergo an experimental period. We have a number of problems. One is that we want to attract visitors and not bureaucrats. So that this speaks for a rate structure which would be very inexpensive for the first 2 hours and then very steeply go up past that time period. That is one possible solution.

The other complicating factor is that our problem on a busy July weekend is much different than it is on a rainy Thursday in February. So we have to be flexible enough to try to keep close to 100 percent occupancy at all times but have the occupants be the people we want—our visitors.

## BUILDING CONSTRUCTION TECHNIQUE

Mr. YATES. I asked Mr. Ripley earlier in the afternoon about the comment that one of my colleagues made when he visited your

museum and saw how thin the walls were. The marble is so thin that he thought a karate expert could put his fist through the wall. Are they that fragile, do you think?

MR. COLLINS. I hope not, Mr. Chairman. It's true that these days marble buildings are not built so that the marble holds the building up. The marble is just a veneer. It's not part of the structure of the building.

MR. YATES. The walls are hung on the frame then, aren't they?

MR. COLLINS. Yes, they are. I think we have our marble sufficiently strong to withstand a karate chop. As a matter of fact, GSA down in Florida has a testing laboratory. This particular structure has been subjected not only to stresses and strains simulating aging but to hurricane force winds, rain, snow, hail, every weather vagary that might be expected in that respect.

#### MALL PARKING

MR. MCKAY. There is one question with relation to parking on the Mall. I heard from a constituent who came in this morning that apparently—I am not exactly sure where but I assumed it was in connection with the Smithsonian or down on the Mall somewhere—the parking area wasn't supposed to be open before 9 o'clock, supposedly to keep out all the bureaucrats and get the visitors in. But on arriving there before 9, it is completely full, wall to wall. Is that so?

MR. COLLINS. I believe you are talking about the two inner roadways that are there. I think the Park Service has signs, and so forth, saying no parking before a certain time of the day. I wouldn't be surprised if that was correct.

MR. MCKAY. Who enforces the parking?

MR. RIPLEY. The police of the National Park Service. It's supposed to be adjusted so that it's difficult for a commuter to park in an area where a visitor would otherwise have a chance to park. It doesn't always work that way.

MR. MCKAY. It doesn't work very well at all.

MR. RIPLEY. I don't know why, but I suspect it's a question of enforcement and urging the police to keep it up.

MR. YATES. The committee will stand in recess until 1 o'clock tomorrow.

MR. YATES. The committee will be in order.

TUESDAY, APRIL 8, 1975

#### NATIONAL AIR AND SPACE MUSEUM

The committee appreciates the fact that Mr. Collins has another meeting that he has to attend. There are several questions that I would like to ask of him before he leaves. One relates to the \$3 million item for the purpose of liquidating contract authority for the National Air and Space Museum.

Mr. Collins, how much of the \$7 million appropriated in fiscal year 1975 has been obligated?



Mr. COLLINS. \$1 million Mr. Chairman.

Mr. YATES. What about the remaining \$6 million?

Mr. COLLINS. The remainder will be obligated shortly. We have a list of finishing work to do in the building. It has to do with such things, for example, as the accessories for the planetarium instruments, central control rooms for the guard force, and the electronic exhibits, various pieces of decorative equipment, wall treatments, internal dividers, and structural modifications to some of the galleries. Funds will be obligated to meet those requirements shortly.

Mr. YATES. Does this mean that you will not have any unobligated balance at the end of the fiscal year?

Mr. COLLINS. No, that does not, Mr. Chairman.

I think we will have some of the fiscal year 1975 money unobligated as of the 1st of July.

Mr. YATES. Why will you need the entire \$3 million, then?

Mr. COLLINS. Because we have yet to contract for a number of the interior finishing projects which must be done in order to make the museum habitable. The GSA will turn over to us essentially a shell. After we move into the new building, there are traffic dividers, partitions, wall treatments for art halls, and a number of interior design details which must be finished.

Mr. YATES. And you anticipate that you will need the full amount then?

#### CLAIMS AGAINST THE AIR AND SPACE MUSEUM

Mr. COLLINS. Yes, although right now, Mr. Chairman, we are showing a small surplus.

For example, we have a contingency set aside for claims which might be brought against the project. Until they are settled on a case-by-case basis, it is difficult to determine requirements, but right now we are showing a small surplus in the project and we would expect not to need quite the entire \$3 million.

Mr. YATES. What is the nature of the claims?

Mr. COLLINS. There are a whole series of them resulting from the usual construction claims. We have about 20 of them altogether which add up to about \$800,000.

Mr. YATES. From your contractors?

Mr. COLLINS. Yes, from the contractors. These are claims against the GSA, by subcontractors and contractors. This is not unusual for a project of this scope and it is more than covered in our contingency fund. We have set aside 100 percent in reserve for the current claims; if we lose the full amount in every case, we are still covered.

Mr. YATES. Did you have a chance to review the press article that Mr. Evans made available to you yesterday?

Mr. COLLINS. Yes, I did, Mr. Chairman.

Mr. YATES. Do you want to answer that or do you want to place your answer in the record?

Mr. COLLINS. I answered it at the time. I wrote a letter to the editor which I thought summarized my view.

Mr. YATES. We will place the article and your response to it in the record at this point.

[The information follows:]



# CAPITAL COMMENT

## Fly Me to the Moon *The Astronaut as Museum Director*

The National Air and Space Museum, long the poor stepchild of the Smithsonian Institution, has had its Cinderella dreams come true during the last few years.

First, dashing handsome astronaut Michael Collins, pilot of the command module during man's first moon landing, became its director in April 1971. He brought the museum publicity and prestige.

Then the Congressional appropriation for its new building, authorized and languishing since 1964, was released. Last December, ground was broken for the museum's new building on the Mall which is to replace the tacky quonset hut it has occupied for so many years.

But all this progress hasn't been without cost.

Members of the museum staff charge that Collins and his deputies are so preoccupied with the new building that they have become dangerously negligent about preserving and restoring the museum's invaluable collection of historic airplanes. If something isn't done, they say, the planes are going to rot away and there won't be much to exhibit in the museum's new showcase of a building.

Citing instances of waste, pilferage, and the use of government equipment for private purposes, they also charge that Collins has overlooked sloppy management of the museum's sprawling storage and renovation facilities at Silver Hill in Suitland, Maryland.

Part of the problem, disgruntled staffers say, may be expansion of the staff occasioned by the demands of the new building. Collins has been filling top-level positions at the museum with retired military officers and space agency officials who have no previous museum experience.

Morale among the museum's experienced workers, who have kept alive the dying art of aircraft construction from earlier days, is at an all-time low. Morale was not raised by a recent party for the Silver Hill workers. They felt the party money could better have been spent preserving the museum's collections, an instance of devotion to duty rare among government workers but not un-

usual among the museum's staff.

Sources said the ostensible purpose of the party was to introduce new staffers to old, but the private word around the museum was that the party was meant "to celebrate the new fiscal year." That questionable party is only the latest in a long string of grievances the Silver Hill workers hold against the National Air and Space Museum hierarchy. Tales of inefficiency and negligence are rife at the Maryland facility. The workers who tell them, though, are reluctant to be identified. Their complaints have been taken all the way to Collins' office and have fallen on deaf ears everywhere. Those who complained have been harassed in the many special ways possible within the tight confines of the Civil Service system.

One story concerns the fate of \$800,000 worth of stainless steel bolts necessary to the renovation of many of the aircraft now in the museum's care. The bolts had been donated to the museum by various concerns across the country after solicitation by a former curator who explained how important they were to the museum's work.

When the bolts reached Silver Hill, however, they began to disappear. Some were given away, some were junked, and some were simply plowed under by a bulldozer during the construction of a new building there. One source said several antique aircraft engines also had been plowed under. Stainless steel bolts of the type that were destroyed are expensive. The National Air and Space Museum now buys them for \$3 to

\$4 each when they are needed.

The quality of aircraft restoration work at the museum has declined drastically in recent years. Staffers say they now are allowed to do only "a cosmetic job" on the nation's collection of historic aircraft. As a result the Smithsonian's collection is deteriorating each day. No work is being done to protect the fragile fabric of many of the aircraft. Fuselage interiors no longer are coated with special protective oil or powder. Engines are not overhauled and treated to protect them from rust and decay.

"All we do now is just sandblast a little bit and spray 'em with some short term anti-rust oil," one worker said. "In another 50 years they'll be completely destroyed."

Workers blame many of the problems on Donald Merchant, chief of the museum's preservation and restoration division, who began as a clerical worker with the museum in the early 1960s. Staffers feel he lacks interest in properly preserving historic aircraft and is more interested in warehousing than in restoring them.

Merchant has allowed at least one friend, sources say, to use the museum's facilities to restore his own airplane. On another occasion one of the museum's air compressors was lent to a private group at an airport in Clinton, Maryland, for nearly two years.

Merchant has given permission to members of the Antique Aircraft Association to use the museum's shop facilities freely. The antiquers are donating their time to the restoration of a 1930s fighter owned by the

museum, but staffers complain that they always are underfoot, have broken equipment, and have been working on the fighter for nearly two years without completing it.

Other sources said museum employees had retrieved valuable aircraft parts from an airport on Long Island and shipped them to the Silver Hill facility. Merchant then turned the parts over to the Antique Aircraft Association.

Silver Hill workers also complain that all promotions during the last few years have gone to Merchant's cronies who lack knowledge of proper museum standards for the care of the nation's collection.

Evidence of problems at Silver Hill litter the landscape. Rare, one-of-a-kind, or historically important aircraft have been rotting away outside for years, unprotected from the weather.

One of the rusting airplanes sitting outside at Silver Hill is "The Sacred Cow," the C-54 that once served as President Franklin D. Roosevelt's personal airplane.

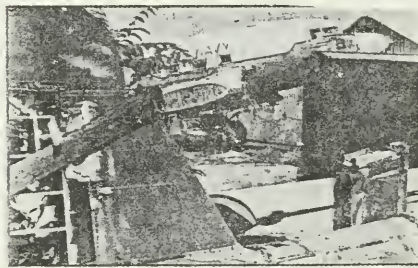
Another is a B-17 bomber rebuilt from parts of many B-17s destroyed by the Japanese at Pearl Harbor. Another is a rare P-61 "Black Widow" night fighter of World War II vintage. The "Enola Gay," the B-29 that dropped the atomic bomb on Hiroshima, finally has been dismantled and stored inside, but it is in deplorable condition.

Museum officials, with some justification, blame that situation on lack of space and money to bring the planes inside.

But sources at Silver Hill see it as just another indication of lack of concern by museum officials. And while some of the problems antedate Collins' appointment as director, the workers feel he has shown little interest so far in correcting them.

Something must be done quickly if the nation's incomparable collection of historic aircraft is to be preserved for future generations, Michael Collins' new broom has swept clean in the museum's top ranks. It now is time for him to listen to some of the lesser but dedicated museum employees.

—JIM SETMORE



PHOTOGRAPHED BY HOKE KEMPLEY

SMITHSONIAN INSTITUTION,  
NATIONAL AIR AND SPACE MUSEUM,  
Washington, D.C., July 25, 1973.

The EDITOR,  
*The Washingtonian Magazine*  
Washington, D.C.

DEAR SIR: Jim Seymore's "Fly Me to the Moon" in August's Capital Comment is more a flight of fancy than of fact. I have never read a short piece so riddled with half-truths and outright errors, despite the fact that Seymore is an ex-Smithsonian employee.

Item: "Collins has been filling top level positions at the museum with retired military officers and space officials. \* \* \* Of the 23 positions I have filled, one has gone to a retired officer and one to a man who worked briefly for NASA.

Item: "Collins and his deputies \* \* \* have become dangerously negligent about preserving and restoring \* \* \* historic airplanes." When Don Merchant took over Silver Hill in 1966 there were 102 airplanes stored outdoors, the majority of them having been unceremoniously dumped at Silver Hill in the early fifties. Recently we have been able, by acquiring new space and making more efficient use of old, to reduce this number to 40 out of a total of 200. I am forecasting that all of them will be indoors by the end of 1974.

Item: "No work is being done to protect \* \* \* interiors are no longer coated \* \* \* engines are not overhauled. \* \* \* Two years ago, when I arrived here, we had one airplane undergoing restoration at Silver Hill; today we have six. If you tell the men working on these planes that they are doing only "a cosmetic job" you had better duck, because they are putting an average of 5,000 man-hours of tender loving care into each one.

Item: "\$800,000 worth of stainless steel bolts \* \* \* given away, \* \* \* junked \* \* \* plowed under." Fantastic! My arithmetic says that, even at phase IV prices, \$800,000 will buy approximately 3,800,000 stainless steel bolts of average size, more than enough to fasten together the entire Silver Hill collection a hundred times over. But more to the point, we have not given away, junked, or plowed under any bolts, let alone \$800,000 worth, nor are we buying bolts now, as Seymore goes on to say. Doesn't the man check anything?

Item: "\* \* \* staffers complain that they (the Antique Aircraft Association) always are underfoot \* \* \* The Antiquers work one night a week, starting at 6:30, long after our people have departed.

Item: "\* \* \* the B-29 \* \* \* finally has been dismantled and stored inside \* \* \* That happened in 1961.

Item: "Collins' new broom has swept clean in the museum's top ranks." Baloney. Nearly all the old-timers are still here and I listen carefully to what they have to say. One of the best of them is Don Merchant, whom Seymore so unjustly maligns, apparently because he "began as a clerical worker."

In short, you have printed a shoddy piece of sloppy journalism with at least another dozen factual errors which could easily have been avoided by a simple check. Our telephones work fine, and you or your reporters are welcome here. How about getting the facts next time?

Sincerely,

MICHAEL COLLINS,  
*Director.*

ART QUARTERLY

MR. YATES. In your justifications, you state that the Art Quarterly will be published beginning this year by the Smithsonian, and that "through various economies and a minor reorganization of staffing patterns, this new activity will require no increase in Federal funding in fiscal year 1976."

Can you tell us a little more explicitly what these economies will entail?

MR. BLITZER. Certainly. May I say a word about the Art Quarterly first?

Mr. YATES. Of course you may. We would be glad to know about it.

Mr. BLITZER. It is I think the most distinguished art historical journal published in this country and one of the most, if not the most, distinguished in the English language.

I have a sheet of testimonials, which I will not take up your time with, to this effect. It is not only a first-rate journal, but it has a special relationship to museums. It was founded by the Detroit Institute of Arts. It has two features of special interest to us; one, it regularly reviews museum exhibitions in a more serious way than any other journal and, secondly, it carries a section on museum accessions which is enormously important to the profession.

When we learned last summer that the Detroit Institute felt it was unable to carry this on, we entered into conversations with other museums and with the Detroit Institute to see if it could be saved.

We believe that the budget for the Art Quarterly for the next fiscal year will total about \$99,000. Its income from subscriptions and from advertising at the present rates would be about \$65,000, leaving a deficit of about \$35,000.

What we hope we can do, using the expert advice of the people from the Smithsonian magazine, is increase its subscriptions from 1,500 to 3,000, which could put it in the black; then we would not be asking Congress or our Treasurer for any money.

This is an experiment, I should say. If we find that it is a constant drain, we may also decide that we cannot maintain it. That should be made clear.

The Regents were very emphatic on that point.

Specifically to your question, there is one unfilled position in my office, one of the seven that comes under No. II on page A-38. Our feeling is that if it becomes necessary for 1 year to help the Art Quarterly, the simplest way would be to have the editor made part of my office and use that position for that purpose. That is the minor reorganization of staffing patterns talked about.

Mr. RIPLEY. We might mention that the regents considered this matter at their January meeting and authorized us to take the Art Quarterly on the basis of a one-year trial effort to make the books balance, and said that no more than \$40,000 of funds should be used. They did not specify whether these should be private funds or those that we would obtain from appropriations.

At the end of that year, we would then be prepared to review the situation and decide whether or not we could swing it. But we do have this aggressive program of working on subscriptions which we believe will more than balance the books.

Mr. YATES. If you are able to get the people from Smithsonian onto this one, you probably will be successful. I think it is a wonderful magazine. I am sure they are having a very successful operation, too, are they not?

Mr. RIPLEY. Yes, they are.

#### FUTURE REQUIREMENTS FOR ART QUARTERLY FUNDING

Mr. YATES. Will the Smithsonian be requesting funds in the next fiscal year for the Art Quarterly, or must we wait and see what happens during the year?



Mr. BLITZER. I would prefer to wait and see. I think we can say, as the Secretary has indicated, that it will not be in excess of \$40,000, if any.

Mr. YATES. I am not sure I gleaned from your previous answer what your relationship would be with the Detroit Institute of Arts in connection with the publication.

Mr. BLITZER. None. They simply terminated it.

Mr. YATES. They terminated, and they made a gift to you of what was left of it?

Mr. BLITZER. Right: all of their assets come to us.

Mr. YATES. What are their assets?

Mr. BLITZER. A certain amount of money in the form of prepaid subscriptions, advertising revenue, and so forth, its mailing list and its name, which are the main assets, and its files and back issues.

Mr. RIPLEY. I might add, one foundation grant in support of it.

Mr. BLITZER. We have raised the money to run a trial mailing to see what we can do to increase subscriptions.

The Smithsonian magazine people have helped admirably. They are really quite excited about the prospects for the Art Quarterly.

Mr. YATES. You do not have a copy of it with you?

Mr. BLITZER. I should have brought one. I will see that you get one.

#### SMITHSONIAN MAGAZINE

Mr. YATES. I notice the Smithsonian magazine is available only by subscription. Have you considered a wider dissemination of it?

Mr. RIPLEY. No, sir, we have not. This is an activity of the Associates of the Smithsonian, which is a self-supporting operation. The Regents approved the concept of the magazine on the basis that we needed to have a kind of connection with those Associates who are more than 50 miles away from our base of operation in Washington, and that, therefore, in those terms, a magazine was probably the best way of keeping Associates out of town up to date about what we are doing.

We have several pages in each issue devoted to things the Associates can do either here or elsewhere, as well as a tally of the current traveling exhibitions so they can visit them in their own communities, as well as opportunities of going on tours locally, nationally, or abroad, as an Associate. These are privileges of the \$10 membership.

#### MUSEUM OF HISTORY AND TECHNOLOGY

Mr. YATES. Please justify for the committee the requested increase of \$120,000 and seven additional positions for the National Museum of History and Technology.

Mr. BLITZER. Mr. Chairman, this is one of the cases where our request really represents the price of success.

The Museum of History and Technology, as indicated in our justifications, is by far the most popular and the most visited museum in the world. We expect it will be more popular and more visited in the future.

The attendance figures have held up in spite of the fact that a considerable part of the exhibit space is now closed for the preparation of our Bicentennial exhibits. Still the millions throng in.

Of the seven positions, five are housekeeping positions; four custodians and a laborer. The other two are for education specialists to prepare orientation programs for the visitors so they can find their way around better and get more from the museum.

NATIONAL COLLECTION OF FINE ARTS

Mr. YATES. You are requesting \$104,000 and three positions for the National Collection of Fine Arts. Is that attendance growing, also?

Mr. BLITZER. Yes, indeed, it is. The attendance in that building, because of subway construction at the entrances to the building, is difficult to sort out. Therefore, we count attendance for the whole building including the National Portrait Gallery.

As I recall, the attendance for the entire building last year was up 30 percent. Here again, all of the three positions are housekeeping positions, a painter-helper and two laborers.

*question*  
The main thing I would like to bring to the committee's attention is the \$50,000 for acquisition funds, which I feel is enormously important for this museum. All of our museums, certainly all of our art museums, have received historically, and, I am sure, will continue to receive more in gifts than they can possibly purchase, but they are, as the justification points out, in a sense museums of record that have a kind of responsibility to cover an area of art, in this case the history of American art.

If there is a particular painting or sculpture that is needed to tell the story of American art, one could wait 50 years for someone to turn up and give it to us.

Mr. YATES. I get the impression that the Smithsonian finds it easy to tap private sources for most of the things it wants.

Mr. BLITZER. We do very well, I think.

Mr. RIPLEY. We try our best.

Mr. YATES. Yes; that is why I wondered why you wanted the \$50,000 for acquisition.

Mr. BLITZER. One of the points is precisely to have some money under the control of the Director and his staff to do with what they feel is necessary to strengthen the collection.

Mr. YATES. Was any spent for acquisitions during the last fiscal year?

Mr. BLITZER. Yes.

Mr. YATES. What was acquired and for how much money?

Mr. BLITZER. I would have to supply a list of what was purchased.

Mr. YATES. I would like to know what was acquired. What was the amount of the acquisition fund?

Mr. BLITZER. In fiscal 1974, about \$76,000 was spent.

Mr. YATES. Why do you ask for a lesser amount of money?

Mr. BLITZER. This is an increase.

Mr. YATES. You want an increase of \$50,000?

Mr. BLITZER. Yes.

Mr. YATES. What will the total be then?

Mr. BLITZER. Somewhere in the vicinity of \$100,000 or \$120,000.

Mr. YATES. That should almost pay for one DeKooning, should it not?



Mr. BLITZER. I do not think so.

Mr. RIPLEY. In every case, Mr. Chairman, the Commission of the National Collection of Fine Arts must approve all purchases over very minimal sums. They do have regular meetings, they render an annual report to the Regents, and they detail in that report the particular purchases, gifts, exchanges, and so on.

We do have that in case you would like us to supply it for the record because that is made available to the Regents.

Mr. BLITZER. I have it in my briefcase, but it would take time to quote from it.

We estimate the value of gifts of art to the National Collection of Fine Arts in fiscal year 1974, and so far in fiscal year 1975, at about \$550,000 worth, including a Peto, a Kensett, and a Motherwell.

[Additional information follows:]

*Art Purchased by National Collection of Fine Arts in fiscal year 1974*

"Undine" by Henry Peters Gray-----	\$1, 700
"Landscape with Farm and Mountain" by Charles Codman-----	7, 000
"Portrait of Godfrey Frankenstein" by John Frankenstein-----	14, 400
"View Near Florence" by George Loring Brown-----	10, 800
"Self Portrait" by George Johnson-----	900
Portrait miniatures by various artists-----	4, 325
"Songs of Sleep" by Jay Backstrand-----	500
"Toot, Toot, the Fog" by Jack Portland-----	600
"The Temple of Peace" by George Loring Brown-----	8, 550
Portrait miniature by James Peale-----	1, 400
"November, 1953" by Frank Lobdell-----	6, 375
"Youth" Thomas Cole (copy)-----	1, 200
Prints and drawings by many printmakers-----	8, 692
Photographs collectors' items-----	9, 358
Total -----	\$75, 800

FREER GALLERY OF ART ACQUISITION FUNDS

Mr. YATES. I do not notice any funds for acquisition for the Freer Gallery. Do you have any?

Mr. RIPLEY. They have had funds in their own private budget.

Mr. YATES. I do not notice any request for appropriations for acquisition.

Mr. RIPLEY. They have not so far as I know used appropriated funds for their purchases.

Mr. YATES. Would you know how much is available for acquisition?

Mr. RIPLEY. Something in the neighborhood of \$300,000, it varies year by year, depending on the commitments, many of which are long range. In other words, they agree to pay off over a period of 2 years or more to buy some things. The prices of objects are very high now. They have attempted always under the will to purchase within the private endowment funds.

Mr. BLITZER. The estimate for this fiscal year is \$320,000.

SALE OR EXCHANGE OF PAINTINGS

Mr. YATES. Do any of your museums ever sell any of their collections or exchange them?

Mr. BLITZER. The National Collection of Fine Arts several years ago sold four paintings.

Mr. YATES. At auction?

Mr. BLITZER. In various ways.

If I can recall the details, one or two were auctioned, one was exchanged, and one was sold to a dealer.

Mr. YATES. I would have thought that the galleries would have wanted to avoid the embarrassment that came to the Director of the Metropolitan Museum as a result of his exchanges. I would have thought the best way to dispose of them would be by auction, therefore.

Mr. BLITZER. We now, as the Secretary said yesterday, have rather strict rules of procedure established by the Regents for this. I suspect if it happens, it will be done through auction.

#### INVENTORY OF AMERICAN PAINTINGS

Mr. YATES. What have been the results to date of your project to inventory American paintings executed before 1914?

Mr. BLITZER. That is Mrs. Hamilton's project.

Mr. YATES. Is this a Bicentennial project?

Mr. BLITZER. It is a Bicentennial project. It has been enormously successful and thrilling, I think.

Mr. YATES. Really? Let's let Mrs. Hamilton have the floor.

Mrs. HAMILTON. There are in excess of 100,000 paintings now on the listing. We hope by next summer to have 150,000 paintings listed. At that time we will also publish the first directory to the inventory which will become available to museums and art history departments and art historians across the Nation. We will literally be in business for use of this resource by scholars.

Mr. YATES. You must have had some significant discoveries then.

Mrs. HAMILTON. We have.

Of course, the inventory is not based on necessarily the esthetic quality of paintings.

Mr. YATES. Yes, just on the fact that one was made.

Mrs. HAMILTON. The important thing is that it is an American painting by an American artist.

We are finding out some incredible things, information about painters we have known very little about and may have known only one or two works, and suddenly now know 14 or 15 works spread across the country.

We have made some significant discoveries of major paintings in places such as a high school in Peru, Ind. We know of a Hopper painting in a gas station out West.

Mr. YATES. Made before 1914, the Hopper?

Mrs. HAMILTON. Yes.

Mr. YATES. How do you authenticate the fact that they are American, made by an American painter and painted before 1914?

Mrs. HAMILTON. Well, in the case of the inventory, everything that goes into it will not be absolutely authenticated. This will be a job that scholars will do as they begin to study various areas of interest. We can only take the information that is sent in to us by people.

Mr. YATES. There is no authentication then, is there?

Mrs. HAMILTON. At this point, no. This is simply a listing of the paintings, of the estimated year of each, of the painter or artist, where the painting is located, and any other information that can be provided generally about that work of art.

Mr. YATES. I seem to be skeptical, but I think you are going to have many less than 100,000, are you not?

Mrs. HAMILTON. This may be possible.

Mr. BLITZER. If I may say, the enterprise really is simply to assemble the raw material, which I suspect art scholars will be working on for the rest of the century.

#### ACQUISITION POLICY OF THE NATIONAL COLLECTION OF FINE ARTS

Mr. YATES. Can you state for the committee what your general policy is regarding the acquisition of art objects for the National Collection of Fine Arts?

Mr. BLITZER. The purpose, the philosophy, of the National Collection of Fine Arts, which I think has become much clearer over the last few years, is to serve as the Nation's national museum of the history of American art. The policy, especially under the present director, is to assemble a representative collection of the kinds of paintings that American painters have been painting since the beginning of this country, rather than, if this is a choice and often I think it is a choice, simply assembling great masterpieces that will knock out the eyes of the people as they walk in.

Mr. YATES. Have there been acquisitions that the director of the gallery wanted that you were unable to acquire because of lack of funds?

Mr. BLITZER. Yes, sir.

Mr. YATES. Can you give us some examples of that?

Mr. BLITZER. I cannot on the spot, but I am sure I can almost instantly produce such a list.

Mr. YATES. If you do not remember any offhand, place it in the record.

[The information follows:]

#### NATIONAL COLLECTION OF FINE ARTS ACCESSIONS UNOBTAINABLE BECAUSE OF INADEQUATE PURCHASE FUNDS

"Kaaterskill Falls" by Thomas Cole, 1827, oil on canvas.....	\$150,000
"The Lost Balloon" by William Beard, oil on canvas.....	25,000
"Niagara Falls" by Raphaelle Peale, oil on canvas.....	25,000
"Roman Daughter" by Rembrandt Peale, oil on canvas.....	50,000
"Mrs. Otis" by Henry Inman, miniature, watercolor on ivory.....	900
"William Smith and Grandson" by Charles Wilson Peale, oil on canvas.....	200,000
"Landscape with Shepherd" by Robert S. Duncanson, oil on canvas ...	9,000
"Peeling Onions" by Lilly Martin Spencer, oil on canvas.....	10,000
Pair of portraits by George C. Bingham, oil on canvas.....	32,000
"On the Wing" by William T. Ranney, oil on canvas.....	45,000 to 55,000
"Portrait of Joseph Scott" by John Singleton Copley, oil on canvas.....	200,000 to 225,000

#### INSTALLMENT BUYING

Mr. YATES. Are any of the paintings acquired on an installment basis, looking to appropriations in future years for the balance?

Mr. BLITZER. I think that is only done with a guarantee of Smithsonian private funds.

Mr. YATES. Not by appropriated funds?

Mr. RIPLEY. No; I do not think we would feel justified in attempting that, Mr. Chairman.

We have, as I say, in the case of the Freer because of a vast price, let's say \$80,000, postponed a full payment over 2 years, but again it has been using private funds.

#### DISPOSAL OF ART OBJECTS

Mr. YATES. Do you have a feeling that some of the objects that you have in your galleries may not be of museum quality and should be disposed of? And if you do, what do you do in that case?

Mr. BLITZER. That certainly was the case in the case of the four objects the National Collection of Fine Arts disposed of. It is a sensitive question, which I need hardly tell you.

Each of our directors has a slightly different view. Joshua Taylor, who runs this gallery, the National Collection of Fine Arts, on the whole is opposed to disposing of things. I think he and his Commission really have to determine this.

Mr. YATES. This is a question that is submitted by the director to the Commission for its consideration before any action is taken?

Mr. BLITZER. Certainly if he proposed to do such a thing it would go to his Commission, yes; and then it would go to the Board of Regents, also, if it were of any size.

#### FINANCIAL VALUE OF ART WORK

Mr. YATES. What do you do in order to ascertain the monetary value of an art work in any of your galleries?

Mr. BLITZER. We have a rule that our staff should not be involved in that sort of thing.

Mr. YATES. I remember that you did present to the committee a list of the appraisals for the Hirshhorn some years ago.

Mr. BLITZER. In the case of Mr. Hirshhorn's second gift, the one that met the million-dollar pledge and turned out to be appraised at \$7 million, we went to professional appraisers and got an appraisal largely because the Congress and the press were so interested.

Mr. YATES. And whether or not the gift was as valuable as had been advertised?

Mr. BLITZER. Yes.

Our view is that we deal in art rather than in market values.

#### LOAN OF ART WORK

Mr. YATES. The justification statement for the National Collection of Fine Arts says that about 1,700 works are on loan to public offices in the Washington area. Who is entitled to receive public art works on loan for their offices?

Mr. BLITZER. It is a very difficult question. We have been trying to get a handle on it for as long as I have been around. We try to limit this as much as possible to high Government officials.

I was talking to the director only 2 days ago about this.

Mr. YATES. 1,700 works of art; do you know where they are?

Mr. BLITZER. I think we do. Yes.

Mr. YATES. You do not want to say I think we do. You mean we do?

Mr. BLITZER. I do not, but I know the National Collection of Fine Arts does.

Mr. YATES. Are there any provisions made for insuring or protecting these?

Mr. BLITZER. Provisions are made for inspecting them and taking them back if they need work.

Mr. YATES. What about insurance?

Mr. BLITZER. I do not believe so.

Mr. YATES. There ought to be a reappraisal of that; should there not?

Mr. BLITZER. I think there should be. There is a continuing but never-conclusive kind of reappraisal.

Mr. YATES. Have any of them been damaged while out on loan?

Mr. BLITZER. I am not aware of any major damage to any of them. There has been wear and tear, I suspect—more wear, not tear.

Mr. RIPLEY. It has really been a question of framing and cleaning.

Mr. YATES. Now the loaned works do not necessarily represent the least desirable works in the collection, do they?

Mr. BLITZER. I am sure if we are doing a halfway decent job they represent works that the Collection does not at that time want to display and does not feel are immediately important for research purposes.

#### SELLING OF ART WORKS

Mr. YATES. Do you sell any of the works in order to raise funds?

Mr. BLITZER. My view, and I think it is the official view of the Smithsonian and of the Regents, is that the only excuse for selling things from the collections is to buy other things for the collections. As I say, we do not do much of that.

#### NATIONAL PORTRAIT GALLERY

Mr. YATES. You are requesting an increase of \$104,000 and three positions for the National Portrait Gallery. Why is this needed?

Mr. BLITZER. This is very much the counterpart of the previous request.

Again, all of the positions are housekeeping positions; two janitors and an electrician helper. The funds, except for \$50,000, are for payment of the salaries of these people, cleaning supplies, and equipment. The remaining requested \$50,000 increase is for purchases for the collection.

Mr. YATES. Does the National Portrait Gallery have the same requirement as the National Collection of Fine Arts, that the paintings be done by Americans or be reflective of Americans?

Mr. BLITZER. No. There just is not a rule about that. For instance, there is a great portrait of General Grant by a Norwegian painter who came to this country.

Mr. RIPLEY. May I interject that the subject of the portrait is the important thing in the case of the Portrait Gallery. It should be a



representation of a person who has figured in some way in American history, so that, for example, we could have a portrait of Sir Walter Raleigh in connection with his known explorations of Virginia, and so on. So they need not in every case be an American citizen.

We have had loan exhibitions showing British royalty, George III, or other connections, such as William Pitt, with the history of America.

MR. YATES. How do you decide whether a work, an American portrait, should go to the Portrait Gallery or to the National Collection of Fine Arts?

MR. BLITZER. I think it is sometimes not an easy decision.

MR. YATES. Sometimes?

MR. BLITZER. One of the questions would be whether it is more important as a work of art or as a representation of a person.

MR. YATES. You make the decision or do the directors of the two museums toss a coin?

MR. BLITZER. We hope the directors can get together. I may say there have been some real cooperative efforts.

For example, the Portrait Gallery under the present director had a show a few years ago of portrait reliefs by Augustus St. Gaudens. As a result of that, several of them were given or offered to the gallery, but the subjects were not major figures in American history. We wrote tactful letters to the donors and asked if they would just as soon have their reliefs in the National Collection of Fine Arts. They all said yes.

#### NATIONAL PORTRAIT GALLERY ACQUISITIONS

MR. YATES. How much of the National Portrait Gallery budget is allocated for acquisitions?

MR. BLITZER. In fiscal year 1974 they spent \$170,000 on acquisitions. We estimate this year that it will be somewhere in the vicinity of \$200,000.

I might say their estimate of the value of gifts in fiscal 1974 and so far in fiscal 1975 is \$600,000.

MR. YATES. Dr. Blitzer, would you place in the record a statement of the policy of the National Portrait Gallery with respect to the purchase, sale and exchange of its paintings?

[The information follows:]

#### POLICY OF NATIONAL PORTRAIT GALLERY ON PURCHASE, SALE, OR EXCHANGE OF ITS PAINTINGS

The policy on the acceptance of gifts by the National Portrait Gallery is contained in title 20 § 75d. Acceptance of gifts: title to property.

(a) The Board is authorized to accept for the Smithsonian Institution gifts of any property for the benefit of the gallery.

(b) Legal title to all property (except property of the United States) held for the use or benefit of the Gallery shall be vested in the Smithsonian Institution. Subject to any limitations otherwise expressly provided by law, and, in the case of any gift, subject to any applicable restrictions under the terms of such gift, the Board is authorized to sell, exchange, or otherwise dispose of any property of whatsoever nature held by it, and to invest in, reinvest in, or purchase any property of whatsoever nature for the benefit of the National Portrait Gallery. (Pub. L. 87-443, § 5, Apr. 27, 1962, 76 Stat. 62.)

## EXHIBITION SPACE

Mr. YATES. You want to add 10,000 square feet of exhibition space to the gallery. Where is it going to come from?

Mr. BLITZER. The space?

Mr. YATES. Will it be taken away from the National Collection of Fine Arts?

Mr. BLITZER. No, sir. There is on the third floor of the gallery a glorious space, polychrome with colored tiles, stained glass that somehow miraculously survived from the Patent Office and through all of its subsequent uses. It has been used for storage.

Mr. YATES. Where are you going to put the people who are being replaced?

Mr. BLITZER. Actually, the offices are not in the great ceremonial part. They are off to the sides.

Mr. YATES. They are not being used? So there is no problem in connection with having to manufacture space for people?

Mr. BLITZER. No, sir.

## HIRSHHORN MUSEUM AND SCULPTURE GARDEN

Mr. YATES. What are the policies respecting the Hirshhorn Museum's acquisitions? Is its funding taken care of under the terms of the gift of Mr. Hirshhorn or will appropriated funds be necessary for that purpose?

Mr. BLITZER. Appropriated funds will be necessary, in addition to private funds from all sources, we hope.

Mr. YATES. How much money are you requesting for the Hirshhorn for acquisition?

Mr. BLITZER. We are hoping that next year they will have \$90,000.

Mr. YATES. What does that mean? Who are you hoping to get it from?

Mr. BLITZER. Within the total of \$1.625 million, we are asking for the museum.

Mr. YATES. You mean appropriated funds?

Mr. BLITZER. Correct. Our budget allows for \$90,000.

Mr. YATES. I understand that museum is doing well in terms of visitor attendance.

Mr. BLITZER. Yes. I had the pleasure of welcoming the 1 millionth visitor on the 2d of April, 6 months after the opening.

Mr. YATES. Did you give that visitor a sculpture or a painting?

Mr. BLITZER. We gave an autographed catalog and a subscription to the *Smithsonian* magazine. She was a very pretty girl who had come from Las Vegas and said she had never won anything before.

Mr. YATES. Is there anything else we ought to know about the Hirshhorn? Is the fountain working?

Mr. BLITZER. Yes. When the weather gets warm it will have to be emptied and patinaed.

## VANDALISM AT THE HIRSHHORN MUSEUM

Mr. YATES. Did you not have some casualties among the bronzes as a result of touching, kicking, or pushing?

MR. BLITZER. Yes. This is the classic case of the price of success. Really, I think we never imagined there would be this many people. There is a problem.

As the Secretary indicated yesterday, my sense of the place is that it is not a problem of malice, in the sense of sinister people who go around deliberately damaging works of art. I think it is a result of just high spirits and pleasure that leads people to touch things.

MR. YATES. We notice as we go through Statuary Hall in the Capitol that the shoes of Will Rogers, who looms above the corridors, have a shiny surface where people touch as they walk by. I think they raised the bust of Abraham Lincoln above touching areas because people used to rub his nose as they went by. I assume they do this at the Hirshhorn.

MR. BLITZER. Yes. We have had to put in more vitrines as we went along.

MR. YATES. Also, when I went through the Hirshhorn I noticed that they are now covering certain of the paintings with glass and plastic covers.

MR. BLITZER. Very few. There are some that are apparently irresistible. Some of them have a thick impasto and people want to break them off. There is one that has a dead fly fastened to it with a little label saying "Made in Japan." and people want to pull that off.

There is a Reinhardt that apparently would be simply destroyed by one fingerprint, I am told.

MR. YATES. Is that the huge one?

MR. BLITZER. The black painting that depends solely on subtle gradations of color. I am told when Mr. Reinhardt was alive, museums would send his works back and he would repaint them. But he is not alive now.

MR. YATES. Are you going to say something about the toilet facilities? Are they adequate for the number of visitors?

MR. BLITZER. My view is that they are.

MR. YATES. You do not go there very often?

MR. BLITZER. I do. I live nearby.

MR. YATES. Are there complaints?

MR. BLITZER. I have not heard any.

MR. YATES. As far as you know, they are adequate?

MR. BLITZER. I believe so.

MR. YATES. Did you want to say something else?

#### VISITOR SURVEY AT HIRSHHORN

MR. BLITZER. We did a little informal visitor survey in the first week in March, if you are interested in hearing the kinds of people who come.

MR. YATES. I would indeed.

MR. BLITZER. This was really quite informal, taken in the week of the 6th through 13th of March, which is not, clearly, in the height of the tourist season. Of the visitors, 12 percent came from the District of Columbia, 28 percent from the outlying suburbs, 56 percent from other parts of the United States, and 3 percent from abroad. Three percent of them were under 13 years of age, which is another problem we have: 40 percent were between 13 and 29 years old; and 57 percent were over 30. Close to half were under 30 years old.

Seventy-six percent of the ones questioned that week were coming for the first time, and 24 percent had been there before. Of the 24 percent who had been there before, 59 percent had been there once before, and this was their second visit; 29 percent had been there between 3 and 5 times already; 7 percent between 5 and 10 times; and 4 percent more than 10 times. Two percent of all the people surveyed had never been to an art museum before. Twenty percent had never been to a modern art museum before.

Those are the basic findings.

#### FINE ARTS AND PORTRAIT GALLERIES VISITATION

Mr. YATES. As I look over the justifications for the National Collection of Fine Arts and the National Portrait Gallery, I am not sure that I saw any reference to the number of visitors.

I think it is unfortunate that they happen to be located where they are, because they are off the beaten track, not on the Mall. I think people would have some difficulty in finding them.

Do you have any statistics on the number of visitors?

Mr. BLITZER. Yes, sir. The visitors to that building in fiscal year 1974 were 329,000.

Mr. YATES. Which is much less—

Mr. BLITZER. Much less than they deserve.

Mr. YATES. Yes.

Mr. BLITZER. One of the members of the National Portrait Gallery Commission at the end of one meeting offered us a London bus, which we accepted. I thought it would have started running by now, but soon, anyway, I believe we will have a London bus traveling from the History and Technology Museum, I think the Natural History Museum, maybe even the National Gallery of Art up to the Fine Arts and Portrait Galleries and back.

Mr. YATES. You may want to import a fleet of them to go between Kennedy Stadium and some of your other museums.

Mr. BLITZER. This will be a free service just for people who want to go. Ultimately what we depend upon is the redevelopment of that part of the city and the creation of the original Eighth Street axis that will bring it into the Mall.

Mr. RIPLEY. May I say that the 329,000 visitors in this past year represent a very major increase from previous years? What we were hit by in 1968, when the riots were in Washington, many of which occurred in the immediate neighborhood, was a kind of numb feeling of difficulty, difficulty to park, dangerous, inaccessible, and so on, in many people's minds in this locality. We are now gradually breaking that down, gradually getting away from it.

We think the opening of the subway will double the present visitation quickly, because there is a station, as you know, right next to the basement of the National Collection of Fine Arts called Gallery Place.

#### INSTALLATIONS AWAY FROM THE MALL

Mr. YATES. How many of the installations of the Smithsonian are not on the Mall? Obviously these two are not.



Mr. RIPLEY. The Renwick Gallery on Pennsylvania Avenue, the Anacostia Neighborhood Museum, and Hillwood in Washington; the Silver Hill, Md., storage area; the Chesapeake Bay Center; the Smithsonian Astrophysical Observatory; and several others.

Mr. YATES. But many of those are not exhibition galleries.

Mr. RIPLEY. Many of them are research laboratories, that is true.

#### FREER GALLERY OF ART

Mr. YATES. I find the Freer Gallery a joy to visit.

Mr. RIPLEY. There again the visitation remains small, Mr. Chairman.

Mr. YATES. That is interesting. I think it is because people do not know about its existence, Mr. Secretary.

Mr. RIPLEY. I believe that is partly true; I believe it is also a kind of change of pace. Different galleries have different kinds of visitations. Some are automatically exposed to very high visitation; others are a rather quiet, reflective place to go to.

The Freer enjoys that mood and atmosphere. That is highly appropriate for it.

Mr. YATES. You want \$10,000 for conservation equipment for the materials contained in the Freer complex. You say that this will be the first such conservation laboratory for the Smithsonian. Will this laboratory be available for conservation of materials in all Smithsonian museums?

Mr. BLITZER. I think they will work on, or at least give advice about things like bronze that they know a great deal about, but basically it is devoted to the Freer collection. They will give advice to non-Smithsonian museums, also.

Mr. YATES. The conservation laboratory at Freer is unique. I think it is one of the great laboratories in the country. I think their expertise is primarily in paper and certain kinds of fabrics.

Mr. BLITZER. Traditionally bronze has been, also.

Mr. YATES. And bronze, that is correct.

Mr. BLITZER. Yes.

#### CONSERVATION ANALYTICAL LABORATORY

Mr. YATES. How will the Freer's Technical Conservation Laboratory differ from the Conservation Analytical Laboratory?

Mr. BLITZER. I can speak to the first and Mr. Perrot perhaps will speak to the second.

Mr. YATES. I did not know you were a team today.

Mr. BLITZER. As I said, the Freer specializes in the conservation of Near and Far Eastern art objects—as you said, this means in particular the materials of which that art is made; bronze, paper, textiles, and ceramics. They work largely on the collections of the Freer.

They are also a major international research resource. They publish papers about all of these subjects, they even prepare films about how to do this work. Really, I think they are one of the jewels in the crown of the Smithsonian.

Mr. Perrot can tell you about CAL.



MR. YATES. Tell us about CAL. Mr. Perrot. I notice in your justifications that it is used for all the museums of the Smithsonian and it examines and treats objects for their protection and preservation.

I notice, for example, in the Chinese show at the National Gallery of Art, they have the recording instruments, I suppose for humidity and temperature for each of the collections. Is this what CAL does, too?

MR. PERROT. The Conservation Analytical Laboratory has instruments throughout the Museum of History and Technology. It monitors as well as advises on instruments in other museums, so to maintain as close a control of temperature and humidity as possible. The difference between the CAL and the Freer Laboratory is one of emphasis. The Freer Conservation Laboratory specializes in the care of oriental objects, particularly bronzes. The results of their research have been published in reports which have been universally acclaimed.

CAL concentrates on the specialized problems for those museums that do not have a conservation laboratory of their own.

In other words, we would like each museum to have a basic capability to monitor its day-to-day operations, take care of first aid to its objects. Certain objects, however, require a considerable amount of research and extremely complex equipment such as X-ray and spectrographic analysis: some highly complex methods, for example, neutron activation may be done in cooperation with other research organizations, such as the Brookhaven National Laboratory.

CAL provides those specialized services, but does not do so for oriental bronzes, that is left to the Freer. The Freer has published monumental works particularly on the study of Chinese bronzes. The Freer has specialized in the study of certain types of pigments. There is a close rapport between CAL and the Freer Laboratory and we try to avoid duplication to the maximum. Members of the staff meet regularly and exchange their problems wherever that is appropriate.

#### FREER ACQUISITION FUNDS

MR. YATES. How much money is being requested for acquisitions for Freer from appropriated funds?

MR. BLITZER. No Federal funds.

MR. YATES. Why is that?

MR. BLITZER. They have, as we said, roughly \$300,000 of endowment income for this.

MR. YATES. Of their own? You feel that is enough?

MR. BLITZER. It is never enough, but in comparison with the rest of our museums they are reasonably well-off.

#### ARCHIVES OF AMERICAN ART

MR. YATES. Tell me about the Archives of American Art. You have been interested in this a long time: have you not?

MR. BLITZER. Yes, sir. It is another success story, I think.

MR. YATES. Tell us why?

MR. BLITZER. That, coincidentally, was also founded in the Detroit Institute of Arts, largely by Edgar Richardson, who had a vision that

there should be gathered at one place in this country, either in original or microfilm, the basic documentation needed by historians of American art. He started this in Detroit. It was a great success.

At some point it seemed to the people who were running it, and to us also, that this really was a kind of national resource and it made very little sense to have it simply in Detroit. The pattern from the beginning had been to have regional offices, there are now four of these, one each in New York, Boston, Detroit, and San Francisco, two of which, San Francisco and Detroit, come rent-free—they are simply given house room in the DeYoung Museum and Detroit Institute—two of which we have to pay rent for.

The regional centers serve two purposes. In the first place, each one has a complete microfilm set of all of the millions of documents of the Archives for consultation by scholars of that area.

It is also a regional collecting center. It fans out into its part of the country and tries to acquire, with great success, the papers of artists and art institutions in that part of the country.

Mr. YATES. I notice you have an oral history program made up of interviews with artists, dealers, collectors, and administrators. Are these interviews subject to publishing, if somebody wants to hear them? Are they on file?

Mr. BLITZER. The conditions as to their use, as you know, depends very much on the feelings of the interviewee. Some are perfectly easy about having these used in any way.

As a matter of fact, the Archives is very substantially supported by private membership. As one of the benefits, they sent their members a recording of Louise Nevelson from one of their tapes. Others insisted these not be released for 20 years or that they be edited.

Mr. YATES. But they are in the Archives and subject to be released at the time that the conditions are met?

Mr. BLITZER. Right.

I think all of them, I may be wrong about this, but I am sure almost all of them are available to scholars right away. It is not in our budget. I hope before long they will also enter a film program. I think tape recordings of the voice of the artists are interesting, but I think a sound film, showing some of the works, would be better.

#### COOPER-HEWITT MUSEUM

Mr. YATES. You are requesting a program increase of \$80,000 and five positions for the Cooper-Hewitt. Can you tell us when the museum will be open to the public?

Mr. BLITZER. It will open, we hope, next fiscal year. We have a \$400,000 grant from the Johnson Wax Co., to pay for an inaugural exhibition and we are working on that. The hope is to do it in this calendar year, but I would not like to tell you that will happen. I think it will open in the next fiscal year.

Mr. YATES. Your associates or assistants had some samples yesterday from the Cooper-Hewitt. I do not know whether they are still here today or not.

Mr. RIPLEY. The catalogs are, Trade Goods and Winslow Homer, but not the objects.

Mr. BLITZER. The Cooper-Hewitt has an extraordinary collection.

Mr. YATES. Yes. We will have to go up and see it. It is housed in the old Carnegie Mansion.

Mr. BLITZER. We were given this great house and its garden and the townhouse comprising a whole block on Fifth Avenue between 90 and 91st Streets in New York City.

Mr. YATES. How much will it cost to sustain that house, in order to make a museum out of it? Will the gift take care of the expenses?

Mr. BLITZER. No, sir. We have been raising private funds for the restoration of the house for museum purposes. This is now under way without Federal funds to the extent of about \$1¼ million.

Mr. YATES. Will this be adequate?

Mr. BLITZER. To get it open as a museum, it will not be adequate to do the whole house. We are concentrating very heavily on air-conditioning and on the public spaces.

Mr. YATES. Have you taken it up with the Carnegie Institution?

Mr. BLITZER. No; we have not.

#### PUBLIC SERVICE

Mr. YATES. We now turn to the Assistant Secretary for public Service.

Mr. Euell is here. I see. His request is for \$215,000. Can you tell us what the funds are needed for, Mr. Euell?

Mr. EUELL. This is the total budget request for my office to maintain the office staff and support as it is. There is no increase in positions in that office this year, that is just to keep us going, with the necessary pay increases.

#### ANACOSTIA NEIGHBORHOOD MUSEUM

Mr. YATES. Are you in charge of the Anacostia Museum?

Mr. EUELL. Yes, sir, I am.

Mr. YATES. How is it doing?

Mr. EUELL. It is doing very well.

We have just completed the new Exhibits Design and Production Laboratory, which is one of the reasons why we are asking for two additional positions. One is an exhibits specialist because we will be upgrading and increasing our production capability in terms of exhibit-making. The other is for a maintenance person.

We are in three facilities now, the old theater, another small facility across the street, and the new design and production laboratory. So we feel we need someone who is familiar with all three of these facilities to pay attention to them every day, who can do general repair work and that kind of thing.

As you know, it is an unusual setting, certain special needs exist in that area.

Mr. YATES. Has the community responded well to the museum?

Mr. EUELL. The community has responded very well. This museum has one of the few neighborhood or community advisory boards that actually operates and is listened to. We work very closely with it. They really do have a voice in terms of some of the exhibitions and what goes on in that museum.

Mr. YATES. I notice you propose to have some exhibits for the Bicentennial. Are they already planned?

Mr. EUELL. Yes; they are planned. That is another reason we have to augment our production staff with that additional person. Three or four major exhibits of a traveling nature are planned for the Bicentennial. That is Anacostia's major effort for us in terms of those exhibitions.

#### INTERNATIONAL EXCHANGE SERVICE

Mr. YATES. We now turn to the International Exchange Service for which you request \$212,000. I notice this is a system of exchange of publications between the Smithsonian and learned societies of other countries. What other countries do you service in that exchange?

Mr. EUELL. This has recently been changed to Mr. Ault's office. Could I refer to him to answer that question?

Mr. YATES. Mr. Ault, what other countries do you work with in connection with your exchange?

Mr. AULT. Virtually every country in the world. Mr. Yates.

In the last year we exchanged documents with over 100 countries. We have a list of 50 countries under the Brussels Convention of 1886 to which the United States was a signatory.

Last year, for example, we exchanged some 246,000 pounds of material with these various countries.

#### DIVISION OF PERFORMING ARTS

Mr. YATES. With respect to the Division of Performing Arts, you request \$402,000 an increase of \$23,000. Why do you need that, Mr. Euell?

Mr. EUELL. We are asking for one additional position that we feel we need very badly. All of this, I might add, is in keeping with the attempt to stay as close as possible to the current trend of austerity in budgeting.

We actually could use more positions than we are asking for. I must say that for the record. But this position will allow us to unify all of the many programs that the Division for Performing Arts does. We have the Folklife Festival, live performances—we work closely with our museums in presenting live performances that reflect the collections.

We need an education person to unify these programs and to get these materials collated and out to the public and to the schools. We have not done very well in this area up to now, but we can if we have that one person.

#### JAZZ RECORD

With relationship to the jazz classics, because of Martin Williams, our jazz historian and having been a former jazz musician myself, it was quite a feat to get 17 record companies to agree to let us use their tapes to pull together, for the first time in history, a more comprehensive story of jazz development. The conditions for development of this album were that it would not be distributed commercially but would be solely distributed to educational institutions and through our museum shops. You cannot buy this record at any record store. We have sold thousands of albums and W. W. Norton is handling the distribution for us in thousands of schools across the country. Again,



with this kind of material, this education specialist could do a lot more in developing education pamphlets and that type of thing.

MR. YATES. You work with the endowment for the arts in this respect?

MR. EUELL. They have asked us to do some work for them. We are trying to organize an oral history program on the subject of jazz. The endowment had started it some years ago but it was sort of disorganized. They asked us to set up a system so it would be better organized. We do get small grants from them for performances from time to time.

#### AMERICAN COLLEGE THEATER FESTIVAL

MR. YATES. You plan to curtail or transfer to other organizations the American College Theatre Festival, the Indian awareness program, and some other of the Mall-based programs. Can you explain for each of these programs why this decision has been made?

Why are you getting rid of them?

MR. EUELL. We are not getting rid of them. We are still very much involved with Indian programs. The Museum of Natural History anthropologists are using Indian people to work on the Encyclopedia of North American Indians. Dr. Perrot has a program now involving training for Indian people. The Division of Performing Arts still has two Indian people on the staff who are organizing that part of the Folklife Festival.

MR. YATES. What will happen to the College Theater Festival?

MR. EUELL. It is going along very well. The Smithsonian endorses the College Festival in principle. We have tried to suggest that we wanted to support the idea of a college festival, that is how we got into it, but as the program progressed they raised a great amount of their own money. The Kennedy Center plays a large role and we play no role whatsoever. I think we could better direct that money to programs where we have more input. The jazz program could be embellished, for example, the American folk music programs could in general be further developed.

MR. RIPLEY. You recall before the Kennedy Center came in to existence, it was discussed at several of the meetings of the committee what we could do to get the performing arts more into focus. That was really the initiative which got us started. Once the Center was in shape to participate with us, they took over the College Theater Festival. In effect, we have been gradually pulling out our support as funds have been sent in from private sources.

#### TELEVISION EFFORTS

MR. YATES. We now turn to the Office of Public Affairs. You are requesting \$317,000 for this office.

You currently have an agreement with the Wolper Organization, Inc., for television program development. As I understand this contract gives the Wolper group exclusive rights to certain Smithsonian commercial television activity.

MR. EUELL. These are not exclusive rights. There is contained in the contract an understanding that we will not produce any prime time national commercial shows with the Smithsonian name in the title; but we are involved in public television and participate in all kinds of tele-



vision segments of newsworthy and educational events as well as in children's programing, and we encourage and welcome film companies from this country as well as from Europe and Japan to film in the Smithsonian. The "exclusivity" is just for programmatic reasons, we do not want to duplicate programs. We protect that.

Mr. YATES. Could you arrange to have a show like, *The Sky Is The Limit*, or some other such show without going through Wolper?

Mr. EUELL. If we had not agreed previously with Wolper to do those shows.

Mr. YATES. That is why I suggested it was an exclusive agreement.

Mr. RIPLEY. It depends on how many shows we might want to do on a certain subject. We had an exhaustive study of this including outside legal advice, Mr. Chairman. The contract specifies we put up no money for this. Actually, the producer must find the money through an advertising agency.

Mr. YATES. Do you share the proceeds?

Mr. RIPLEY. We receive a small royalty and we do get an in-house television expert who is added to our staff from these private funds. Smithsonian has never had the financial means to develop expertise in television. Our Regents have thought about this for years and felt we should be in this medium. We have had various contracts with both public and commercial broadcasting in the past for short-range things but we have never been able to develop any in-house capability.

Yet, when the Museum of History and Technology was built there was a large room which was supposed to be used as a television studio. I would like very much to have continuous video tape performances in connection with some of the exhibits. One of the theories on which we adopted this contract was that we would be able to develop some in-house expertise. We would use the royalties or any facilities they gave in the way of people as a way of developing this capability. We have no expectation of developing any long-range federally supported program. But in connection with the fact that television is here apparently to stay and is considered to be an enormous educational vehicle, I feel we should not neglect experimenting with it and this is the only way we can afford to experiment with it.

Mr. YATES. Do you know how much Wolper makes and—

Mr. EUELL. Wolper is the producer and Du Pont is the sponsor. We decide on program subjects and cost estimates will be made by the producers. Generally, a straight documentary is costed out at a certain level, with docu-dramas costing more because of additional production elements. I would say the shows average \$300,000 per program, of which we get a certain royalty.

Mr. RIPLEY. Would you say that would be a profit?

Mr. EUELL. Not all of that is profit for David Wolper.

Mr. RIPLEY. It apparently costs him an average of \$300,000 to put on a show.

Mr. YATES. It would be interesting to find out how much money he makes on it or whether he loses on it.

Mr. EUELL. We do have the right to review his books. We did want to wait until the first series was over.

Mr. RIPLEY. We have just completed the first season's three shows as called for in the contract.

## TELEVISION FOR ARCHIVE PURPOSES

Mr. YATES. Why is it not a good idea to make television recordings for your archives or for your files of the exhibits put on by the Smithsonian?

Mr. RIPLEY. It is a superb idea but we have never had the capability to do it. In one of the art exhibits we had recordings made by some of the small video packs; this was a show held in connection with art produced in prisons. That is the only case I can recall where there was a similar attempt by the museum to do this sort of thing. It would be a splendid idea, but then, we would have to have the equipment and the video people to do it, which we have never had the funds for.

There is a history in my years of trying to get in touch with ABC, NBC, and public broadcasting media and always getting turned down.

Mr. YATES. What are we talking about in terms of costs?

Mr. RIPLEY. Two or three persons; maybe a major person in the \$30,000 range and a couple of assistants.

Mr. YATES. For example, one of the shows was on the Steuben Glass exhibit. What would the cost be? Something like \$300,000?

Mr. RIPLEY. No, but it could cost \$30,000 or more.

Mr. EUELL. We have a staff which is being built with the kind of people who have the discipline to make the determinations when any one of the museum directors wants to do something in this medium. He can be advised of the best way in which it can be done. For archival purposes this is absolutely essential. One of the reasons why we agreed to go into this present phase of commercial television was to begin to tool up and build those disciplines toward this professional capability. It is a short-range process in terms of commercial television; therefore we are already planning other components and additional utilization in terms of telecommunications in general.

## SMITHSONIAN INSTITUTION LIBRARIES

Mr. YATES. You are requesting a program increase of \$238,000 and four positions for the Smithsonian Institution Libraries. What are your needs in this regard?

Mr. RIPLEY. Mr. Perrot, would you speak to that?

Mr. PERROT. Integral to the Smithsonian's being are its libraries, they are keys to our entire program of research, interpretation and dissemination of knowledge. The Smithsonian now has some 1 million volumes distributed among eight large libraries and many departmental libraries. The growth of the literature at the present time has been described as explosive. Our staff has not been able to keep up with this growth and the library has not been able to maintain the commanding position it should have. Immediate priorities include accelerating the pace of conservation, perfecting the computerized cataloging procedures which have already resulted in considerable economies, as well as accelerating the rate in the cataloging of the National Air and Space Museum library, so that it will be ready when the Museum opens. The rapid increase in the cost of books due to inflation is making it impossible for the library to keep up without an increase in the book budget. This amounts to some \$60,000. Might I add that though the total proposed for the acquisition budget is around \$260,000, we feel it should be in the area of \$400,000 a year.

Mr. YATES. Why are you not asking for that amount?

Mr. PERROT. Mr. Chairman, we are cognizant that we are part of a total family and that this family has priorities which are varied in nature. We felt we could not now ask for more than we did.

Mr. RIPLEY. We asked for \$430,000 this year.

Mr. YATES. From OMB?

Mr. RIPLEY. Yes; and we were allotted \$238,000.

#### TRAVELING EXHIBITION SERVICE

Mr. YATES. We talked about SITES program.

Why do you send your exhibits to States that have museums and none to States which do not? For example, I see you are sending 59 exhibits to New York and only three to Utah.

Mr. RIPLEY. We advertise our exhibitions through mailing lists and regular updates. We cannot force museums to borrow our cultural exhibits.

Mr. YATES. In other words, New York wanted to see your exhibition and Utah did not?

Mr. MCKAY. What does it cost to get an exhibit?

Mr. RIPLEY. There is a transportation fee, and if the costs are excessive they are prorated among the borrowers. So if you are in Alaska, let us say, it is not necessarily going to cost you the actual amount it would cost to transport it.

Mr. MCKAY. How much would be the difference? It would not cost the same as it would to New York, would it?

Mr. BROOKS. We divide the total travel cost by the number of bookings.

Mr. YATES. Some of the exhibits are very interesting. Lion rugs from Fars, what is that?

Mr. RIPLEY. Iran.

Mr. PERROT. Fars is a province in Persia.

Mr. YATES. Very good.

Maybe we can get more to Utah.

#### VISITOR STATISTICS

Mr. MCKAY. You were giving some figures earlier as to visitors to the Washington area and I think you said that 56 percent come from outside the Washington metropolitan area. Do you have any breakdown as to how many come from the Far West.

Mr. BLITZER. We do not have that information. Many of our museums plan more sophisticated visitor surveys.

Mr. RIPLEY. At the zoo, the license plates were checked. Also, we did a spot check in the museum by State.

Mr. MCKAY. I am just curious. Although you get 56 percent outside the Metropolitan Washington area, you get less and less the farther west you go.

Mr. BROOKS. When we did that, we found that was not the case to a marked degree. The representation outside the Washington area was roughly proportional to the population of the State. Not as many came from the Midwestern States but there was not a great decline.

Mr. RIPLEY. Really, if they are coming, they are going to come.

Mr. YATES. I tend to sympathize with Mr. McKay. Our impressions were brought out in the examinations of the National Endowments. There is a controversy as to whether their grants should go to exhibition centers such as New York City or whether the funds should be used to disseminate the performing arts or visual arts throughout the country. With the SITES program I felt it might be better to go throughout the country in the same way but as Mr. Perrot says, it is up to the States to determine whether they want to see these exhibits.

Mr. MCKAY. I think the Chairman makes a good point. Here is California, they have 23 of them.

Mr. YATES. Texas, 39; New York received the most. So I think if the people of Utah want it, it is available.

Mr. PERROT. I think it also would depend on the museum tradition of the State. Utah at this moment is developing new museums and there is considerable movement going on there. Last fall there was a meeting of the Western Regional Conference of the American Association of Museums, in Salt Lake City, at which Mr. Brooks spoke. So, if there is development, and I hope there will be, I expect that the demand on SITES will increase. It may be noted that the directory of the American Association of Museums lists 39 museum related organizations in Utah versus 419 in New York State.

Mr. MCKAY. As the chairman indicates, we need to build more than just centers. If we are going to develop all our people in art and thought, somehow they have to know what they can develop without moving to metropolitan areas such as New York, but can get this within their own jurisdictions.

Mr. RIPLEY. You might be interested in knowing the number of subscribers of the Smithsonian within your own constituency. We have found distributions right across the 50 States.

Mr. YATES. Do we know?

Mr. RIPLEY. We can pull their names; they are all on tape. I know these people are getting the message.

#### NATIONAL MUSEUM ACT

Mr. YATES. Let us talk about the condition of the museums and the National Museum Act.

You are requesting \$767,000, a program reduction of \$37,000 for the National Museum Act. The authorization for this program is \$1 million. Why are you requesting a reduction in view of the needs of the museums of this Nation?

Mr. PERROT. Basically the moneys expended on behalf of the museums throughout the country will be virtually the same in fiscal 1976 as in fiscal 1975. Various administrative economics are making this possible. It should be noted that in fiscal 1974, the act was funded to the amount of \$900,000 but under the terms of the authorization then in effect, \$100,000 each went to the National Endowments for the Arts and Humanities. So, basically, we have had an increase of \$100,000 since fiscal year year 1974.

Mr. YATES. I am not sure I understand that point.

Are you saying \$200,000 or your money went to the Endowments?

Mr. RIPLEY. Yes. We were required to transfer the Endowments \$100,000 each by the legislation then in effect.



Mr. YATES. Each year?

Mr. RIPLEY. Yes.

Mr. YATES. Are you still required?

Mr. RIPLEY. No.

Mr. YATES. Then, you should be asking for more money.

Mr. RIPLEY. Mr. Perrot has the explanation.

Mr. PERROT. The same reply applies to this as to previous comments.

Mr. BROOKS. We asked OMB for an additional \$75,000; within our allowance, this had to be adjusted to a reduction of \$37,000.

Mr. YATES. Let us find out what you are doing. Who have you given grants to and how much?

Mr. PERROT. In fiscal year 1975, we had an appropriation of approximately \$802,000. During the year we received 141 applications, we funded 56 grants totaling \$751,868, of which, \$212,568 were conservation related. Under the terms of the reauthorization of the act last year, \$200,000 was to be spent on conservation matters.

The range of the grants extended from \$485 to \$56,874. The average grant amounted to \$13,426. If you would like, I could provide a breakdown of the categories in which these grants were given, it included travel grants, a stipend support program for graduate students in various aspects of museum management, seminars and workshops conducted in cooperation with professional organizations, such as the American Association of Museums and others, as well as a professional assistance program and support of special studies. The largest grant this year was for \$56,874.

Mr. YATES. Who was that to?

Mr. PERROT. The National Conservation Advisory Council.

Mr. YATES. How much of the budget is allocated to the National Conservation Advisory Council?

Mr. PERROT. Approximately \$57,000 in fiscal year 1975. The status of the findings will determine future allocations.

Mr. YATES. What do they do?

Mr. PERROT. They were created, Mr. Chairman, to assess the country's need in conservation primarily in personnel, research and funding and to provide a kind of national guideline which could be presented to foundations, the Congress, and research organizations, in the hope that more responsible mechanisms could be developed to define and meet national needs.

Mr. YATES. How many meetings did they hold last year?

Mr. PERROT. Four meetings, and a fairly large number of committee meetings. I will be glad to submit that for the record.

Mr. YATES. Will you submit the names of the persons on that committee for the record?

Mr. PERROT. Yes.

[The information follows:]

#### NATIONAL CONSERVATION ADVISORY COUNCIL

##### INSTITUTIONAL MEMBERS

Advisory Council on Historic Preservation—Designee: Anne Webster Smith.  
Alternate: Anne Grimmer.

American Association of Museums—Designee: Robert Damm.

American Association for State and Local History—Designee: Edward R. Gilbert.



American Institute of Architects—Designee: Nicholas A. Pappas.

American Institute for Conservation—Designee: Clements Robertson, Alternate: Kay Silberfeld.

Architect of the Capitol—Designee: George White, Alternates: Mario E. Campioli, and Elliot Carroll.

Cooperstown Graduate Programs—Designee: Sheldon Keck, Alternates: Caroline Keck, and F. Christopher Tabk.

Fogg Art Museum—Designee: Arthur Beale, Alternates: Marjorie Cohn, and Mary Lou White.

Intermuseum Conservation Association—Designee: Marigene H. Butler, Alternates: Richard Spear, and James Wood.

Library of Congress—Designee: Frazer G. Poole, Alternates: Peter Waters, and John C. Williams.

National Archives—Designee: James L. Gear, Alternates: Frank G. Burke, and Albert Meisel.

National Bureau of Standards—Designee: John D. Hoffman, Alternates: Harry C. Burnett, and William K. Wilson.

National Gallery of Art—Designee: Charles Parkhurst, Alternates: Victor C. B. Covey, and Robert L. Feller.

National Park Service—Designee: Harold Peterson, Alternates: Art Allen, and W. Brown Morton III.

National Trust for Historic Preservation—Designee: James C. Massey, Alternate: Letitia Galbraith.

Newberry Library—Designee: Paul N. Banks, Alternate: Joel L. Samuels.

New York University—Institute of Fine Arts—Designee: Lawrence Majewski, Alternate: Norbert S. Baer.

Smithsonian Institution—Designee: Robert M. Organ, Alternate: William T. Chase.

Winterthur Museum—Designee: Charles van Ravenswaay, Alternates: Charles F. Hummel, and George J. Reilly.

Washington Region Conservation Guild—Designee: Bruce Etchison, Alternates: Robert Scott Wiles, and Judith Webster.

National Endowment for the Arts—(non voting)—Designee: John Spencer.

National Endowment for the Humanities (non voting)—Designee: Paula Degen, Alternates: Alexander Lacey, and Irene Burnham.

#### COUNCIL OFFICERS AND EXECUTIVE COMMITTEE

Chairman: Edward R. Gilbert, chief conservator, Greenfield Village and Henry Ford Museum.

Vice Chairman: Charles van Ravenswaay, director, Henry Francis du Pont Winterthur Museum.

Executive Secretary: Gretchen Gayle, program officer, Office of Academic Studies, Smithsonian Institution.

Executive Committee: Norbert S. Baer (ex-officio), scientist, Conservation Center, Institute of Fine Arts; Paul Banks (ex-officio), chief conservator, the Newberry Library; Marigene Butler (elected), director, Intermuseum Conservation Association; Robert L. Feller (elected), senior fellow, National Gallery of Art research project, Carnegie-Mellon University; and Sheldon Keck (elected), director, Conservation of Historic and Artistic Works, Cooperstown graduate programs.

#### COUNCIL COMMITTEES

Bylaws Committee: William T. Chase (chairman), Freer Gallery of Art; Harold L. Peterson, National Park Service; Charles van Ravenswaay, Henry Francis du Pont Winterthur Museum; and Peter Powers (adviser), Smithsonian Institution.

Education and Training Committee: Norbert S. Baer (chairman), Conservation Center, Institute of Fine Arts; Paul Banks, the Newberry Library; Victor Covey, National Gallery of Art; Charles F. Hummel, Henry Francis du Pont Winterthur Museum; Sheldon Keck, Cooperstown graduate programs; Arthur Beale, Fogg Art Museum; Richard Buck; Robert M. Organ, Smithsonian Institution; Harold L. Peterson, National Park Service; and Frazer G. Poole, Library of Congress.

Library and Archives Study Committee: Paul Banks (chairman), the Newberry Library; Norbert Baer, Conservation Center, Institute of Fine Arts; George Cunha, New England Document Conservation Center; Philip Knachel, Folger

Shakespeare Library; Philip Mason, Archives of Labor History and Urban Affairs, Wayne State University; Frazer Poole, Library of Congress; Peter Waters, Library of Congress; and Gordon Williams, Center for Research Libraries.

Membership Committee: Peter Waters (chairman), Library of Congress; Marigene Butler, Intermuseum Conservation Association; Robert L. Feller, National Gallery of Art Research Project, Carnegie-Mellon University; James C. Massey, National Trust for Historic Preservation; and Charles Parkhurst, National Gallery of Art.

Regional Centers Study Committee: Marigene Butler (chairman), Intermuseum Conservation Association; George Cunha, New England Document Conservation Center; Caroline Keck, Cooperstown Graduate Programs; Lawrence Majewski, Conservation Center, Institute of Fine Arts; and Clements L. Robertson, City Art Museum of St. Louis.

Research and Publications Committee: Robert Feller (chairman), National Gallery of Art Research Project, Carnegie-Mellon University; William T. Chase, Freer Gallery of Art; George J. Reilly, Henry Francis du Pont Winterthur Museum; Edward V. Sayre, Brookhaven National Laboratory; Norman Weiss, Society for the Preservation of New England Antiquities; John C. Williams, Library of Congress; and William K. Wilson, National Bureau of Standards.

#### MEETINGS OF THE NATIONAL CONSERVATION ADVISORY COUNCIL FISCAL YEAR 1974

Council meetings: November 19, 1973—Washington, D.C. and March 25, 1974—Washington, D.C.

Executive committee meetings: March 25, 1974—Washington, D.C. and May 30, 1974—Cooperstown, N.Y.

Education and training committee: May 31, 1974—Cooperstown, N.Y.

Regional centers committee: March 24, 1974—Washington, D.C. and May 31, 1974—Cooperstown, N.Y.

#### AMERICAN REVOLUTION BICENTENNIAL PROGRAM

Mr. YATES. Now we turn to the American Revolution Bicentennial program.

Mr. RIPLEY. Mrs. Hamilton is present.

Mr. YATES. Mrs. Hamilton. I think you have been doing very good work, by and large on the Bicentennial

What you propose to do is contained in the book, the American Experience which bears the date January 1975. I might say that it is a very attractive booklet indicating a great deal of preparation and thought. It is well planned. You have already expended \$193,000 for administration and coordination. You request an increase of \$84,000 for the next fiscal year, which includes necessary pay increases.

Mrs. HAMILTON. This would be distributed over all the programs. The total for support is \$763,000. This includes protection personnel, 84 temporary guards and sophisticated visitor count equipment for crowd control among our buildings and galleries, a telephone operator, nurse, animal keepers, and personnel for our visitor centers, as well as printed information and mall signs. Then, there are our general administration costs.

Mr. YATES. You say that a great deal of your travel increase is related to the festival of American folklife. Why is this needed?

Mrs. HAMILTON. Most or all of the participants are not professional performers, and they come from all over the country. They are involved in other jobs. We pay for their transportation and provide them with a very small subsistence during their stay in Washington.

Mr. YATES. Where do they stay?

Mr. EUCELL. They stay at Marymount College and Catholic University. It will be a combination of places this year as we are enlarging the festival.

AMERICAN FOLK LIFE CENTER

Mr. YATES. I have the impression that the Festival has been a tremendous success. What is your impression of the proposal for an American Folk Life Center in the Library of Congress? Would you like to be in charge of that?

Mr. RIPLEY. No, sir, it is a different ball of wax, if I may use the phrase. There is a distinction between folk life as performed which is the kind we encourage, and the sort of folk life traditions which are librarylike in terms of oral and other history.

Mr. YATES. Do you not have that in your collection?

Mr. RIPLEY. We have some of it, but there is a kind of division between the classical-oriented folk life tradition and the sort we put on for performances. We found as soon as we got involved in discussions of that bill that there were strongly divergent issues involved. We prefer not to be directly involved. The Library of Congress is very keen to go ahead and do this, and we would be absolutely delighted to have them do so. We feel they are parallel tracks not overlapping, and the definition of the folk life we encourage and the kinds of folk life the library will encourage are entirely different.

It is clear from the time in which I have participated, that there are two rather divergent schools, one the teaching types strongly sociological and traditional, and the one we are involved in, in the Festival.

Mr. EUCELL. Ours would be the Festival; the other would be more classic and formalized putting us in the position of becoming a granting agency. We are more involved in the presentation of folk life expression.

SUMMER OF 1976

Mr. YATES. I notice you want \$4,256,000 for your Bicentennial programs. Is that for the 5-month peak period?

Mr. RIPLEY. That is for the entire Bicentennial program which includes the Folklife Festival.

Mrs. HAMILTON. Some of the exhibitions will be up approximately from April to September or October. Some are permanent exhibitions and will be up for some years to come.

Mr. RIPLEY. It is a multidisciplinary program involving the whole requested \$4 million which as you know, we have defended ever since being encouraged by this committee, and we will gradually terminate positions on the basis they were temporary for the peak year.

Mr. YATES. Mr. McKay.

Mr. MCKAY. Anticipating hiring on a temporary basis, do you feel you can get the caliber person you need for these positions?

Mr. RIPLEY. Yes. Many are anxious to participate; many are college students.

Mr. MCKAY. You believe you can get all the expert people you will need?

Mr. RIPLEY. Yes.

Mr. YATES. You request \$180,000 for a program called The Benefits of Flight.

Mr. BROOKS. This is the final funding for that project for the National Air and Space Museum.

## ACADEMIC AND EDUCATIONAL PROGRAMS

Mr. YATES. Under the academic and educational programs, how much money is involved in the average fellowships?

Mr. BLITZER. I can give you gross figures. The sum of \$473,000 goes to the academic studies portion of this.

Mr. YATES. This is practically the whole universe of arts and sciences.

Mr. BLITZER. You will see on page 84 what we have done.

Mr. YATES. How do you find your applicants?

Mr. BLITZER. We publish a catalog called Smithsonian Research Opportunities and disseminate it to schools.

Mr. YATES. How many applicants did you have last year?

Mr. BLITZER. I cannot tell you.

Mr. YATES. Will you place that information in the record, please?

Mr. BLITZER. Certainly.

[The information follows:]

## NUMBER OF STUDENTS APPLYING IN FISCAL YEAR 1974 FOR ACADEMIC APPOINTMENTS

(1) Fellowship program for Ph. D. candidates—57 applications total (22 students appointed).

(2) Postdoctoral fellowship program—112 applications total (23 students appointed).

For the two programs listed above, 792 application forms were mailed to individuals and 169 completed applications were submitted. The application instructions discouraged individuals from applying to the program unless they felt that they would have a strong chance of receiving an award.

(3) Undergraduate and first- and second-year graduate students—83 applications total (32 students appointed).

## AVERAGE STUDENT STIPENDS

Ph. D. candidates receive an average stipend of \$5,000. Postdoctoral fellows receive an average stipend of \$10,000. First- and second-year graduate students receive a \$1,000 stipend. Undergraduate students receive no financial support.

## SELECTION OF FELLOWSHIPS

Mr. YATES. Who determines who receives these awards?

Mr. BLITZER. We have an internal committee which meets and considers these.

Mr. YATES. You have only one committee to do that?

Mr. BLITZER. Yes.

Mr. YATES. It must be composed of universal people.

Mr. BLITZER. We have a very good staff but, yes, it is a broad committee.

Mr. YATES. What procedure do you go through? You say it goes through your committee but apparently, it goes through your staff first before there is an ultimate decision.

Mr. BLITZER. We would not want anybody who is not going to work well with the staff. If no one wants to work with a particular person, if we have no one in that field, then obviously, we would not take that person.

Mr. RIPLEY. The catalog describes all the curators and their subjects. So we publish this list of all the curators and other professional staff and their scholarly research so the students can identify the subject they are interested in.



Mr. BLITZER. One of the happiest ones a few years ago was an American historian who wanted to write a history of zoos. She worked with one of our historians and very closely with Dr. Reed.

Mr. RIPLEY. From that history we have developed a traveling exhibition.

#### RESEARCH AWARDS

Mr. YATES. You are requesting \$450,000 for the Smithsonian research awards program.

I am kind of interested in a paragraph that appears in the justifications which says:

Prior to fiscal year 1966, the Smithsonian received funds from the National Science Foundation (NSF) for special research projects of individual staff members. In 1964, the Congress prohibited the NSF from making grants for scientific research to other Government agencies. The NSF instituted a further limitation that it would no longer make grants to any agency or institution receiving direct Federal appropriations. The research awards program was begun in fiscal year 1966 by an appropriation of \$350,000 to the Smithsonian Institution for the purpose of financing new or continuing research projects formerly eligible for support from NSF.

Do these research grants go to your staff members?

Mr. RIPLEY. Yes, sir, that is the purpose of it. This is a replacement fund which the Smithsonian administers again with an ad hoc outside committee procedure of the same sort as the NSF itself.

Actually, the date was 1964 when the then chairman of the Independent Offices Appropriation Subcommittee of the House—not the Interior Committee—made a statement that he felt that it was unfair for NSF to give any awards to an organization like the Smithsonian, which also had a major part of its budget coming from appropriated funds. This was interpreted very literally within the NSF, who then pronounced a kind of stop order on the awards which prior to that time had been a major source of research support to our scholars in the same way that they would be to a university staff or faculty.

It was a crippling blow at the time because it tended greatly to discourage scientists wishing to come on to the Smithsonian staff.

Mr. YATES. Do you have "scholars" on your staff?

Mr. RIPLEY. We have people who work in research fields, for example, in natural history such as Dr. Kier, who was here yesterday, who is a distinguished paleobiologist and who could easily get an equivalent post as a professor in a university or as a dean.

Mr. YATES. Is he qualified for one of these awards?

Mr. RIPLEY. If he has a particular research project he writes it up in the same way that he would write as a scholar in a university, a proposal to the NSF. If that goes through our committees and is approved in the same manner as the NSF would approve it, then he qualifies.

Mr. YATES. Does that mean that he gets both the salary and an award?

Mr. RIPLEY. In every case the salary is paid from the bureau allotments. The research award is only for Smithsonian scholars and scientists and is designed to supplement research needs, certain kinds of assistance, travel, curatorial aides, equipment in certain cases, particularly with mineralogists and geologists. Then it is absolutely implicit in such a research proposal that there will be publication of the results.



I may say this of course represents approximately a third of the kind of money which we would have to award if we had the NSF sort of budget.

Mr. YATES. Yes. How much is represented by an individual award?

Mr. RIPLEY. These vary from a few hundred dollars for a small piece of equipment or something of this sort, which is not currently in the museum. The average award is about \$12,000 per year.

Often the research award he has requested is for 2 years running, but we are not able to commit the funds on account of our annual appropriation.

#### OFFICE OF THE GENERAL COUNSEL

Mr. YATES. How many lawyers do you have in the Office of General Counsel?

Mr. RIPLEY. We have at present 11 positions of which seven are attorneys. The others are assistants or secretarial help.

Mr. YATES. How much money do you pay during a year for outside legal advice?

Mr. RIPLEY. I do not have that figure. Do you have it, Mr. Brooks?

Mr. BROOKS. I can supply it for the record.

[The information follows:]

#### COST OF OUTSIDE LEGAL ADVICE

In fiscal year 1973, \$857 was expended from appropriated funds. In fiscal year 1974, there were no such expenditures. So far, in fiscal year 1975, \$6,843 has been expended and it is estimated that the total for this year will not exceed \$10,000.

#### USE OF DEPARTMENT OF JUSTICE

Mr. BROOKS. In general, I can say it fluctuates, many years it is zero. We do go outside for certain specific problems. We do not have any outside legal firms, for example, on retainer.

Mr. YATES. You are not represented in any way by the Attorney General's Office?

Mr. RIPLEY. We are from time to time, particularly in litigation.

Mr. YATES. Do you go to him for advice, for opinions, and so forth?

Mr. RIPLEY. Yes.

Mr. LONG. Is that the Attorney General or the Solicitor General?

Mr. RIPLEY. Attorney General.

Mr. YATES. The Solicitor General is a part of the Attorney General's Office. You may be thinking of the Solicitor of the Department of Interior, perhaps. He is their lawyer.

Mr. LONG. No, the Solicitor for the whole United States.

Mr. RIPLEY. The Solicitor General is really concerned with the courts, with the preparation of cases to go before the courts.

Mr. LONG. Yes, noncriminal cases.

Mr. BROOKS. We have contact with his office when appropriate, yes.

#### OFFICE OF THE TREASURER

Mr. YATES. Mr. Wheeler, you are requesting two additional positions for the Office of the Treasurer.

Mr. WHEELER. Yes, sir.

Mr. YATES. Why do you need them?

Mr. WHEELER. Well, you have heard of the many activities we have in the Smithsonian. They are getting no smaller, they are increasing all the time.

Mr. YATES. Yes, and all the fees that you get.

Mr. WHEELER. The activities are increasing also. We are doing many things to improve our efficiency, but we still need people to work on that aspect of it.

#### OFFICE OF PERSONNEL ADMINISTRATION

Mr. YATES. The Office of Personnel Administration, who is in charge of that, Mr. Ault?

Mr. AULT. Yes, sir.

Mr. YATES. Do you want any more people?

Mr. AULT. No, sir; we are asking for no additional positions.

Mr. YATES. I take it that means you do not need any more.

Mr. AULT. Not at this time, sir.

#### OFFICE OF AUDITS

Mr. YATES. Mr. Brooks, you request an increase of \$14,000 and one position for the Office of Audits.

Mr. BROOKS. Yes.

Mr. YATES. Do you have enough auditors so that you feel there is adequate coverage of income and expenditures of the Smithsonian?

Mr. BROOKS. I wish we could say that we have completely adequate coverage. That is one of the reasons why we are asking for the additional person in our Internal Audit Office.

We are now able to cover the activities of the institution on about a 7-year cycle. We would like to be able to reduce that to 5 years in terms of just being able to take a more frequent look at the total activities of the Smithsonian.

I think once we achieve this, we will have an adequate audit capability.

Mr. BLITZER. Could I interject one thing at this point?

There was some talk yesterday about the General Accounting Office and its audits. I thought it would be good to inform the committee of the results of one GAO audit that we do know about.

In May of 1974, a member of the Senate wrote to the General Accounting Office and asked the GAO to examine a number of legal and financial questions that arose from the construction, design, and operation of the Hirshhorn Museum and Sculpture Garden, which request received a lot of publicity and continues to.

On August 2, 1974, the Comptroller General sent a 12-page letter to the Senator, concluding:

In sum, we have examined the circumstances of the Hirshhorn Museum and Sculpture Garden gift to the Smithsonian Institution, with respect to the legal questions you have raised, and find no evidence that the transaction was illegally consummated in any particular.

Mr. YATES. Mr. McKay.

#### RESEARCH AT RHODE RIVER

Mr. MCKAY. Are the studies being conducted on the Rhode River and its watershed in the Chesapeake Bay Center for Environmental Studies of general usefulness, or are the benefits confined to the Rhode River?

Mr. CHALLINOR. The work underway on the Rhode River and its watershed will produce data applicable to other geographic areas and provide policy makers and regulatory agencies with a useful tool for assessing in advance the impact in terms of nonpoint source pollution that certain kinds of development will produce. For example, the data can be applied to fixing maximum levels of certain pollutants which the system can absorb without damaging shellfish production or making the water unfit for recreational use. Another phase of the study now underway will provide a basis for comparing levels of pollution caused by runoff from unsewered residential areas with that from sewer areas.

#### ENVIRONMENTAL PROGRAMS

Mr. MCKAY. It seems that many of the administrative offices of the Institution overlap in responsibility. For example, there were a number of offices in charge of some phase of environmental work. Has the Institution studied the possibility of consolidation or at least had a good management analysis?

Mr. CHALLINOR. I understand your question to mean that you are concerned that the offices or bureaus in the Smithsonian Institution dealing with the environment might overlap in administrative responsibility. Of our natural science research, 90 percent relates to the environment. This research is undertaken by five major science bureaus, the National Museum of Natural History, Smithsonian Tropical Research Institute, the Radiation Biology Laboratory, the Chesapeake Bay Center for Environmental Studies, and the National Zoological Park. The directors of all the science bureaus meet monthly with the Assistant Secretary for Science to discuss their programs and this mechanism is used in part to avoid overlap. Also, the Office of the Assistant Secretary for Science centrally administers multibureau environmental programs such as the environmental sciences program and the international environmental program and thereby avoids overlapping responsibility. In fiscal year 1974, we began a consolidation process of our environmental programs, and further consolidation is under study.

#### RESEARCH AT THE TROPICAL RESEARCH INSTITUTE

Mr. MCKAY. You ask for \$42,000 for work to analyze enzyme forms and structures to detect subtle differences in tropical fish of seemingly identical kind. Could you give a more complete justification?

Mr. CHALLINOR. One of the basic biological questions we are examining at the Smithsonian Tropical Research Institute is how so many kinds of animals can coexist in the tropics. For example, there are more breeding species of birds on 6 square miles of Barro Colo-

rado Island than in the entire State of New York. Obviously such a dense species packing requires fine tuning of organisms' adjustment to their environment. Electrophoretic techniques provides us with a powerful, modern tool in our attempts to understand the genetic differences of many of the related species in the tropics. We can examine fine scale differences between the haemoglobins, enzymes, and other complex molecules of otherwise undistinguishable organisms by using these techniques. We can also detect subtle responses to environmental changes, as well as phenomena such as influx of new species to the island.

#### LOANS TO PUBLIC OFFICES

Mr. MCKAY. About 1,700 works of the National Collection of Fine Arts are on loan to public offices in the Washington area. Under what authority are such loans made and to whom are the loans made?

Mr. BLITZER. The National Collection of Fine Arts loans pictures to the White House, the Capitol, and the Supreme Court. They also loan pictures to Cabinet officers, other high Government officials—for example, Counselors to the President—and to offices in the Smithsonian. These loans are made by authority of the director. Part of the policy of all art museums is to make loans. The number of loans to public offices is kept as low as possible and the policy is currently undergoing review.

#### DIRECT BENEFITS OUTSIDE WASHINGTON

Mr. MCKAY. As I review your nearly \$100 million budget, I notice that much of it goes for museums, projects, and research right here in Washington, on the eastern seaboard. Could you provide for the record how much of your budget directly benefits the Midwest and Western part of the United States?

Mr. PERROT. Direct benefits to the Midwest and Western parts of the United States come to about \$1.5 million. Of this total, \$1.3 million are expended in Detroit, Michigan; Mount Hopkins, Arizona; San Francisco, California; and Point Barro, Alaska. The balance is spent for programs in other locales in the Midwest and West.

#### OFFICE OF EQUAL OPPORTUNITY

Mr. YATES. In your Office of Equal Opportunity, what is meant by the upward mobility program?

Mr. AULT. This is a program established by the President to provide opportunities for persons within an agency to progress in their vocations or from their present job into a better job. There are many instances of this in an unofficial sense. We have enabled, for instance, some of elevator operators to become a part of our protection program. But these are unofficial. Officially these slots have to be made available for the specific purpose of training people for a job. The zoo has formally established itself as an operating part of this program with three additional people so we have a total of 15 slots currently available for our upward mobility program.



## PRINTING AND PHOTOGRAPHIC SERVICES

Mr. YATES. You have asked for an increase in the Office of Printing and Photographic Services. This is an important part of your program, is it not?

Mr. AULT. It is indeed, sir.

## INFORMATION SYSTEMS DIVISION

Mr. YATES. You request an increase of approximately \$26,000 for the Information Systems Division. How many additional people do you want?

Mr. AULT. We are asking for two additional positions, one mathematician and one computer specialist, to enable us to expand further our program of computer support. We did not mention yesterday the SELGEM system which we are proud of. This is something we have provided without charge to universities and other organizations, for example, to the Field Museum of Natural History in Chicago.

## OFFICE OF PROTECTION SERVICES

Mr. YATES. You want an increase of almost \$1,000,000 for the Office of Protection Services. Please place in the record the grade, title, and assignments proposed for the positions you request.

[The information follows:]

## DISTRIBUTION OF PROTECTION SERVICES POSITIONS FISCAL YEAR 1976 (534 POSITIONS)

1. Office of Protection Services (nine positions): Director, OPS, GS-15; Assistant Director, OPS, GS-14; Administrative Assistant, GS-12; Supply Technician,<sup>1</sup> GS-7; Supply Clerk,<sup>1</sup> GS-5; Secretary, GS-7; Administrative Clerk,<sup>1</sup> GS-6; Identification Clerk,<sup>1</sup> GS-5; and Clerk Typist,<sup>2</sup> GS-5.

2. Safety and Health Division (11 positions): Chief, Safety and Health, GS-13; Safety Management Officer, GS-13; Fire Safety Engineer, GS-13; Safety Specialist, GS-9; Safety Specialist trainee, GS-7; Secretary, GS-6; Fire Inspector (two), GS-7; RN (Natural History), GS-7; RN (History and Technology), GS-9; and RN (Hirshhorn), GS-7.

3. Systems Division<sup>3</sup> (seven positions): Chief, Systems Division, GS-12; Protection Systems Assistant, GS-7; Locksmith (three), WG-11; Systems Technician, WG-11; Secretary, GS-5.

4. Protection Division (507 positions):

(a) Headquarters (eight positions)—Chief, Protection Division, GS-13; Assistant Chief, GS-12; Inspector (two), GS-11; Training Instructor, GS-9; Training Instructor, GS-8; Secretary, GS-6; and Clerk Typist, GS-5.

(b) Alarm Control Center (seven positions)—Control Room Supervisor (three), GS-7; and Control Room Operator (four),<sup>2</sup> GS-6.

(c) Investigations Branch (seven positions)—Chief Investigator, GS-11; Detective (two), GS-6; Clerk Typist (two), GS-4; and Investigator (two).<sup>2</sup> GS-7.

(d) Canine Corps (six positions)<sup>4</sup>—Canine Supervisor, GS-6; and Canine Officer (five), GS-5.

(e) National Museum of Natural History (72 positions)—Police/Guard Supervisor, GS-9 (1); Police/Guard Supervisor, GS-7 (4); Police/Guard Supervisor, GS-6 (8); Police Officer/Guard, GS-5 (30); Police Officer/Guard, GS-4 (23); and Police Officer/Guard, GS-4 (6).<sup>2</sup>

<sup>1</sup> Transferred from Protection Division during fiscal year 1975.

<sup>2</sup> New position requested for fiscal year 1976.

<sup>3</sup> Transferred from Protection Division during fiscal year 1975, elevated to Division Status.

<sup>4</sup> These positions are used to supplement the regular protection forces in the Mall area facilities.



(f) National Museum of History and Technology (79 positions)—Police/Guard Supervisor, GS-9 (1); Police/Guard Supervisor, GS-7 (4); Police/Guard Supervisor, GS-6 (8); Police Officer/Guard, GS-5 (35); Police Officer/Guard, GS-4 (25); and Police Officer/Guard, GS-4 (6).<sup>2</sup>

(g) Fine Arts and Portrait Galleries Building (53 positions)—Police/Guard Supervisor, GS-9 (1); Police/Guard Supervisor, GS-7 (2); Police/Guard Supervisor, GS-6 (4); Police Officer/Guard, GS-5 (26); and Police Officer/Guard, GS-4 (20).

(h) Hirshhorn Museum and Sculpture Garden (66 positions)—Police/Guard Supervisor, GS-7 (2); Police/Guard Supervisor, GS-6 (4); Police Officer/Guard, GS-5 (34); and Police Officer/Guard, GS-4 (26).

(i) National Air and Space Museum (85 positions)—Police/Guard Supervisor, GS-9 (1); Police/Guard Supervisor, GS-7 (1); Police/Guard Supervisor, GS-7 (4);<sup>2</sup> Police/Guard Supervisor, GS-6 (4); Police/Guard Supervisor, GS-6 (3);<sup>2</sup> Police Officer/Guard, GS-5 (5); Police Officer/Guard, GS-5 (18);<sup>2</sup> Police Officer/Guard, GS-4 (19); Police Officer/Guard, GS-4 (29);<sup>2</sup> and Elec. Equip. Repairer, WG-10 (1).

(j) Arts and Industries Building (33 positions)—Police/Guard Supervisor, GS-9 (1); Police/Guard Supervisor, GS-7 (4); Police/Guard Supervisor, GS-6 (8); Police Officer/Guard, GS-5 (15); Police Officer/Guard, GS-4 (3); and Police Officer/Guard, GS-4 (2).<sup>2</sup>

(k) Freer Gallery of Art (17 positions)—Police/Guard Supervisor, GS-6 (1); Police Officer/Guard, GS-5 (10); and Police Officer/Guard, GS-4 (6).

(l) Smithsonian Building (8 positions)—Police Officer/Guard, GS-5 (8).

(m) Old Air and Space Building (2 positions)—Police Officer/Guard, GS-5 (2).

(n) Anacostia Museum (4 positions)—Police Officer/Guard, GS-5 (4).

(o) Renwick Gallery (15 positions)—Police/Guard Supervisor, GS-6 (1); Police Officer/Guard, GS-5 (9); and Police Officer/Guard, GS-4 (5).

(p) Facilities away from Mall (31 positions)—Police/Guard Supervisor, GS-7 (2); Police/Guard Supervisor, GS-6 (4); Police Officer/Guard, GS-5 (18); and Police Officer/Guard, GS-4 (7).

(q) National Museum of Design (14 positions)—Police/Guard Supervisor, GS-6 (1) and Police Officer/Guard, GS-5 (13).

Mr. YATES. You say you are moving toward full compliance with the Occupational Safety and Health Act. Are you not in compliance now?

Mr. AULT. We are not in compliance in the sense of accomplishing all we want to accomplish, Mr. Chairman. We are having our second annual visit this year by the OSHA Office; we were found to be generally in compliance last year.

Mr. YATES. Where are you deficient?

Mr. AULT. Principally in the area of health, particularly health facilities. We have only three minor health units and are reliant almost totally on other agencies, such as the Public Health Service for support in the area of major services.

Mr. RIPLEY. These are small units in three of the major buildings where there are staff nurses and a part-time doctor. It has been very difficult to service these and to get enough people, especially doctors, who are in such short supply everywhere.

#### OFFICE OF FACILITIES PLANNING AND ENGINEERING SERVICES

Mr. YATES. For the Office of Facilities Planning and Engineering, you are proposing a total request of approximately \$600,000. Does this include any additional people?

Mr. AULT. Yes; an additional planner designer and an estimator.

<sup>2</sup> New Position requested for fiscal year 1976.

## OFFICE OF PLANT SERVICES

Mr. YATES. With respect to the Office of Plant Services, you want an additional \$1,349,000 and 40 positions.

Mr. AULT. Twenty-five of these positions are for the National Air and Space Museum, primarily building engineers. Fifteen additional positions are for our craft and trades shops to provide continuing maintenance to our buildings and utility plants within those buildings. In addition, we are requesting \$538,000 for uncontrollable items which were covered in the discussion of utility increases. We have no control, of course, over those. We experienced significant increases in utilities costs this past year, almost 100 percent. Since coming to you, sir, with the request for a supplemental, we just received from GSA a notice advising that retroactive to February 1975, we will be assessed a 25 percent increase in steam, which represents another \$130,000 this year.

Mr. YATES. Is there any appellate court you can go to?

Mr. BROOKS. No, sir, I do not believe there is. In this budget, Mr. Chairman, that will result in another cost of \$300,000.

Mr. YATES. Have you asked for a justification or explanation of the increase?

Mr. AULT. The cost of coal has risen 197 percent since 1973 and they are passing that increase to us.

Mr. YATES. Mr. Ault, will you place in the record the grade, title and salaries for the new positions?

Mr. AULT. Yes.

[The information follows:]

## NEW POSITIONS FOR OFFICE OF PLANT SERVICES

Number of positions	Title	Grade	Annual salary (each position)
1	Mechanic	WG-11	\$12,480
14	do	WG-8	10,962
17	do	WG-5	9,443
1	Vehicle operator	WG-6	9,942
1	do	WG-7	10,462
1	Telephone operator	GS-5	8,500
2	Mail clerk	GS-4	7,596
1	Laborer	WG-5	9,443
2	do	WG-2	7,925

## IMPROVED MAINTENANCE SERVICES

Mr. YATES. You say a new maintenance services concept has been instituted. Please explain the new system.

Mr. AULT. This is to insure that we provide periodic preventive maintenance to the buildings and facilities on a regularized basis. Also, we have gone into a system of power management in an effort to reduce our costs of power. We have installed a small computer system which will enable us to reduce the peak loads which affect our utility rates.

## SALARIES AND EXPENSES TRANSITION PERIOD

Mr. YATES. You are requesting \$22,010,000 for the transition period. What were the calculations you made in developing this request?

Mr. BROOKS. This is somewhat more than 25 percent of our fiscal year 1976 request. The difference is essentially caused by the fact that the summer of 1976 is also going to be the period of our major Bicentennial events.

Mr. YATES. Are you going to initiate any new programs during the transition period?

Mr. BROOKS. No.

#### SCIENCE INFORMATION EXCHANGE

Mr. YATES. Please insert justification pages B-1 through B-7 in the record at this point.

[The pages follow:]

SMITHSONIAN SCIENCE INFORMATION EXCHANGE

1974 Actual.....	\$1,695,000
1975 Estimate.....	\$1,805,000 <sup>/1</sup>
1976 Estimate.....	\$1,875,000

The Smithsonian Science Information Exchange (SSIE) has served for more than 25 years as a national center for information on research in progress and now operates the largest and most modern information system of its kind in the world. The Exchange collects, indexes, stores, and retrieves information about ongoing research projects in all areas of basic and applied research in the life, physical, behavioral, and engineering sciences. This information is used by an increasing number of scientists, research managers, and administrators to keep abreast of current research, help avoid unwarranted duplication of effort, evaluate existing research activities, and plan new research programs.

SSIE's data base has grown steadily and the currently active file now averages some 190,000 projects. The Exchange adds and updates information on more than 110,000 projects each year. Project summaries are received on Federally supported research as well as on research supported by non-Federal organizations, such as private foundations, fund raising associations, state and local government, and private industry. Foreign research in areas of high national interest is also incorporated into the data base. Such information from non-Federal sources has proven to be extremely useful in the management of U.S. research currently being supported by the Federal government.

The Exchange not only serves its users directly, but furnishes data to a number of specialized information centers such as the Transportation Research Information Service, the National Clearinghouse for Smoking and Health, the Water Information Center, and the ERIC Clearinghouse for Social Science Education as well. These centers cover both ongoing and completed research in a wide range of subject areas. They reach an even wider total audience than does the Exchange through its direct user service program.

Information in the Exchange's data base is used also to prepare catalogues of ongoing work in specific areas, such as water resources, pesticides, health services, disaster assistance, marine sciences, and dental research. Catalogues of ongoing research are published and distributed by Federal agencies in increasing numbers and areas of interest (Table 1). They make information available to large users on a significantly broader scale than is possible in response to individual information requests made to the Exchange. Still, in FY 1975, the Exchange will provide well over a half million summaries of research in progress in response to specific requests, not including the information available to users from catalogues and the specialized information centers.

In addition to the more traditional uses of the SSIE system, the Exchange has recently been asked to work with policy makers in a number of Federal agencies to explore ways in which its resources might be more effectively applied to the information requirements of high priority national programs. One important product of this effort has been the designation of SSIE by the National Cancer Institute as a Current Cancer Research Project Analysis Center under the International Cancer Research Data Bank program. Another is the compilation of a directory of international energy research in progress, in support of a Department of State evaluation of alternatives for U.S. initiatives for international cooperation in energy R&D.

These output services, as well as the more routine information products which are regularly provided, are paid for by SSIE users. SSIE's Federal support provides for performance of the data analysis and storage operations necessary to make possible the rapid and efficient retrieval of information in response to the needs of the nation's

<sup>/1</sup> Includes requested pay supplemental appropriation of \$50,000.





research community. This support covers the efforts required to assure a steady flow of information into the Exchange, the registration and entry of data into SSIE's computerized data base, the development and maintenance of input processing systems, and the multi-disciplinary classification of research project information by scientists necessary for the Exchange to meet a broad range of demands for information services.

The effect of these demands on SSIE input operations can be most clearly expressed in terms of the ongoing research information requirements of programs of high national priority such as the National Cancer Plan and Project Independence. More comprehensive coverage, more timely data, and more rapid input processing are input improvements seen by administrators and program managers as necessary precursors to the more effective application of SSIE resources to the problems of program implementation and management.

In spite of agency support for the services sought, demands on SSIE input operations have increased. Input volume rose by 21 percent in FY 1974, and an additional 10-15 percent increase is being experienced in FY 1975. Preliminary projections for 1976 indicate a still further increase. Moreover, under Federal Revenue Sharing, more and more resources provided to state and local governments are being directed toward research programs which address problems local in scope but common in nature. Within these programs, the avoidance of unwarranted duplication of research and the sharing of information and expertise require the availability of comprehensive ongoing research information from a central source.

Within the resources it has had available, SSIE has been able to capitalize on new techniques for improving input into its data base and to make it as current for searching as possible. Development and implementation of a system of computer-assisted indexing is expected to reduce the time required for input processing and to free professional staff resources for conceptual indexing and improvement of the SSIE classification system. Conversion by large supporting agencies from hard copy to magnetic tape input has also relieved some of the registration backlog which has accumulated.

Further improvement is needed, however, in order to support more effectively programs of high national concern and to serve better the information needs of state and local governments. SSIE is seeking an increase in Federal support in FY 1976, which it has been able to hold to \$70,000 in spite of the impact of rapidly rising operating expenses, to improve selectively input and processing time in subject areas of critical concern and to expand its efforts to encourage and provide for new state and local input into the SSIE system. In the former case, funds will be applied toward further development and implementation of the SSIE machine-assisted indexing system. In the latter, SSIE will work with organizations such as the Council of State Governments, the National Conference of State Legislatures, and the National Governors' Conference to begin to develop mechanisms and procedures for collection, input, and delivery of ongoing research information.

The estimated budget for FY 1976 follows:

	<u>Total Cost of Operations</u>	<u>Federal Support Requested</u>	<u>User Support Expected</u>
Personnel	\$1,934,000	\$1,385,000	\$549,000
Rents (building, space, computer, etc.)	449,000	313,000	136,000
Printing	70,000	3,000	67,000
Services	121,000	42,000	79,000
Supplies	48,000	24,000	24,000
Equipment	3,000	-	3,000
Total	<u>\$2,625,000</u>	<u>\$1,767,000</u>	<u>\$858,000</u>
SI Services	150,000	108,000	42,000
Grand Total	<u>\$2,775,000</u>	<u>\$1,875,000</u>	<u>\$900,000</u>

SMITHSONIAN SCIENCE INFORMATION EXCHANGE

FY 1976 Estimate and July 1 - Sept. 30, 1976 Period

<u>Activity</u>	<u>FY 1976 Estimate</u>	<u>July 1 - Sept. 30, 1976 Estimate</u>
Science Information Exchange	\$1,875,000	\$500,000

## SMITHSONIAN INSTITUTION

## SCIENCE INFORMATION EXCHANGE

For necessary expenses of the Science Information Exchange, \$1,875,000  
~~\$1,755,000~~

For "Science Information Exchange" for the period  
July 1, 1976, through September 30, 1976, \$500,000.

(20 U.S.C. 41 et seq.; Department of the Interior and  
Related Agencies Appropriation Act, 1975.)

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**STANDARD FORM 300**  
July 1964, Bureau of the Budget  
Circular No. A-11, Revised.  
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SMITHSONIAN INSTITUTION  
SCIENCE INFORMATION EXCHANGE

PROGRAM AND FINANCING - TRANSITION PERIOD  
(in thousands of dollars)

Identification code	19 actual	19 estimate	19 estimate
32-50-0103-0-1-503	July 1 - Sept. 30, 1976		
<u>Program by activities:</u>			
10 Science Information Exchange (costs - obligations).....	500		
<u>Financing:</u>			
40 Budget authority (appropriation)	<u>500</u>		
<u>Relation of obligations to outlays:</u>			
71 Obligations incurred, net.....	500		
72 Obligated balance, start of period..	104		
74 Obligated balance, end of period....	- 139		
90 Outlays.....	<u>465</u>		

Justification for Transition Period

Science Information Exchange ..... \$500,000

Funds requested for the period July 1, 1976 - September 30, 1976, slightly more than 25 percent of the FY 1976 estimate reflecting rising prices for services and supplies, will sustain data acquisition and storage operations to maintain continuity and comprehensiveness of information on research projects in progress as a service to the research community.

## JUSTIFICATION OF INCREASE FOR SCIENCE INFORMATION EXCHANGE

Mr. YATES. An increase of \$70,000 is requested for the Science Information Exchange. What are your needs in this regard?

Mr. CHALLINOR. This is what it will cost us to put additional ongoing research information into the computer system. We anticipate an additional 10- or 15-percent increase in the current fiscal year. The input costs are covered by this Federal appropriation to the Smithsonian. The output cost is covered by the user. An agency or individual who requests information pays stated rates for the information received from the Smithsonian Science Information Exchange. So this increase is to cover the increased cost of getting more information into the system.

Mr. YATES. Is your working relationship with other Federal agencies such that you receive complete information on their research and development programs?

Mr. CHALLINOR. This is the ultimate goal. If we received 100 percent of the information available, we would have to probably triple our size. What happens now is an increasingly efficient cooperation from other agencies, for they are starting to hand us their completed tapes of their ongoing research. This tape unit can then be plugged into our computer. The Science Information Exchange has an Advisory Council which meets regularly. It consists of representatives of each of the Federal agencies producing research of the kind we record. We have certain problems with the Department of Defense. Much of their research is of a classified nature. Their unclassified research, however, does go into our system.

Mr. YATES. It is interesting that your computers cooperate with each other. Do you use the same computer?

Mr. CHALLINOR. We issue instruction or work out arrangements through this interagency advisory committee so that their tapes are compatible with our computers, they can either be translated automatically into ours or they put their information onto a tape compatible with our system. Any citizen or State agency doing research on which we have information can call up and get information. We produce on a regularly scheduled basis catalogs on research supported by the Federal Government in such fields as pesticides, water resources, and dental research. As the Secretary pointed out yesterday, we have been designated by the National Cancer Institute as a Current Cancer Research Analysis Center, to cover all the ongoing Federally supported research, and we also cover much privately supported research in cancer.

## INFORMATION EXCHANGE WITH FOREIGN GOVERNMENTS

Mr. YATES. What about foreign governments?

Mr. CHALLINOR. We have made four trips in the last 2 years abroad and are now able to furnish foreign governments with English language summaries of our studies. We are in the process now of signing contracts with the German equivalent of our organization also with the Italian, French and Japanese. We have even had a group of Russians come and visit the Center on M Street. We have a way to go with them mainly because of language problems. The Japanese and European countries can use English language summaries.



Mr. YATES. What percent of your total operating costs are met through user fees?

Mr. CHALLINOR. Less than half our operating costs are met through user fees.

Mr. YATES. Can you cover all your costs through this method?

Mr. CHALLINOR. No. It is unlikely we could cover the input cost. If we tried, it would make it so expensive that the user could not afford to buy information.

Mr. YATES. Mr. Regula.

Mr. REGULA. Mr. Challinor, I had a request from our local cancer society to provide them information as to what is happening in the Federal Government in this connection. My question is, what do you have assembled and would your institution be the best place for me to get this information or would it be too voluminous?

Mr. CHALLINOR. We could get you something quite voluminous—or something readable.

I would be happy to have the Exchange call your office and tell you exactly what they can furnish and see if it fits your demands. If you describe what you need this would be the most complete source. Then, it is a question of what would be usable for you. I will have them get in touch with your office to see what you will require.

Mr. REGULA. A corollary question would be whether the material you are assembling is being used on a pragmatic basis.

Mr. CHALLINOR. Very much. The major private research institutions, such as the Roscoe Jackson Memorial Lab, the Sloan-Kettering Cancer Foundation, make very good use of this. This is one reason why the National Cancer Institute has asked this facility to get it all together so they might have a clearer picture than was possible before.

Mr. REGULA. Would you risk the possibility of duplicating the activities of the Library of Congress?

Mr. CHALLINOR. I cannot see how it would duplicate what the Library of Congress does.

#### SPECIAL FOREIGN CURRENCY PROGRAM

Mr. YATES. We now turn to the special foreign currency program. We will insert justification pages C-1 to C-9 in the record at this point. [The pages follow:]

SMITHSONIAN INSTITUTION  
MUSEUM PROGRAMS AND RELATED RESEARCH  
(SPECIAL FOREIGN CURRENCY PROGRAM)

1974 Appropriation.....	\$4,500,000	
1975 Appropriation.....	\$2,000,000	Equivalent in Excess
1976 Estimate.....	\$2,000,000	Foreign Currencies

An appropriation of \$2,000,000 in foreign currencies determined by the Treasury Department to be in excess of the normal needs of the United States is requested for FY 1976. The appropriation will be used for two general purposes:

1) To continue a program of grants to United States institutions for field research in those countries where excess local currencies are available in the following general areas:

Obligations of Funds by Program Area  
(dollar equivalents)

	<u>FY 1974</u> <u>Obligations</u>	<u>FY 1975</u> <u>Estimated</u> <u>Obligations</u>	<u>FY 1976</u> <u>Estimated</u> <u>Obligations</u>
Archeology and Related Disciplines	\$1,331,000	\$ 772,000	\$ 313,000
Systematic and Environmental Biology	1,420,000	970,000	477,000
Astrophysics and Earth Sciences	86,000	115,000	267,000
Museum Programs	91,000	370,000	18,000
Grant Administration	102,000	83,000	37,000
Transfer to NSF--Science Information Program	<u>140,000</u>	<u>95,000</u>	<u>-</u>
Total	\$3,170,000	\$2,405,000	\$1,112,000

2) To make the third of four annual payments, each of \$1,000,000 equivalent in excess Egyptian pounds, which together would constitute the United States' contribution to the International Campaign to Save the Monuments of Nubia which are inundated by Nile River waters regulated by the Aswan Dam. These payments would support the preservation of the monuments on the Island of Philae in Egypt as proposed by President Kennedy in his letter to the Congress dated April 6, 1961.

THE PROGRAM OF GRANTS FOR FIELD RESEARCH

The purposes of the Special Foreign Currency Program (SFCP) are consonant with the Smithsonian Institution's stated objective, "... the increase and diffusion of knowledge among men." The Program receives project proposals from United States institutions and supports those which it judges most likely to contribute to that objective. To assist in the process of selection, the SFCP consults preeminent scholars who advise on the scientific quality of each project, on its feasibility, and on the qualifications of its proponents.

In addition to pursuing its primary objective, the Program through its research awards contributes to strengthening universities, museums, and other institutions of higher learning both in the United States and in the host countries. The research projects also promote transnational scientific and cultural cooperation among United States and foreign scientists and institutions with a resulting benefit to international relations that, although difficult to quantify, is undoubtedly real.

In FY 1974, participation in the SFCP foreign research projects involved about 370 American scientists from 46 United States institutions in 32 states. Over 45 additional scientific publications were reported, raising the Program's accumulative total to 507.

#### SIGNIFICANT PROJECTS

Utah State University, which has been the headquarters of United States Desert Biome Research under the International Biological Program is applying the plan developed in the course of studies of deserts in the United States to the encroaching desert fringe in southern Tunisia. Research is expected to provide insight into the pressing problem of loss of arable land. Of special scientific interest is the opportunity to measure the human role in this ecosystem, which is possible because of the unique isolation of the human population.

The American Institute of Indian Studies, with headquarters at the University of Chicago, has received grants in excess Indian rupees since 1968 to support the development of American scholarly competence in the study of India chiefly in the fields of archeology and related disciplines. The Institute is a consortium of 28 American colleges and universities in which teaching and research on India are a part of the academic program at the undergraduate or graduate levels. One hundred twenty-eight research awards have been made to the Institute.

The University of Michigan operates a world-renowned laboratory for the study of snails, some of which transmit human diseases like schistosomiasis which is considered with malaria and hookworm to be one of the greatest parasitic scourges of mankind. The initial step in learning to control the disease is to identify the snails and to understand their life cycles. To this end, the University has joined Ain Shams University in Cairo in establishing a regional laboratory where specimens collected all over Africa are brought for study.

#### SFCP IN RELATION TO THE U.S. TAXPAYER

The excess foreign currencies utilized by the SFCP were largely generated years ago by sales of United States agricultural commodities. Their use has no current effect on the U. S. taxpayer. They are not dollars but are local currencies that can be spent only for selected purposes in selected countries. It is also important to note that in some of these countries, such as India and Pakistan, the purchasing power of the local currency, and hence of the U.S.-owned funds, is falling with increasing rapidity every year. In those two countries, the currencies have shown a loss of about 50 percent since 1966, and half of this loss has occurred since 1973.

#### THIRD U.S. CONTRIBUTION TO THE SALVAGE OF THE MONUMENTS OF NUBIA

The Smithsonian is seeking a continued appropriation of \$1,000,000 equivalent in excess Egyptian pounds to help preserve the temples on the Island of Philae which have been inundated by Nile River waters regulated by the Aswan Dam. The contribution of \$1,000,000 would be the third of four equal annual appropriations which together would constitute the total United States' contribution to UNESCO's international campaign for the safeguarding of the Nubian Monuments.

The International Campaign was undertaken in 1960 at the request of the Governments of Egypt and Sudan. President John F. Kennedy said in his letter of April 6, 1961 to the Congress in response to Public Law 86-472 that he considered it "to be in the interest of the United States to assist in rescuing these historic remains of a former civilization from destruction...." Funds contributed are placed in a trust fund devoted exclusively to the study, salvage, and preservation of the archeological monuments of Nubia.

The total cost of the program to salvage the monuments on the Island of Philae will probably exceed \$16,000,000 in convertible and local currencies. As of July 12, 1974, some \$8,500,000 of this total had already been pledged by other nations. In addition, Egypt has undertaken to meet one-third of the project's total cost.

The salvage plan, adopted with the advice and concurrence of an American engineer, provides for a coffer dam to be erected around the Island of Philae to permit the lowering of the water for removal of the temples. They are to be erected on the nearby Island of Agilkia in a setting like the original one. There they will be higher and safe from further erosion by the river and accessible to all.

Work has progressed satisfactorily. The United States representative on the Group of Archeologists and Landscape Architects for Safeguarding the Philae Temples reports that in December 1974 the coffer dam had been completed, the water level lowered to the level necessary to permit the removal of the temples, the photogrammetry of the temples had been completed, and the archeology of the island and the temples had been started. The leveling of the surface of the Island of Agilkia is taking longer than had been anticipated primarily because of the unanticipated hardness of the stone which must be removed to prepare an appropriate site for the temples.

Obligation of Total SFCP Funds by Country  
(dollar equivalents)

	FY 1974 <u>Actual</u>	FY 1975 <u>Estimate</u>	FY 1976 <u>Estimate</u>
Egypt	\$1,769,000 <sup>/1</sup>	\$1,538,000 <sup>/1</sup>	\$1,090,000 <sup>/1</sup>
India	396,000 <sup>/2</sup>	535,000 <sup>/3</sup>	293,000
Pakistan	387,000 <sup>/2</sup>	295,000	195,000
Poland	428,000	486,000	230,000
Tunisia	703,000	551,000	304,000
Yugoslavia <sup>/4</sup>	486,000	-	-
TOTAL	\$4,170,000 <sup>/1</sup>	\$3,405,000 <sup>/1</sup>	\$2,112,000 <sup>/1</sup>

<sup>/1</sup> Includes payment to the UNESCO trust fund of \$1,000,000 equivalent excess Egyptian pounds for the International Campaign to Save the Monuments of Nubia.

<sup>/2</sup> Includes \$70,000 equivalent transferred to the NSF Science Information Program.

<sup>/3</sup> Includes \$95,000 equivalent transferred to the NSF Science Information Program.

<sup>/4</sup> Yugoslavia ceased to be an excess currency country in FY 1974.

STATUS OF SMITHSONIAN SFCP FUNDS  
(dollar equivalents)

	<u>FY 1974</u> <u>Actual</u>	<u>FY 1975</u> <u>Estimated</u>	<u>FY 1976</u> <u>Estimated</u>
Unobligated Balance, Start of year	\$ 783,000	\$1,327,000	\$ 149,000
Appropriation	4,500,000	2,000,000	2,000,000
Recovery of Prior Years' Obligations	214,000	227,000	100,000
Unobligated Balances, End of year	<u>-1,327,000</u>	<u>-149,000</u>	<u>-137,000</u>
Total Obligations	\$4,170,000	\$3,405,000	\$2,112,000



*Smithsonian Foreign Currency Program Grants  
Awarded in Fiscal Year 1974*

## ARCHEOLOGY AND RELATED DISCIPLINES

**American Institute of Indian Studies**, Philadelphia, Pennsylvania. Continued support for administration, Benares Center for Art and Archeology, and research fellowships (India).

**American Museum of Natural History**, New York, New York. Excavation at the Harappan site of Allahdino in the Malir Area, Karachi District, Pakistan.

**American Research Center in Egypt**, Princeton, New Jersey. Continued support for a program of research and excavation in Egypt: support for operation of the Cairo Center, fellowship support, maintenance of archeological research at the site of Hierakonpolis (Nekhen) in Edfu District, survey of Arabic scientific manuscripts in Cairo, maintenance of a stratified pharonic site in the Egyptian delta at Mendes, Akhenaten Temple project, research in modern Arabic literature, continuation of an epigraphic and architectural survey at Luxor of the Oriental Institute, feasibility of clearing, conserving, and recording the tomb of King Rameses II in the Valley of the Kings, an egyptological conference, editing the Nag Hammadi codices.

**Boston University**, Boston, Massachusetts. Archeological excavations at Stobi (Yugoslavia).

**Dumbarton Oaks Center for Byzantine Studies**, Washington, D.C. A corpus of the ancient mosaics of Tunisia.

**Smithsonian Institution, Department of Anthropology**, Washington, D.C. Helmand-Sistan projects: studies of historical ecology.

**Southern Methodist University**, Dallas, Texas. The Pleistocene sediments of the Nile Valley, Egypt.

**State University of New York at Buffalo**, New York. Investigations on the Neolithic sites in Southeastern Poland.

**University of California**, Berkeley, California. Archeological excavations at the Harappan Seaport of Balakot, Pakistan.

**University of Minnesota**, Minneapolis, Minnesota. Excavations in Diocletian's Palace at Split, Yugoslavia.

**University of Missouri**, Columbia, Missouri. Research and study of Early Medieval Polish archeology.

**University of Pennsylvania, University Museum**, Philadelphia, Pennsylvania. The Dira Abu el-Naga project (Egypt).

**University of Pennsylvania, University Museum**, Philadelphia, Pennsylvania. Excavation within the town and harbour site of Malkata, Western Thebes (Egypt).

## MUSEUM PROGRAMS

**Smithsonian Institution, Department of Science and Technology**, Washington, D.C. Publication in Islamic medicine in the thirteenth century (Egypt).

**Smithsonian Institution, Office of Museum Programs**, Washington, D.C. Publication of ICOM's *The Protection of Cultural Property: handbook of national legislations*.

**Smithsonian Institution, Traveling Exhibition Service**, Washington, D.C. Study and exhibition of Wissa Wassef tapestries from Egypt.

## SYSTEMATIC AND ENVIRONMENTAL BIOLOGY (INCLUDING PALEOBIOLOGY)

**Academy of Natural Sciences**, Philadelphia, Pennsylvania. Biochemical investigations of diploid and triploid frogs of the *Rana esculenta* complex (Poland).

**Duke University**, Durham, North Carolina. Exploitation of habitats by chemically differentiated races of morphologically uniform lichen-forming fungi (Tunisia).

**Harvard University, Museum of Comparative Zoology**, Cambridge, Massachusetts. Study of the dentition of Cretaceous mammals of Mongolia (Poland).

**Howard University**, Washington, D.C. Cenozoic mammals of Pakistan.

**Smithsonian Institution, Department of Botany**, Washington, D.C. Revision of *Trimen's Handbook to the Flora of Ceylon*.

**Smithsonian Institution, Department of Paleobiology**, Washington, D.C. Comparative study and geography of selected Devonian and Permian corals in Poland and the U.S.A.

**Smithsonian Institution, Office of International and Environmental Programs**, Washington, D.C. Limnological investigations of Lake Ohrid (Yugoslavia), limnological investigations of Skadar Lake (Yugoslavia), Mediterranean Marine Sorting Center (Tunisia).

**Smithsonian Institution, Tropical Research Institute**, Balboa, Canal Zone. Ecology of freshwater lakes in Panama (Poland).

**Texas Tech University**, Lubbock, Texas. Mammals of the Adriatic islands and adjacent mainland of Yugoslavia.

**University of California**, Berkeley, California. A biosystematic comparison of the siphonocladales (Chlorophyta) (Tunisia).

**University of California**, Berkeley, California. Comparative study of Late Cretaceous Mongolian and North American mammals (Poland).

**University of Michigan**, Ann Arbor, Michigan. Systematic studies of the molluscan genus *Bulinus* in Africa and adjacent regions (Egypt).

**University of Utah**, Salt Lake City, Utah. The evolution of optimal reproductive strategies (India).

**Utah State University**, Logan, Utah. Systems analysis of the PreSaharan ecosystem of Southern Tunisia.

**Yale University**, New Haven, Connecticut. Paleoanthropology, paleontology, and stratigraphy of Neogene localities in Pakistan.

## ASTROPHYSICS AND EARTH SCIENCES

**Duke University**, Durham, North Carolina. Studies in Lake of Tunis.

**Smithsonian Institution, Astrophysical Observatory**, Cambridge, Massachusetts. Operation of the Uttar Pradesh State Observing Station at Naini Tal (India).

**Smithsonian Institution, Department of Mineral Sciences**, Washington, D.C. Lonar Meteorite Crater project (India).

**University of Washington**, Seattle, Washington. Color magnitude diagrams for young star clusters in magellanic clouds (Poland).

MUSEUM PROGRAMS AND RELATED RESEARCH  
(SPECIAL FOREIGN CURRENCY PROGRAM)

FY 1976 Estimate and July 1 - Sept. 30, 1976 Period

<u>Activity</u>	<u>FY 1976 Estimate</u>	<u>July 1 - Sept. 30, 1976 Estimate</u>
Grants for museum programs and related research in the natural and physical sciences and cultural history	\$2,000,000	\$750,000

## SMITHSONIAN INSTITUTION

## MUSEUM PROGRAMS AND RELATED RESEARCH (SPECIAL FOREIGN CURRENCY PROGRAM)

For payments in foreign currencies which the Treasury Department shall determine to be excess to the normal requirements of the United States, for necessary expenses for carrying out museum programs, scientific and cultural research, and related educational activities, as authorized by law, \$2,000,000, to remain available until expended and to be available only to United States institutions: *Provided*, That this appropriation shall be available, in addition to other appropriations to the Smithsonian Institution, for payments in the foregoing currencies: *Provided further*, That not to exceed \$1,000,000 shall be available to the Smithsonian Institution for the International Campaign To Save the Monuments of Nubia of the United Nations Educational, Scientific, and Cultural Organization for the salvage of archeological sites on the Island of Philae.

For "Museum Programs and Related Research (Special Foreign Currency Program)" for the period July 1, 1976, through September 30, 1976, \$750,000.

(20 U.S.C. 41 et seq.; Department of the Interior and Related Agencies Appropriation Act, 1975.)

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**STANDARD FORM 300**  
July 1964, Bureau of the Budget  
Circular No. A-11, Revised.  
300-1101

SMITHSONIAN INSTITUTION  
MUSEUM PROGRAMS AND RELATED RESEARCH  
(SPECIAL FOREIGN CURRENCY PROGRAM)

PROGRAM AND FINANCING - TRANSITION PERIOD  
(in thousands of dollars)

Identification code	19 actual	19 estimate	19 estimate
32-50-0102-0-1-503			
	July 1-		
	Sept. 30, 1976		
<u>Program by activities:</u>			
Grants for museum programs and related research in the natural sciences and cultural history (program costs - funded) .....	1,550		
Change in selected resources (undelivered orders).....	<u>- 800</u>		
10 Total obligations.....	750		
<u>Financing:</u>			
40 <u>Budget Authority (appropriation)</u>	<u>750</u>		
<u>Relation of obligations to outlays:</u>			
71 Obligations incurred, net.....	750		
72 Obligated balance, start of period...	3,302		
74 Obligated balance, end of period.....	<u>- 3,252</u>		
90 Outlays.....	<u>800</u>		

Justification for Transition Period

Special Foreign Currency Program ..... \$750,000

This appropriation, about one-third of the FY 1976 level, will continue a program of grants to United States institutions for field research in those countries where "excess" local currencies are available. Research will be performed in archeology and related disciplines, systematic and environmental biology, astrophysics and earth sciences, and in museum and other cultural activities.



## ACCOMPLISHMENTS OF PROGRAM

MR. YATES. You are requesting \$1 million for grants for field research and \$1 million for the third of four equal payments to preserve the temples on the Island of Philae. Briefly summarize for the committee the accomplishments of the program during the past year.

MR. CHALLINOR. During fiscal 1974, 309 scholars and scientists have participated in projects. By State you might be interested to know there were 18 from Illinois, 22 from Colorado, 32 from Pennsylvania, 3 from Maryland and 16 from Utah. The University of Colorado and Colorado State, received about \$24,000 worth of foreign currency support. Illinois, about a half million dollars, Utah State and University of Utah about \$145,000, Pennsylvania, represented by the University of Pennsylvania, Academy of Natural Science, Gettysburg College, and Pennsylvania State received just shy of \$100,000.

This program enables scholars and scientists throughout the country to have a source of research funds which is not costing the taxpayer anything. The Government has already spent this money and that is the crucial point which would be most useful in defending this on the floor. The research projects are all reviewed and we are satisfied with the quality of this research. The host country in which these funds are available in all cases has to approve this research: not only approve it but have it supported by their respective ministries or scientific establishments which control the research in those countries. It is a real bargain, in other words, and I would hope we could get some more funds. There are fewer countries in which this money is still available. In some countries the funds will probably never be all used.

MR. YATES. Have the funds appropriated in 1975 for the temples, all been obligated?

## TEMPLES OF PHILAE

MR. CHALLINOR. Yes, Mr. Chairman. I think we might mention for the record, the problem concerning the Temples at Philae. We have pledged \$4 million worth of Egyptian pounds.

For fiscal year 1975, \$1 million was made available to the Smithsonian Institution "for the International Campaign to Save the Monuments of Nubia of the United Nations Educational, Scientific, and Cultural Organization for the salvage of archeological sites on the Island of Philae." As the above language states, payment of these funds was to be made to UNESCO, which in turn would turn the money over to the Egyptian Government for salvage and restoration work on the temples. UNESCO agreed that it would not subtract any service charge from these payments, but would forward directly to the temple project 100 percent of all of the funds received by it for this purpose.

During October and November 1974, a written agreement was reached between the Smithsonian Institution and Dr. Rene Mayheu, Director General of UNESCO, whereby UNESCO would receive these funds and then transfer them to the Egyptian repository, the National Bank of Egypt. The \$1 million payment for fiscal year 1975 was made on February 24, 1975.

The Smithsonian is aware of the present restrictions on support of UNESCO, contained in Public Law 93-559, of December 30, 1974.

Section 9 of that act (22 U.S.C. § 2222) provides in subsection (h) that:

“Congress directs that no funds shall be obligated or expended, directly or indirectly, to support the United Nations Educational, Scientific, and Cultural Organization until the President certifies to the Congress that such organization (1) has adopted policies which are fully consistent with its educational, scientific, and cultural objectives, and (2) has taken steps to correct its recent actions of a primarily political character.”

That provision has been carefully studied, along with a study of the sense of the Congress that led up to that enactment. The Smithsonian's Office of General Counsel is of the opinion that because of the special circumstances in this case, however, such payments through UNESCO do not violate either the letter or the spirit of that enactment. In this particular instance, UNESCO is merely a conduit: and rather than the payments providing any direct or indirect support for that organization, the reverse is true.

UNESCO handles the details of this transaction without any allocation from the payment of moneys to take care of its attendant administrative expenses. In this circumstance, therefore, we do not believe that the above payment to UNESCO, which was immediately transferred in toto to the National Bank of Egypt, represents any direct or indirect support for UNESCO.

#### INVOLVEMENT OF OTHER COUNTRIES

Mr. YATES. How many other countries are involved?

Mr. CHALLINOR. Four major ones besides the United States—Egypt, the Soviet Union, which has pledged as of August 1974, \$1,277,791 worth of equivalent Egyptian pound., Germany, and Italy—as well as a number of other smaller European countries. This is not a solely U.S. project.

Mr. YATES. I am not sure about this. I have before me the provisions of that law, and I am not sure your counsel is right. But of course you are acting in accordance with what you consider the intent of the law to be.

I suppose, if need be, that you could make that contribution directly to the Government of Egypt, could you not, and avoid the problem.

Mr. CHALLINOR. Payment directly to the Bank of Egypt would avoid the problem completely. It has been done through UNESCO merely to demonstrate the international character of the support for the Nubian monuments project, as opposed to using bilateral agreements. That was the idea. By using an international vehicle you divorce the support of mankind's history from national political considerations.

Mr. YATES. When you say the Russians are making available an equivalent number of rubles, does it mean they are selling something to Egypt in exchange for this?

Mr. CHALLINOR. Whether this is their equivalent of a Public Law 480 program, selling them airplanes or whatever it is, I have no idea. But that is the information we received from UNESCO on the Russian pledge to the Philae project. The total amount pledged by all countries is about \$16 million in convertible and local currencies.

Mr. YATES. Of which the United States will pay \$4 million?

Mr. CHALLINOR. Yes; we have pledged to contribute \$4 million of United States-owned Egyptian pounds.

#### AVAILABILITY OF FOREIGN CURRENCIES

Mr. YATES. Do all the countries listed in the justifications have excess local currencies available?

Mr. CHALLINOR. Yes; they do.

Mr. YATES. In those amounts?

Mr. CHALLINOR. They have more than the funds shown. This is the money available to the Smithsonian program in these amounts.

Mr. YATES. I see.

Mr. CHALLINOR. They are administered differently in each country, depending on the local regulations of these countries.

Mr. YATES. Is it your policy to make grants under this program to any individual?

Mr. CHALLINOR. Grants are made to American organizations such as museums and universities; grants therefore are not made to a private individual, just as the National Science Foundation and the National Endowment for the Humanities make grants to organizations as opposed to private individuals.

Mr. YATES. All right.

#### DIRECT PAYMENT TO EGYPT FOR PHILAE

Mr. BROOKS. Mr. Chairman, if I may respond to your suggestion that the payment might be made directly to the Government of Egypt, this might require a change in the language of the Appropriation Act.

Mr. YATES. How does it read now?

Mr. BROOKS. I cite the relevant portion:

Not to exceed \$1 million shall be available to the Smithsonian Institution for the International Campaign to Save the Monuments of Nubia, of the United Nations Educational and Scientific Organization, for the salvage of archaeological sites on the Island of Philae.

#### CONSTRUCTION

Mr. YATES. Please place justification pages D-1 through D-25 into the record at this point.

[The justifications follow:]

FACILITIES PLANNING, RENOVATION, RESTORATION, AND CONSTRUCTIONSummary

<u>Current Programs</u>	<u>Fiscal Years</u>			<u>Transition Period Estimate</u>
	<u>1974</u>	<u>1975</u>	<u>1976</u>	
	<u>Appropriation</u>	<u>Appropriation</u>	<u>Estimate</u>	
Construction and Improvements, National Zoological Park	\$3,790,000	\$9,420,000	\$9,550,000	\$1,440,000
Restoration and Renovation of Buildings	1,070,000	1,490,000	1,467,000	400,000
Construction, National Air and Space Museum	<u>17,000,000</u>	<u>7,000,000</u>	<u>3,000,000</u>	<u>-</u>
Totals	\$21,860,000	\$17,910,000	\$14,017,000	\$1,840,000

The FY 1976 appropriation requested for Construction and Improvements, National Zoological Park will allow progress to be sustained on the implementation of the approved Master Plan for the improvement of the Zoo's animal and public facilities and essential repairs and additions to existing facilities. Work to be accomplished includes completion of the service facility and the construction and rehabilitation of bear exhibits; the continued planning for beaver, otter, seal, sea lion, and wolf exhibits; the design and installation of exhibit, orientation, and education graphics and street furniture; and a program of repairs and renovation of Zoo facilities in Rock Creek and at Front Royal, Virginia. Transition period funding will sustain planning and construction on Central Area exhibits and provide for a continued program of repairs and improvements to existing facilities.

The FY 1976 appropriation sought for Restoration and Renovation of Buildings emphasizes continuing projects including road improvements at the Mt. Hopkins, Arizona, Observatory, the installation of fire detection and suppression systems, renovation of the Arts and Industries Building and the Smithsonian Building south yard, the completion of planning for a sixth floor library and research center addition to the History and Technology Building, and general repairs and improvements to buildings and facilities. The requested transition period funding will sustain the facility maintenance effort.

The FY 1976 appropriation for Construction, National Air and Space Museum will complete the liquidation of the contract authority provided in FY 1973.

CONSTRUCTION AND IMPROVEMENTS,  
NATIONAL ZOOLOGICAL PARK

1974 Appropriation.....	\$3,790,000
1975 Appropriation.....	\$9,420,000
1976 Estimate.....	\$9,550,000

This appropriation is used to fund repairs, alterations, and improvements to existing facilities including exhibits; to prepare plans and specifications for construction; and to perform renovations, restorations, and new construction implementing the Master Plan approved by the Commission of Fine Arts and the National Capital Planning Commission in FY 1973.

The requested FY 1976 appropriation will be applied as follows.

General Service & Parking Facilities	\$4,550,000
Lower Rock Creek Valley	3,000,000
Beaver Valley	490,000
Graphics	100,000
Renovation and Repair	650,000
Front Royal, Virginia, Conservation Center Renovation	<u>760,000</u>
Total	\$9,550,000

Background

The National Zoological Park (NZN) was established in 1890 under the Board of Regents of the Smithsonian Institution who were authorized to "administer and improve" the Zoo for "the advancement of science and the instruction and recreation of the people" (20 U.S.C. 81). The NZN has two locations. Exhibition and education functions have been centered since 1890 on some 150 acres in Washington, D. C.'s Rock Creek Valley. At present there are on display some 2,835 animals and birds of 600 different species. Complementary animal conservation and breeding functions (to be done in collaboration with other zoos) are now being developed on about 3,000 acres of Federal land near Front Royal, Virginia.

Why Does the NZN Need to be Improved?

There are several principal reasons why the Zoo must be renovated.

It is the National Zoo of the United States yet has fallen far behind many other United States and foreign zoos in terms of adequate facilities. Approximately half of its millions of annual visitors come from outside the Washington Metropolitan area. Many of its visitors are from foreign countries, and the Zoo is the official repository for many foreign gifts of rare and valuable animals as well as gifts from public-spirited Americans.

The Zoo has an aged and crumbling physical plant. Animals, employees, and visitors are housed and served in facilities that date from 1805 with most of the plant having been constructed between 1902 and 1937. Repairs are difficult and expensive.

Animal facilities fall far short of acceptable modern standards for care, health, breeding, and research for conservation of rare and endangered species. Known requirements of animals, both physiological and psychological, are not being met by present housing. The accelerating extinction of many species means that zoos must manage and study their animals in such a way as to maximize reproduction and to contribute to knowledge that will assist management in the wild to help survival.



The education potential of the National Zoo is not being met by the cramped, unnatural cages which were in style 50 or more years ago. Today's public should not be asked to accept inadequate, outmoded housing of animals which neither serves the animals nor meets the needs of a more aware, conservation-minded, and environmentally-conscious public.

The requirements of a growing number of visitors for parking (the Zoo is not now, nor will it be under Metro, adequately served by public transportation), orientation and school education facilities, food service, adequate restrooms, first aid, and other services to make their visits pleasant and instructive are not being met. Facilities designed for an 1890 horse and carriage population are woefully inadequate to handle present day crowds. Present day automobile traffic is chaotic. Utilities that were serviceable 50 years ago do not meet today's needs.

Administrative, crafts and trades, animal keeper, commissary, police, and other essential and dedicated staff are scattered throughout the Zoo in inefficient and hazardous structures not designed for today's uses. Work effectiveness and morale suffer

#### Has Any Progress Been Made on Corrective Action?

A renovation program was initiated in the early 1960's and some improvements have been made since then. Except for the most urgent repairs and very limited planning efforts, the program ground to a halt between about 1968 and 1972 during the Vietnam period.

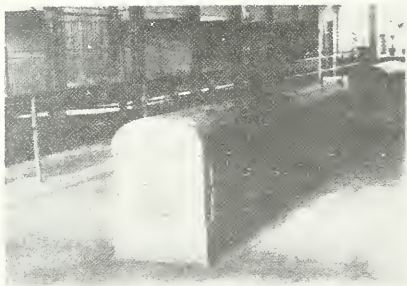
New access roads and parking lots have been constructed and automobile traffic has been largely removed from the central exhibit area of the Zoo (an additional 12 acres of prime animal and visitor space would be regained by the construction of the general service and parking facility). The heating plant has been converted from hand firing and the sewage system has been modernized to meet public health standards. The 1926 Bird House was renovated and a separate walk-through flight cage completed in 1964. Repair projects (such as walks, roofs, and guardrails) have been undertaken to attempt to keep the Zoo operational and safe.

The deer and hoofed-stock area was redeveloped and five additional acres put to use resulting in much larger quarters for the zebra, antelope, and oxen. The Hospital and Research Building was finished in 1969. The pandas arrived in 1972 and are now well-housed in a renovated hoofed-stock building. The 1904 Monkey House is now being remodeled with larger cages and other animal and visitor improvements. Very recently, the 1890 Lion House was demolished. With \$3,000,000 appropriated in 1974 a modern moated exhibition facility for lions and tigers is now under construction. This year, with \$2,970,000 appropriated, work is underway on the Elephant House Yards and Bird House Plaza to enlarge and redevelop them for animal health, exhibition, and education purposes. These exhibits will be ready by the summer of 1976. Also \$2,500,000 has been appropriated for construction of an education and administration building. Photographs of the Monkey House, Elephant Yards, and Lion-Tiger facility projects are on page D-4.

#### What Work Needs to be Done?

Only a small number of the important projects have been accomplished or are currently underway. The Master Plan, approved by the Commission of Fine Arts and the National Capital Planning Commission in FY 1973, for the renovation and improvement program, has 41 major projects clustered into 14 groups for planning, budgeting, and management purposes. Page D-5 shows the Master Plan schedule for these projects, budget estimates, and estimated completion dates.

With funds available from a prior reprogrammed appropriation and new funds appropriated in fiscal years 1973, 1974, and 1975, six of the projects are or can be completed



Monkey House/Old cramped & barred cages



New well-spaced enclosures



New Elephant Yards/ Three times more space for the animals



Replacement of 19th century Lion-Tiger facility

January 1975

## NATIONAL ZOOLOGICAL PARK MASTER PLAN SCHEDULE

PROJECT GROUP	PROJECT NUMBER	PROJECT	ESTIMATE (1976 VALUE)	PLANS & SPECS.	CONSTR.	ESTIMATED COMPLETION DATE
I	1	Monkey House				12/74
	2	Puma House				12/74
	3	Panda House		Authorized prior to FY 1973		Complete
II	4	Lion & Tiger Exhibit	\$3,275,000	FY 73	FY 74	7/76
III	5	Elephant Yards	1,450,000	FY 74	FY 75	9/75
	6	Bird House Plaza	1,680,000	FY 74	FY 75	9/75
IV	7	General Svc-Parking	21,000,000	FY 74,75	FY 76,77	4/78
V	8	Education-Visitor Center	2,500,000	FY 75	FY 75	8/77
VI	Lower Rock	Creek Valley	6,450,000	FY 74,75	FY 76,77	7/78
	9	Bears				
	10	Sheep & Goats				
	11	Baboons				
	14	Roadway & Utilities				
VII	20	Polar Bears				
	Beaver Valley		10,000,000	FY 75, 76	FY 77	12/78
	15	Beavers				
	16	Wolves				
VIII	17	Seals & Sea Lions				
	18	N. American Otters				
	Central Area Complex		14,000,000	FY 75,77	FY 77,78	7/79
	21	Small Mammal House Ren.				
	22	Crocodiles & Komodo Dragon				
IX	23	New Monkey House				
	24	Monkey Island				
	Waterfowl Pond Complex		12,000,000 <sup>/1</sup>	FY 75,78	FY 79	1/80
	26	Waterfowl Pond Remodeling				
X	27	Lesser & Medium Cats				
	28	Plains Animals				
	Building Renovation		4,500,000	FY 79	FY 80	7/80
XI	29	Reptile House				
	30	Elephant House				
	Connecticut Avenue Complex		8,000,000	FY 79	FY 80	7/81
XII	31	Restaurant & Cafeteria				
	32	Entrance-N. Amer Animals				
	Aquatic Habitats Complex		9,500,000	FY 80	FY 81	7/82
	12	Aquatic Habitats				
	15	Penguins				
	33	Manatee				
	34	Kiwi				
XIII	35	Sea Otters				
	36	Platypus				
	37	Hawks & Owls				
XIV	Holt House Area		3,500,000 <sup>/1</sup>	FY 81	FY 82	1/83
	38	Holt House Ren. & Greenhse				
	39	Research-Holding Nursery				
XIV	North Road Area		15,000,000 <sup>/1/2</sup>	FY 82	FY 83	7/84
	40	Klingle Street Bridge				
	41	Large Plains Animals				
Total Cost			\$112,855,000 <sup>/3</sup>			

Estimates include plans and specifications, all utilities, walks and roads in Master Plan area, landscaping, graphics, exhibits, construction contingencies and escalation to July 1976.

<sup>/1</sup> Projects may be reduced approximately \$10,000,000 by alternative development at the Front Royal Conservation Center.

<sup>/2</sup> This project includes animal exhibits above future underground parking structures.

<sup>/3</sup> This amount represents the \$99,180,000 Master Plan program described in the FY 1975 justifications, updated by escalation of costs to FY 1976.

(Monkey House, Panda House, Lion and Tiger Exhibit, Elephant Yards, Bird House Plaza, and Education-Visitor Center). Planning can be completed and first phase construction accomplished on the General Service and Parking Facility. And planning can be advanced on Lower Rock Creek Valley, Beaver Valley, and Central Area group projects.

As shown by the schedule, however, planning and construction remain to be completed on new bear exhibits (polar bears included); renovation of present bear dens; complete remodeling of sea lion exhibits for seals, sea lions, beavers, and otters; renovation and remodeling of small mammals house (including gorillas and orangutans); renovation and modernization of the Reptile House with special exhibit of the Komodo Dragon and crocodile; modernization of the waterfowl complex; monkey island; small and medium cats (bobcats to leopards); renovation and modernization of Elephant House and tropical aquatic habitat building for such as penguins, manatees, various aquatic mammals, and fish.

#### Why is the FY 1976 Plan of Work Particularly Important?

First and foremost, it is important to keep the long-sought momentum in order to complete the jobs as quickly as possible for program reasons, to save future year construction cost escalation, and to conclude the necessary interference with visitors' education and enjoyment caused by construction detours and activity.

Past and present planning has recognized the impact that the Bicentennial celebration visitor load will have on the Zoo. Consequently, a construction and renovation schedule has been adopted that will result in the center of the Zoo being presentable to receive visitors with some new attractions such as the large cat exhibit now under construction. New construction during this period will be on the perimeter of the Zoo, such as the General Service and Parking Facility and the Lower Rock Creek Valley complex as shown on page D-7.

Details on FY 1976 projects are provided in the following sections.

General Service and Parking Facilities (\$4,550,000). These facilities are pivotal to the entire Master Plan construction program. They will provide improved access and accommodation for visitor parking, contain approximately 900 parking spaces for a total of 1730 (the Zoo now has 1030 spaces), and, equally important, centrally house and organize all service and support functions of the Zoo. These are craft and trade shops and offices, gardening shops, animal commissary, motor pool, supply offices and stock-rooms, and protective services. Space vacated elsewhere in the Zoo by these activities and certain current parking areas (some 12 acres) will become available for animal and public service development projects that are keys to the success of the Master Plan. Some of these projects are new monkey exhibits, exhibits for small and medium sized cats, and exhibits for large plains animals.

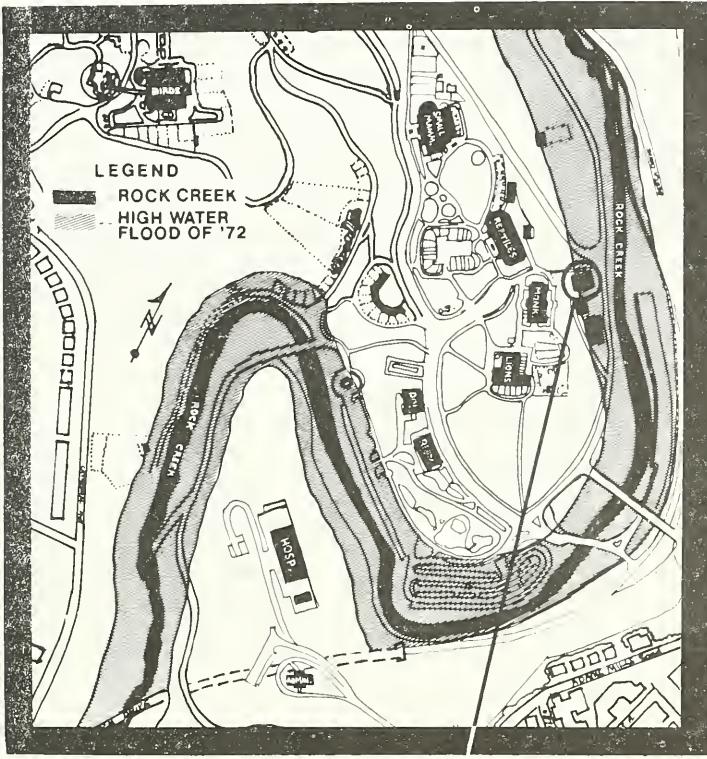
These facilities will be located along Rock Creek adjacent to the roadway which now connects the Connecticut Avenue and Harvard Street entrances to the Zoo. The architect's design adapts the structure to the hillside and blends the floor levels to a slope thereby minimizing the visual impact from Rock Creek Drive. Landscaped terraces and planter boxes will reduce further any intrusion of this structure on the natural character of the area.

Total cost of these facilities is estimated at \$21,000,000 of which \$300,000 was appropriated in FY 1974 for first phase planning and \$2,700,000 in FY 1975. The FY 1975 appropriation will permit final plans and specifications to be completed and ready for bidding by July 1975. The FY 1976 request of \$4,550,000 will permit construction completion of an initial self-contained increment of the facility, consisting of the lower level service building with roof-top parking for 298 cars. This will be a fully usable facility designed so that the additional parking decks above can be constructed at a later date. An appropriation of \$13,450,000 will be requested in FY 1977 to complete the total parking structure in order to free up valuable in-park space for Master Plan exhibits.









Present facilities under increasing flood threat      New facilities will correct flood threat



The service facility solves tough problems that plague more than a dozen support services stuffed in old basements, attics, and temporary sheds. Most critical among these are the maintenance shops and commissary. Nearly all the workshops are now on a site suffering increasing flood damages and risk. The \$125,000 damages caused by Hurricane Agnes may not be repeated soon, argue the statisticians. But the fact is that since Agnes, three flash floods have washed up to the shops' level and these events are becoming more frequent as more of the watershed is paved over. See page D-8 for the effects of floods.

The commissary is in an impossible pinch. More efficient animal food service is being demanded from an increasingly antiquated facility. The freezers and coolers were written off by a commercial donor before received a decade ago. Cramped space, low basement ceilings deny any chance for solution in the current site. The new General Service facility is needed now to solve these and many other problems.

Lower Rock Creek Valley (\$3,000,000). The FY 1974 and 1975 appropriations provided a total of \$500,000 to prepare construction plans and specifications for Master Plan Group VI projects designated for the Lower Rock Creek area. By July 1975, the Zoo will be ready to obtain construction bids for a portion of the Group's projects consisting of new polar and grizzly bear exhibits and complete renovation (rather than new construction to reduce costs) of existing bear dens for sun, sloth, and spectacle bears and for the Smokey exhibit. All bears will be exhibited with increased space for their well being and with minimum visual obstruction to the visitors by use of moats and other techniques. The reconstruction of the bear dens is an essential safety and health requirement. Present facilities were constructed in 1902 and are badly deteriorated. The existing cement pools have major cracks through which hundreds of gallons of water are lost daily. Bars have rusted so badly that in many places there is insufficient metal to which replacement bars can be welded.

The major new exhibit to be constructed with funds requested in FY 1976 is the Polar Bear exhibit which will have three viewing areas with water moats and simulated ice floe areas. Two viewing areas will be used for females and cubs. A feature of the facility will be the cubbing dens carefully designed for breeding purposes. Breeding the endangered polar bear in captive conditions can be accomplished by overcoming technical difficulties.

A future appropriation will be requested to complete projects in the lower Rock Creek Group which include exhibits of goats, sheep, and baboons with excellent hillside viewing and with associated audio-visual exhibits.

Beaver Valley (\$490,000). Advance planning for the several projects in Beaver Valley (Master Plan Group VII) has been started with \$80,000 appropriated in FY 1975. The projects in this group include a beaver exhibit (illuminating this animal's extraordinary role as a natural force in the development of our country), constructed to show the beaver in action in the water, dam building, and in his lodge; a very active exhibit of the North American otter; a major exhibit pool for seals and sea lions; and a new enclosure permitting people to discover the beauty and character of the wolves.

The requested FY 1976 appropriation of \$490,000 will allow completion of the total plans and specifications in advance of a construction appropriation to be requested in FY 1977.

Design and Installation of Graphics (\$100,000). Present signage at the Zoo is a patchquilt of improvisations strung together through this century. The Zoo must do a better job in guiding and serving the visitor, thus a graphic design consultant has been retained to work with the Master Plan architect and with the exhibits and education



New purposes for old barns



Pere David's Deer / Extinct in wild / Free safe and breeding at Front Royal



Building enclosure fencing



offices to upgrade and standardize graphics and street furniture and to identify and coordinate graphic needs for new facilities. This will result in approved standards for exhibits, street signs, building signs, benches, trash containers, light posts, and telephone booths. As new facilities are completed, the approved graphics and street furniture designs should be implemented. In order to prepare for Bicentennial visitors to the new exhibits, an appropriation of \$100,000 is required for the environs of the lion and tiger exhibit, elephant and bird house yards, and other connecting areas and pathways.

Front Royal, Virginia, Conservation Center Renovation and Improvements (\$760,000). An appropriation of \$760,000 is sought to make repairs, modifications, and improvements to the National Zoological Park's Animal Conservation Center. This 3,000 acre site, the former Beef Cattle Experiment Station at Front Royal, Virginia, was declared excess by the U.S. Department of Agriculture in November, 1973. A temporary use permit was granted by the General Services Administration to the Smithsonian in January, 1974. Formal transfer of the property to the Institution is being processed.

Such a site has long been sought by the Zoo to use for breeding endangered wildlife species and for associated conservation and research efforts. Breeding groups will be assembled in cooperation with other zoos whose city sites preclude the space needed for successful breeding groups of exotic animals. Other important uses include holding animals temporarily displaced by the Master Plan construction at the Zoo (as well as animals obtained in anticipation of construction completion) and farming land to produce an ample supply of selenium-rich hay needed for animal health which must now be purchased from the Midwest. Photographs of the Front Royal site are on page D-10.

Funds are required to continue the installation of containment fencing and cages. Existing buildings will be modified to provide space for animal housing, commissary facilities, administration, research, and housing for personnel. The water, sewage, and electrical systems must be renovated to ensure continued dependable service. Master planning for the future use of the Conservation Center will be undertaken, including study of cost saving alternatives to the development of the Rock Creek Zoo, particularly with reference to research and breeding programs.

Renovation and Repairs (\$650,000). An amount of \$650,000 is required to continue the program of renovation, repairs, and preventive maintenance of existing facilities. This funding is required to keep the heavily used Zoo in safe condition for the visiting public, for the upkeep and improvement of animal enclosures and staff facilities, and to maintain new buildings in good condition so that in the future the Zoo will not be faced with an overwhelming backlog of repairs. Renovation and repair projects include: painting; roof patching and replacement; electrical repairs and improvements; repairs and extensions to water, steam, and other utilities; and fence, road, curb and sidewalk repairs and improvements for safety.

Construction and improvement work is accomplished primarily by contract. There are occasional projects, however, not lending themselves to contract. For example, suitable contractors cannot be located or their estimates are exorbitant in relationship to the proposed job. In such cases, accomplishment of the work by other means, such as the purchase with this appropriation of supplies, materials, and equipment and the use of in-house or temporary labor, is the most cost-effective solution.

CONSTRUCTION AND IMPROVEMENTS, NATIONAL ZOOLOGICAL PARK

FY 1976 Estimate and July 1 - Sept. 30, 1976 Period

<u>Project</u>	<u>FY 1976 Estimate</u>	<u>July 1 - Sept. 30, 1976 Estimate</u>
1. General Service and Parking Facilities	\$4,550,000	-
2. Lower Rock Creek Valley	3,000,000	-
3. Beaver Valley	490,000	-
4. Graphics	100,000	-
5. Central Area Complex	-	\$900,000
6. Renovation and Repair	650,000	160,000
7. Front Royal, Virginia, Conservation Center Renovation	<u>760,000</u>	<u>380,000</u>
Totals	\$9,550,000	\$1,440,000



## SMITHSONIAN INSTITUTION

## CONSTRUCTION AND IMPROVEMENTS, NATIONAL ZOOLOGICAL PARK

For necessary expenses of planning, construction, remodeling, and by contract or otherwise,  
 equipping of buildings and facilities at the National Zoological Park, \$9,550,000  
~~\$9,120,000~~ to remain available until expended.

For "Construction and Improvements, National Zoological  
 Park" for the period July 1, 1976, through September 30, 1976,  
 \$1,440,000.

(20 U.S.C. 41 et seq.; Department of the Interior and  
 Related Agencies Appropriation Act, 1975.)

STANDARD FORM 300  
 July 1964, Bureau of the Budget  
 Circular No. A-11, Revised.  
 300-101

SMITHSONIAN INSTITUTION  
 CONSTRUCTION AND IMPROVEMENTS, NATIONAL ZOOLOGICAL PARK  
 PROGRAM AND FINANCING - TRANSITION PERIOD  
 (in thousands of dollars)

Identification code 32-50-0129-0-1-503	19 actual	19 estimate	19 estimate
	July 1 - Sept. 30, 1976		
<u>Program by activities:</u>			
Planning, Design, and Construction (program costs, funded).....	1,998		
Change in selected resources (undelivered orders).....	<u>- 558</u>		
10 Total obligations.....	1,440		
<u>Financing:</u>			
40 <u>Budget authority (appropriation)</u>	<u>1,440</u>		
<u>Relation of obligations to outlays:</u>			
71 Obligations incurred, net.....	1,440		
72 Obligated balance, start of period.	12,113		
74 Obligated balance, end of period...	<u>- 7,953</u>		
90 Outlays.....	<u>5,600</u>		

D-14

(Mono cast: 21.5)

(Mono cast: 5)

(Mono cast: 5)

(Mono cast: 4.9)

## Justification for Transition Period

Work must be undertaken during the summer of 1976 in order to be ready to meet FY 1977 scheduled objectives for completion of Master Plan improvements to the National Zoological Park; to prepare for animal relocations before the advent of cold weather; and to accomplish non-deferrable repairs and renovations. The transition period appropriation will be applied as follows:

Central Area Complex	\$900,000
Renovation and Repair	160,000
Front Royal, Virginia, Conservation and Research Center	<u>380,000</u>
Total	\$1,440,000

Central Area Complex ..... \$900,000

With funds appropriated in FY 1975, schematic studies were started for projects incorporated in the approved Master Plan for the central area of the Zoological Park. These projects include complete renovation of the existing Small Mammal House, constructed in 1937, to provide new and improved space for great apes as well as a variety of small mammals; new central yard exhibits; new facilities for monkeys including an outdoor island exhibit; as well as graphics, landscaping, utilities, sidewalks, and site improvements. Funds will distribute evenly for purposes of maintaining planning progress to gain readiness for earliest possible FY 1977 construction, and for necessary preparations for continuity of visitor and animal programs during construction. Since the area includes the Zoo's central pedestrian arteries, alternative walkways must be achieved before new construction. Utilities must be relocated in some instances. Animals must be relocated from the site of first phase construction. To be ready to maintain Master Plan progress in FY 1977, this work must be accomplished in the summer of 1976.

Renovation and Repair..... \$160,000

This amount is a quarterly increment of an annual request for funds to maintain existing deteriorating facilities and exhibits in advance of complete rebuilding under the Master Plan program; and to perform essential major repairs to used walkways, facilities, and mechanical services. Because the Zoo is an open park there are many renovation and repairs tasks that may not be deferred until fall.

Front Royal, Virginia, Conservation Center Renovation..... \$380,000

The amount requested, 50 percent of the FY 1976 estimate, is for improvements to the Conservation Center that are essential for housing and care of scheduled animal arrivals. A number of tasks must be accomplished during the summer season for completion prior to late fall. Beyond that time animal transfers, in most cases, must be deferred until after severe winter weather has passed. This, in effect, would mean a lost breeding season should these improvement tasks not be undertaken in July and August. It is also necessary that improvements be accomplished on schedule to permit certain animal relocations in preparation for Master Plan construction steps in the Zoological Park.

RESTORATION AND RENOVATION OF BUILDINGS

1974 Appropriation.....	\$1,070,000
1975 Appropriation.....	\$1,490,000
1976 Estimate.....	\$1,467,000

This account is used to fund major repairs, alterations, and improvements of a long-term nature and benefit. From time to time, it is used also for construction of major additions to existing facilities or for minor new temporary or permanent buildings or other facilities. Facilities planning and studies and other related expenses may be funded from this account. Projects undertaken are in support of research, care, and protection of collections; public accommodation and safety; and maintenance and development of a valuable physical plant and natural areas. Work is accomplished primarily by contract. There are occasional projects not lending themselves to contract. For example, suitable contractors cannot be located or their estimates are exorbitant in relationship to the proposed job. In such cases, accomplishment of the work by other means, such as the purchase with this appropriation of supplies, materials, and equipment and the use of in-house or temporary labor, is the most cost-effective solution.

With funds now available, the Institution is carrying out several significant projects, most notably the air-conditioning and phased interior and exterior renovation and restoration of the Arts and Industries Building for special Bicentennial exhibition purposes. Continuation funding for certain of these projects and funding for other repair and major maintenance work are sought in the FY 1976 appropriation.

An amount of \$1,467,000, a reduction from the FY 1975 level, is required for these projects.

1. Mt. Hopkins, Arizona, Observatory road improvements and telescope annex facility	\$ 200,000
2. History and Technology Building and Natural History Building fire control systems	150,000
3. Tropical Research Institute laboratory improvements	75,000
4. Arts and Industries Building renovation	250,000
5. South Yard improvements	200,000
6. History and Technology Building library addition planning	125,000
7. General building and facility repairs and improvements	<u>467,000</u>
	\$1,467,000

Details on these projects appear in the following justifications.

1. Mt. Hopkins, Arizona, Observatory Road Improvements and Telescope Annex Facility  
 (\$200,000)

For several years the Smithsonian Astrophysical Observatory (SAO) has been following a phased plan of repairs and improvements at its Mt. Hopkins Observatory near Tucson, Arizona.

Construction of a commercial power line by the Citizens Utilities Co. from the Amado area in the valley to the ridge area distribution point along with the installation

of switchgear for standby generators is planned to be completed in FY 1975. Extension of the distribution system to the summit bowl area is planned for completion in FY 1976. No additional funds are required for this project in FY 1976. Engineering source survey and design of a water supply system is planned for completion in FY 1976. Holding tanks at the summit and ridge sites were installed in FY 1975. Construction of the water system is planned for FY 1977. No additional funds are requested for this project in FY 1976.

Repairs and improvements to some of the more dangerous sections of the Mt. Hopkins access road will be completed in FY 1975. Because of the heavy hauling necessitated by the installation of the MMT at the summit site, the paving of the improved sections of the ridge area and summit access roads will be deferred until FY 1977. The Mt. Hopkins road improvement plan, prepared by consulting engineers, calls for the rerouting of the existing section of the access road through Montosa Canyon as the next phase of the project for safety and economic reasons. This section of steep (12 percent to 18 percent grades), narrow roadway is the most dangerous portion of the access road. It severely restricts the type of vehicles that may safely traverse it, as well as the hauling capacity of trucks delivering materials and equipment to the Observatory. It is estimated that significant savings in hauling bulk material for future paving operations will result from the construction of this new 7 percent grade road to bypass the existing treacherous route. An amount of \$125,000 is requested for this project for FY 1976. The plan calls for continued improvements to the sections below the Montosa Canyon in FY 1977 and future years.

A 24-inch telescope and its dome, given to SAO by the State University of New York at Stony Brook, Long Island, has been installed near the existing 60-inch telescope facility. Work and storage space are needed at both instruments if they are to be used effectively. An amount of \$75,000 is required to design and construct laboratory, darkroom, and storage space.

2. History and Technology Building and Natural History Building Fire Control Systems (\$150,000)

Studies by safety and fire protection experts have shown that much work needs to be done in the History and Technology and Natural History Buildings to improve fire safety. Fire detection and sprinkler protection is presently lacking in most public areas and should be installed as changes take place in exhibit and other public areas. Similar safeguards are needed in areas where museum collections are housed and where research work takes place. Other fire protection needs include the addition of booster pumps in order to give adequate water pressure and the installation of fire doors and drains. Funding of \$150,000 is sought to continue this long-term phased program.

3. Tropical Research Institute Laboratory Improvements (\$75,000)

The Smithsonian Tropical Research Institute, centered in Panama, is engaged in basic biological research especially concerning questions of ecology and evolution in the tropics. Its present facilities are inadequate. The Tivoli Hotel site (in the Canal Zone but adjacent to the Republic of Panama) has been made available to the Institute. It offers several important advantages as the headquarters site to include offices and laboratories for administrative staff and scientists and spaces for visiting researchers and students. The site has a sturdy masonry structure, previously used as a kitchen building, which was deemed suitable for renovation to meet some of these needs.

Work that has been completed or is underway includes roofing, new electrical and mechanical distribution systems, and air-conditioning, plumbing, and a new entrance. The plan of work for FY 1976 to complete this project calls for the partitioning of interior work spaces, finishing floors, installing lighting, and painting. An appropriation of \$75,000 is requested.



#### 4. Arts and Industries Building Renovation (\$250,000)

Estimates in the early 1970's of the cost of the renovation and restoration of the historic 1879 Arts and Industries Building amounted to about \$5,000,000. The FY 1973 appropriation provided \$3,355,000 for the major portion of the required work and for recreating the original appearance of the rotunda and four main exhibition halls. Major improvements include installing heating, ventilation, and air-conditioning systems; replacing obsolete and inadequate electrical and utilities systems; providing additional public and staff restrooms; and related demolition and restoration incidental to the accomplishment of the project's objectives. This initial work was started in February 1974 and is expected to be completed in February 1976. Prior to this completion, exhibits installation will begin for a major presentation, 1876 - A Centennial Exhibition, funded as part of the Institution's Bicentennial program.

Based on current costs, about \$2,300,000 of additional work remains to be done to produce a completely restored and renovated facility. This additional work is important to the long-term proper functioning of the building and to protect the structure from weather damage. Major additional jobs to be done include new roofing and insulation (a survey is now underway to determine the extent of the requirement); the repair, replacement, and painting of windows, including double glazing where necessary to maintain proper temperature and humidity conditions and save on utility costs; the installation of an elevator, especially to aid handicapped persons; installation, repair, and painting of arched ceilings; and the preparation of interior spaces for staff and visitor uses. An amount of \$300,000 was appropriated in FY 1975 towards these needs. The FY 1976 budget request for \$250,000 will sustain renovation progress with the balance of the required funding to be sought in future years.

#### 5. South Yard Improvements (\$200,000)

Funds are required to continue immediate improvements and plan for long-term development of the South Yard, the area bounded by the original Smithsonian Building, the Arts and Industries Building, the Freer Gallery of Art, and Independence Avenue. The immediate goal is to remove much of the aggregation of unattractive sheds, structures, and surface facilities and develop an inviting, restful garden area. The longer-range plan is to maintain this environment while developing the site for additional productive uses to include areas for research, education, and other public services.

Funds available in FY 1975 will initiate planning for the development of this site, for demolition and removal of existing structures and facilities, and for preliminary construction phases. The FY 1976 requirement is to complete the Bicentennial preparation including landscaping, plantings, fixtures and furnishings, and to plan for the phased development of the site subsequent to the Bicentennial. An amount of \$200,000 is sought for these purposes.

#### 6. History and Technology Building Library Addition Planning (\$125,000)

The National Museum of History and Technology's collections of approximately 16 million artifacts are unparalleled in any other institution in the world. Of this number approximately half are related to the history of science and technology. This collection and staff are presently supplemented with considerable holdings of archival materials which lack space to be catalogued and used.

Recently, the largest single private library on the history of science and technology in the world has been given to the Museum by Bern Dibner as a research resource. This extraordinary collection contains more than 25,000 rare books, over 300 incunabula (books printed before 1501), and historic manuscripts, prints, letters of scientists, portraits, science medals, instruments, and apparatus. The library is presently housed in a permanent installation and it is offered to the Museum on the basis that suitable accommodation can be provided. A conservative estimate of the present value of this collection is ten million dollars.

The offer of this library provides the Museum with a unique opportunity. It makes it possible to combine under one roof the largest collection of scientific artifacts with the greatest existing staff of subject experts and the finest library resource on the subject, a combination which would serve as a magnet to attract important scholars and students from all over the world.

The planned sixth floor addition will allow the development of an historical research center in which the Museum's present and future library holdings will be centralized for the use of staff and visiting scholars and students as well as members of the public as appropriate. The Museum's programs in museum and conservation training, pre- and postdoctoral fellowships, and visiting scholars in residence will be accommodated on this floor as well as the newly established Dwight D. Eisenhower Center for Historical Research.

Funds are required to complete the final design effort for the research and library facility for which partial funds were appropriated in FY 1973 and 1974.

7. General Building and Facility Repairs and Improvements (\$467,000)

The Smithsonian has major museum buildings (ranging in age from new to well over 100 years old) with a replacement value of several hundred million dollars, many lesser structures used for research, exhibition, collections management, and administrative purposes, and several thousand acres of land devoted to research, conservation, and education. Heavy public use of these facilities, general deterioration because of age and weathering, safety requirements, and the occasional need to make improvements or additions to keep pace with program requirements create a need for regular, annual attention. Anticipated, mostly major, needs are budgeted in this account under specific building or project headings. There is strong need, however, for funds for planning, engineering, repair, and improvement response to other projects, including those arising during the year, that are beyond the capability of the Institution's maintenance support effort. Examples of such work are: interior reconstructions or other improvements to meet program requirements; installation of new or replacement plumbing, electrical, and mechanical distribution systems, including heating, ventilating, and air-conditioning; roof repairs and replacements; maintenance and repairs to masonry and other building exteriors to prevent leaks or structural damage; and major repairs to elevators and escalators.

RESTORATION AND RENOVATION OF BUILDINGS

FY 1976 Estimate and July 1 - Sept. 30, 1976 Period

<u>Project</u>	<u>FY 1976 Estimate</u>	<u>July 1 - Sept. 30, 1976 Estimate</u>
1. Mt. Hopkins, Arizona, Observatory road improve- ments and telescope annex facility	\$200,000	\$50,000
2. History and Technology Building and Natural History Building fire control systems	150,000	35,000
3. Tropical Research Institute laboratory improvements	75,000	-
4. Arts and Industries Building renovation	250,000	50,000
5. South Yard improvements	200,000	-
6. History and Technology Building library addition planning	125,000	-
7. General building and facility repairs and improvements	<u>467,000</u>	<u>265,000</u>
Totals	\$1,467,000	\$400,000

## SMITHSONIAN INSTITUTION

## RESTORATION AND RENOVATION OF BUILDINGS

For necessary expenses of restoration and renovation of buildings by contract or otherwise,  
 owned or occupied by the Smithsonian Institution was authorized by  
 section 2 of the Act of August 22, 1949 (63 Stat. 623), including not \$1,467,000  
 to exceed \$10,000 for services as authorized by 5 U.S.C. 3109 (\$1,490,000)  
 to remain available until expended.

For "Restoration and Renovation of Buildings" for the  
period July 1, 1976, through September 30, 1976,  
\$400,000.

(20 U.S.C. 41 et seq.; Department of the Interior and  
Related Agencies Appropriation Act, 1975.)

STANDARD FORM 300  
 July 1964, Bureau of the Budget  
 Circular No. A-11, Revised.  
 300-101

SMITHSONIAN INSTITUTION  
 RESTORATION AND RENOVATION OF BUILDINGS

PROGRAM AND FINANCING - TRANSITION PERIOD  
 (in thousands of dollars)

Identification code 32-50-0132-0-1-503	19 actual	19 estimate	19 estimate
	July 1- Sept. 30, 1976		
<u>Program by activities:</u>			
Planning, Design, and Construction (program costs, funded).....	434		
Change in selected resources (undelivered orders).....	<u>- 34</u>		
10 Total obligations.....	400		
<u>Financing:</u>			
40 Budget authority (appropriation)	<u>400</u>		
<u>Relation of obligations to outlays:</u>			
71 Obligations incurred, net.....	400		
72 Obligated balance, start of period..	100		
74 Obligated balance, end of period....	...		
90 Outlays.....	<u>500</u>		
D-22	(Memo est: 5)	(Memo est: 5)	(Memo est: 4.0)



## Justification for Transition Period

The transition period will be used to sustain progress on certain continuing projects and needs described in the FY 1976 budget, taking advantage of favorable weather conditions for outside projects and scheduling work in such a way to avoid interference with Bicentennial summer visitation. Funds requested will be used for the following projects:

Mt. Hopkins, Arizona, Observatory road improvements	\$50,000
History and Technology and Natural History Buildings fire control systems	35,000
Arts and Industries Building renovation	50,000
General building and facility repairs and improvements	<u>265,000</u>
Total	\$400,000

Mt. Hopkins, Arizona, Observatory road improvements ..... \$50,000

The requested amount, 25 percent of the FY 1976 budget estimate, will continue the program of correcting safety, drainage, and maintenance problems of the Mt. Hopkins Observatory access road for the protection of staff and visitors and to facilitate operations of the observatory. Portions of the improved road will be paved to eliminate dust problems and to extend the life of the road.

History and Technology and Natural History Buildings fire control systems ... \$35,000

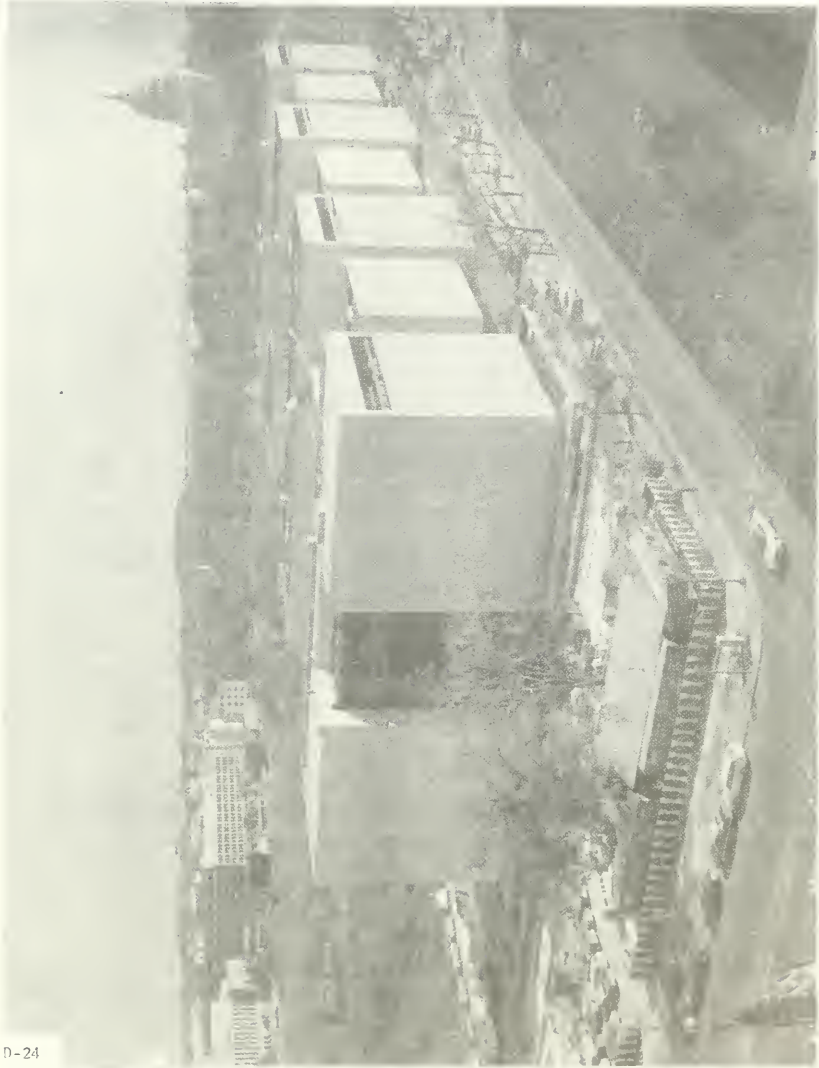
Funds will be used to sustain the phased effort to improve fire detection and extinguishing systems in public, collection, and work spaces in the History and Technology and Natural History Buildings for the safety and protection of visitors, staff, art, science, and history objects, and the physical plant. This proposed amount is slightly less than 25 percent of the FY 1976 estimate.

Arts and Industries Building renovation ..... \$50,000

The air conditioning and basic renovation of public spaces of the Arts and Industries Building will be accomplished in time for its use for the 1876 - A Centennial Exhibition. Substantial additional work (roof, windows, insulation, etc.) needs to be done to protect the investment in the public areas and to prepare other interior spaces for staff and visitor use. The requested amount is 20 percent of the FY 1976 budget but will maintain steady progress towards the complete renovation of this 1879 structure.

General building and facility repairs and improvements ..... \$265,000

The Institution's physical plant is valued at several hundred million dollars in replacement costs. Substantial funds should be budgeted each year to protect this plant from deterioration by meeting a wide range of major preventive and corrective maintenance. Despite surveys of the buildings and facilities, problems cannot always be detected sufficiently in advance for specific budget identification. Although somewhat more than half of the FY 1976 level, the transition period amount represents a sound investment in needs that are certain to become realities.



New National Air and Space Museum nearing completion for public opening July 4, 1976.

CONSTRUCTION  
(Liquidation of Contract Authority)

1974 Appropriation.....	\$17,000,000
1975 Appropriation.....	\$ 7,000,000
1976 Estimate.....	\$ 3,000,000

Construction of the National Air and Space Museum continues at a pace which will ensure the building's completion on schedule--by June 1975--and within the authorized funding. At that time, the installation of exhibits will begin in preparation for the public opening on July 4, 1976.

The construction manager system (under the supervision of the General Services Administration) continues to perform with efficiency and effectiveness. The project has been divided into 22 construction contract packages and two supply contract packages. Five of the construction contracts have been completed. These are: excavation; water main relocation; structural steel; metal decks; and roofing. Four contracts are in the final stages. These are: foundations; window walls; skylights; and masonry. The remaining contracts are on schedule and in various states of completion. These are: marble; mechanical; electrical; elevators and escalators; concrete slabs; painting; fireproofing; kitchen equipment; miscellaneous metal; carpentry; spacearium dome; landscaping; and graphics. The two supply contracts are for carpet, which is now being laid. In addition, contracts are being processed for the purchase and installation of necessary equipment for offices, shops, cafeteria, garage, library, work and research areas, and building control and security functions; protective or decorative treatment of walls, entrances, and approaches; theater and planetarium seating and projection systems; gallery structures and other requisite equipment which will permit full and efficient use of the building, its exhibit galleries and its other facilities.

The liquidation of the final \$3,000,000 of contract authority is requested in FY 1976 consistent with the timely completion of the building for its public opening.

Mr. YATES. I have seen the pictures in the justifications of work at the National Zoo. Apparently you are making pretty good progress on the elephant yard and lion and tiger facilities; is that true?

Dr. REED. Yes, we are making excellent progress and are on schedule. In fact, the elephant house yard is ahead of schedule. For once we have found a contractor who wants to get the animals outside. We are ahead and we are within budget.

#### SERVICES AND PARKING FACILITIES—NATIONAL ZOOLOGICAL PARK

Mr. YATES. You want \$4,550,000 for general service and parking facilities. What is the current status of the project and what do you estimate the total cost will be?

Dr. REED. The project now is in the planning and design stage. Plans will be ready, we hope, at the very end of this fiscal year or the beginning of the next fiscal year to go out for construction contracts.

The first section we are asking for in the fiscal year 1976 budget is the service facility which will contain all of our mechanical shops, garages, property, supply, commissary, gardeners' quarters, and garage space for the automotive repair shops. All of those nonanimal-oriented facilities which are currently scattered throughout the zoo.

By combining these services under one roof we will free up other sections of the zoo for future development and renovation, such as the basement of the reptile house, where by taking the commissary out, we will have space.

Mr. YATES. How much of your request is for planning costs?

Dr. REED. We have received \$3 million for plans and specifications. That is for the plans and specifications for the entire structure—service and parking.

Mr. YATES. How much money have you collected from zoo parking that can be applied for this project?

Dr. REED. We have at the present time about \$200,000 that has been collected. We plan to use this money for the mechanical and electronic devices necessary to operate it as a parking garage.

#### METRO STATIONS

Mr. YATES. What is the status of your discussions with Metro about providing additional transportation to the zoo?

Dr. REED. Sir, that is a sad, long, bitter story.

Mr. YATES. Sorry to hear that.

Dr. REED. We will have two stations, one of them which is called Zoo Station, 2,000 feet away from the zoo, and the other which is at Calvert Street, which will be 2,020 feet away. So we are halfway between two stations. We hope to encourage a shuttle bus arrangement from the station to the zoo entrance.

This is a battle yet to be joined with the D.C. traffic people to get permission to run a surface shuttle bus on Connecticut Avenue. That is a fight for another day.

Mr. YATES. You probably could use a helicopter more than a bus.

Dr. REED. You need a good strong pair of legs to walk on the city sidewalk.

Mr. YATES. Too bad those stations could not be closer to your entrances.

Dr. REED. The very first week they announced they were going to have a Metro station, I was down there insisting on a station right in front of the zoo. Ever since, we have been fighting with them. We have not achieved any success. We do have an air ventilation shaft, but that does not do us any good.

#### LOWER ROCK CREEK VALLEY

Mr. YATES. No; that is true.

You want \$3 million for lower Rock Creek Valley. Why do you need that money for that purpose?

Dr. REED. This is for the building of the bear dens. We have altered our plans and now plan to renovate our present bear dens, effecting some economies. We will be building a new polar bear exhibit along with one for the grizzly bear and two other minor bears, the sloth bear of Asia and spectacle bear of South America. These funds will be for development of these animal exhibit areas.

#### BEAVER VALLEY

Mr. YATES. You want \$490,000 for Beaver Valley planning. What is involved in this?

Dr. REED. Would you care to see the plans for this project? I have the plans of Beaver Valley here.

Mr. YATES. Surely, as long as you brought them.

Dr. REED. It would be easier to look at them.

This plan shows how the polar bear line will be. This shows how the grizzly bear area will be renovated. You can see the water moats with bears in this particular area with a waterfall in the background.

The polar bear area will be prepared so that the public can see them under water. This is the entire bear area. There will be three separate areas for the polar bears so we can breed this highly endangered species. The male has a propensity to kill the offspring so we have to have separate pools for the cubs until they are 18 months of age. There will be more bears here.

This is Beaver Valley. There will be seal and sea lion pools here with a combined unit between for the filtration and recirculation of the water.

Incidentally, we will use fresh water. These animals do not need salt water.

Mr. YATES. Why do you call it Beaver Valley if the seals are there?

Dr. REED. The first successful beaver colony in any zoo in the United States was here. We had a breeding colony of beaver until the mid-forties. During World War II we lost them, the cages deteriorated and would not hold the beavers. They escaped down Rock Creek.

At the head of the valley the beaver will be reinstated. We will have underwater viewing so that the visitor will be able to see beaver under water; see into their lodge as an educational unit. We think we are going to make the pond in such a way, with riffles and waterflow, that the beavers will build their own dam. But if you have had ex-



perience with beaver, and maybe you have had some beaver experience in ponds or irrigation canals, we think we will make the beaver do it, but I would not want to guarantee it.

Mr. LONG. Most of my experience is with eager beavers.

Dr. REED. We hope we have some very eager beavers here. The otters will be right across from them, underwater viewing again, with proper proportion of land to water. We hope to induce a great deal of activity and breeding.

Wolves will be along this area here, a rather generous wolf woods to show the highly organized social habits of these animals. This area will be an important social unit to demonstrate to the public.

Of course the beaver, I want to show that Jim Bridger really could have hidden in that beaver dam when the Shoshones were after him.

Mr. YATES. I think that is important.

Dr. REED. As a western boy, I like it.

#### GRAPHICS

Mr. YATES. You want \$100,000 for design and installation of graphics. What kind of graphics?

Dr. REED. There will be a variety of graphics. In addition to graphics for visitor orientation, there will be the best of museum style graphics, including cutaways of skeletal material, demonstrations, audio-visuals using either cassette TV tapes or slide shows, showing the animals in the wild. There will be traditional zoo labels and information, making for the visitor an educational experience for each of the animals viewed.

#### FRONT ROYAL CENTER

Mr. YATES. You are requesting \$760,000 for the Front Royal complex. What will you be doing there?

Dr. REED. At the Front Royal Research and Conservation Center, we will be doing zoological research—that is studying the behavior of animals, their social organization, studying their diets, and the physiology of the animals—as well as breeding them for conservation, to save these animals from extinction.

This is a cooperative program we have with a number of other zoos to insure that there will be in the United States these animals available for education and exhibition purposes. We have fond hopes of perhaps even returning certain animals to their native lands. For instance we have a cooperative project with Brazilian scientists and government officials concerning the breeding of the golden marmoset. When they establish national parks to handle them, we will be able to return animals to Brazil.

#### LANGUAGE CHANGE

Mr. YATES. You are requesting \$650,000 for renovation and repairs. You want to amend your appropriation language under "Construction and improvements, National Zoological Park," and "Restoration and renovation of buildings" to include the phrase "by contract or otherwise."

What does this involve? Why do you need this? Do you have legislative authority for the new language?

Dr. REED. Yes, we have legislative authority for it. The reason we want the language changed is to enable us, particularly at the Front Royal Research and Conservation Center, to be able to do certain work ourselves. If we have construction money to buy material, we may decide to use our staff or hire people to do the work.

For instance, we put in already 2,500 feet or 8-foot chain link fence at a total cost of about \$5.50 per running foot when the outside contractor price would have been \$20 a foot. We can effect economies for the Government and to the Institution with this language change.

#### TRANSITION BUDGET FOR ZOO CONSTRUCTION

Mr. YATES. For the transition period you want \$1,440,000.

Dr. REED. Yes, sir.

Mr. YATES. How did you determine which projects should be funded during the period?

Dr. REED. This estimate is based upon those projects that we must accomplish during the summer months. This is seasonal work based upon what we can do in relation to our animals in preparation for work during the winter months. Much of this will be in preparing for the central zoo area, moving, and temporarily housing the animals. It is caused by the seasonality of our work due to the nature of the animals concerned.

Mr. YATES. Do you want to tell us about any of your problems, other than the Metro? How is the zoo progressing? Are the animals happy and well?

Dr. REED. Sir, I believe that for the first time since 1890 the zoo is finally achieving the mandate which was given to us by Congress for the advancement of science and education and recreation of people. I believe in every area we are advancing; we are strong in science, strong in medicine; our animal exhibits are improving, our educational work is beginning to be effective, and even the labels are getting better.

I really am very proud of the way the zoo is developing at the present time. I owe a great deal of that to this committee for helping us in achieving our congressional mandate. We are beginning to achieve it.

Mr. YATES. Good, we are glad to hear that.

#### [JUSTIFICATION MATERIAL]

Please insert pages E-1 through E-33 of the justifications into the record at this point.

[The pages follow:]

SMITHSONIAN INSTITUTION  
"Salaries and Expenses"

Report of Appropriation by Objects  
(In thousands of dollars)

	<u>1974</u> <u>Actual</u>	<u>1975</u> <u>Estimate</u>	<u>1976</u> <u>Estimate</u>	<u>Increase</u> <u>'76 over '75</u>
11 Personnel Compensation.....	36,294	44,597	48,991	4,394
12 Personnel Benefits.....	3,075	3,850	4,332	482
21 Travel & Transportation of Persons.....	620	644 <u>/1</u>	810 <u>/1</u>	166
22 Transportation of Things.....	295	331	411	80
23 Rent, Communications, and Utilities.....	4,143	5,499	7,103	1,604
24 Printing and Reproduction....	1,022	1,134	1,383	249
25 Other Services.....	6,164	7,314	8,367	1,053
26 Supplies and Materials.....	2,715	2,928	3,403	475
31 Equipment.....	3,453	2,692	2,916	224
32 Lands and Structures.....	8	507	507	-
41 Grants.....	1,078	1,190	1,171	-19
42 Insurance, Claims, and Indemnities.....	<u>1</u>	<u>20</u>	<u>14</u>	<u>- 6</u>
Total Appropriation.....	58,868	70,706 <u>/2</u>	79,408 <u>/3</u>	8,702 <u>/3</u>

/1 Excludes \$21 additional travel authority which is to be allocated for priority purposes to Smithsonian user units.

/2 This amount includes \$2,917 for pay and utility costs supplementals.

/3 This amount includes \$1,873 for necessary pay and \$637 for other uncontrollable increases.

SMITHSONIAN VISITORS  
(By fiscal year)

Fiscal Year	Smithsonian Institution Building		Arts and Industries Building		Museum of Natural History		National Air & Space Building		Freer Gallery of Art		Museum of History & Technology <sup>1/</sup>		Fine Arts & Portrait Galleries <sup>2/</sup>		Renwick Gallery <sup>3/</sup>		Total <sup>4/</sup>	
	Building	Building	Building	Building	History	Natural History	Building	Building	Art	Gallery	Technology <sup>1/</sup>	History & Technology <sup>1/</sup>	Portrait Galleries <sup>2/</sup>	Gallery <sup>3/</sup>	Gallery <sup>3/</sup>	Gallery <sup>3/</sup>	Gallery <sup>3/</sup>	Gallery <sup>3/</sup>
1961	1,024,526		2,912,371		2,047,973		987,858		130,746									7,103,474
1962	1,222,112		3,471,050		2,113,053		1,986,319		130,597									8,923,131
1963	1,630,280		3,534,182		2,288,397		2,673,618		183,359									10,309,836
1964	1,311,061		2,457,243		2,512,306		1,854,186		168,625			2,509,774 <sup>1/</sup>						10,813,195
1965	1,065,635		2,028,175		3,051,472		1,705,683		210,972			5,091,776						13,153,713 <sup>5/</sup>
1966	870,010		1,746,715		2,988,006		1,494,922		222,089			4,829,112						12,150,854
1967	1,020,312		1,638,873		3,409,957		1,484,422		212,920			5,546,102						13,312,586
1968	847,176 <sup>6/</sup>		1,344,622		3,257,957		1,123,698		169,533			4,750,023					30,888	11,523,897 <sup>7/</sup>
1969	275,259 <sup>6/</sup>		1,493,141		2,916,749		1,225,959		179,374			4,174,071						10,430,730 <sup>8/</sup>
1970			2,557,155		3,269,791		1,839,373		217,305			5,483,555						13,583,702
1971	681,255		1,985,732		3,456,755		1,337,445		190,425			5,955,128						13,801,208
1972	819,617		2,306,071		3,414,640		1,104,151		230,475			6,808,526				105,186		15,035,323
1973	807,294		2,285,603		3,306,105		1,223,917		204,858			6,905,339				254,005		15,152,967
1974	739,651		2,040,731		3,067,694		1,285,598		219,346			5,850,227				329,487		13,708,406

1/ Museum of History and Technology opened January, 1964.

2/ National Collection of Fine Arts opened May, 1968 and the National Portrait Gallery in October, 1968.

3/ Renwick Gallery opened January, 1972.

4/ An additional 2-3,000,000 visitors to the National Zoological Park annually and 50,000 to the Anacostia Museum are excluded from these totals.

5/ July-August, 1964, certain Smithsonian Institution buildings were open 4:30 to 10 p.m. for the first time.

6/ Building closed for renovation October, 1968.

7/ Reflects the significant decrease in visitors to the Nation's Capital in the first six months of CY 1968 due to unsettled local conditions.

8/ Fiscal year 1969 visitor totals represent the effect of local conditions in late 1968 on visitor attendance. During CY 1969, a total of 12,438,909 visitors came to the Smithsonian, an increase of 25 percent over CY 1968.

## FINANCIAL REPORT

T. AMES WHEELER, TREASURER

FY 1974

CONTINUED SOUND PROGRESS was shown in Smithsonian finances in fiscal year 1974. Thanks to increased federal support and further improvement in results of the Institution's own educational and revenue-generating efforts, we were able to cope satisfactorily with the large inflation-bred rise in costs of salaries, supplies, and services, and, at the same time, to strengthen our current operating funds position.

Added federal appropriations enabled us to increase needed museum protection and other support services and to step up preparations for our important 1976 Bicentennial commitments. These included steady progress on construction and future exhibits for the new National Air and Space Museum and a beginning on a major long-term reconstruction of National Zoological Park facilities. An additional \$1-million gift from the donor of the collections permitted completion of the construction of the Hirshhorn Museum and Sculpture Garden. Other gifts and grants for specific purposes funded a wide variety of research and exhibit activities.

There remains an urgent need for major outside contributions in support of the Cooper-Hewitt Museum of Decorative Arts and Design and a large number of other specific projects. Also, the Institution's endowment funds — always far from adequate for an Institution of this size — experienced during the year a worrisome drop in value. In other respects, however, Smithsonian finances can be said to have improved substantially in fiscal year 1974. Full detail of these results is provided below.



### *Overall Sources and Application of Financial Support*

The total financial support available to the Institution from all sources is shown in Table 1. These figures do not include the finances of the National Gallery of Art, the John F. Kennedy Center for the Performing Arts, and the Woodrow Wilson International Center for Scholars, which are all related legislatively to the Smithsonian but whose financial and administrative affairs are for the most part separately managed under independent Boards of Trustees.

Total funds for operating purposes rose to \$82,681,000 in fiscal year 1974, an increase of \$10,607,000 over the preceding year. Federal appropriations of \$65,063,000 accounted for 78.7 percent of the total, research grants and contracts 12.1 percent, and nonfederal income 9.2 percent; this ratio of support was roughly the same in fiscal year 1973. In addition, Congress provided \$21,860,000 in construction funds for continuing work on the National Air and Space Museum, for repairs to other Smithsonian buildings, and for the National Zoological Park, principally for "Lion Hill," a major beginning on the long-term renovation plan of Zoo facilities.

In Table 2, these revenues from all sources (excluding construction funds and the Special Foreign Currency Program) and their application to individual Smithsonian bureaus and activities are shown in considerable detail, demonstrating the complexity of funding resulting from the variety of resources and the large number of diversified services provided.

#### *FEDERAL OPERATING FUNDS*

Federal appropriations for operating purposes totaled \$65,063,000 including \$1,695,000 for the Smithsonian Science Information Exchange, a separately incorporated organization, and \$4,500,000 for the Special Foreign Currency Program (in the blocked currency of certain foreign countries). The Special Foreign Currency Program administers grants to United States universities and similar organizations for research studies in Egypt, India, Pakistan, Poland, Tunisia, and Yugoslavia (see Table 3). This program included a special \$1,000,000 amount (to be renewed for three additional years) to allow United States participation in UNESCO's international campaign to preserve archeological monuments on the Island of Philae in Egypt.

TABLE 1. Overall Sources of Financial Support  
[In \$1,000's]

Sources	FY 1971	FY 1972	FY 1973	FY 1974
<b>OPERATING FUNDS</b>				
Federal appropriation:				
Salaries and expenses .....	\$36,895	\$44,701	\$51,633	\$58,868
Smithsonian Science Information Exchange .....	*	1,600	1,600	1,695
Special Foreign Currency Program .....	2,500	3,500	3,500	4,500
Subtotal .....	\$39,395	\$49,801	\$56,733	\$65,063
Research grants and contracts .....	9,312*	8,088	8,996	9,996
Nonfederal funds:				
Gifts (excluding gifts to endowments)				
Restricted purpose .....	1,880	1,598	2,901	1,970
Unrestricted purpose .....	304**	26**	33**	275**
Income from endowment and current funds investment				
Restricted purpose .....	1,372	1,573	1,736***	1,750
Unrestricted purpose .....	330	334	436	747
Revenue producing activities (net)	(534)	(141)	170	1,770
Miscellaneous .....	406	482	1,069	1,110
Total nonfederal funds .....	3,758	3,872	6,345***	7,622
Total Operating Support .....	\$52,465	\$61,761	\$72,074	\$82,681
<b>CONSTRUCTION FUNDS</b>				
Federal Construction Funds:				
National Zoological Park .....	\$ 200	\$ 200	\$ 675	\$ 3,790
National Air & Space Museum ...	-0-	1,900	13,000	17,000
Hirshhorn Museum .....	5,200	3,697	-0-	-0-
Restoration & Renovation of Bldgs.	1,725	550	5,014	1,070
Total Federal Construction Funds	\$ 7,125	\$ 6,347	\$18,689	\$21,860
Private Plant & Land Acquisition Funds:				
Copper-Hewitt Museum .....	\$ —	\$ 700	\$ 106	\$ 262
Hirshhorn Museum .....	—	—	—	1,000
Chesapeake Bay Center .....	25	386	149	70
Total Private Plant and Land Acquisition Funds .....	\$ 25	\$ 1,086	\$ 255	\$ 1,332

\* Smithsonian Science Information Exchange, Inc., funded by National Science Foundation contract in fiscal year 1971 (\$1,400,000) and thereafter by direct federal appropriation.

\*\* Excluding gifts to Associates (included under Revenue Producing Activities).

\*\*\* Includes \$225,000 of fiscal year 1973 income transferred from Endowment Fund No. 3 for this purpose in fiscal year 1972.

TABLE 2.—Source and Application of Operating Funds for  
Year Ended June 30, 1974  
(Excludes Special Foreign Currency Funds, Plant Funds, and Endowments)  
[In \$1,000's]

Funds	Fed- eral funds	Nonfederal funds					
		Unrestricted			Restricted		
		Total non- fed- eral funds	Gen- eral	Reve- nue pro- duc- ing	Spe- cial pur- pose	Gen- eral	Grants and con- tracts
<b>FUND BALANCES —</b>							
1 July 1973 .....	\$ 0	\$ 5,120	\$ 2,292	\$ 0	\$ 201	\$ 2,546	\$ 81
<b>FUNDS PROVIDED</b>							
Federal Appropriations ...	\$60,563						
Investment Income .....		\$ 2,497	\$ 744	\$ -	\$ 3	\$ 1,750	\$ -
Grants and Contracts .....		9,968	-	-	-	-	9,968
Gifts .....		2,505	151	260	124	1,970	-
Sales and Revenue .....		12,615	-	12,473	142	-	-
Other .....		970	284	2	138	546	-
Total Provided .....	\$60,563	\$28,555	\$1,179	\$12,735	\$407	\$4,266	\$ 9,968
Total Available ....	\$60,563	\$33,675	\$3,471	\$12,735	\$608	\$6,812	\$10,049
<b>FUNDS APPLIED</b>							
<i>Science:</i>							
Environmental Science ....	\$ 1,316	\$ 1,158	\$ 14	\$ -	\$ 5	\$ 107	\$ 1,032
Natl. Museum of Nat. Hist. ....	8,040	1,055	41	-	43	161	810
Natl. Zoological Park .....	4,565	46	19	-	-	21	6
Fort Pierce Bureau .....	-	1,032	24	-	-	1,008	-
Science Info. Exchange ....	1,695	-	-	-	-	-	-
Smithsonian Astroph. Observatory .....	3,207	5,844	18	-	7	210	5,609
Radiation Biology Lab. ....	1,294	95	-	-	-	9	86
Smithsonian Tropical Research Inst. ....	1,002	70	1	-	47	4	18
Interdisciplinary Communi- cations Program .....	-	894	22	-	1	30	841
Natl. Air and Space Museum .....	2,633	108	3	-	59	24	22
Other Science .....	1,132	1,041	118	-	1	114	808
Total	24,884	11,343	260	-	163	1,688	9,232
<i>History and Art:</i>							
Natl. Portrait Gallery ....	1,122	62	22	-	25	1	14
Natl. Collection of Fine Arts .....	1,653	79	8	-	34	35	2
Freer Gallery of Art .....	274	1,134	-	-	-	1,134	-
Natl. Museum of History and Technology .....	4,334	398	46	-	11	222	119

TABLE 2. *Source and Application of Operating Funds for  
Year Ended June 30, 1974—continued*  
[In \$1,000's]

Funds	Nonfederal funds							
	Federal funds	Total non- fed- eral funds	Unrestricted			Restricted		
			Gen- eral	Reve- nue pro- duc- ing	Spe- cial pur- pose	Gen- eral	Grants and con- tracts	
Cooper-Hewitt Museum ...	174	266	4	-	-	237	25	
Archives of American Art .....	238	203	-	-	-	203	-	
Bicentennial of the American Revolution ...	1,746	-	-	-	-	-	-	
Hillwood .....	-	210	-	-	-	210	-	
Hirshhorn Museum .....	1,326	82	82	-	-	-	-	
Other History and Art ...	1,263	63	5	-	-	19	39	
<b>Total .....</b>	<b>12,130</b>	<b>2,497</b>	<b>167</b>	<b>-</b>	<b>70</b>	<b>2,061</b>	<b>199</b>	
<i>Public Service:</i>								
Revenue Producing Activities								
Smithsonian Press .....	800	200	-	200	-	-	-	
Performing Arts .....	422	1,083	-	493	-	107	483	
Other .....	-	10,342	-	10,272	-	9	61	
Anacostia Museum .....	317	21	18	-	-	3	-	
Reading Is Fundamental, Inc. ....	-	533	-	-	-	533	-	
Other Public Service .....	1,157	83	72	-	-	5	6	
<b>Total .....</b>	<b>2,696</b>	<b>12,262</b>	<b>90</b>	<b>10,965</b>	<b>-</b>	<b>657</b>	<b>550</b>	
<i>Museum Programs:</i>								
Libraries .....	1,165	2	-	-	-	2	-	
Exhibits .....	1,063	26	-	-	13	2	11	
Natl. Museum Act Programs .....	684	-	-	-	-	-	-	
Other Museum Programs ..	1,409	87	45	-	6	36	-	
<b>Total .....</b>	<b>4,321</b>	<b>115</b>	<b>45</b>	<b>-</b>	<b>19</b>	<b>40</b>	<b>11</b>	
Buildings Management and Protection Services .....	11,839	9	9	-	-	-	-	
Administration .....	4,693	3,386	443	461	13	331	2,138	
Overhead Recovered ....	-	(3,345)	(402)	(461)	(13)	(331)	(2,138)	
Transfers for Designated Purposes .....	-	1,026	(208)	1,770	(104)	(436)	4	
<b>Total Funds Applied</b>	<b>\$60,563</b>	<b>\$27,293</b>	<b>\$ 404</b>	<b>\$12,735</b>	<b>\$148</b>	<b>\$4,010</b>	<b>\$9,996</b>	
<b>FUND BALANCES—</b>								
30 June 1974 .....	0	\$ 6,382	\$3,067	\$	0	\$460	\$2,802	\$ 53

TABLE 3. *Special Foreign Currency Program,  
Fiscal Year 1974 Obligations*  
[In \$1,000's]

Country	Archeology	System- atic & Astro- Environ- physics & mental Earth Biology Sciences	Museum Programs	Grant Adminis- tration	Total	
India .....	\$ 125,470	\$ 112,650	\$31,369	\$ 8,679	\$48,081	\$ 326,249
Pakistan .....	92,661	223,383	-	950	-	316,994
Poland .....	311,750	68,726	38,645	8,576	670	428,367
Tunisia .....	96,661	544,107	16,250	40,343	5,668	703,029
Egypt .....	1,619,172	115,046	401	34,370	-	1,768,989
Yugoslavia .....	85,908	400,905	-	-	-	486,813
Total .....	<u>\$2,331,622</u>	<u>\$1,464,817</u>	<u>\$86,665</u>	<u>\$92,918</u>	<u>\$54,419</u>	<u>\$4,030,441</u>

Excluding these special-purpose appropriations for the Science Information Exchange and the Foreign Currency Program, federal operating funds amounted to \$58,868,000. This is \$7,235,000 more than fiscal year 1973, but \$4,180,000 (58 percent) of this substantial increase is attributable solely to meeting the costs of federal pay raises of various categories beyond the Institution's control. The balance of the increase, \$3,055,000, went primarily to three high-priority program objectives. These were (1) preparation of exhibits and related work of the National Air and Space Museum scheduled to open in its new building on the Mall on July 4, 1976; (2) development of special Washington, D. C., and national Bicentennial activities; and (3) phased strengthening of supporting services such as museum object conservation; reference and research libraries; automatic data processing applications to research, collections, and administrative activities; and buildings and facilities care and protection. Allocation of the appropriations for operating purposes (excluding the Foreign Currency Program) by broad activity areas over the past several years is shown in Table 4.

It may be of interest to note that in performance terms about \$12.6 million of the fiscal year 1974 appropriation was spent on basic research in art, history, and science; \$4.2 million on the acquisition and management of collections (only a few hundred thousand dollars of this were available for the purchase of objects); \$7.1 million for



TABLE 4. *Application of Federal Appropriations  
Fiscal Year 1971 through Fiscal Year 1974*  
(Excluding Special Foreign Currency Program)  
[In \$1,000's]

<i>Area</i>	<i>FY 1971</i>	<i>FY 1972</i>	<i>FY 1973</i>	<i>FY 1974</i>
Science .....	\$13,495	\$18,365*	\$20,329*	\$24,884*
History and Art .....	5,878	6,285	8,022	12,130
Public Service .....	1,442	2,093	2,253	2,696
Museum Programs .....	3,744	5,881	6,660	4,321
Administration .....	3,051	3,235	3,987	4,693
Building Maintenance and Protection .....	9,285	10,442	11,982	11,839
Total .....	\$36,895	\$46,301	\$53,233	\$60,563

\* Includes \$1,600,000 (FY 1972 and FY 1973) and \$1,695,000 (FY 1974) for the Smithsonian Science Information Exchange, Inc., which had been funded prior to 1972 by grants from the National Science Foundation.

the design, production, installation, and upkeep of exhibits; and \$2.7 million for various aspects of public and scholarly education and orientation. These program output areas total about \$26.6 million. Support areas total about \$34 million, of which \$13.0 million was for the care of buildings, \$7.8 million was for protection and security, and the balance was for other important administrative and support functions.

#### FEDERAL CONSTRUCTION FUNDS

Construction funding in fiscal year 1974 amounted to \$4,860,000, plus \$17,000,000 to meet progress payments under the contract authority provided in the fiscal year 1973 Appropriation Act for the construction of the National Air and Space Museum. The new appropriation provided primarily for the construction of the exciting new lion and tiger-exhibit at the National Zoological Park and further planning efforts aimed at implementing the approved master plan for the complete renovation of the Zoo. This funding also provided relatively minor amounts for repairs and improvements to other Smithsonian facilities such as safety and access improvements to the Mount Hopkins Observatory road in Arizona.

*GRANTS AND CONTRACTS*

Grants and contracts from federal agencies once again contributed in a major way to the Institution's research programs, predominantly in scientific disciplines. \$9,996,000 of these funds was expended in fiscal year 1974, up from \$8,996,000 in fiscal year 1973. The major recipient, accounting for over half of the total expenditures, continued to be the Smithsonian Astrophysical Observatory in Cambridge, Massachusetts, with grants from the National Aeronautics and Space Administration for such projects as the monitoring of Comet Kahoutek, meteor studies, and design of hydrogen maser systems. Other projects ranged from ecological studies in South America and Asia to research on American folklore. Table 5 shows the major granting agencies to the Smithsonian over a four-year period, representing several hundred different grants and contracts each year.

*PRIVATE TRUST FUNDS*

Originally established entirely with funds from Mr. Smithson's bequest, the Institution has, over a long period of years, derived an increasing proportion of its support from federal appropriations as it was entrusted with more national collections and expanded its research and public exhibitions.

It is now an important goal of Smithsonian administration to bolster the Institution's private resources in line with or exceeding the growth of its federal support, in order to restore a better balance between the two, thereby helping to preserve its uniquely flexible and independent character among national establishments. Despite the many serious economic uncertainties of this past 12-month period, fiscal year 1974 results were in line with this goal. Receipts (including those for operating purposes, land acquisition, and building construction) from gifts, investment income, revenue-producing activities, fees, and other revenues all increased to record levels, with the total equaling \$8,954,000 (not including \$105,000 gifts to endowment funds). Of this total \$5,598,000 was designated for specific restricted purposes; this latter amount was fractionally higher than in fiscal year 1973, while income for unrestricted purposes rose from \$1,013,000 to \$3,356,000 (see Table 6).

TABLE 5. *Grants and Contracts*

[In \$1,000's]

<i>Federal Agencies</i>	<i>FY 1971</i>	<i>FY 1972</i>	<i>FY 1973</i>	<i>FY 1974</i>
Atomic Energy Commission .....	\$ 91	\$ 73	\$ 76	\$ 72
Department of Commerce .....	166	392	203	184
Department of Defense .....	843	916	969	872
Department of Health, Education and Welfare .....	409	411	306	261
Department of Interior .....	258	247	230	283
Department of Labor .....	3	11	51	163
Department of State .....	176	195	593	1,066
National Aeronautics and Space Administration .....	4,930	4,605	4,923	5,308
National Endowments for the Arts and Humanities .....	—	35	58	102
National Science Foundation ....	2,028*	560	957	690
Other .....	408	643	630	995
<b>Total .....</b>	<b>\$9,312</b>	<b>\$8,088</b>	<b>\$8,996</b>	<b>\$9,996</b>

\* Includes funding for Smithsonian Science Information Exchange, Inc. of \$1,400,000.

TABLE 6. *Total Private Funds Income Fiscal Year 1974*

[In \$1,000's]

<i>Revenue sources</i>	<i>Unrestricted purposes</i>			<i>Total</i>
	<i>General &amp; revenue producing</i>	<i>Special purpose*</i>	<i>Restricted purposes</i>	
<i>For Operating Purposes:</i>				
Investments .....	\$ 744	\$ 3	\$1,750	\$2,497
Gifts .....	151**	124	1,970	2,245
Revenue Producing Activities ..	1,770	—	—	1,770
Concessions and miscellaneous..	284	280	546	1,110
<b>Total Operating Funds ..</b>	<b>\$2,949</b>	<b>\$407</b>	<b>\$4,266</b>	<b>\$7,622</b>
<i>For Plant:</i>				
<i>Gifts —</i>				
Hirshhorn Museum .....	\$ —	\$ —	\$1,000	\$1,000
Chesapeake Bay Center .....	—	—	70	70
Cooper-Hewitt Museum .....	—	—	117	117
<b>Total Gifts .....</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$1,187</b>	<b>\$1,187</b>
<i>Miscellaneous —</i>				
Cooper-Hewitt Museum .....	\$ —	\$ —	145	145
<b>Total Plant .....</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$1,332</b>	<b>\$1,332</b>
<b>Grand Total .....</b>	<b>\$2,949</b>	<b>\$407</b>	<b>\$5,598</b>	<b>\$8,954</b>

\* Classified as Restricted Funds in previous years; represents unrestricted income designated by management to be used only for specific purposes.

\*\* Excluding \$260,000 gifts to Associates (included under Revenue Producing Activities) and \$105,000 gifts to Endowment Funds.

## UNRESTRICTED PRIVATE FUNDS

The substantial increase in unrestricted general purpose private funds in fiscal year 1974 was extremely welcome and enabled the Institution for the first time to reserve private monies for plant improvements not believed to be obtainable from federal appropriations but which will enhance our ability to serve the public and which may, at the same time, lead to increased private support in the years ahead. The build-up of the general unrestricted fund balance to a more adequate level of \$3,067,000 also means that portions of any similar gains in future years may also be used for this purpose or to strengthen our present low endowment reserves.

As may be seen in Table 7, the increase in income before transfers to other funds, equaling \$2,336,000 in fiscal year 1974 compared to \$688,000 in fiscal year 1973, arose in part from a jump in investment income but, more importantly, from successful results of our educational and revenue-producing activities. There was, at the same time, a somewhat offsetting rise in administrative costs, partly from salary and other administrative cost increases (including an initial charge of \$198,000 to establish a reserve for employees' accrued annual leave), but also reflecting greater assistance to a number of bureaus for special needs and urgent research projects.

The increase in investment income this year resulted primarily from the build-up in working capital and advance *Smithsonian* magazine subscription monies which made more funds available for investment in high quality short-term issues at prevailing high interest rates. As may be noted on the Balance Sheet, page 48, current fund investments equaled \$8,298,000 as of June 30, 1974, compared to \$6,223,000 a year earlier; of the former amount, \$6,600,000 was invested in very high grade, short-term securities and bank certificates of deposit.

The *Smithsonian* magazine was responsible for the largest share of the net gain from revenue-producing activities. As shown in Table 8, its income for the year rose to \$1,327,000, from \$330,000 in the previous year. At June 30, 1974, there were 622,000 National Associate members and subscribers to the magazine, making it one of the fastest growing publications in the Nation. The Associates program also contributed heavily to this year's gains, with net income of \$263,000, versus a slight loss in fiscal year 1973. The Resident Asso-

TABLE 7. *Unrestricted Private Funds  
General and Revenue Producing Activities*  
(Excluding Special Purpose Funds and Gifts to Endowment)  
[In \$1,000's]

Item	FY 1971	FY 1972	FY 1973	FY 1974
<b>INCOME</b>				
<b>General Income:</b>				
Investments .....	\$ 334	\$ 334	\$ 436	\$ 744
Gifts .....	304	26	33	151
Concessions and miscellaneous ..	215	197	374	284
Total General Income .....	853	557	843	1,179
<b>Revenue Producing Activities:</b>				
<b>Associates</b>				
Smithsonian Magazine .....	(209)	2	330	1,327
Other .....	10	74	(43)	263
Shops .....	(80)	19	47	226
Press .....	(159)	(111)	(109)	(89)
Performing Arts .....	(78)	(50)	(65)	104
Product Development .....	-	-	69	37
Other Activities .....	(18)	(75)	(59)	(98)
Total Activities .....	(534)	(141)	170	1,770
Total Income .....	319	416	1,013	2,949
<b>EXPENDITURES</b>				
Administrative Expense .....	2,681	2,956	3,097	3,957
Less Administrative Recovery ...	2,254	2,639	2,772	3,345
Net Administrative Expense ...	427	317	325	612
Net Gain (Loss) before Transfers	(108)	99	688	2,337
<b>Less Transfers:</b>				
To Plant .....	-	-	-	1,134
To Endowment .....	21	21	21	121
Other (Net) .....	21	17	124	307
Net Gain (Loss) after Transfers	(150)	61	543	775
Ending Balance .....	\$1,720	\$1,781	\$2,292*	\$3,067

\* Adjusted to reflect reclassification to Plant Funds of \$32,000 net investment in capitalized equipment.

ciates program continues to furnish great benefits to the Washington, D.C., community with its offering of classes, study trips, lectures, and exhibit openings; the Foreign Study Tours program has likewise gained enthusiastic acceptance.



TABLE 8. Revenue Producing Activities for Fiscal Year 1974  
[In \$1,000's]

Item	Total	Museum Shops	Associates					Other**
			Press*	Smithsonian Magazine	Other	Performing Arts	Product development	
Sales and Revenues . . . . .	12,473	2,141	111	7,127	1,778	597	107	612
Less Cost of Sales . . . . .	6,918	1,211	83	4,426	886	145	—	167
Gross Income	5,555	930	28	2,701	892	452	107	445
Gifts . . . . .	260	—	—	—	260	—	—	—
Other Income . . . . .	2	—	—	—	—	—	—	2
Total Income . . . . .	5,817	930	28	2,701	1,152	452	107	447
Expenses . . . . .	3,586	604	105	1,174	820	314	64	505
Administrative Costs . . . . .	461	100	12	200	69	34	6	40
Income (Loss) before Transfers . . . . .	1,770	226	(89)	1,327	263	104	37	(98)
Less Transfers . . . . .	28	—	(5)	—	—	—	33***	—
Net Income (Loss) . . . . .	1,742	226	(84)	1,327	263	104	4	(98)

\* The privately funded activities of the Press as opposed to the federally supported publication of research papers.

\*\* Includes Traveling Exhibitions, Belmont Conference Center, Photo Sales, "Commons" Restaurant, Center for Short-Lived Phenomena, Special Publications, and Television Programs.

\*\*\* This includes allocations to the Press and other Smithsonian bureaus participating in this program.

The profitability of the Museum Shops also increased dramatically, from \$47,000 in fiscal 1973 to \$226,000 in fiscal 1974, due in large measure to improved management practices and increased emphasis on higher quality merchandise relevant to the collections exhibited in the various Smithsonian museums. As with the Product Development Program, which transferred \$33,000 of royalties to individual bureaus, income from the Museum Shops will in the future be shared with the museums for their use in public education programs and purchases for the collections.

The Performing Arts Division produced an extremely successful record album, the *History of Jazz*, which enabled them to show a gain of \$104,000 in this fiscal year, as opposed to a deficit of \$65,000

in fiscal year 1973. Another "bestseller" was the guidebook, *Seeing the Smithsonian*, developed by the Smithsonian Press and Product Development Offices in cooperation with the CBS Publishing Company; its sales added substantially to the profitability of the Museum Shops.

As any surplus funds accrue from project receipts of the shops or the Associates program an appropriate effort is made to return this in kind to the public in the form of improved public facilities, improved public reference books or publications, and improved public exhibits. As an example, the unusually large net gain in unrestricted private funds in fiscal year 1974 coincided with urgent requirements for construction funds, necessitating transfers of \$1,134,000 to the Institution's plant funds, with other transfers to Special Purpose funds, Restricted Funds, and Endowment Funds bringing total transfers to \$1,561,000 (see Table 7). Of the transfers to plant funds, \$365,000 was set aside to redesign and reconstruct the museum shop in the National Museum of History and Technology. Another \$500,000 was reserved for a part of the costs of the proposed construction of additional public service facilities in the West Court of the National Museum of Natural History. Finally, \$150,000 was transferred to cover a part of the cost of a visitor's study center at the Chesapeake Bay Center for Environmental Studies, and \$119,000 was transferred for computer and equipment purchases. Other transfers from unrestricted funds include allocations toward operations of the Cooper-Hewitt Museum (\$178,000), special research grants to Smithsonian scientists (\$49,000), and transfers to Endowment (\$121,000) which includes a bequest of \$100,000 from the estate of Paula Lambert.

A new category of unrestricted private funds ("Special Purpose") is set out separately this year, namely, those which are legally unrestricted but which have been designated by management to be reserved for specific uses (see Table 6). These accounts, previously treated as a part of Restricted Funds, include, for example, receipts from parking at the Zoo (reserved to aid future construction of additional parking facilities for visitors), and revenues from various minor enterprises in individual museums (e.g., charges for tour-guide audiophone equipment, etc.) and related expenditures of these monies, chiefly for improvement of exhibits. As of June 30, 1974, balances of these funds totaled \$460,000, an increase of \$259,000 in the year.

TABLE 9. *Restricted Operating Private Funds,\* Fiscal Year 1974*  
 [In \$1,000's]

Fund	Income					Deductions	Transfers in (out)	Net increase (decrease)	Fund balance end of year
	Investment	Gifts	Miscellaneous	Total income					
Archives of American Art . . . . .	\$ 1	\$ 19	\$186	\$ 206	\$ 203	\$ 9	\$ 12	\$ 205	
American Banking Exhibit . . . . .	-	285	-	285	17	-	268	268	
American Maritime Hall . . . . .	-	52	-	52	-	-	52	166	
Cooper-Hewitt Museum:									
Operations . . . . .	6	29	38	73	190	232	115	-	
Funds for Collection and other Special Purpose Funds . . . . .	-	70	-	70	47	10	33	582	
Fort Pierce Bureau . . . . .	530	385	28	943	1,008	300	235	192	
Freer Gallery . . . . .	876	100	200	1,176	1,134	-	42	191	
Hillwood . . . . .	-	299	1	300	210	-	90	79	
Reading is FUNDamental . . . . .	-	-	-	-	532	-	(532)	180	
Other . . . . .	337	731	93	1,161	1,104	(115)	(58)	939	
Total Restricted Funds . . . . .	\$1,750	\$1,970	\$546	\$4,266	\$4,445	\$436	\$257	\$2,802	

\* Excluding Grants and Contracts shown in Table 5 and also Restricted Plant Funds included in Table 6.

#### RESTRICTED PRIVATE FUNDS

The Restricted Private Funds of the Institution, which support a wide variety of activities even beyond the major ones highlighted in Table 9, received \$4,266,000 for operating purposes in fiscal year 1974. The Freer Gallery of Art and the Fort Pierce Bureau depend primarily on income from their endowment funds, while the Cooper-Hewitt Museum of Decorative Arts and Design and the Archives of American Art, although receiving some federal support, must look to gifts, grants, memberships, and various money-raising efforts for their principal operating funds. In addition, it was necessary to transfer \$178,000 of private unrestricted funds to Cooper-Hewitt in fiscal year 1974 to eliminate operating deficits accumulated over this and previous years.

In September 1973, at the death of Mrs. Marjorie Merriweather Post, the responsibility for her "Hillwood" estate and the extraordinary collections it contains passed to the Smithsonian. A trust fund

was provided by her will for the maintenance and operation of Hillwood, but the estate had not yet been settled at year-end; part-year income and expenditures for this new project are reflected in the Restricted Private Funds table.

The National Museum of History and Technology is conducting a fund-raising campaign, with strong support from industry, to enable creation of a new exhibit "Hall of American Maritime Enterprise" devoted to national marine history. As of June 30, 1974, \$166,000 had been raised with additional pledges received of over \$100,000.

A gift of \$1 million was received from Joseph H. Hirshhorn in fiscal year 1974 to be used to complete construction of the Hirshhorn Museum and Sculpture Garden, due to open to the public in October 1974. This gift is reflected in the restricted gifts total in Table 6 in the category of Plant Funds along with other gifts and miscellaneous revenues for the new Chesapeake Bay Center building (\$70,000) and renovation of the Carnegie Mansion for the Cooper-Hewitt Museum (\$262,000).

#### ENDOWMENT FUNDS

The Smithsonian endowment includes three separate investment funds: the Freer Fund, whose income is used solely by the Freer Gallery of Art; Endowment Fund No. 3, which supports oceanographic research at the Fort Pierce Bureau in Florida; and the Consolidated Fund, which is an investment pool of all other Smithsonian restricted and unrestricted endowment funds, although distinct administration and accounting is maintained on each individual fund. Changes in market values of these funds since 1970, reflecting additions from donations and reinvestment of income, limited withdrawals, and changes in securities valuations are shown in Table 10.

TABLE 10. *Market Values of Endowment Funds*  
[In \$1,000's]

<i>Fund</i>	<i>6/30/70</i>	<i>6/30/71</i>	<i>6/30/72</i>	<i>6/30/73</i>	<i>6/30/74</i>
Freer .....	\$14,987	\$18,805	\$21,973	\$18,279	\$14,250
Endowment No. 3 ..	5,433	12,331	14,641	13,196	11,128
Consolidated .....	8,998	11,470	13,287	12,393	10,172
Total .....	\$29,418	\$42,606	\$49,901	\$43,868	\$35,550

As detailed in previous Smithsonian Annual Reports, the investment of these three endowments is managed by three professional advisory firms, under the close supervision of the Investment Policy Committee and the Treasurer, and subject to policy guidelines set by the Smithsonian's Board of Regents. Under the Total Return policy, adopted for all funds by the Board of Regents in 1972, the income to be paid each fund in the subsequent fiscal year is determined each March 31 by computing 4½ percent of the running five-year average of market values. By selecting a fixed rate of return, regardless of what the actual yield may be, the investment advisors are free to choose the most attractive securities without being limited by the need to achieve a specified dividend and interest income level and at the same time Smithsonian budgeting procedures are simplified.

TABLE 11. *Changes in Endowment Funds for Fiscal Year 1974*

[In \$1,000's]

<i>Fund</i>	<i>Market value 6/30/73</i>	<i>Gifts and transfers</i>	<i>Interest and dividends*</i>	<i>Income paid out</i>	<i>Sub- total</i>	<i>Decline in market value</i>	<i>Market value 6/30/74</i>
Freer Fund ...	\$18,279	\$ -	\$ 670	\$ 876	\$18,073	\$3,823	\$14,250
Endowment Fund No. 3 ..	13,196	(300)	445	520	12,821	1,693	11,128
Consolidated Fund .....	12,393	297	478	552	12,616	2,444	10,172
Total** ..	<u>\$43,868**</u>	<u>\$ (3)</u>	<u>\$1,593</u>	<u>\$1,948</u>	<u>\$43,510</u>	<u>\$7,960</u>	<u>\$35,550</u>

\* Income earned less managers' fees.

\*\* Not including Endowment Funds of \$1,000,000 held in U.S. Treasury, carrying 6 percent interest, nor minor amount of miscellaneous securities treated separately.

As shown in Table 11, the market values of the endowment funds suffered badly in fiscal year 1974, sharing fully in the general stock market decline. This fall in market values will have the effect in fiscal year 1975 of reducing the Total Return income to the Freer and Consolidated Funds to somewhat below the level of fiscal year 1974, although still higher than prior years.



Gifts, bequests, and reinvestment of income in certain restricted funds added \$297,000 to the Consolidated Fund, and a transfer of \$300,000 was made from Endowment Fund No. 3 to permit completion of the RV *Johnson* submarine tender as well as to cover costs relating to the entrapment of the submersible *Johnson-Sea-Link* in June 1973. Income totaling \$1,948,000, net of managers' fees, was paid out under the Total Return policy described above; this was \$355,000 in excess of dividend and interest yield on these Endowment Funds in the year. Market valuations and income of the individual restricted funds participating in the Consolidated pool are shown in Table 12, and detail on the funds by types of securities held is given in Table 13. A listing of the individual investments held in the various endowment funds at June 30, 1974, may be obtained upon request to the Treasurer of the Institution.

### *Accounting and Auditing*

The Private Trust Funds of the Institution, as well as the accounts of Smithsonian Science Information Exchange, Inc., the Smithsonian Research Foundation, and Reading-Is-Fundamental, Inc., are audited annually by independent public accountants. Their report for fiscal year 1974 on the Smithsonian is contained in the following pages, including a comparative balance sheet and a statement of changes in the various fund balances. Extensive changes in accounting treatment of a number of items in accordance with new guidelines established by the American Institute of Certified Public Accountants have been referred to at length in the Notes to these statements and are reflected in the tables in this report dealing with Unrestricted and Restricted Private Funds.

The Defense Contract Audit Agency annually performs an audit on grant and contract monies received from federal agencies. In addition, the federally appropriated funds of the Institution are subject to audit by the General Accounting Office. The internal audit staff continues to conduct audits throughout the wide range of Smithsonian activities and contributes greatly to smooth administrative and financial management.

TABLE 12. Consolidated Fund, June 30, 1974

Funds participating in pool	Principal		Income	
	Book value	Market value	1974 Net income	Unexpended balance
UNRESTRICTED FUNDS .....	\$ 4,616,391	\$ 3,809,559	\$ 219,510	\$ -
RESTRICTED FUNDS				
Abbott, William L. ....	211,924	187,195	11,420	2,411
Archives of American Art .....	21,986	19,081	782	-
Armstrong, Edwin James .....	4,133	3,176	185	-
Arthur, James .....	62,497	70,039	3,575	5,821
Bacon, Virginia Purdy .....	184,850	146,095	8,913	18,728
Baird, Spencer Fullerton .....	57,364	62,608	3,197	-
Barney, Alice Pike .....	44,821	50,191	2,562	6,240
Barstow, Frederic D. ....	2,032	1,792	110	1,806
Batchelor, Emma E. ....	67,414	52,069	3,176	6,066
Beauregard, Catherine Memorial Fund .....	77,837	69,749	792	791
Becker, George F. ....	317,610	252,863	15,428	10,763
Brown, Roland W. ....	51,303	47,868	2,443	7,595
Canfield, Frederick A. ....	59,323	77,168	3,940	-
Casey, Thomas Lincoln .....	25,489	22,552	1,376	1,856
Chamberlain, Frances Lea .....	44,007	49,281	2,515	5,859
Cooper, G. Arthur, Curator's Fund ..	2,840	2,294	97	-
Cooper-Hewitt Museum .....	158,973	121,148	5,822	-
Desautels, Paul E. ....	1,463	1,159	52	52
Div. of Mammal Curator Fund .....	3,366	2,863	146	920
Div. of Reptiles Curator Fund .....	1,006	847	38	120
Drake, Carl J. ....	283,815	230,827	11,562	25,406
Dykes, Charles .....	87,541	77,416	4,723	12,500
Eickemeyer, Florence Brevoort .....	16,988	19,015	971	2,602
Guggenheim, David and Florence ...	238,898	179,715	7,235	-
Hanson, Martin Gustav and Caroline Runice .....	18,077	15,986	975	9,919
Henderson, Edward P. Meteorite Fund	623	623	-	-
Hillyer, Virgil .....	13,365	11,826	721	3,548
Hitchcock, Albert S. ....	2,464	2,806	143	331
Hrdlicka, Ales and Marie .....	95,780	87,196	4,451	6,030
Hughes, Bruce .....	29,910	33,536	1,712	24,641
Johnson, E. R. Fenimore .....	16,361	11,836	722	4,732
Kellogg, Remington, Memorial .....	48,275	33,947	2,054	1,442
Lindsey, Jessie H. ....	587	493	25	633
Loeb, Morris .....	177,619	158,544	9,673	1,207
Long, Annette E. and Edith C. ....	848	976	49	232
Lyons, Marcus Ward .....	8,778	6,390	390	-
Maxwell, Mary E. ....	30,650	34,361	1,755	8,365
Myer, Catherine Walden .....	41,084	36,336	2,217	4,220

TABLE 12. Consolidated Fund, June 30, 1974—continued

Funds participating in pool	Principal		Income	
	Book value	Market value	1974 Net income	Unexpended balance
Nelson, Edward William .....	\$ 37,315	\$ 38,911	\$ 1,987	\$ -
Noyes, Frank B. ....	1,976	1,831	112	1,237
Pell, Cornelia Livingston .....	15,091	13,414	818	5,849
Petrocelli, Joseph, Memorial .....	11,582	13,033	665	8,540
Ramsey, Admiral and Mrs. DeWitt Clinton .....	527,193	387,110	23,857	15,467
Rathbun, Richard, Memorial .....	21,648	19,220	1,172	11,701
Reid, Addison T. ....	36,166	31,982	1,951	2,852
Roebling Collection .....	188,656	210,194	10,730	1,059
Roebling Solar Research .....	50,163	41,324	2,521	962
Rollins, Miriam and William .....	298,674	296,708	14,862	-
Ruef, Bertha M. ....	63,809	45,991	2,101	2,809
Smithsonian Agency Account .....	186,886	138,087	7,417	-
Sprague, Joseph White .....	2,179,658	1,785,177	89,418	1,746
Springer, Frank .....	28,025	31,366	1,601	20,767
Stevenson, John A. ....	9,525	8,522	435	-
Strong, Julia D. ....	20,348	18,061	1,101	4,559
T.F.H. Publications, Inc. ....	13,539	9,554	523	9,816
Walcott, Charles D. ....	191,293	185,590	9,296	11,323
Walcott, Charles D. and Mary Vaux	719,110	804,766	41,084	20,114
Walcott Botanical Publications .....	90,618	97,623	4,984	15
Zerbee, Francis Brinckle .....	1,483	1,649	84	1,718
Total Restricted Funds .....	<u>\$ 7,204,659</u>	<u>\$ 6,361,980</u>	<u>\$332,666</u>	<u>\$295,370</u>
Total Consolidated Funds .....	<u>\$11,821,050</u>	<u>\$10,171,539</u>	<u>\$552,176</u>	<u>\$295,370</u>

TABLE 13. *Endowment and Similar Funds Summary of Investments*

<i>Accounts</i>	<i>Book value 6/30/74</i>	<i>Market value 6/30/74</i>
<b>INVESTMENT ACCOUNTS</b>		
<b>Freer Fund:</b>		
Cash .....	\$ 544,442	\$ 544,442
Bonds .....	2,755,871	2,559,139
Convertible Bonds .....	1,657,791	1,360,919
Stocks .....	11,264,712	9,785,271
Total .....	\$16,222,816	\$14,249,771
<b>Consolidated Funds:</b>		
Cash .....	\$ 91,898	\$ 91,898
Bonds .....	2,981,194	2,785,227
Convertible Bonds .....	0	0
Stocks .....	8,747,958	7,294,414
Total .....	\$11,821,050	\$10,171,539
<b>Endowment Fund No. 3:</b>		
Cash .....	\$ 108,931	\$ 108,931
Bonds .....	2,996,566	2,916,807
Convertible Bonds .....	202,878	159,155
Stocks .....	9,423,532	7,944,033
Total .....	\$12,731,907	\$11,128,926
<b>Miscellaneous:</b>		
Cash .....	\$ 731	\$ 731
Bonds .....	9,769	9,100
Common Stocks .....	3,322	8,373
Total .....	\$ 13,822	\$ 18,204
Total Investment Accounts .....	<u>\$40,789,595</u>	<u>\$35,568,440</u>
<b>Other Accounts:</b>		
Notes Receivable .....	\$ 49,966	\$ 49,966
Loan to U.S. Treasury in Perpetuity .....	1,000,000	1,000,000
Total Other Accounts .....	<u>\$ 1,049,966</u>	<u>\$ 1,049,966</u>
Total Endowment and Similar Fund Balances ....	<u>\$41,839,561</u>	<u>\$36,618,406</u>

*Donors to the Smithsonian*

The Smithsonian Institution gratefully acknowledges gifts and bequests received during fiscal year 1974 from the following:

*\$100,000 or more:*

American Bankers Association	Mr. Joseph H. Hirshhorn
The Atlantic Foundation	Estate of Paula C. Lambert
Hillwood Trust	The Majorie Merriweather Post Foundation of D.C.

*\$10,000 or more:*

Alcoa Foundation	International Business Machines Corporation
American Philosophical Society	Interdisciplinary Communication Associates, Inc.
Anonymous	J. M. Kaplan Fund, Inc.
The Arcadia Foundation	Mr. and Mrs. Daniel E. Koshland
Estate of William A. Archer	Mr. Edwin A. Link
Batelle Memorial Institute	Andrew W. Mellon Foundation
Dr. William H. Crocker	Eugene and Agnes E. Meyer Foundation
John Deere Foundation	The Mobil Foundation, Inc.
The Henry L. and Grace Doherty Charitable Foundation, Inc.	The Ambrose Monell Foundation
Doubleday & Company, Inc.	National Geographic Society
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Charles Hayden Foundation	Mississippi State Historical Museum
William Randolph Hearst Foundation	Miss Alice Tully
Mr. and Mrs. Henry J. Heinz II	The Thomas J. Watson Foundation
Mrs. Ethel R. Holmes	United Seamen's Service
Houston Endowment, Inc.	Weatherhead Foundation
	World Wildlife Fund

*\$1,000 or more:*

Mr. Max Abramovitz	Barra Foundation
American Express Foundation	Mr. Hilary Barratt-Brown
American Council of Learned Societies	Mrs. Evelyn F. Bartlett
American Federation of Information Processing Societies, Inc.	The Bedminster Fund, Inc.
The American Foundation	Beneficial Fund, Inc.
American Institute of Marine Underwriters	Mrs. Neville J. Booker
American Metal Climax Foundation	Ms. Beulah Boyd
Arthur Anderson and Company	Mr. John Nicholas Brown
Anonymous	Mr. David K. E. Bruce
Astillero Nacional	The Burroughs Wellcome Fund
Bankers Trust Company	Mr. and Mrs. Douglass Campbell
	Caterpillar Tractor Company
	Celanese Corporation of America
	Charron Foundation



## \$1,000 or more—continued:

- General Claire Lee Chennault  
 Foundation  
 Mrs. Frances K. Clark  
 The Coca Cola Company  
 Committee for Islamic Culture  
 Continental Oil Company  
 Mr. and Mrs. Raymond E. Cox  
 Mrs. Alice Crowley Trust  
 Cultural Council Foundation  
 Ms. Priscilla Cunningham  
 Ms. Aileen Curry-Cloonan  
 Dana Corporation Foundation  
 Mrs. John Dimick  
 Cleveland H. Dodge Foundation, Inc.  
 Earhart Foundation  
 The Edipa Foundation, Inc.  
 El Paso Natural Gas Company  
 Dr. William L. Elkins  
 Elsa Wild Animal Appeal  
 Mr. Alfred U. Elser, Jr.  
 Entomological Society of America  
 The Eppley Foundation for Research  
 Mrs. Ruth M. Epstein  
 Fieldcrest Mills, Inc.  
 First National Bank of Miami  
 General Electric Company  
 General Telephone & Electronics  
 Foundation  
 Mrs. Rebecca D. Gibson  
 Mr. Alfred C. Glassell, Jr.  
 Mr. and Mrs. Joshua A. Gollin  
 Mrs. Katherine Graham  
 Great Lakes Aircraft Co.  
 Mr. Felix Guggenheim  
 Mr. M. D. Guinness  
 Mrs. David L. Guyer  
 Hallmark Educational Foundation  
 Mr. Wallace K. Harrison  
 Hiram Walker & Sons, Inc.  
 Hoover Foundation  
 Institute of International  
 Education  
 International Association of Plant  
 Taxonomy  
 International Rectifier Corporation  
 International Telephone and  
 Telegraph Corporation  
 The Island Foundation  
 Janss Foundation  
 The Johnson Foundation, Inc.  
 J. D. R. 3rd Fund, Inc.  
 Mr. James Ellwood Jones, Jr.  
 Mrs. Merri Jones  
 Mrs. Ruth Cole Kainen  
 Atwater Kent Foundation, Inc.  
 Mr. and Mrs. Judd Kessler  
 Keystone Shipping Co.  
 Kidder Peabody Foundation  
 Mr. Irving B. Kingsford  
 Dr. and Mrs. Robert Kinnaird  
 Kominers, Fort, Schlefer & Boyer  
 Mr. Edward F. Kook  
 Mr. David Lloyd Kreeger  
 S. S. Kresge Company  
 Mr. and Mrs. Rodney M. Layton  
 Lilly Endowment, Inc.  
 Mr. Charles A. Lindbergh  
 Mr. Harold F. Linder  
 The Link Foundation  
 Mrs. Elizabeth Lorentz  
 The Lykes Foundation, Inc.  
 Maritime Overseas Corporation  
 Mr. and Mrs. William A. Marsteller  
 Townsend B. Martin Charitable  
 Foundation  
 Mr. and Mrs. John Mayer  
 McDonald's Corporation  
 Mr. Forrest L. Merrill  
 Mobil Foundation, Inc.  
 Mr. and Mrs. Harry C. Nail, Jr.  
 National Bank of Detroit  
 National Council on Productivity  
 National Research Council  
 National Steel and Shipbuilding  
 Company  
 Northrop Corporation  
 Northwest Industries Foundation, Inc.  
 Olin Corporation Charitable Trust  
 Ourisman Foundation, Inc.  
 Palisades Foundation, Inc.  
 Mr. Perry R. Pease  
 J. C. Penney Company, Inc.  
 The Pioneer Foundation  
 Mr. and Mrs. Feodor U. Pitcairn  
 Polaroid Foundation, Inc.  
 Dr. and Mrs. John A. Pope  
 Propeller Club of U.S., Port of  
 New York  
 R. J. Reynolds Industries, Inc.  
 Miss Esther M. Ridder  
 Mr. and Mrs. Ralph C. Rinzler  
 Dr. S. Dillon Ripley  
 Mr. and Mrs. William G. Roe  
 Schubert Foundation  
 Miss Elsie Shaver  
 Shipbuilders' Council of America  
 Sidney Printing and Publishing Co.  
 Stacks Coin Company  
 Miss Elizabeth Stein  
 Mrs. Alice T. Strong

*\$1,000 or more—continued:*

Sumner Gerard Foundation	Miss Leslie Anne Weeks
Todd Shipyards Corporation	Wells Fargo Bank
T.R.W. Foundation, Inc.	Wenner-Gren Foundation
Trust of Georgia Foundation	Mr. and Mrs. Albert Whiting
UNESCO	Elsie de Wolfe Foundation, Inc.
University of Michigan	Women's Committee of the
Mr. Arthur K. Watson	Smithsonian Institution
Mr. Thomas J. Watson, Jr.	Woodheath Foundation, Inc.
Ellen Bayard Weedon Foundation	Charles W. Wright Foundation of
Mr. Christopher A. Weeks	Badger Meter, Inc.
Mr. Kermit A. Weeks	Wunsch American Foundation

*\$500 or more:*

American Airlines, Inc.	The Magnavox Foundation
Anonymous	Mrs. Margaret McClellan
AVCO Corporation	Ellen McCluskey Associates
Mr. and Mrs. Frank C. Baldwin	Mr. and Mrs. John McGreevey
Mr. Harry Hood Bassett	Mr. Henry P. McIlhenny
Mr. Arthur W. Bedell	Mr. and Mrs. K. M. McLaren
Brotherton-DiGiorgio Corporation	Dr. and Mrs. Leo A. McNalley
Mr. and Mrs. C. Emery Buffum	Mr. Robert L. McNeil, Jr.
Mrs. W. Randolph Burgess	Mr. and Mrs. Walter W. Meiers
Mr. Carter Cafritz	Mrs. Constance L. Mellen
Charities Aid Fund	Mr. Paul Mellon
China Airlines	Dr. and Mrs. Matthew Michiewicz
Mr. and Mrs. Edward T. Choy	Mr. and Mrs. Arthur H. Miller
Mr. R. Coaley	Mr. and Mrs. Bernard Nath
Mr. Sheldon R. Coons	The Nature Conservancy
Mr. John M. Crawford, Jr.	Nautilus Foundation, Inc.
Dr. and Mrs. Willis N. Dickens	Mr. Otto Natzler
Mrs. Helen W. Edey	Mr. Edward Neinken
Educational Audio Visual, Inc.	Mr. Mortimer Neinken
Emery Air Freight	PACCAR Foundation
Mr. and Mrs. Ralph H. Fisher	Mr. Carl H. Pforzheimer, Jr.
Mr. Robert B. Flint	Mr. John Shedd Reed
Mr. and Mrs. Robert W. Fuller III	Dr. Ira Rubinoff
Dr. and Mrs. Carl E. Gericke	Santa Fe Industries, Inc.
The B. F. Goodrich Company	The Norine and Otilie
Guide Foundation	Schillig Foundation, Inc.
Edith G. Halpert Foundation	Mr. Sidney N. Shure
Mrs. Francis Head	Shuttleworth Carton Co.
Institute of Psychiatry and	Mr. Robert H. Smith
Foreign Affairs	E. R. Squibb and Sons, Inc.
The IX Foundation	Mr. and Mrs. Irwin R. Stone
S. C. Johnson and Son, Inc.	Levi Strauss Foundation
Mr. E. P. Jones	Strayer College
Josten Fund, Inc.	Mr. and Mrs. John L. Tishman
Mr. James G. Kenan	Mr. Chi-Chuan Wang
Mr. and Mrs. Fleming Law	Mr. and Mrs. Harold I. Westcott
James A. MacDonald Foundation	Winn-Dixie Stores, Inc.

We also gratefully acknowledge other contributions in the amount of \$229,197.80 received from more than 5,000 contributors in fiscal year 1974.

## PEAT, MARWICK, MITCHELL &amp; CO.

CERTIFIED PUBLIC ACCOUNTANTS  
1025 CONNECTICUT AVENUE, N. W.  
WASHINGTON, D. C. 20036

The Board of Regents  
Smithsonian Institution:

We have examined the balance sheet of the Private Funds of Smithsonian Institution as of June 30, 1974 and the related statement of changes in fund balances for the year then ended. Such statements do not include the accounts of the National Gallery of Art, the John F. Kennedy Center for the Performing Arts, nor other departments, bureaus and operations administered by the Institution under Federal appropriations as detailed in note 3 to the financial statements. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the aforementioned financial statements present fairly the financial position of the Private Funds of Smithsonian Institution at June 30, 1974 and the changes in its fund balances for the year then ended, in conformity with generally accepted accounting principles which, except for the changes referred to in note 1a to the financial statements, with which we concur, have been applied on a basis consistent with that of the preceding year.

PEAT, MARWICK, MITCHELL & CO.

September 5, 1974

## SMITHSONIAN INSTITUTION - PRIVATE FUNDS

## Balance Sheet

June 30, 1974

(with comparative figures for 1973)

<i>Assets</i>	1974	1973
<b>CURRENT FUNDS:</b>		
Cash:		
In U. S. Treasury .....	\$ 139,352	293,324
In banks and on hand .....	651,485	413,499
Total cash .....	<u>790,837</u>	<u>706,823</u>
Investments (note 2) .....	<u>8,298,318</u>	<u>6,223,305</u>
Receivables:		
Accounts, less allowance for doubtful accounts of \$200,000 (\$194,486 in 1973) .....	1,247,671	935,486
Advances — travel and other .....	203,705	172,568
Reimbursement — grants and contracts .....	2,261,103	1,061,872
Due from agency funds .....	136,151	—
Total receivables .....	3,848,630	2,169,926
Inventories .....	780,054	602,254
Prepaid expenses .....	420,272	456,659
Deferred expenses .....	<u>1,208,561</u>	<u>769,670</u>
Total current funds .....	<u>\$15,346,672</u>	<u>10,928,637</u>
<b>ENDOWMENT AND SIMILAR FUNDS:</b>		
Cash and receivables for securities sold .....	506,035	359,353
Notes receivable .....	49,966	51,486
Due from current funds .....	239,967	—
Investments (note 2) .....	40,043,593	41,266,827
Loan to U. S. Treasury in perpetuity at 6% .....	<u>1,000,000</u>	<u>1,000,000</u>
Total endowment and similar funds .....	<u>\$41,839,561</u>	<u>42,677,666</u>
<b>PLANT FUNDS:</b>		
Due from current funds .....	1,934,519	938,480
Real estate (note 5) .....	4,847,870	3,471,825
Equipment, less accumulated depreciation of \$409,830 (\$303,385 in 1973) (note 4) .....	<u>237,025</u>	<u>328,107</u>
Total plant funds .....	<u>\$ 7,019,414</u>	<u>4,738,412</u>
<b>AGENCY FUNDS:</b>		
Investments .....	10,000	—
Due from current funds .....	<u>213,100</u>	<u>130,814</u>
Total agency funds .....	<u>\$ 223,100</u>	<u>130,814</u>

See accompanying notes to financial statements.

## SMITHSONIAN INSTITUTION - PRIVATE FUNDS

## Balance Sheet

June 30, 1974

(with comparative figures for 1973)

<i>Liabilities and Fund Balances</i>	1974	1973
<b>CURRENT FUNDS:</b>		
Accounts payable and accrued liabilities .....	\$ 2,596,331	1,701,665
Due to plant funds .....	1,934,519	938,480
Due to agency funds .....	213,100	130,814
Due to endowment and similar funds .....	239,967	-
Deferred income:		
Magazine subscriptions .....	3,645,757	2,746,892
Other .....	334,955	290,560
Total liabilities .....	<u>8,964,629</u>	<u>5,808,411</u>
Fund balances:		
Unrestricted:		
General purpose .....	3,066,594	2,292,017
Special purpose .....	460,544	201,491
Total unrestricted .....	<u>3,527,138</u>	<u>2,493,508</u>
Restricted .....	2,854,905	2,626,718
Total fund balances .....	<u>6,382,043</u>	<u>5,120,226</u>
Total current funds .....	<u>\$15,346,672</u>	<u>10,928,637</u>
<b>ENDOWMENT AND SIMILAR FUNDS:</b>		
Fund balances:		
Endowment .....	34,999,970	35,844,768
Quasi-endowment:		
Restricted .....	2,286,057	2,304,158
Unrestricted .....	4,553,534	4,528,740
Total quasi-endowment .....	<u>6,839,591</u>	<u>6,832,898</u>
Total endowment and similar funds .....	<u>\$41,839,561</u>	<u>42,677,666</u>
<b>PLANT FUNDS:</b>		
Note payable (note 4) .....	191,843	295,761
Mortgage notes payable (note 5) .....	349,617	432,534
Accrued liabilities .....	36,832	-
Fund balances:		
Acquisition fund:		
Unrestricted .....	933,661	-
Restricted .....	964,026	938,480
Total acquisition fund .....	<u>1,897,687</u>	<u>938,480</u>
Investment in plant .....	4,543,435	3,071,637
Total plant funds .....	<u>\$ 7,019,414</u>	<u>4,738,412</u>
<b>AGENCY FUNDS:</b>		
Due to current funds .....	136,151	-
Deposits held in custody for others .....	86,949	130,814
Total agency funds .....	<u>\$ 223,100</u>	<u>130,814</u>



SMITHSONIAN INSTITUTION - PRIVATE FUNDS  
Statement of Changes in Fund Balances

Year ended June 30, 1974

	Current funds					Endowment and similar funds	Plant funds	
	Total current funds	Total unrestricted funds	Unrestricted				Acquisition	Investment in plant
			General	Activities	Special purposes			
<b>REVENUE AND OTHER ADDITIONS:</b>								
Auxiliary enterprises revenue	\$12,615,044	12,615,044	-	12,473,118	141,926	-	-	-
Federal grants and contracts	9,967,552	-	-	-	-	9,967,552	-	-
Investment income (net of \$108,752 management and custodian fees)	2,158,982	729,476	726,312	-	3,164	1,429,506	-	-
Gains (losses) on sale of securities (16,243)	(16,243)	(16,243)	(16,243)	-	-	(480,095)	-	-
Gifts, bequests, and foundation grants	2,503,499	533,624	150,586	259,881	123,357	105,260	-	-
Additions to equity in real estate and capitalized equipment (including \$110,000 of land acquired in prior year)	618,773	618,773	511,779	-	106,994	-	-	1,583,504
Rentals, fees, and commissions	753,409	207,308	173,797	2,224	31,287	546,101	-	-
Other - net	28,601,016	14,688,182	1,546,231	12,735,223	406,728	(374,835)	1,332,361	1,578,243
<b>Total revenue and other additions</b>								
	12,662,553	695,060	571,236	-	123,824	11,967,493	-	-
Administrative expenditures	3,386,476	916,804	442,974	461,298	12,252	2,469,672	-	-
Auxiliary enterprises expenditures	10,619,160	10,619,160	-	10,503,508	115,652	-	-	-
Expended for real estate and equipment	-	-	-	-	-	-	1,281,400	-
Retirement of indebtedness	-	-	-	-	-	-	192,095	-
Interest on indebtedness	-	-	-	-	-	-	35,930	-
Depreciation	-	-	-	-	-	-	-	106,445
<b>Total expenditures and other deductions</b>	26,668,189	12,231,024	1,014,210	10,964,806	252,008	14,437,165	1,507,434	106,445
<b>TRANSFERS AMONG FUNDS - ADDITIONS (DEDUCTIONS):</b>								
Mandatory - principal and interest on note	(103,917)	(103,917)	(103,917)	-	-	-	-	103,917
Portion of investment gain appropriated	355,376	34,321	34,321	-	-	321,055	-	(355,376)
For plant acquisition	(1,015,000)	(1,015,000)	(1,015,000)	-	-	-	1,015,000	-
Income added to endowment principal	(71,106)	-	-	-	-	(71,106)	-	71,106
Appropriated as quasi-endowment	(100,446)	(100,446)	(100,446)	(28,360)	104,333	202,569	15,363	-
For designated purposes (35,917)	(35,917)	(238,486)	(314,459)	-	-	300,000	-	(300,000)
Endowment released	300,000	-	-	(1,742,057)	-	-	-	-
Net increase in activities	(671,010)	(1,423,528)	242,556	(1,770,417)	104,333	752,518	1,134,280	-
<b>Total transfers among funds - additions (deductions)</b>	1,261,817	1,033,630	774,577	-	259,053	228,187	(838,105)	959,207
Net increase (decrease) for the year	5,120,226	2,493,508	2,292,017	201,491	2,626,718	42,677,666	938,480	3,071,637
Fund balances at June 30, 1973	\$ 6,382,043	3,527,138	3,066,594	-	460,544	2,854,905	41,839,561	1,897,687
Fund balances at June 30, 1974								4,543,435

See accompanying notes to financial statements.

SMITHSONIAN INSTITUTION - PRIVATE FUNDS  
Notes to Financial Statements

June 30, 1974

1. *Summary of Significant Accounting Policies*

- a. **Accrual Basis**—The financial statements of Smithsonian Institution have been prepared on the accrual basis, except for depreciation accounting as explained in note 1g below, and are in conformity with generally accepted accounting principles included in the recently issued American Institute of Certified Public Accountants Audit Guide "Audits of Colleges and Universities". In accordance with the requirements of the Guide, annual leave and interest income on endowment and similar fund investments have been accrued at June 30, 1974 and, in addition, certain changes in financial statement classification have been adopted. The effect of such changes in classifications on beginning fund balances is as follows:

	<i>Current funds</i>		<i>Endowment and similar funds</i>		<i>Plant funds</i>	<i>Agency funds</i>
	<i>Unrestricted</i>	<i>Restricted</i>	<i>Endowment</i>	<i>Quasi-endowment</i>		
Balance at June 30, 1973 as previously reported	\$2,323,958	3,897,908	36,913,730	5,763,936	3,039,291	-
Reclassify fund restricted for construction and acquisition of real estate		(938,480)	-	-	938,480	-
Reclassify funds that are internally restricted by the Institution	201,896	(201,896)	-	-	-	-
Net assets transferred to plant fund	(32,346)	-	-	-	32,346	-
Reclassify miscellaneous funds to agency status		(130,814)	-	-	-	130,814
Reclassify endowments	-	-	(1,068,962)	1,068,962	-	-
Balance at June 30, 1973 as restated	<u>\$2,493,508</u>	<u>2,626,718</u>	<u>35,844,768</u>	<u>6,832,898</u>	<u>4,010,117</u>	<u>130,814</u>

Current funds used to finance the acquisition of plant assets and for provisions for debt amortization and interest are accounted for as transfers to the plant fund.

- b. **Fund Accounting**—In order to ensure observance of limitations and restrictions placed on the use of the resources available to the Institution, the accounts of the Institution are maintained in accordance with the prin-

principles of "fund accounting". This is the procedure by which resources for various purposes are classified for accounting and reporting purposes into funds that are in accordance with activities or objectives specified. Separate accounts are maintained for each fund; however, in the accompanying financial statements, funds that have similar characteristics have been combined into fund groups. Accordingly, all financial transactions have been recorded and reported by fund group.

Within each fund group, fund balances restricted by outside sources are so indicated and are distinguished from unrestricted funds allocated to specific purposes by action of the governing board. Externally restricted funds may only be utilized in accordance with the purposes established by the source of such funds and are in contrast with unrestricted funds over which the governing board retains full control to use in achieving any of its institutional purposes.

Endowment funds are subject to the restrictions of gift instruments requiring in perpetuity that the principal be invested and the income only be utilized. Also classified as endowment funds are gifts which will allow the expenditure of principal but only under certain specified conditions.

Unrestricted quasi-endowment funds have been established by the governing board for the same purposes as endowment funds, any portion of such funds may be expended. Restricted quasi-endowment funds represent gifts for restricted purposes where there is no stipulation that the principal be maintained in perpetuity or for a period of time, but the governing board has elected to invest the principal and expend only the income for the purpose stipulated by the donor.

All gains and losses arising from the sale, collection, or other disposition of investments and other noncash assets are accounted for in the fund which owned such assets. Ordinary income derived from investments, receivables, and the like, is accounted for in the fund owning such assets, except for income derived from investments of endowment and similar funds, which income is accounted for in the fund to which it is restricted or, if unrestricted, as revenues in unrestricted current funds.

All other unrestricted revenue is accounted for in the unrestricted current fund. Restricted gifts, grants, endowment income, and other restricted resources are accounted for in the appropriate restricted funds.

- c. Investments are recorded at cost or fair market value at date of acquisition when acquired by gift.
- d. Inventories are carried at lower of average cost or net realizable value.
- e. Income and expenses in respect to the Institution's magazine and associates' activities are deferred and taken into income and expense over the applicable periods and are reported in the activities section of the current unrestricted funds.
- f. Endowment and Similar Fund Investments—The Institution utilizes the "total return" approach to investment management of endowment funds and quasi-endowment funds. Under this approach, the total investment return is considered to include realized and unrealized gains and losses in addition to interest and dividends. In applying this approach, it is the Institution's policy to provide 4½% of the five year average of the market value of each fund (adjusted for gifts and transfers during this period) as being available for current expenditures; however, where the market value of the assets of any fund is less than 110% of the historic dollar value (value of gifts at date of donation) the amount provided is limited to only interest and dividends received.

g. Plant Fund Assets — Plant fund assets are recorded as follows:

Museum shop and computer equipment purchased with Private Funds is capitalized in the plant fund at cost, and is depreciated on a straight-line basis over an estimated useful life of five years.

Real estate (land and buildings) are recorded in the plant fund at cost, to the extent that restricted or unrestricted funds were expended therefor, or appraised value at date of gift, except for gifts of certain islands in Chesapeake Bay, Carnegie Mansion, and Hillwood Estate which have been recorded at nominal values. Depreciation on buildings is not recorded.

All the other land and buildings (principally acquired with Federal funds), fixtures, equipment, works of art, living or other specimens are not reflected in the accompanying financial statements.

Funds, previously recorded in the current funds group, whose purpose is for construction and acquisition of plant assets, have been reclassified to plant funds.

h. Agency Funds — The agency funds group consists of funds held by the Institution as custodian or fiscal agent for others.

i. Pension Costs — All pension costs are funded as accrued.

2. Investments

Quoted market values and carrying values of investments (all marketable securities) of the funds indicated were as follows:

	June 30, 1974		June 30, 1973	
	Carrying value	Market value	Carrying value	Market value
Current funds . . . . .	\$ 8,298,318	7,971,088	6,223,305	6,078,226
Endowment and similar funds . . . . .	40,043,593	34,822,438	41,266,827	43,530,142
Total investments . . . . .	<u>\$48,341,911</u>	<u>42,793,526</u>	<u>47,490,132</u>	<u>49,608,368</u>

Total investment performance is summarized below:

	Net gains (losses)		
	Current funds	Endowment and similar funds	Total
Unrealized gains (losses):			
June 30, 1974 . . . . .	\$(327,230)	(5,221,155)	(5,548,385)
June 30, 1973 . . . . .	<u>(145,079)</u>	<u>2,263,315</u>	<u>2,118,236</u>
Increase in unrealized gains (losses) for year	(182,151)	(7,484,470)	(7,666,621)
Realized net losses for year . . .	<u>(16,243)</u>	<u>(480,095)</u>	<u>(496,338)</u>
Total net losses for year	<u>\$(198,394)</u>	<u>(7,964,565)</u>	<u>(8,162,959)</u>

Assets of the endowment and similar funds having a carrying value of \$11,845,384 are pooled on a market value basis (consolidated fund) with each individual fund subscribing to or disposing of units on the basis of

the value per unit at market value at the beginning of the calendar quarter within which the transaction takes place. Of the total units each having a market value of \$84.60 (\$105.22 in 1973), 67,856 units were owned by endowment, and 52,665 units by quasi-endowment at June 30, 1974.

### 3. Related Activities

Federal appropriations, which are not reflected in the accompanying financial statements, provide major support for the operations and administration of the educational and research programs of the Institution's many museums, art galleries and other bureaus, as well as for the maintenance and construction of related buildings and facilities. In addition, land, buildings and other assets acquired with Federal funds are not reflected in the accompanying financial statements.

The following Federal appropriations were received by the Institution for the fiscal year ended June 30, 1974:

Operating funds .....	\$60,562,900
Special foreign currency program .....	4,500,000
Construction funds .....	21,860,000
	<u>\$86,922,900</u>

### 4. Note Payable

The note payable in the principal amount of \$191,843 (\$295,761 in 1973) which is non-interest bearing, is secured by computer equipment and is payable in monthly installments of \$7,993 to June 30, 1976.

### 5. Mortgage Notes Payable

The mortgage notes payable are secured by first deeds of trust on property acquired in connection with the Chesapeake Bay Center. The details of the mortgage notes payable are as follows:

	<u>June 30,</u>	
	1974	1973
Mortgage note, payable in semi-annual installments of \$13,300, plus interest at the prevailing prime rate at the due date of the installment payment but not less than 8%, due July 1, 1980 .....	\$172,900	199,500
6% mortgage note payable, due in monthly installments of \$451 including interest, due November 1, 1989 .....	36,717	33,034
6% mortgage note, payable in semi-annual installments of \$10,000, plus interest, due November 7, 1979 .....	110,000	140,000
7% mortgage note, payable in annual installments of \$30,000, plus interest, due November 1, 1974 ....	30,000	60,000
	<u>\$349,617</u>	<u>432,534</u>

### 6. Pension Plan

The Institution has a contributory pension plan providing for the purchase of retirement annuity contracts for all employees meeting certain age and length of service requirements. Under terms of the plan, the Institution contributes the amount necessary to bring the total contribution to 12% of the participants' compensation subject to social security taxes and to 17% of the participants' compensation in excess of that amount. The total pension expense for the year was \$729,068 (\$688,782 in 1973).



Mr. YATES. Mr. Long?

GROWTH OF SMITHSONIAN APPROPRIATIONS

Mr. LONG. Mr. Ripley, I received a letter from a gentleman whom you may have heard of, Robert Hilton Simmons. Do you know who he is?

Mr. RIPLEY. I know that he exists.

Mr. LONG. He puts some questions that I wondered whether your mind answering.

You indicated the other day that the Smithsonian had a growth rate of about 1.7 percent per year compounded, but then he points out that your budget in 10 years has risen from \$10 million to \$100 million, which would of course be enormously greater than 1.7 percent per year compounded. I just wonder how you would reconcile those.

Mr. YATES. I would suggest that the committee has approved those appropriations for the expansion of the Smithsonian.

Mr. LONG. Of course, I just wanted to reconcile to the statement in this room of 1.7 percent. I am trying to get an idea of how fast you are growing and what the prospects for growth are in the future.

Mr. RIPLEY. We had some testimony which Mr. Brooks gave yesterday about growth. This was in connection with collections; that is, the acquiring of materials which flow into a museum.

Mr. LONG. You mean the number of pieces has gone up by 1.7 percent?

Mr. RIPLEY. That is right. Museums acquire materials, as you know, every year at a certain kind of rate.

Mr. LONG. 1.7 percent. If that is so, your budget of course has grown enormously faster than the number of pieces, at a much faster rate.

Mr. RIPLEY. I do not believe that our budget in 10 years has increased by the amounts cited.

Mr. LONG. From \$10 million to \$100 million?

That is 1,000 percent growth for those 10 years.

Mr. RIPLEY. Those are not exact figures, if you do not mind. Our total budget for 1965 was over \$19 million.

Mr. LONG. I said 1964, \$10 million in 1964.

Mr. RIPLEY. It was over \$20 million in 1964. It is at present proposed for fiscal year 1976, something in the neighborhood of \$97 million.

Mr. LONG. All right.

Mr. RIPLEY. From about \$20 million to \$97 million.

Mr. LONG. That is a 500-percent increase.

Mr. RIPLEY. What would you like to know?

Mr. LONG. My point is that your budget is growing many times faster than your 1.7 percent annual rate of collection items.

Mr. RIPLEY. We testified yesterday that the matter of annual accretion of objects collected is a varying one which depends year by year on the number of collections offered to the Smithsonian and the decisions made by curators, so I am not at all sure that you could assume that there should be an incremental relationship between the two.

Then, of course, there is the fact that, as we well know, there is something which we dislike very much in this country called inflation. I am not sure that you could describe the inflationary effects of the difference between our budget today and the budget in real figures.

## FUTURE GROWTH

Mr. LONG. I do not think you could attribute that to inflation; we have had roughly a 50- or 60-percent increase in the living costs over a 10-year period. If you added that to the 1.7-percent annual growth rate, you still could not account for a 500-percent increase in your budget.

Now I ask these questions not in criticism of your organization, but to try to get some clue as to where we are going, because if we are increasing your budget at this really tremendous rate of 500 percent in a single decade, although you have had this relatively modest rate of increasing the items, where are we going in another 10 or 20 years?

Mr. RIPLEY. Is that not generally within the powers of this committee to judge in each case?

Mr. LONG. Of course.

Mr. RIPLEY. We have justified our increases over the past 10 years.

Mr. LONG. Would you not agree the committee should look ahead and see where we are going for the future?

Mr. RIPLEY. The committee should always look ahead.

Mr. LONG. We cannot just shut our eyes and forget where we have been and where we are going, and say we are just going to base it on this year alone.

My feeling is—how fast is this budget going to grow?

I have the feeling it is a very good investment of money compared with an awful lot of things our Federal Government puts money into. My, there are fabulous wastes of money. We put money into things that do not even represent assets, but are actually mischievous.

I still think, however, we ought to know what is the possible rate of increase in expenditures.

Mr. RIPLEY. I believe, Mr. Long, that the incremental increase between the construction of buildings and the necessary plant expansion that goes with that, many of which were planned long before 10 years ago, in fact some were planned in the 1930's, and the incremental 1.7 percent compound which has to do with object accumulation, should not be equated.

Mr. LONG. You are saying, are you then, if I can understand you, that the last decade in a sense stands alone, it is a unique period?

Mr. RIPLEY. I am not saying that.

Mr. LONG. That, although the budget has grown enormously in that time, even relatively to quite a big increase in the number of items collected, that it is rather unlikely that it is going to continue to grow at this rate?

Mr. RIPLEY. I am saying that the planning for the buildings which have been evolved during this period, the three major units, the additions to the Museum of Natural History, the Museum of History and Technology, and the National Air and Space Museum, has all taken far more than a decade.

Mr. LONG. I see. So you feel that more than a decade of building has happened to be packed into a single decade. Is that the point you make?

Mr. RIPLEY. Exactly.

Much of the legislation, much of the authorization, and much of the planning goes back to 1941 when I was here at the Smithsonian as an assistant curator.

Mr. LONG. That was the purpose of my previous question when I asked whether it was not just a unique decade.

Mr. RIPLEY. No, I do not think it is.

Mr. LONG. I think you are saying that, though. That is what you just got through saying, that it happens to be a decade in which an awful lot of stuff got packed in that probably would not be reproduced in another decade. It is not a typical decade.

#### PAST DECADES

Mr. RIPLEY. All I am saying is that any decade that you wish to use, let's say the decade of the construction of the Freer Gallery in 1923, would have seemed to be an outstanding decade or the decade which included the construction of the Museum of Natural History in 1911 would have been assumed to have been a great decade.

Now the decade in which you have seen the resolution of projects which began being planned in 1937, 1938, has obviously happened to coincide as being a great decade, of course, but each one of these things has been a phased and a developed evolution, with full exposure along the way so that at any time you or any other Member of Congress could question the purposes, the intentions.

In fact, we had stop orders, as you may recall, on the National Air and Space Museum at the height of the Vietnam war. There was language in the Senate approval of the authorization bill which required us to demonstrate to the Government that there was a sufficient cessation of the war before we could start building, which in the case of the Air and Space Museum was contemplated in 1946 in the basic legislation.

Mr. LONG. Let me rephrase the question a little differently. It has been a fabulous decade of budget growth for the Smithsonian, the decade from 1964 to 1974. Much of that represented the fruition of plans which began much earlier than that?

Mr. RIPLEY. Yes.

Mr. LONG. Now, are we going to have in the next decade a great many projects coming along that were being planned in this last decade?

Mr. RIPLEY. No.

Mr. LONG. You are not?

Mr. RIPLEY. No.

#### OTHER NEW FACILITIES

Mr. LONG. The person who wrote to me said that you did mention the Museum of History and Technology, the Hirshhorn Museum, the Air and Space Museum, the facilities at Silver Hill, but that you did not mention—and I do not recall whether you did or not, but this is the gentleman who was apparently listening to this—did not mention the following items that took place in this last decade.

The National Collection of Fine Arts, the National Portrait Gallery, both housed in the city-sized block of the old Patent Office Building, Renwick Gallery, Hillwood, Belmont Gallery, Chesapeake Bay Facilities, two large wings of the Natural History Museum, Fort Pierce Facilities in Palm Beach, Fla., facilities in the Panama Canal Zone, facilities in India, Tunisia, and many other countries throughout the world, plus the Smithsonian Astrophysical Observatory in Cambridge, tracking facility and other facilities, over the years.

What he is saying is that your acquisitions go well beyond the four items that you mentioned to me.

Mr. RIPLEY. I mentioned several of the items which he recalls, the letter writer. I did not mention a number of others which he also recalls.

The Tropical Research Institute in Panama originally began as a project in 1924 but has been under Smithsonian administration only since 1946, so I am not sure whether this is within the realm of the decade.

I think in almost every instance we can establish that these were not, let us say, targets of opportunity within the decade, if you wish to use that structure.

The Astrophysical Observatory began in 1890 and moved to Cambridge, Mass., in 1955 as a result of a very able presentation by my predecessor to the then president of Harvard, that they should combine, for efficiency's sake, two outstanding facilities for astrophysics.

I could detail I think in almost every case, except for the Renwick Gallery, that these go back far more than a decade.

On the Renwick Gallery, to be specific, it has already been described of course in numerous hearings in this committee. I think you will recall that this was a target of opportunity in this sense: The Renwick Gallery was originally built in the 1870's as the first building designed as a gallery of art in the United States. Then when the Corcoran Gallery moved out of it, as a private gallery and built their present gallery in 1907, the U.S. Government took it over and turned it eventually into the Court of Claims.

During the 1960's, it was finally approved, as part of the Federal buildings reorganization, that the Court of Claims would have a home of its own on Lafayette Square. This meant that the building fell vacant. There were alternative thoughts, demolishing it, redesigning it for office spaces or, as we thought and suggested to President Johnson, turning it back into a museum, its original use. We received his encouragement, as a result of which we requested Congress to help us fix it up and we did so, again with the approval of this committee.

#### OTHER QUESTIONS OF THE SMITHSONIAN

Mr. YATES. Mr. Long, may I suggest that I, too, have a letter from Mr. Simmons. I do not know about Mr. Murtha but Mr. Duncan told me that he has a letter from him, and Mr. McKay told me he had a letter from him. Mr. Simmons is the same Mr. Simmons who has been apparently carrying on a vendetta.

Mr. LONG. I understand that. The reason I raise them is because they bear on questions which I asked yesterday.

Mr. YATES. Sure. The point I am making is this: He raised his original charge against the idea of having the Hirshhorn Museum approved by the Congress, and since that was approved by the Congress he seems to be directing his attention to the Smithsonian, and particularly to Mr. Ripley.

Mr. LONG. I thought Mr. Ripley would appreciate an opportunity to answer some of these questions.

Mr. YATES. The questions that he has in his letter to me have already been answered. For example, the charges he has in this letter addressed



to me as Chairman of the committee, dated March 24, do not indicate dates. Apparently these are questions that have already been asked.

I notice some of the allegations were disposed of. The GAO audit matter was closed in 1970. There seems to be a repetition.

Mr. LONG. I do not doubt that but I asked the question because it did seem to me that it raised some question as to whether the rate had not been substantially greater. I do think we are entitled to get a feeling as to where we are going.

Mr. YATES. You are entitled to ask any question you want.

#### ACCUSATION OF STOLEN ART

Mr. LONG. There is also another question; the stealing of works of art from abroad. I will read from this article written by Jack Anderson:

The Smithsonian Institution, which has scolded art dealers for plundering antiquities from foreign lands, is about to acquire a barnload of looted treasures itself.

The Smithsonian's aristocratic secretary S. Dillion Ripley, has been preaching to the museum world against "illicit, international traffic in \* \* \* antiquities." Dealers, he declared are "the pimps of the profession."

While holding himself above such dirty dealings, however, Ripley has been salivating over the fabulous collection of Joseph Hirshhorn, the tough old stock market operator. His treasures, which include hundreds of antiquities from abroad, will soon be turned over to the Smithsonian.

In the Hirshhorn collection are stone sculptures torn from Mayan temples, plus Turkish, Italian and Nigerian treasures. All these lands have strict laws against removal of their relics.

A Smithsonian spokesman assured us that the Hirshhorn trustees will comb through every antiquity and return any which were clearly ripped off from foreign lands. The search will begin when the collection is turned over to the Smithsonian.

Is this consistent?

Mr. RIPLEY. This is consistent.

Mr. LONG. Is it untrue?

Mr. RIPLEY. It is untrue.

Mr. LONG. The Hirshhorn collection does not contain stolen items?

Mr. RIPLEY. It does not contain masses of ripped off material. It is no more true than the fact that I am aristocratic.

Mr. YATES. The statement which should be made as to antiquities is that up to recently there were no laws which prevented the sale of such antiquities. It was only in recent years that such steps have been taken. I notice that Mexico has enacted laws for its antiquities, but I think these were within the past 10 years.

Mr. LONG. Isn't it true that most countries have laws against stealing from museums and temples.

Mr. BLITZER. May I just add one thing. Mr. Anderson quotes the Secretary as speaking of combing through the collection. It is a vast collection, mostly consisting of contemporary art. The staff now has engaged a highly qualified consultant on pre-Columbian art to go through the collection and make a report. The same will be done to every item of antiquity.

Mr. LONG. You are able to assure us the Hirshhorn Museum does not contain large quantities of stolen materials?

Mr. BLITZER. No, sir. I said the collection is being studied. As a percentage of the collection, antique art is very small.



Mr. LONG. I am not talking about just antiquities. I am talking about art.

Mr. BLITZER. I have heard no charge that there is any other stolen material in the Hirshhorn collection.

Mr. RIPLEY. We know of no stolen material in the Institution.

Mr. LONG. It was simply buying stolen material?

Mr. BLITZER. If anyone has any evidence that any work of art in that museum is stolen we would appreciate hearing about it.

Mr. RIPLEY. I tried to demonstrate in my testimony yesterday that we had set up a rather rigorous set of criteria about 3 years ago at the request of the Regents. We have furnished a copy of that for the record. This includes inspection and studying of objects in case there is any question as to their validity, or as to the possibility they may have been ripped off at some prior time without our knowledge. The allegation that the Hirshhorn collection is full of ripped off objects is baseless.

Mr. LONG. Thank you very much.

Mr. YATES. Mr. Murtha.

#### COMPARISON OF FISCAL YEAR 1975-74 APPROPRIATIONS

Mr. MURTHA. I am certain your file cabinet is full of Anderson material. I have a question on the increase in appropriations this year in comparison. Your request this year is 5.3 percent above last year. It is a very nominal request. Your operating budget increase requested is 12 percent. You have in your National Air and Space Museum a request for \$3 million, which would make it about 21½ percent of the overall budget for the year. My question is, does this mean you are going to have to come in for a supplemental appropriation or is this in line with what you have been saying?

Mr. RIPLEY. Our request does include a final \$3 million to liquidate the contract authority of \$40 million approved by this committee to construct the National Air and Space Museum. Over the years we have received incremental amounts. This year we are requesting an amount in order to be able to open the building at the time we agreed to open it.

Mr. MURTHA. The actual operating budget is the area where you have the 12-percent increase which includes inflation?

Mr. RIPLEY. Yes.

Mr. MURTHA. What is the balance of the budget?

Mr. RIPLEY. It includes accounts for the construction and renovation at the Zoo for the special foreign currency program, for the Science Information Exchange and for the restoration and renovation of buildings.

Mr. MURTHA. Is your operating budget the 12-percent increase in utilities, salaries, and so forth, a realistic figure, and you will not need a supplemental request at the end of the year?

Mr. RIPLEY. We have had to come in these past few years for supplementals. These are for mandated and legislated pay increases which occur irrespective of our own budget increase. This current year we have also had to seek funds for astounding utility rate increases.

Mr. BROOKS. We have just received notification of a further such increase which will cost us \$300,000 next year. Such increases may necessitate our coming back.

Mr. RIPLEY. The two big expenses in our budget for fiscal year 1976 are to complete the Air Museum and the Bicentennial. We began explaining to this committee 10 years ago that we had better prepare for something which would be happening in 1976.

There was an article by James Michener in which he pointed out the tragedy of the fact that no one had really begun preparing for the Bicentennial in time. I derived a kind of wry pleasure from the fact I had begun speaking to this committee under Mr. Denton; that the Smithsonian was the lead agency beginning in 1963 for the Bicentennial. We advised we had better get on our own band wagon. We suggested we start planning for the Bicentennial. If we had not done that, we would not be in the shape of asking for the last increment of our Bicentennial budget. So the size of the budget we are requesting reflects these two major items. We have continually asserted to the committees we will phase down after fiscal year 1977.

Mr. MURTHA. The only reason you would have to request additional money is if there is a legislative mandate to increase salaries.

Mr. RIPLEY. Supplementals are out of our normal procedure entirely and are for uncontrollables.

Mr. MURTHA. That is all I have, Mr. Chairman.

#### HIRSHHORN MUSEUM ART PURCHASES

Mr. YATES. To complete the Simmons matter, I have a letter from him in which he asks questions that apparently have been asked before and apparently answers have been prepared.

Question No. 1 refers to the application by officials of the Hirshhorn Museum of \$67,000 of appropriated funds intended for other purposes spent for purchases of art objects.

The reply of the Smithsonian to that question dated March 31, 1975, is hereby placed in the record.

[The document follows:]

Hirshhorn Museum and Sculpture Garden  
Purchase of Art Objects

The use of Federal funds for the purchase of art objects for the Hirshhorn Museum and Sculpture Garden is provided for by law and is covered by Smithsonian budget requests to the Congress.

Sections 76aa through 76ee of Title 20 of the United States Code authorize the Joseph H. Hirshhorn Museum and Sculpture Garden. Several of these sections, or subsections thereto, are applicable directly to the matter of purchases for the museum's collection. Section 76bb(b) states that the "United States shall provide such funds as may be necessary for the upkeep, operation, and administration" of the museum. Section 76cc(a) states that the Museum's Board of Trustees have the authority "to purchase or otherwise acquire...works of art" for the museum. There is no statutory requirement that purchases be limited to the use of Federal or private funds. And, finally, section 76ee authorizes "sums as may be necessary for the maintenance and operation" of the museum and sculpture garden. There can be no serious doubt that the "operation" of a museum of contemporary art must include a program of acquisitions.

Appropriation language for the Smithsonian's Salaries and Expenses account, as contained in the annual act making appropriations for the Department of the Interior and Related Agencies, states that this appropriation is to be used in part for the "development, preservation, and documentation of the National Collections." An analysis of the language, submitted to the House Committee on Appropriations, in January 1974, clearly established that the word "development" includes acquisitions by purchase.

The Smithsonian's budget request to the Congress for FY 1975 (page A-51) contains the following statement in outlining the general program of work for the overall budget request: "While the Hirshhorn collection will form the strong core of the Museum's holdings, a continuing program of new acquisitions by gift and purchase will be pursued." A nearly identical statement appears in the FY 1976 budget request (page A-47). Specific proposed expenditures cannot be identified because it is impossible to know what works may become available and at what price.

Federal object class 31 (equipment) is the proper and official classification for purchases for the collections as well as library books and zoo animals, items not ordinarily called equipment. At the time that FY 1975 budget was being prepared for submission to the Congress it was not possible to forecast a very precise overall distribution of funds by object classes, particularly in view of the planned transition of the museum from the preparation stage to an operational status in its new building. As it turned out, fewer funds needed to be spent on "other services" and more could be budgeted for "equipment." Changes to object class distributions in the budgets of the Institution's 50 bureaus and offices are unavoidable in view of the 18 months between the budget submission and the end of the budget year.

On May 20, 1974, a member of the Senate wrote to the General Accounting Office requesting that the GAO examine a number of legal and financial questions relating to the construction, design, and operation of the Hirshhorn Museum and Sculpture Garden. This request received considerable publicity at the time, and as recently as this January a leading art journal referred rather ominously to the GAO investigation of possible illegalities or improprieties connected with the Museum.

On August 2, 1974, the Comptroller General of the United States sent a twelve-page letter to the Senator, concluding:

In sum, we have examined the circumstances of the Hirshhorn Museum and Sculpture Garden gift to the Smithsonian Institution, with respect to the legal questions you have raised, and find no evidence that the transaction was illegally consummated in any particular.

On September 30, 1974, the Acting Comptroller General of the United States sent an eight-page letter (plus ten pages of appendices) to the Senator. This letter contained the following statement:

Our review of the operating expenses and other costs indicated that they were consistent with the purposes cited in the Smithsonian Institution's annual budget justification presented to the Congress and the statements by Smithsonian officials during appropriation hearings.

## BOOK BY DANIEL BOORSTIN

Mr. YATES A second question relates to the misuse of \$65,000 of Federal appropriated funds in the production of a book for profit of a private individual, Mr. Daniel Boorstin, Director, National Museum of History and Technology.

The answer of the Smithsonian is placed in the record.

[The document follows:]



Preparation of The Americans: The Democratic Experience,  
by Daniel J. Boorstin

Daniel Boorstin served as director of the National Museum of History and Technology from October 1, 1969 to October 1, 1973; he is now a Senior Historian at that museum. He is not and has not been a government employee, and his salary has not been paid from appropriated funds.

When Dr. Boorstin came to the Museum of History and Technology, it was his wish and the Institution's that he should continue his career as an historian, to the degree that this would be consistent with the fulfillment of his administrative duties. To this end, it was agreed that the Institution would undertake to provide him the kind of research assistance afforded scholars of his eminence in other institutions such as universities, research libraries and other centers for advanced study. In addition to office space, the Museum of History and Technology did provide Dr. Boorstin a research assistant and a secretary in connection with his continuing scholarly endeavors. The research assistant (actually three individuals who served in succession) and the secretary have been civil servants and were paid with appropriated funds. All of them have participated in a variety of programs in the Museum of History and Technology, including work on exhibitions and exhibition catalogues, in addition to their involvement in Dr. Boorstin's scholarly activities. It might be pointed out that the contribution of Smithsonian funds for the salary of the Director of the Museum of History and Technology during these years considerably exceeded the expenditure of appropriated funds for his research assistant and secretary.

While Director of the Museum of History and Technology, Dr. Boorstin completed and published the third volume of his trilogy The Americans: The Democratic Experience, for which he was awarded the Pulitzer Prize in History for 1974.

It has been suggested that some impropriety or illegality was involved in the fact that Dr. Boorstin, as the author of this work, copyrighted it and has earned royalties from it. Although the unique situation of the Smithsonian makes it impossible to find any exact parallel to the facts in this case, a study of the relevant laws and the closest precedents indicates that no illegality and no impropriety is involved here.

Since the Smithsonian is an institution devoted to the increase and diffusion of knowledge, and since Dr. Boorstin is not a civil servant and is not paid from appropriated funds, the usual rules and practices of the academic world offer the most relevant standard. The study of "Copyrights At Colleges and Universities," published in 1972 by the Committee on Governmental Relations of the National Association of College and University Business Officers, begins with the following statement:

Colleges and universities recognize and encourage the publication of scholarly works as an inherent part of the educational mission. They also acknowledge the privilege of university personnel (faculty, staff, and students) to prepare, through individual initiative, articles, pamphlets, and books that may be copyrighted by and generate royalty income for the author.

The same study continues more specifically:

Rights to copyrightable material generated as a result of individual initiative, not as a specific university assignment and only incidental use of university facilities or resources, should normally reside with the author... Where the university provides partial support of an individual effort resulting in copyrightable material by contributing significant faculty time, facilities, or university resources it is reasonable to consider joint rights to ownership and disposition of these materials and a sharing of royalty income. Some universities may find it desirable in the interest of simplification to merge this category with category 1 above.../1

Our own inquiries in the academic community have confirmed that in practice the provision of office space, modest research assistance, and secretarial assistance is seldom if ever interpreted as justifying the institution in asserting any

claim to either the copyright or the royalties arising from scholarly works produced by its staff. This is true of state and municipal institutions, in which both scholars and assistants are publicly supported, no less than of privately supported institutions.

It has been suggested that the provision of support in the form of federally-funded research assistants and secretary makes it improper or illegal for Dr. Boorstin to have copyrighted The Democratic Experience, or to earn royalties from it. Unless one is prepared to assert that this prize-winning volume was not written by Dr. Boorstin but by his research assistants and secretary, there can be no legal question about his right to copyright it and to receive royalties from it.<sup>/2</sup> Even in cases where federal funds go directly to the support of scholars and scientists, rather than simply to the provision of research and secretarial assistance, this principle has been clearly recognized. For example, the guidelines for National Science Foundation research grants state:

NSF encourages and in some cases requires publication and distribution of the results of research conducted under grants...Unless otherwise provided in the grant instrument, the author or grantee institution is free to copyright any books, publications, films, or other copyrightable materials developed in the course of or under an NSF grant.<sup>/3</sup>

Similarly, recipients of fellowships from the National Endowment for the Humanities are free to copyright publications resulting from federally-funded fellowships, and to earn royalties from these publications. <sup>/4</sup>

In summary, the general standards and practices of the scholarly community fully support the right of authors to copyright and earn royalties from their published writings, even in cases where research and secretarial assistance have been provided by their institutions. The use of appropriated funds for this assistance in no way compromises this right.

Finally, it should be said that the Smithsonian Institution is proud of Dr. Boorstin's achievements, as it is of the achievements of others on the Smithsonian staff who contribute at the highest level to the increase and diffusion of knowledge among men.

<sup>/1</sup> In the case of Smithsonian exhibit catalogues to which Dr. Boorstin has contributed, it should be noted that he has either earned no royalties from this work or has assigned all of his royalties to the Institution.

<sup>/2</sup> The provision of 17 U.S.C. §8 restricting copyright in publications of the United States Government apply only to publications written by government employees.

<sup>/3</sup> This is subject to a license in the U.S. Government to use such materials for Government purposes. But, in turn, these rights "may be relinquished by the Grants Officer upon request of the grantee."

<sup>/4</sup> The National Endowment for the Humanities has reserved the same license for U.S. Government use, but we are informed that it intends to drop this reservation.

## COOPER-HEWITT MUSEUM

Mr. YATES. A third charge refers to the misappropriation of circa \$77,500 in salaries, plus unaccounted expense moneys, for benefit of Federal employees working at Cooper-Hewitt Museum in New York City—without legislative authority for such appropriation.

The answer of the Smithsonian on April 4, 1975, is placed into the record at this point.

[The document follows:]

April 4, 1975

COOPER-HEWITT MUSEUMExpenditures of Federal Funds

The basic statutory authority for Smithsonian activities was legislated by Congress in 1846 when it established the Institution to carry out the Smithsonian trust "for the increase and diffusion of knowledge," and delegated to the Smithsonian Board of Regents the authority and responsibility to determine the specific projects appropriate to the trust. Under this basic Congressional charter, the Board has initiated the numerous and varied research and museum activities which now comprise the Institution. Beginning in 1858 Congress annually has appropriated funds for these activities, including such major units as the Museum of Natural History, on the basis of the general authority now set forth at 20 U.S. C., sections 41 to 57, without attempting to legislate for each and every project as it developed.

In several instances in recent years, when a proposed new bureau, such as the National Air and Space Museum, has involved very substantial federal construction and operating expense, the Board of Regents has deemed it appropriate to ask Congress to pass specific legislation confirming the judgment of the Board that such a bureau should be developed within the Institution. Other projects with lesser potential needs for federal support, such as the Freer Gallery, the Renwick Gallery, and the Cooper-Hewitt Museum, have been initiated by the Board of Regents under its general authority. In all cases Congress determines the level of federal support appropriate to each activity through the annual appropriations' process.

In October 1967 the Smithsonian Institution, authorized by the Board of Regents, entered into an agreement with the trustees of the Cooper Union for the transfer to the Smithsonian of the collections of the Cooper Union Museum in New York City, at that time housed in the Cooper Union at 3rd Avenue and 7th Street. Later, in January 1972, the Carnegie Corporation of New York gave the Smithsonian the Andrew Carnegie Mansion, the adjoining Miller House, and the adjacent grounds comprising the entire block from 90th to 91st Streets on Fifth Avenue to be the new home of the Cooper-Hewitt Museum.

These gifts to the United States became the property of the Smithsonian Institution and, as such, require that they be given proper care and safeguarding as a public trust. Section 46 of Title 20 of the United States

Code gives the Secretary of the Board of Regents the responsibility to "take charge of the buildings and property of the Institution." The discharge of this responsibility requires that the Secretary take all necessary and prudent steps, including the application of staff and other resources. Throughout Smithsonian operations, the care and protection of its many buildings and collections is accomplished by staff and other resources assigned directly to museums and galleries and by other staff, such as those in central administration, buildings management, exhibit, guard, conservation, and other offices available for application where needed.

With regard to the Cooper-Hewitt, the Institution adopted the principle that its programs should be conducted with non-appropriated funds and that the use of appropriated funds should be limited, insofar as practical and possible, to the protection and preservation of collections and property. Of necessity, this has required some level of continuing on-site administrative assignment reflecting the Smithsonian's stewardship role. Consequently, a federal employee on the staff of the NCFA was temporarily assigned as director in 1968. After the appointment of a private roll director, a small administrative staff of three persons has been assigned to the Museum from the Secretary's staff starting in 1971. One of these lives on the top floor of the Miller House, at the convenience of the Smithsonian, in order to provide an element of after-hours protection for the property. Some federal funds were spent in FY 1971 and FY 1972 to prepare these quarters and to repair the heating plant of the Carnegie Mansion to protect the property from deterioration.

In FY 1973 the Smithsonian specifically requested (page A-102 of the justifications) and received, as part of its Building Management Department budget, nine positions and \$85,000 for guards, custodians, and mechanics for the Cooper-Hewitt Museum. This staff was on the roll of the BMD but assigned to the Cooper-Hewitt, as was the procedure for other museums of the Institution. In FY 1974 and FY 1975 as part of the several reorganizations for increased effectiveness cited to the Congress (see page ii of the FY 1975 and 1976 budgets), these positions and the dollars now related to them (reflecting legislated pay raises and funds for necessary utilities and supplies) were transferred directly to Cooper-Hewitt as well as to other museums and galleries. Also made available at the same time were the positions and funds associated with administration and registration. As a result of these reorganizations, it was now appropriate to show the Cooper-Hewitt as a line item in the FY 1976 budget, with the approval of the Regents. The FY 1975 budget (page A-55) specifically requested library positions to be assigned to the Cooper-Hewitt. While these persons work at the Cooper-Hewitt, they remain on the staff of the Libraries. Similar arrangements are in effect for other Smithsonian activities outside of Washington, D. C.



## TRAVEL BY SMITHSONIAN SECRETARY

Mr. YATES. A fourth and last question deals with the lack of accountability and authority for expenditure of enormous sums of Federal appropriations on junkets made by Smithsonian Secretary S. Dillon Ripley in calendar year 1973.

The answer by the Smithsonian on this point was made by Secretary Ripley in response to that question.

The answer is also made a part of the record.

[The document follows:]

TRAVEL BY THE SECRETARY OF THE SMITHSONIAN INSTITUTION  
IN CALENDAR YEAR 1973

Details of the travel of Mr. S. Dillon Ripley, Secretary of the Smithsonian Institution, during calendar year 1973 were provided to the Congress in the spring of 1974 and printed in the hearings of the Subcommittee on the Department of the Interior and Related Agencies, Committee on Appropriations, U.S. Senate (pages 195-196). This travel was in connection with the official business of the Institution which is world-wide in nature and in furtherance of the specialized research of the Secretary which has the support of the Regents and, because of its nature, must be performed in certain areas of the world. Federal funds for travel shown in the Office of the Secretary's budget to the Congress are required to meet the program management needs of the immediate Office of the Secretary, the Office of the Under Secretary, and the Office of the Director of Support Activities all of which are cited in the justification.

OTHER MATTERS RAISED

Mr. YATES. The committee takes note of these other points. The Smithsonian Board of Regents does not have the right to legislate; that is true. The Committee on Appropriations errs, it is said, because it passes provisions which have no authorizing legislation. I point out such appropriations, if they do exist, are subject to points of order to be made on the floor.

We will place the letter of Mr. Simmons in the file of the committee.

SPECIAL FOREIGN CURRENCY RESEARCH PROJECTS

If there are no further questions, may I commend the Smithsonian Institution upon the excellent justifications which it submitted to the committee. They were very precise and comprehensive in delineation of the appropriations requests. There has been handed to the committee a list of the special foreign currency research programs, scientific and cultural, in accordance with the questions asked by the committee yesterday. As I leaf through these projects I am still interested in the titles as they appear. I will say to Dr. Challinor, I am not going to place myself above the scholars who consider these to have some basis, but I would hope in accordance with his assurances to the committee yesterday, he will sustain the validity of the requests for appropriated funds even though the appropriated funds are in exchange for foreign currency.

As I look through this, at one point I raise a question as to why the necessity to examine the social and agricultural centers in Tunisia.

Mr. CHALLINOR. This was a proposal submitted to us for review that the Tunisians were particularly interested in. They had put a high priority on this study within the appropriate ministry of the Tunisian Government. They had asked us to see if the Smithsonian

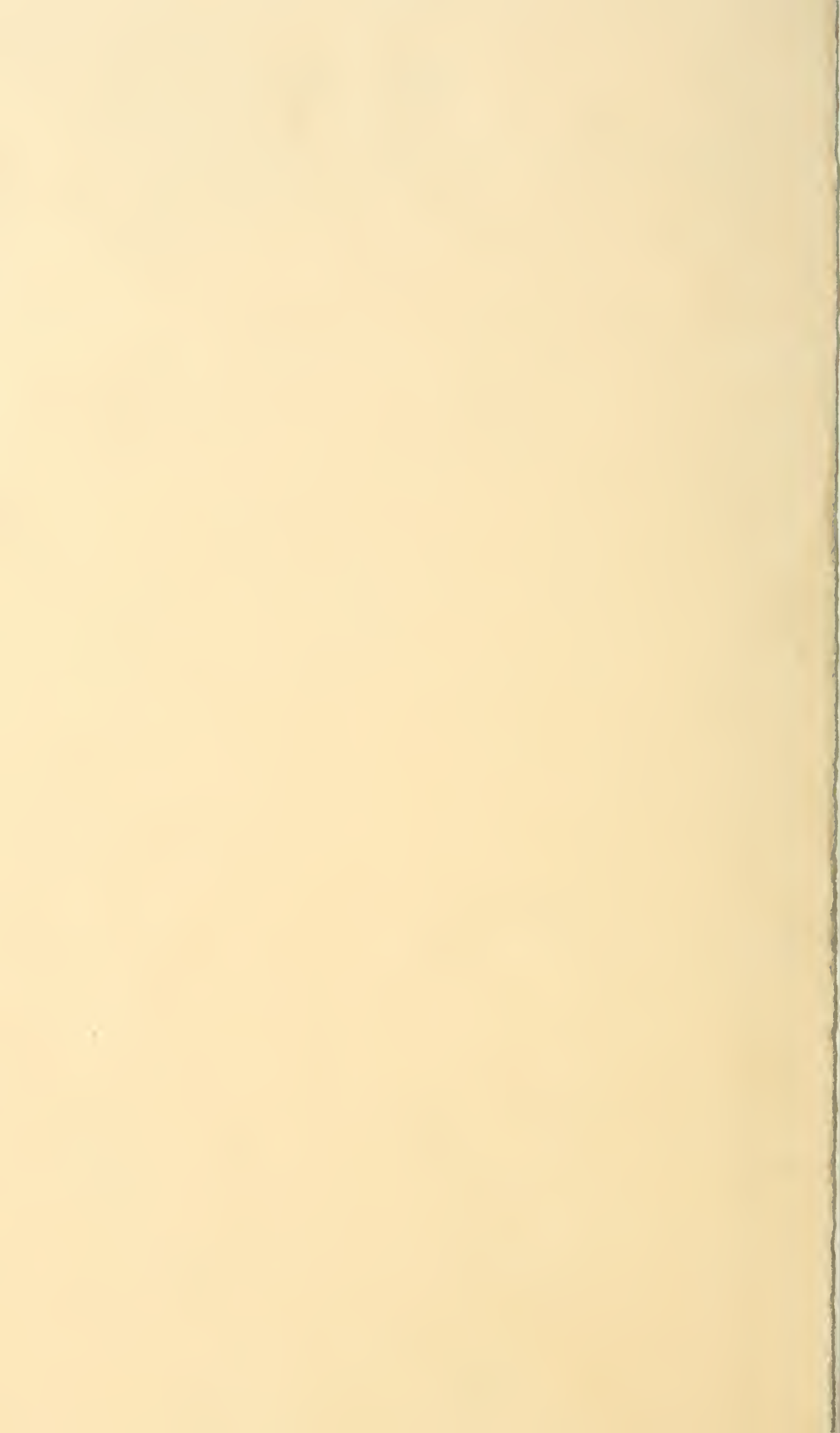
foreign currency program could fund this. Our job was to see whether this was scientifically suitable and up to standard. In this case, it did pass review and was awarded. But I do emphasize that was a high Tunisian priority.

Mr. RIPLEY. We could describe it as a kind of social anthropology.

Mr. YATES. I think you may have some difficulty with some Members of Congress with items which bear the title such as the Cenozoic mammals in Pakistan. You might want to look through this and amplify the statements which appear in here. I say this with respect, knowing the scholars may be able to identify this as an important work.

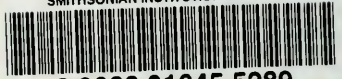
With that injunction to Dr. Challinor, may I again compliment the Smithsonian upon its presentation and wish it well in connection with the leadership and the work it has undertaken with the Bicentennial.

Thank you, gentlemen.





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