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DEPARTMENT OF THE INTERIOR AND RELATED
AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1967

HEARINGS
BEFORE A
SUBCOMMITTEE OF THE
COMMITTEE ON APPROPRIATIONS
UNITED STATES SENATE

EIGHTY-NINTH CONGRESS

SECOND SESSION

ON

H.R. 14215

MAKING APPROPRIATIONS FOR THE DEPARTMENT OF THE
INTERIOR AND RELATED AGENCIES FOR THE FISCAL YEAR
ENDING JUNE 30, 1967, AND FOR OTHER PURPOSES

PART 2

(PAGES 1101 TO END)

(FRIDAY, MARCH 4, 1966, THROUGH WEDNESDAY, MARCH 16, 1966)

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WEDNESDAY, MARCH 9, 1966.

SMITHSONIAN INSTITUTION

STATEMENT OF S. DILLON RIPLEY, SECRETARY; JAMES BRADLEY, ASSISTANT SECRETARY; SIDNEY R. GALLER, ASSISTANT SECRETARY; FRED L. WHIPPLE, DIRECTOR, ASTROPHYSICAL OBSERVATORY; AND MARIA M. HOEMANN, BUDGET OFFICER

1967 BUDGET REQUEST

Mr. RIPLEY. Senator, I hope you will allow me to introduce some of my colleagues.

On my right is Assistant Secretary for Administration, Mr. Bradley; the Assistant Secretary for Science, Dr. Galler; and on my left, Dr. Whipple, Director of the Astrophysical Observatory.

Senator BARTLETT. Good morning, gentlemen.

There will be placed in the record the general statement submitted with the budget justification of the Smithsonian Institution, together with a number of other informational items.

(The justification follows:)

The Smithsonian Institution, established by the act of August 10, 1846, is devoted to public education, basic research, and national service in science, learning, and the arts. The Institution, with its wide array of research and education facilities for both the scholar and the general public, is richly endowed with many of the resources that can create a fuller and more meaningful life for the American people.

The dedication of the Smithsonian to the high purposes of its founder, "the increase and diffusion of knowledge among men," was renewed through the scholarly observance of the Smithsonian Bicentennial in September 1965. For well over a century the Institution has been concerned with the nature of man, the organization of life, and the nature of the physical universe.

The Institution performs fundamental research and publishes the results of studies, explorations, and investigations. It holds for study over 59 million valuable items of scientific, cultural and historical interest. It presents public exhibitions in the arts, history, and science.

The museums and art galleries are a powerful but still little understood force for the free education of approximately 13 million of our fellow citizens who visit these exhibitions every year. The rewarding experience of these visits is made possible only because, in our conception, this Institution represents a company of scholars, brought together to use and to interpret objects and to pursue original investigations and research. One of our leading concerns is the study of what constitutes the creation of awareness and interest in people as a result of viewing exhibits. We believe the solution of this problem can represent a fundamental breakthrough in the educational process.

The "Salaries and expenses" appropriation finances the continuing operations of the Smithsonian Institution. The Institution maintains public exhibits representative of the arts, American history, aeronautics, space, technology, anthropology, geology, and biology; preserves for reference and study purposes millions of valuable objects of scientific, cultural, and historic interest; conducts research in the natural and physical sciences and in the history of cultures, technology, and the arts in the United States and in many foreign countries; and participates in the international exchange of scientific literature and art. The areas of research in the sciences include anthropology, biology, geology, solar radiations, and astrophysics. The Smithsonian is also undertaking an exten-

sive program of classification and study of marine organisms collected in connection with the Government's expanded oceanographic program.

The Institution administers three museums, five scientific programs, three art galleries, the Armed Forces Museum Advisory Board, and associated international programs. It is responsible for the operation and maintenance of seven main exhibition buildings; the Astrophysical Observatory in Cambridge, Mass.; the Canal Zone biological area; the river basin surveys in Lincoln, Nebr.; a storage facility at Silver Hill, Md.; and an exhibits laboratory.

The increases requested for the professional staff and their assistants are based on an objective analysis of these programs. By every standard the Institution is undermanned in the area of basic research.

The U.S. National Museum requires an increase for the increasing number of exhibitions and to intensify efforts to preserve thousands of valuable museum objects.

The Museum of History and Technology, which enjoyed an unprecedented number of visitors (5,300,000) in its first year, requires additional funds for a limited number of professional staff to complete the 50 thematic exhibition halls, interpret the collections, extend historic research, design exhibitions, and publish scholarly studies. This support is required in order that this museum may utilize its collections as a living center for scholarly research in American studies.

The Museum of Natural History requires an increase in order to fill gaps in the scientific research program: to meet increasing demands for identification of scientific specimens originating from every major university and study center in the Nation; and to reduce serious backlogs in classification and studies of the national collections of scientific specimens.

The National Collection of Fine Arts requires funds to create a basic curatorial staff to establish a great national art gallery in the Fine Arts and Portrait Galleries Building scheduled for completion during the fiscal year 1967. Funds are similarly requested for the Smithsonian Gallery of Arts, Crafts, and Design to be housed in the old Court of Claims Building which has been transferred to the Institution with the approval of the President. It is essential that a curatorial staff be established for planning of the programs and exhibits of these galleries. Funds are included also to continue the U.S. Information Agency art program of international exhibits.

The National Portrait Gallery requires funds to provide the necessary staff and associated equipment to open its new gallery in the Fine Arts and Portrait Galleries Building. This will provide the Nation for the first time with a major gallery dedicated to the outstanding men and women who have contributed to the history, development, and culture of our country.

In astrophysics, we plan to participate in studies for the northeast radio telescope in consortium with Harvard University and the Massachusetts Institute of Technology and in collaboration with the National Science Foundation. An astronomical radio antenna, obtained from the Army, will be erected and a large reflector for gamma ray experiments will be fabricated and installed.

At the Canal Zone Biological Area, we plan a modest increase in the scientific staff of this unique tropical field preserve.

Buildings management expenses for the operation and maintenance of additional building space will require an increase in funding.

A program of education and training will be established for visiting research scientists and qualified students. Fuller utilization of the institution's extensive collections and laboratories will be achieved by offering scholars opportunities to pursue their studies at the Smithsonian.

The administrative services divisions require commensurate increases in order to overcome existing backlogs, particularly in the library and publications divisions, and to keep pace with the substantive programs of the Institution.

Overseas programs in archeological research and excavation, systematic biology, and museum sciences are proposed to be expanded. This work is financed by excess foreign currencies. The construction program contemplates a continuation of a 12-year capital improvement program at the National Zoological Park.

The "Restoration and renovation of buildings" appropriation will finance the restoration of the old Court of Claims Building for use as a Smithsonian Gallery of Arts, Crafts, and Design; plans for rehabilitating the Arts and Industries Building; and feasibility studies of future potential needs of the Institution.

*Exhibits program, Museum of History and Technology, fiscal years
1964 through 1967*

- A. Halls installed and opened to the public as of June 30, 1965:
1. Flag hall.
 2. First ladies hall.
Everyday life in the American past:
 3. 17th-century furnishings.
 4. 18th- and 19th-century furnishings.
 5. Historic Americans.
 6. American costumes.
 7. Light machinery (timekeeping, typewriters, phonographs, and locks).
 8. Tools.
 9. Farm machinery.
 10. Autos and coaches (partial).
 11. Railroads.
 12. Temporary exhibits gallery (1st floor).
 13. Civil engineering (bridges and tunnels).
 14. Watercraft.
 15. Philately and postal history.
 16. Glass.
 17. Graphic arts: Hand processes.
 18. Graphic arts: Photomechanical processes.
 19. Graphic arts salon.
 20. and 21. History of the Armed Forces (through Civil War).
 22. Ordnance, and the gunboat *Philadelphia*.
 23. Special exhibits (third floor).
- B. Additional halls to be installed and opened to the public by June 30, 1966:
1. Musical instruments (partial).
 2. Physics.
 3. Ceramics.
 4. Medicine, dentistry, and pharmacy.
 5. Heavy machinery.
- C. Additional halls to be installed and opened to the public by June 30, 1967:
1. Autos and coaches (completion).
 2. Health.
 3. Petroleum.
 4. Growth of the United States (three sections).
 5. History of the Armed Forces (post-Civil War period).

SCHEDULE OF RENOVATION OF EXHIBITS

In 1967 the Smithsonian will continue its program of revitalizing the exhibits in the U.S. National Museum.

- A. Completed and opened to the public in 1965:
1. Osteology (23 units).
 2. Physical anthropology.
- B. Halls to be completed and opened to the public by the end of 1966:
1. Gem and jade sections of gems and minerals hall.
 2. Reptile section of cold-blooded vertebrates hall.
 3. Osteology hall (completion).
 4. Meteorite section of physical geology hall.
 5. Peoples of Asia and Africa hall (completion).
- C. Construction partially completed by the end of 1966:
1. Fish section of cold-blooded vertebrates hall.
 2. Physical geology hall (six units).
 3. Classical archeology.
 4. Life in the sea.
- D. During 1966, drawings will be finished for the following: Hall of insects.
- E. During 1967, contract will be awarded for the hall of insects, and the botany hall will be architecturally designed.

Grants to Smithsonian Institution, fiscal year 1965

Granting agency	Title of grant	Actual amount
Department of Defense.....	Potential vectors and reservoirs of disease in strategic overseas areas.....	\$32,000
	Mammals and their ectoparasites from Iran.....	22,000
	Miscellaneous small grants.....	20,000
Total, Department of Defense.....		74,000
Department of the Interior.....	Zoology.....	7,000
National Aeronautics and Space Administration.....	Study of meteorites.....	213,000
	Satellite tracking program.....	4,284,000
	Prairie network.....	104,000
	Miscellaneous small grants.....	22,000
Total, National Aeronautics and Space Administration.....		4,623,000
National Science Foundation.....	Taxonomy of bamboos.....	16,000
	Science Information Exchange.....	1,712,000
	Photographic investigation of comets.....	39,000
	Marine mollusks of Polynesia.....	16,000
	Publication of flora of Japan.....	20,000
	The phanerogams of Colombia.....	19,000
	Recording of data for specimens collected during the U.S. Atlantic Program.....	35,000
	Sorting of U.S. Antarctic research program biological collections.....	48,000
	Sorting of collections from the International Indian Ocean Expedition.....	21,000
	Miscellaneous small grants.....	100,000
Total, National Science Foundation.....		2,026,000
Total grants, fiscal year 1965.....		6,730,000

Research by Smithsonian Institution on contracts, fiscal year 1965

Agency with whom contract was made	Research field	Actual amount
Atomic Energy Commission.....	Plant physiology.....	\$67,000
Department of Defense.....	Astrophysics.....	230,000
	Zoology.....	609,000
Total, Department of Defense.....		839,000
National Aeronautics and Space Administration.....	Telescope.....	2,425,000
	Astrophysics.....	20,000
Total, National Aeronautics and Space Administration.....		2,445,000
Total, research contracts, fiscal year 1965.....		3,341,000

Grants to Smithsonian Institution, fiscal year 1966

Granting agency	Title of grant	Estimated amount
Department of Defense.....	Mammals and their ectoparasites from Iran.	\$65,000
	Potential vectors and reservoirs of disease in strategic overseas areas.	145,000
	Miscellaneous small grants.....	75,000
Total, Department of Defense.....		285,000
National Aeronautics and Space Administration.	Study of meteorites.....	210,000
	Prairie network.....	113,000
	Satellite tracking program.....	4,900,000
	Miscellaneous small grants.....	25,000
Total, National Aeronautics and Space Administration.		5,248,000
National Science Foundation.....	Science information exchange.....	1,800,000
	Estimated miscellaneous grants.....	100,000
Total, National Science Foundation.....		1,900,000
Total grants, fiscal year 1966.....		7,433,000

Research by Smithsonian Institution on contracts, fiscal year 1966

Agency with whom contract was made	Research field	Estimated amount
Atomic Energy Commission.....	Plant physiology.....	\$83,000
Department of Defense.....	Zoology.....	700,000
National Aeronautics and Space Administration.....	Celestscope.....	3,000,000
Total, research contracts, fiscal year 1966.....		3,783,000

SMITHSONIAN INSTITUTION
SCHEDULE OF BUILDING PROJECTS

JANUARY 1966

FISCAL YEARS	1961 AND PRIOR YEARS	1962	1963	1964	1965	1966	1967	1968	1969	1970
REMODELING OF CIVIL SERVICE COMMISSION BLDG. (FOR ART GALLERIES)	PRE-PLANNING STUDIES	PLANNING APPRN. RECEIVED, \$400,000		APPRN. RECEIVED, \$5,465,000	APPRN. RECEIVED, \$1,000,000	UNDER CONSTRUCTION	MARCH 1967 COMPLETION			
NATIONAL AIR AND SPACE MUSEUM BUILDING	PRE-PLANNING STUDIES			PLANNING APPRN. RECEIVED, \$511,000	REMAINDER OF PLANNING APPRN. RECEIVED, \$1,364,000					SCHEDULED TO BE UNDER CONSTRUCTION
CONSTRUCTION & IMPROVEMENTS, NATIONAL ZOOLOGICAL PARK		PLANNING APPRN. REC'D. (OC), \$85,000	APPRN. RECEIVED, \$1,275,000	APPRN. RECEIVED, \$1,275,000	APPRN. RECEIVED, \$1,525,000	APPRN. RECEIVED, \$1,539,000	APPRN. REQUESTED, \$1,589,000			REQUESTED APPROPRIATIONS OF VARIOUS AMOUNTS FOR 12-YEAR PROGRAM.
RESTORATION AND RENOVATION OF BUILDINGS:							REQUEST CONSTRUCTION APPRN. \$2,300,000			
SMITHSONIAN GALLERY OF ARTS, CRAFTS, AND DESIGN							START CONSTRUCTION SEPT. 1966	FEBRUARY 1968		COMPLETION

PREPARED STATEMENT

Senator BARTLETT. Do you have a written statement? If so, do you care to read it?

Mr. RIPLEY. I have a prepared statement I would like to submit for the record.

Senator BARTLETT. The statement will be made a part of the record. (The statement follows:)

I would like to summarize our budget request for 1967.

	1966	1967	Increase
Salaries and expenses.....	\$18,755,000	\$23,437,000	\$4,682,000
Restoration and renovation of buildings.....	2,248,000	2,300,000	52,000
Foreign currency.....	1,300,000	5,700,000	4,400,000
Construction and improvements, National Zoological Park....	1,539,000	1,589,000	50,000
Total.....	23,842,000	33,026,000	9,184,000

¹ 38.5 percent increase.

Half of the increase (\$4,400,000) is for museum programs and associated research in the natural sciences and cultural history using special foreign currency. The administration has urged that worthwhile projects be presented for the approval of the Congress in the countries where deposits of foreign currencies are surplus to our normal needs. I believe that the knowledge that this country will obtain and the knowledge that this country will exchange with the other countries represent an excellent program to take advantage of the availability of these funds and at the same time contribute so strongly to our foreign aid and cultural objectives.

A small part of the increase is for construction and improvements at the National Zoological Park (\$50,000) and for restoration and renovation of buildings (\$52,000).

The remaining half of the increase (\$4,682,000) is for the continuing operations of the Institution which are financed through "Salaries and expenses." Increases are needed to further the research, museum, and art programs.

One million ninety-three thousand dollars of this increase is for the museum programs, including scientific research in natural history. The Museum of Natural History requires most of this increase in order to fill gaps in our scientific research program; to meet increasing demands for identification of scientific specimens; and to reduce serious backlogs in classification and studies of the national collections of scientific specimens.

Seven hundred and thirty-eight thousand dollars is required for the new art galleries we are developing to be established in the Fine Arts and Portrait Galleries Building (the old Patent Office) which is scheduled for completion during the fiscal year 1967.

Six hundred and one thousand dollars is required for our research bureaus, other than museums, principally the Astrophysical Observatory. This increase is needed to participate in studies for a radio telescope in consortium with Harvard University, the Massachusetts Institute of Technology, Lincoln Laboratory, and the National Science Foundation. We have an excellent opportunity to obtain a surplus astronomical radio antenna from the Army and we plan also to install a large reflector for gamma ray experimentation.

One million one hundred and thirty-nine thousand dollars of the increase is required for the expenses of operating and maintaining the additional building space we have acquired. This includes additional part-year operation of the newly renovated Fine Arts and Portrait Galleries Building; additional halls in the new Museum of History and Technology; and additional floor space and laboratories in the west wing of the Museum of Natural History.

One million one hundred and eleven thousand dollars of the increase is requested for administrative support and education and training. The administrative expense is directly related to the proposed scope of our activities in the fiscal year 1967. The education and training request, in the amount of \$150,000 is especially important to the very heart of the Institution's reason for being: the

"increase and diffusion of knowledge." This program will encourage visiting investigators and qualified students to make full use of the Smithsonian's facilities, collections, and scholars in their pursuit of knowledge and at the same time will accomplish work for the Institution by contributing to our research objectives.

USE OF EXCESS FOREIGN CURRENCIES

Mr. RIPLEY. I would be happy to speak to this and highlight some of our proposals.

Senator BARTLETT. I wish you would.

Mr. RIPLEY. The Smithsonian proposes, in our budget request for 1967, an increase of \$9,184,000, of which half, approximately, represents a request for the use of excess foreign currencies abroad. Under Public Law 480, excess currency amounts are maintained in 10 countries from the sale of surplus agricultural products. We found in our experience last year that we had great success in administering a certain amount of these currencies for the aid of American scientific endeavors. We would like to continue this program and increase the amount because of the success of the program last year.

We have been encouraged by conversations with sources in the administration that led us to believe we can do this efficiently and well and believe these currencies should be used.

In terms of currencies in this country, we are requesting an increase of approximately \$4,700,000 for domestic programs. This represents an increase of about 25 percent of our budget, exclusive of the foreign currency.

This increase divides itself into several particular subjects. A large item, a million dollars, is for an increase for museum programs, especially in the sciences having to do with the Museum of Natural History. Seven hundred and thirty-eight thousand dollars is for the new art galleries we are developing to be established in the fine arts and portrait galleries, as a result of Congress giving us the old Patent Office Building in 1962. We have a phased program to build up to the opening of these two galleries.

Six hundred thousand dollars is required for research, principally at the Astrophysical Observatory. We have had excellent opportunities this year to secure, at low cost, a radio antenna from the Army which I know Dr. Whipple would like to speak about. One million one hundred thousand dollars is for operating and maintaining additional building space we have acquired.

Another \$1,111,000 is requested for administrative support and training and educational programs. This administrative expense is directly related to the scope of our activities in fiscal 1967. The education and training request is \$150,000.

I think that, in essence, is a brief summary of what we are proposing.

EDUCATION AND TRAINING PROGRAM

Senator BARTLETT. Now, Mr. Ripley, what is this education and training program?

Mr. RIPLEY. Sir, the education and training program relates to a request we made last year which was refused by the House committee with the suggestion that we make an additional study. We have done so and we believe that the efficiency of the operation of the Smithsonian would be enormously enhanced were we able to get into this.

We have a tremendous number of requests for people to come in on various projects concerned with the collections and the existing scientific and historical staff of the museums. These people are, to a large extent, students at various levels.

Senator BARTLETT. Students where?

Mr. RIPLEY. In the United States.

Senator BARTLETT. All over the country?

Mr. RIPLEY. Yes, universities all over the country. We feel we cannot operate successfully without taking into account the fact that our faculty, our professional staff, are involved in a teaching process. They are concerned with the development of not only exhibits, but scientific papers and research projects on the collections. It would be totally inefficient and unbusiness-like for us not to relate these men and their activities to the stream of education which, in its volume, is so enormous now all over the country.

We feel the students we bring here on training grants and fellowships will succeed to the mantle of the man with who they will be associated.

Senator BARTLETT. You bring these people in from around the country to do further work in their specialities?

Mr. RIPLEY. To do further work in their specialities which are directly connected with work going on in the Smithsonian.

Senator BARTLETT. These will be teachers and students?

Mr. RIPLEY. Yes, people at different levels from postdoctorates down to undergraduates and sometimes even brilliant high school students.

Senator BARTLETT. This money, just how will you operate, select Mr. "A," pay his transportation and pay his cost of living while he is in Washington?

GRANTS BY NATIONAL ACADEMY OF SCIENCES

Mr. RIPLEY. He will ordinarily receive an outright grant. This may be a postdoctorate fellowship which will be a sum worked out by the National Academy of Sciences. Last year the National Academy of Sciences requested us to undertake certain fellowships in various areas of sciences. The demands for filling those fellowships have been about 8 to 1. We will be getting about eight applications for the one post we can offer. These men will be teachers and professors at other universities. They will spend about 1 year working in the Institution, in anthropology, geology, in areas where they could not do this work otherwise. This is a golden opportunity for them to come and learn and enhance their teaching abilities because they would have been exposed to the collections and facilities of the Institution.

Senator BARTLETT. If this grant is allowed, this appropriation is made, how many people might you be able to bring in the first year?

Mr. RIPLEY. The National Academy of Sciences program involves 10, is it, or is it more?

Dr. WHIPPLE. I think it is 10. The total is about 25 at both the predoctoral and postdoctoral levels.

Senator BARTLETT. Will you please, Mr. Ripley, describe or rather indicate the differences between this appropriation request for \$150,000

and education and training requests for \$500,000 which was carried in the fiscal year 1966 budget?

Mr. RIPLEY. Yes, sir.

Senator BARTLETT. That was not granted.

Mr. RIPLEY. This suffered a reduction. The \$500,000 we requested to start this program last year was not granted by the Congress but we were instructed, in the language of the House report, to reconsider this. The implication was that we could bring it up again as a result of further study. We are bringing it up again at a reduced level simply because of the stringency of the 1967 budget; and with the hope that we can get started and with the conviction that the need is overwhelming.

Senator BARTLETT. The budget is strict, as you relate, and I am amazed that the Budget Bureau cleared a 38.5-percent increase.

Mr. RIPLEY. I would like to point out the real increase is half of that, because half is in the foreign currency where we have been encouraged to develop programs.

Senator BARTLETT. What is under the foreign currency?

Mr. RIPLEY. There are three general headings; archeology is one of them. I would like to refer to the complete breakdown which is in our budget estimate this year.

Archeological research and excavation, archeological restoration, systematic and environmental biology in the basic sciences, and museum sciences. Would you like me to describe these?

Senator BARTLETT. Not at this time—later when we reach this activity.

Mr. RIPLEY. Yes, sir. We would be very happy to then.

1967 BUDGET REQUEST

SALARIES AND EXPENSES

Senator BARTLETT. There also will be placed in the record the justifications for the fiscal year 1967 budget estimate of \$23,437,000 necessary for salaries and expenses. This is an increase of \$4,969,000 over the appropriation for fiscal year 1966. There is contemplated a supplemental estimate for fiscal year 1966 necessary because of wage increases.

(The justification follows:)

	<i>Amount</i>
Appropriation act, 1966 (adjusted)-----	\$18, 755, 000
Budget estimate, 1967-----	23, 437, 000
	<hr/>
Increase, 1967-----	4, 682, 000

Summary of increases, 1967

	<i>Amount</i>
1. Pay increases:	
Full-year cost in 1967 of salary increases to general schedule employees effective Oct. 10, 1965 (Public Law 89-301, dated Oct. 29, 1965)-----	\$150,000
Full-year cost of salary increases to wage board employees in December 1964-----	107,000
	257,000
2. U.S. National Museum: To meet increasing demands on its exhibits and conservation programs and for increased shipping activity throughout the Institution (handled by the Registrar, U.S. National Museum)-----	186,000
3. Museum of History and Technology: For additional specialists to meet increasing demands from the public and scholars to research and interpret our country's cultural and technological achievements-----	123,000
4. Museum of Natural History: To further research in systematic, marine, and environmental biology; anthropology; and earth sciences-----	628,000
5. National Air and Space Museum—for increased activity related to planning for the projected new National Air and Space Museum, including exhibition and educational plans-----	45,000
6. National Armed Forces Museum Advisory Board: For accelerated program of museum planning and for building up collections, both of military and naval objects and library materials-----	45,000
7. Freer Gallery of Art: For increased workload of its conservation laboratory-----	6,000
8. National Collection of Fine Arts: For increased activity prior to move into new galleries (Fine Arts and Portrait Galleries and Smithsonian Gallery of Arts, Crafts, and Design); to continue the U.S. Information Agency art program; and for minimum support to Cooper Union Museum-----	369,000
9. National Portrait Gallery: To continue expanding program of acquisition and planning the exhibition of portraiture and other objects in the new gallery-----	343,000
10. Astrophysical Observatory: To give additional support to its programs in radio astronomy, gamma-ray astronomy, theoretical research on stellar and upper atmosphere-----	528,000
11. Canal Zone Biological Area: Scientific research, including the addition of a herpetologist and an ichthyologist-----	62,000
12. Radiation Biology Laboratory: No program increase requested--	0
13. Buildings management: For building services for the Fine Arts and Portrait Galleries Building on a part-year basis, and additional exhibition and laboratory areas in other Smithsonian buildings-----	1,013,000
14. Education and Training Division: To establish programs of national and international cooperative research and training on an Institution-wide basis-----	150,000
15. International activities: To administer the special foreign currency program and the international exchange of publications--	28,000
16. Administrative support: To keep pace with the increased scope of the Institution's programs in 1967-----	899,000
	4,682,000
Total increase, 1967-----	4,682,000

Comparative summary of the 1966 appropriation with the 1967 estimates

	1966		1967		Analysis of Increases*	
	Number of positions	Estimate	Number of positions	Estimate	Pay increases for general schedule and wage board employees 1	Program
1. Museums of science and history (including research):						
U. S. National Museum.....	197	\$2,328,000	210	\$2,528,000	\$14,000	2 \$186,000
Museum of History and Technology.....	154	1,706,000	161	1,843,000	14,000	3 123,000
Museum of Natural History.....	258	3,279,000	287	3,940,000	33,000	4 628,000
National Air and Space Museum.....	34	300,000	38	438,000	3,000	5 45,000
National Armed Forces Museum Advisory Board.....	4	95,000	9	142,000	2,000	6 45,000
Total, museums of science and history.....	647	7,798,000	705	8,891,000	65,000	1,027,000
2. Art galleries:						
Proer Gallery of Art.....	5	32,000	6	39,000	1,000	7 6,000
National Collection of Fine Arts.....	31	437,000	52	814,000	8,000	8 369,000
National Portrait Gallery.....	15	316,000	23	670,000	11,000	9 343,000
Total, art galleries.....	51	785,000	81	1,523,000	20,000	718,000
3. Research bureaus (other than museums):						
Astrophysical Observatory.....	46	1,209,000	52	1,745,000	8,000	10 528,000
Camal Zone biological area.....	18	213,000	21	277,000	2,000	11 62,000
Radiation Biology Laboratory.....	24	364,000	24	365,000	1,000	12 0
Total, research bureaus.....	88	1,786,000	97	2,387,000	11,000	590,000
4. Buildings management:						
Museum of History and Technology.....	240	1,901,000	263	2,169,000	36,000	172,000
Museum of Natural History.....	275	2,384,000	301	2,567,000	48,000	135,000
Fine arts and portrait galleries.....	0	0	77	292,000	0	292,000
Smithsonian Institution.....	54	337,000	58	488,000	8,000	143,000
Arts and industries.....	86	485,500	89	530,500	17,000	28,000
All other.....	73	550,000	82	646,500	17,000	69,500
Rehabilitation of buildings.....		92,500		236,000		143,500
Total, buildings management.....	728	5,750,000	800	6,889,000	126,000	13 1,013,000
5. Other activities (including administrative support):						
Education and training.....	0	0	4	150,000	0	14 150,000
International activities.....	16	186,000	91	214,000	0	13 28,000
Administrative support.....	167	2,400,000	208	3,353,000	34,000	10 899,000
Total, other activities.....	183	2,636,000	231	3,747,000	34,000	1,077,000
Grand total.....	1,097	18,755,000	2,004	23,437,000	257,000	4,425,000

*Footnote references refer to the following numbered paragraphs under "Justifications," below.

JUSTIFICATIONS

(1) *Pay increases—Need for increase.*—An increase of \$257,000 is requested for pay increases. This increase is needed to pay the full-year cost in 1967 of salary increases granted the general schedule employees under the "Federal Employees Salary Act of 1965" (Public Law 89-301, dated October 29, 1965) (\$150,000). The 1966 base for the 1967 estimate includes only 72 percent of the annual cost of the 1965 salary increase.

The remainder of the increase (\$107,000) is needed to pay the full-year cost of salary increases granted to wage board employees in December 1964. This cost is not included in the 1966 base for the 1967 estimate and is to be financed in 1966 by an anticipated supplemental appropriation.

The costs for both the general schedule and wage board increases were determined through analysis of all positions, taking into consideration representative lapse factors.

All operations of the Smithsonian Institution have been carefully reviewed to determine whether any portion of the above amount can be absorbed. Absorption of any additional amount is impracticable because of additional workloads.

The maintenance, operation, and protection of the buildings of the Smithsonian are extremely complex. Its seven exhibition buildings are visited annually by millions of visitors. These large crowds create problems in protecting not only the visitors but also the irreplaceable collections and in maintaining the buildings in a satisfactory condition. In addition, the much needed laboratory space provided by the additions to the Natural History Building have increased the demand for buildings services.

The programs of the National Collection of Fine Arts and the National Portrait Gallery are being accelerated to establish a great national art gallery in the Fine Arts and Portrait Galleries Building, now under contract for restoration and renovation.

The Smithsonian Institution is increasing its services to the community. At the request of the Congress the Smithsonian has for the past two summers kept its buildings open during evening hours and the response from the public has been gratifying. Educational functions, such as the "Smithsonian Film Theater," have been introduced with success.

The observance of the birth of James Smithson this past September has created renewed national interest in the Smithsonian. The many newspaper and magazine stories about the Smithsonian and our research efforts and revitalized exhibits have greatly increased the requests for information.

(2) *U.S. National Museum.*—The U.S. National Museum is comprised of the Museum of History and Technology and the Museum of Natural History. Only the centralized services are included in this estimate, viz, the Office of Exhibits, the Conservation Research Laboratory, and the Office of the Registrar. These centralized services need an increase of \$200,000 which includes \$14,000 for pay increases.

1966 appropriation-----	\$2, 328, 000
1967 estimate-----	2, 528, 000

Exhibits

The Office of Exhibits designs, produces, and installs exhibits in the Museum of History and Technology; conducts the program for the modernization of exhibits in the Museum of Natural History; carries out a program of changing special temporary exhibits on subjects of art, history, and science; maintains the permanent exhibits in good appearance and repair; and assists and advises other elements of the Smithsonian about exhibits work. The Office of Exhibits requests an increase of \$109,000 which includes \$12,000 for pay increases.

Need for increase.—In recent years the exhibits of the National Museum have become the standard of excellence in the museum world. In recognition of this, museum representatives from more than 50 foreign countries and nearly every State in the Union have visited the Office of Exhibits for consultation, advice, and help with their exhibits problems. To carry out the goal of the Smithsonian, to provide the most instructive and inspiring displays of the American heritage and the development of science, the exhibits must be maintained in their original excellent condition.

The National Museum, comprising the 2 museums mentioned above, has designed, produced, and installed 44 permanent exhibits halls with a total of more than 2,000 units and requiring more than a quarter of a million square feet.

Remaining to be done are another 31 halls to complete the job of bringing to the American people the finest exhibits in the fields of anthropology, natural sciences, history, and science and technology.

As the number of completed exhibits halls increases, it becomes necessary to augment the personnel required to maintain and extend the useful life of these exhibits to keep them fresh, attractive, and up to the high standards expected of the National Museum by the more than 13 million visitors who view the exhibits each year.

In the interest of prudent economy, additional funds and staff are required for this part of the exhibits program. The Smithsonian Institution, as all modern museums do to fulfill its obligation to the public, conducts a program of temporary and special exhibits. In addition to these special exhibits, planned by the Smithsonian staff to implement and highlight the permanent exhibits, the Smithsonian receives many requests from other Government agencies, top Government officials, and distinguished citizens for exhibits with important and timely national interest such as the "Profile of Poverty," the "Federal Scientist and Engineer," and "The Dead Sea Scrolls" exhibits.

A total of 8,300 man-hours were required for the production of the "Dead Sea Scrolls." This cost in time has been amply justified by the 209,643 people who viewed the exhibit during the 22 days it was on display in the Museum of Natural History. In addition, this exhibit has been seen by more than 1½ million people on its tour of major cities including Philadelphia, Los Angeles, San Francisco, Omaha, Baltimore, and Ottawa. It will continue on to Toronto, then to the British Museum in London, and several regional museums in England before concluding its tour in Jordan.

Over the years these temporary and special exhibits have averaged about 10,000 man-hours annually; but in the period ending May 15, 1965, a total of 14,652 man-hours had been expended. In fiscal year 1964, 15 special exhibits were produced; and in fiscal year 1965, the number had increased to 22.

The proposals and requests for these temporary and special exhibits have overwhelmed the present capacity of the Office of Exhibits in manpower, time, funds, and space.

Plan of work.—To employ two exhibits designers, three exhibits technicians (\$47,000); personnel benefits (\$3,000); rent, communications, and utilities (\$7,000); supplies (\$13,000); and equipment \$27,000; a total increase of five positions and \$97,000 for program costs.

Conservation Research Laboratory

The Conservation Research Laboratory performs research in the science and techniques of conservation and conducts analysis, examination, treatment, and restoration and preservation of the museum collections. An increase of \$19,000 including \$1,000 for pay increases is requested.

Need for increase.—The increase of \$18,000 is necessary to prevent progressive deterioration of the collections by providing specialists to examine and treat thousands of valuable objects in the national collections of the Institution.

The overpowering number of historic and scientific objects owned by the people of the United States and shepherded by the U.S. National Museum reached a total of 59,691,301 at the end of 1965. The interest expressed in them by the visiting public and students from all parts of the United States mushrooms yearly. Such an interest carries with it the implicit obligations and responsibility for us to effectively maintain, preserve, exhibit, and interpret the collections. A parallel example which can be cited is that of the justifiably renowned British Museum, that has literally millions of objects worth inestimable millions of dollars. This treasure house maintains a large, well-staffed scientific laboratory for the guidance of the professional staff in its care of these collections. This Laboratory has its own 5-story building and a staff of 13 scientists and technicians. The Institute Royal du Patrimoine Artistique at Brussels employs 21 scientists, 35 technicians, and 11 administrative and clerical people, in research, analysis, and treatment for the conservation of art and historical objects.

The Smithsonian Conservation Research Laboratory, with its current limitations in numbers of conservators and technicians, faces the insurmountable task of conserving large numbers of objects that are irreplaceable and all of which are significant to the heritage of our scientific, historic, and artistic accomplishments.

Hundreds of significant and valuable objects in the large collections of the Smithsonian are in poor condition. The rapid rate of acquisition of new collections includes increasing numbers of objects which require repair, cleaning, conservation, and preservation treatments added to a tremendous backlog which existed before the establishment of the Conservation Research Laboratory. The backlog of conservation work required was revealed in the move of collections to the new additions constructed for the Natural History Building, and to the Museum of History and Technology from the Arts and Industries Building. To prevent the progressive deterioration of the collections, additional conservators skilled in the treatment and preservation of materials such as textiles, wood, bone, ivory, reed, metals, ceramics, glass, paper, parchment, and leather are urgently needed to examine collections, to advise the curators responsible, and to train technicians in preservation and preventative treatments.

Plan of work.—To employ two conservators for the analysis and treatment of objects of metal, leather, wood, paper, and cloth (\$17,000); personnel benefits (\$1,000); a total increase of two positions and \$18,000 for program costs.

Office of the Registrar

The Office of the Registrar registers all accessions to the U.S. National Museum and provides transportation and mailing services for all bureaus of the Institution. The Office of the Registrar requires an increase of \$72,000, including \$1,000 for pay increases.

Need for increase.—The increase requested for the Office of the Registrar is required because expanded activities will result from the physical move of the staff and collections of the National Collection of Fine Arts and the National Portrait Gallery to a new building some distance from the Mall. Additional transportation, mail services, and facilities are needed to provide efficient and economical service on a timely basis. The accelerated activities of the National Air and Space Museum and the National Armed Forces Museum Advisory Board in collecting historical objects and in preparing exhibits for their new installation make additional funds necessary for transportation of large objects—both to enrich these exhibits and to keep abreast of the rapid changes in these major areas of achievement. The increased activities of the professional staff in the many bureaus have brought about a commensurate increase in travel and in the work of obtaining passports, visas, and importation permits and the shipment of field collecting equipment. The net result of these expanded services is a need for increase in supporting personnel and funds.

Plan of work.—To employ one transportation clerk, one travel clerk, one shipping clerk, and three messengers (\$29,000); personnel benefits (\$1,000); transportation of things (\$40,000); and equipment (\$1,000); a total increase of six positions and \$71,000 for program costs.

(3) *Museum of History and Technology.*—The Museum of History and Technology presents educational and inspirational exhibitions of the national collections for the millions who visit it each year, to increase knowledge by scholarly research in our country's heritage and cultural history, and in the history of science, engineering, and industry. An increase of \$137,000 is requested including \$14,000 for pay increases.

1966 appropriation-----	\$1,706,000
1967 estimate-----	1,843,000

Need for increase.—Additional curators and technicians are required to plan and direct the installation of a major part of the original exhibits in the new building, to document the collections, to authenticate the educational exhibits, and to search out, acquire, and preserve significant historical objects and source materials.

To insure the most professionally sound planning of exhibits and museum research, and to meet the increasing interest of the public and the scholarly community in communication of ideas through educational exhibits and through public service programs, additional curators and technicians are needed. We must continue to plan informative exhibits, to prepare objects for effective displays, and to improve our musical events, lecture series, and other programs for the public. Continuing studies of the effectiveness of open education through museum exhibitions are required. Research in many areas of the history of our country is essential to enliven the presentation of facts through the varied media of television, student training programs, monographs, and other publications.

To continue to meet the increasing interest of the public and scholars in the communication of ideas through exhibits of objects, to install in the active minds of youths the desire to know and to learn, to strengthen the museum's public service programs, and to research and interpret our country's cultural and technological achievements, gaps in our curatorial staff must be filled.

Because of the unique capabilities and fields of specialization of our professional curators, increasing demands are being made on them to study, evaluate, and report the impact of science and technology upon our industry, culture, and society.

Specialized areas of museum scholarship in which gaps exist in our staffing and for which additional curators and technicians are required include the history of nuclear energy, medical history, the history of electronics, and American studies. To support these professional historians there will be required museum technicians or research assistants and clerk-stenographers.

Plan of work.—To employ three historians, two museum technicians or research assistants, and two clerk-stenographers (\$75,000); personnel benefits (\$5,000); and other services (\$43,000); a total increase of seven positions and \$123,000 for program costs.

(4) *The Museum of Natural History.*—The Museum of Natural History conducts research in all forms of life on earth and the environmental factors interacting with life. The range of research includes: Systematic biology concerned with the identification and classification of all plant and animal life; environmental biology relating to the interaction of all kinds of organisms, including man, with each other and with their surrounding environment; and anthropology and the study of man, his physical nature and his culture from the earliest beginnings to the present in all parts of the world.

The Museum is also the center for basic research in the chemical and the physical structure of rocks, gems, and meteorites in the earth sciences; and sponsors marine biology and oceanography, the multidisciplinary sciences devoted to studying the kinds of plants and animals that live in the sea, their reaction to this environment, and their remains in the sediments.

Collaterally, the Museum has a national responsibility for imparting knowledge through the development and maintenance of exhibition and educational activities in these areas of research.

The scientific studies of the research staff of the Museum are unique since they are based primarily on a collection of more than 50 million specimens gathered from many sources and made available generally to the entire scientific community for scientific investigations.

An increase of \$661,000 is requested including \$33,000 for pay increases.

1966 appropriation-----	\$3, 279, 000
1967 estimate-----	3, 940, 000

Need for increase.—The requested increase will provide for research programs that are necessary both for fully extracting scientific information from the national collections and for increasing and maintaining them for the use of investigators of natural history over the world. Because of the increasing importance of natural history studies and the inadequacy of the Museum's staffing, enormous backlogs of unordered specimens have accumulated. As an example, the Department of Entomology has a backlog of over 2,500,000 specimens, and the present staff is faced with a growing rate of 125,000 additional specimens per year. The problem of ordering and studying this backlog can only be resolved by substantial increases in professional and supporting staff.

The anthropology program has three goals: (1) To undertake basic research in the branches of ethnology, archeology, language of linguistics, and physical anthropology; (2) to provide anthropological documentation to collections for studies by scientists from centers throughout the world; and (3) to make available knowledge for educational purposes and for the general public in the form of exhibits, popular publications, the answering of inquiries, and the identification of specimens.

The Museum maintains and increases one of the world's largest and most comprehensive gem and mineral collections, which are utilized in studies of mineralogy, crystallography, and geochemistry.

Currently, earth sciences is applying new and complex instrumentation, including the electron microprobe, to the identification of samples of the earth's crust and of meteorites to provide information, which will lead to a better understanding of the nature and composition of the solar system and the earth's structure.

The program of environmental biology conceives of three important growing points: (1) Systems analysis of populations by computer simulation, (2) the cycling of energy and materials in ecosystems, and (3) the role of social behavior in the natural regulation of animal numbers. In each, an understanding of how man is related to changes in the environment becomes most vital to his establishing a harmonious relationship with that environment. In addition to the traditional use of ecology in systematic studies, more intensive involvement in purely environmental studies is underway.

Systematic biology, which is the research interest of many staff members of the Museum, is undertaking to stimulate and integrate activity in taxonomy, especially along interdisciplinary lines. Museum scientists study many biological problems directly in the field, observe the behavior, life histories, and finally collect representative samples of the plants and animals involved.

The oceanographic program supports and participates in oceanic expeditions and establishes the identities of the recovered organisms and sediments. Most of the scientific effort of the Smithsonian's oceanography program is concerned with the systematics of marine plants and animals; it is directly related to the national oceanographic goals and to the long-established obligations of the Museum. The five oceans are a vast energy pump and really act as a single world ocean. This ocean may only be adequately understood in its entirety on a global basis since the distributional and dilutional forces make a large effect on one part, a diluted effect on others. A 1-pound explosion at depth in the Indian Ocean has been detected in the North Atlantic 3 hours and 42 minutes later. The principles developed for one part of the world ocean apply to all; however, variability is present and an understanding of all oceans will lead to massive understandings of weather, climate, and coastal management.

Funds are included to permit the initiation of a laboratory for studying modern and fossil pollens; such studies contribute directly to exploration for oil, description and understanding of environmental conditions in the geologic past, and to the construction of acceptable evolutionary explanations.

The requested increase will also provide adequate scientific supporting staff to relieve the scientists from subprofessional tasks, such as sorting, labeling, and filing. Technicians will permit better use of the scientific capability of the Museum and at the same time make possible a reduction in the backlogs of vitally needed collections. In addition, professional positions are required to provide research competence where none now exists on groups of organisms important to man, such as nonhuman primates, flies, and bees. Specialists are also vital to the ongoing of research on meteorites, marine sediments, and various groups of vertebrate and invertebrate animals.

Since taxonomy is the principal research activity of the Museum, this area, centered in the programs of marine and systematic biology, requires most of the professional positions requested. All of these are required to fill major gaps in our research programs and to meet increasing demands for identifications and other assistance from research workers, the public, and Federal agencies. The remaining new professional positions are for 1 anthropological linguist, 5 biologists, 2 geologists, 4 research assistants, 12 museum aids and technicians, and 4 secretaries and clerk-stenographers.

Increases in funds for equipment are urgently required for pursuing scientific investigations; appropriate scientific gear for field expeditions is critical to the success of such ventures which the Museum must sponsor to stay in the vanguard of biology. The operation of the Smithsonian Oceanographic Sorting Center is also dependent on the Museum for funds for equipment to sort and distribute the staggering numbers of collections made on U.S. marine expeditions in many parts of the world.

An increase of \$50,000 is requested in the funds for support of individual research programs which formerly were financed by grants of the National Science Foundation. These are projects of such scope and depth that they are not viewed as ordinary research undertakings supportable by conventional funding means. It is planned to allocate the requested appropriated funds on the comparative merits of research proposals submitted by staff members. Review panels and the same standards of excellence used by the National Science Foundation will be employed in administering these funds. These funds together with the base amount of \$350,000 appropriated for 1966, will be expended on the same basis as were the grants received from the National Science Foundation.

Plan of work.—To employ 6 biologists, 1 linguist, 2 geologists, 4 research assistants, 12 museum aids, 4 stenographers (\$273,000); personnel benefits (\$19,-

000); other services (\$199,000); supplies and materials (\$37,000); and equipment (\$100,000); a total increase of 29 positions and \$628,000 for program costs.

(5) *National Air and Space Museum*.—The National Air and Space Museum presents to the American people this country's past, present, and potential achievements in aerospace science and technology. This museum collects, restores, and preserves the world's greatest collection of air and space craft, engines, rockets, instruments, personal memorabilia, and other historical objects. All of these are of major significance to aviation and space flight and memorialize the famous men and women who have pioneered in this field vital to our Nation's commercial strength and military security. Scholars, writers, historians, and professionals in various disciplines work with the museum's collections and extensive reference library to create an unrivaled center of learning in the history and development of air and space exploration. This educational potential will find a ready response in the great interest and enthusiasm of American youth.

An increase of \$48,000 for fiscal year 1967 is required by this museum, including \$3,000 for pay increases.

1966 appropriation.....	\$390,000
1967 estimate.....	438,000

Need for increase.—The requested increase is needed to meet the intensive planning and preparatory activities necessary for opening the projected National Air and Space Museum Building and to expand our efforts to inform, educate, and inspire visitors and researchers currently viewing and using the national collections.

The recognition of the great inspiration and interest these collections have for all citizens has culminated in plans for a fitting exhibition, education, and research center on the Mall which will attract a minimum of 5 million visitors a year. An Assistant Director and an additional curator will participate in the major effort required to collect and prepare objects of the greatest historical and technical significance and present them in an effective exhibit in order to impart a clear understanding and appreciation of the development of air and space activities. These additional staff are needed also to search out and acquire objects to augment and strengthen the collections, to improve and expand the current exhibit program, and to handle an increased workload of public service activities including responding to public inquiries.

For serious researchers in aerospace history and technology, the museum's vast research resources, both in documentation and in authentic, original air and space craft, must be completely cataloged and made readily available. An archivist is needed for this purpose.

As air and space craft and associated objects are acquired and preserved they must be safely housed for future public display or reference study purposes. Much of this material is located temporarily at the museum's storage facility. A warehouseman will provide essential supporting service to staff and outside users of the collections by taking care of and locating this material.

Modest amounts are required for contractual services for specialized restoration of objects in the collections, refurbishing existing exhibits, and the repair and maintenance of heavy-duty handling equipment; for supplies and materials used in authentic and delicate preparation of models and for repairs to irreplaceable full-size objects; and for purchasing necessary shop, laboratory, and office equipment.

Plan of work.—To employ one Assistant Director, one curator, one archivist, and one warehouseman (\$25,000); personnel benefits (\$1,000); other services (\$8,000); supplies and materials (\$3,000); and equipment (\$8,000); a total increase of four positions and \$45,000 for program costs.

(6) *National Armed Forces Museum Advisory Board*.—The National Armed Forces Museum Advisory Board provides assistance to the Regents of the Smithsonian Institution in commemorating the contributions made by our military forces to our Nation in war and in peace. This responsibility legislated by the Congress is met by collecting, preserving, and exhibiting military objects of historical interest and significance; portraying the valor and sacrificial service of the men and women of the Armed Forces and their extensive peacetime contributions; providing a study center for scholarly research into the meaning of war; and by planning the acquisition of suitable lands and buildings for the display of large military objects and the reconstruction of authentic fortifications.

trenches, and other military and naval facilities characteristic of historic American military and naval operations.

An increase of \$47,000 for fiscal year 1967 is required, including \$2,000 for pay increases.

1966 appropriation-----	\$95, 000
1967 estimate-----	142, 000

Need for increase.—This increase is necessary to add five workers to the small planning staff in order to develop a dramatic documentation of history.

In concept, the museum would seek to inspire the public with a meaningful sense of the accomplishments of the Nation's Armed Forces, their contributions to our national development, and the role played by our people in providing the sinews of defense. The two additional research historians will be engaged in the acquisitions program, locating and acquiring unique and rapidly disappearing military objects needed for the collections, drawing up a well-balanced exhibit plan, and developing the architectural concept for outdoor military exhibits. The military equipment specialist is needed to protect and conserve the increasing number of irreplaceable historical objects being assembled. A library assistant, working with the professional staff, is needed to locate and organize reference materials; identify and record information on the objects accessioned; and secure, catalog, and care for books and manuscripts related to military operations and accomplishments. One additional clerical assistant will be required to assist with the large correspondence workload involved in locating objects and reference materials and developing the exhibits concept.

Funds are required also to undertake additional studies as directed by the act of August 30, 1961, with regard to the possible use of Fort Washington and Fort Foote as the sites for the outdoor museum displays.

Every effort is made to acquire military objects at no cost to the Institution.

Plan of work.—To employ two historians, one secretary, one library assistant, and one military equipment processor (\$30,000); personnel benefits (\$2,000); other services (\$10,000); and equipment (\$3,000); a total increase of five positions and \$45,000 for program costs.

(7) *Freer Gallery of Art.*—The Freer Gallery of Art is concerned with exhibiting its outstanding collections of oriental art and with research in the civilizations of the East. The gallery includes a library, photographic laboratory, conservation laboratory, and a cabinet shop.

An increase of \$7,000 is requested, including \$1,000 for pay increases.

1966 appropriation-----	\$32, 000
1967 estimate-----	39, 000

Need for increase.—An increase of \$7,000 is requested for a secretary in the conservation laboratory, to assist the Head Curator who is responsible for the analysis and preservation of valuable objects of art.

Plan of work.—To employ one secretary (\$5,000); and to provide funds for personnel benefits (\$1,000); a total of one position and \$6,000 for program costs.

8. *National Collection of Fine Arts.*—The National Collection of Fine Arts is the oldest gallery of art directly related to the U.S. Government. The gallery exhibits American art in the Nation's Capital and other parts of the United States and abroad. The gallery is directed by its founding act to develop the appreciation of art both past and present, to encourage contemporary creative effort, and to provide a repository for works of art belonging to the Government. An increase of \$377,000 is requested including \$8,000 for pay increases.

1966 appropriation-----	\$437, 000
1967 estimate-----	814, 000

Need for increase.—An increase of \$377,000 is requested for fiscal year 1967. This increase is needed to prepare to open this major art museum in the enlarged quarters now being renovated and restored in the original Patent Office Building, transferred to the Smithsonian for this purpose by the act of March 28, 1958. The opening of the museum is scheduled for March 1968 and the work of collecting and preparing exhibit materials and of planning and designing exhibits must therefore be accomplished in 1967.

A full year is required to install the exhibits. The installation will begin as soon as the building renovation is finished, in March 1967.

Another unique part of this gallery was initiated on June 23, 1965, when the President signed papers transferring the Old Court of Claims Building (the

original Corcoran Gallery of Art) to the Smithsonian Institution. This gallery will exhibit American decorative arts, folk arts, crafts, and design and will provide space for special exhibits of the arts and designs of foreign countries. The gallery will also provide an assembly hall for lectures, presentations, receptions, and other public ceremonies.

The renovated building is scheduled for completion in January 1968. The planning and design of the exhibitions must be developed in 1967. Works of art and design representing American artists must be searched out in all parts of the country also during 1967.

In addition to the permanent exhibits, other services performed by the National Collection of Fine Arts include rotating exhibits in Washington, D.C., arranging for continuing exhibitions of American art in the White House, assisting the State Department and other Government agencies with temporary exhibitions, and supervising the Traveling Exhibition Service which circulates approximately 80 traveling exhibitions throughout the country.

Funds are also included to carry out a program of international exchange of art exhibits, similar to the fine arts exhibits program formerly conducted by the U.S. Information Agency. This program will include the international exchange of fine arts exhibits and U.S. participation in the Venice and São Paulo Biennials. The program will encompass exhibits of painting, sculpture, prints, folk art, crafts, and related categories of fine and decorative arts.

Plan of work.—To employ 6 curators, 1 archivist, 1 assistant librarian, 1 design specialist, 1 conservator, 1 administrative assistant, 2 research assistants, 1 secretary, 3 museum technicians, 4 clerk-typists (\$170,000); personnel benefits (\$12,000); other services (\$74,000); supplies and materials (\$7,000); and equipment (\$106,000); a total increase of 21 positions and \$369,000 for program costs.

(9) *National Portrait Gallery.*—The National Portrait Gallery exhibits portraiture and statuary depicting men and women who have made significant contributions to the history, development, and culture of the people of the United States. An increase of \$354,000 is requested, including \$11,000 for pay increases.

1966 appropriation-----	\$316,000
1967 estimate-----	670,000

Need for increase.—An increase of \$354,000 is needed to prepare to open this major gallery to the public in 1968, in the new halls of the original Patent Office Building now under restoration and renovation contract. Because the Portrait Gallery began with less of a collection and without a staff, an unusual percentage increase is required to launch the gallery.

An increase of \$63,000 is requested for staff required to continue an expanded program of acquisition and planning the exhibition of portraiture and other objects in the new gallery.

An increase of \$134,000 is requested for the acceleration of renovation and conservation of portraits, contracts for special picture frames and exhibits.

An increase of \$15,000 is requested for office supplies and construction and installation of exhibits.

An increase of \$142,000 is requested for library equipment, books, furnishings for laboratories, and the purchase of portraiture for exhibition.

Plan of work.—To employ one librarian, one conservator, one photographer, one assistant registrar, two museum aids, and two secretaries (\$48,000); personnel benefits (\$4,000); other services (\$134,000); supplies and materials (\$15,000); and equipment (\$142,000); a total increase of eight positions and \$342,000 for program costs.

(10) *Smithsonian Astrophysical Observatory.*—The Smithsonian Astrophysical Observatory carries out basic research in astrophysics, the science concerned with the origin and matter of the solar system and the universe. Research is now in progress in the fields of theoretical astrophysics, gamma-ray and radio astronomy, meteoritics, planetary, terrestrial and lunar research, and exobiology. An increase of \$536,000 is requested, including \$8,000 for pay increases.

1966 appropriation-----	\$1,209,000
1967 estimate-----	1,745,000

Need for increase.—An increase of \$244,000 is requested for gamma-ray astronomy. A large mirror (50 feet in diameter) of modest optical quality will be designed and constructed to collect the faint light emitted by gamma rays when they enter the earth's atmosphere from outer space. Gamma rays carry important information from space, in another part of the same spectrum which at

lower energies includes visible light, ultraviolet, and radio waves. Observatory scientists have pioneered this new branch of astronomy by utilizing, at night, the 28-foot reflector of a solar furnace belonging to the U.S. Army Natick Laboratories. A better instrument is needed now to carry the work forward. It will be erected in the Southwestern United States where the seeing is best. Two scientific positions will be needed.

An increase in the amount of \$264,000 is required to permit the Observatory to participate in preliminary studies for a contemplated northeast regional radio astronomy facility and to continue research programs in radio astronomy. Studies are being undertaken jointly by the Smithsonian Astrophysical Observatory, Massachusetts Institute of Technology and its affiliated Lincoln Laboratory, and Harvard University. Funds will be used for three new scientific positions, for engineering studies, and to modify and operate an 85-foot Army surplus antenna on an existing radio telescope mounting provided by Harvard University. For operation and analysis, the instrument will be connected with an existing electronic computer and will fulfill two purposes. First, it will provide the Observatory at minimum expense a radio telescope for immediate research needs. Second, it will provide invaluable opportunities to solve development problems in preparation for the larger regional facility. However, the present project is self-contained and complete in itself. It does not involve any commitment to the future proposal for the larger antenna.

A \$20,000 increase is requested to further the Observatory's very successful program in theoretical astrophysics. The money will be used for mathematical studies of phenomena involved in the evolution of the solar system and of stellar atmospheres.

The Smithsonian Astrophysical Observatory is unique in the Government, as well as in the academic world. It is devoted solely to basic research with none of the operational or development responsibilities that typify the Department of Defense and the National Aeronautics and Space Administration, which involve appropriations in the billions and major equipment contracts. Yet the two types of activity benefit one another without overlapping. In fact the Observatory collaborates with both agencies and performs substantial basic research for them under grants and contracts.

Among scientific institutions, the Observatory has a unique combination of academic collaboration with New England colleges and universities, close ties with Government research programs, and worldwide network of astrophysical observing stations. The Observatory operates as a service to the international scientific community, International Central Bureaus for Astronomical Telegrams, and for Satellite Geodesy to facilitate the exchange of unclassified scientific information among scientists of all countries.

As a long-range goal, the Observatory plans to develop a major astronomical observing facility, probably in Arizona. A thorough survey of sky and seeing conditions is underway to locate a site which will in the future afford astronomers the very best possible location in the continental United States from which to conduct ground-based observing with versatile modern equipment. No increase is requested for this project although it is of the utmost importance to the Observatory. We plan to fund it largely through research grants and contracts.

Plan of work.—To employ two radio astronomers and four physicists (\$84,000); and to provide funds for personnel benefits (\$6,000); rent, communications, and utilities (\$8,000); other services (\$268,000); supplies and materials (\$6,000); and equipment (\$156,000); a total increase of six positions and \$528,000 for program costs.

(11) *Canal Zone biological area.*—The Canal Zone biological area (CZBA) represents the principal springboard for inter-American collaboration in environmental biology, oceanography, and other biological and natural sciences relating to the tropical Western Hemisphere. An increase of \$64,000 is requested including \$2,000 for pay increases.

1966 appropriation.....	\$213, 000
1967 estimate.....	277, 000

Need for increase.—This biological field preserve by virtue of its strategic location in the Panama Canal serves as a center for inter-American science, using the transportation, communication, and logistic facilities available in the Canal Zone.

It should be noted that this is the only station in the world that has the opportunity to conduct long-term oceanographic investigations in two oceans.

the Atlantic and the Pacific, simultaneously from a single base. The biological area provides scientific leadership in fresh water investigations, the limnology of Gatun Lake.

It is noteworthy that the eyes of the international scientific community are currently focused on CZBA as a possible international science center to facilitate the essential biological and environmental investigations on the Isthmus of Panama preliminary to the initiation of the proposed sea level canal program.

The potential of the CZBA to both foster and facilitate scientific cooperation among the scientists of the two Americas cannot be overestimated.

Plan of work.—To employ one herpetologist, one ichthyologist, and one manager (\$33,000); personnel benefits (\$2,000); transportation of things (\$1,000); other services (\$6,000); supplies and materials (\$2,000); and equipment (\$18,000); a total increase of three positions and \$62,000 for program costs.

(12) *Radiation Biology Laboratory.*—The Radiation Biology Laboratory has a broad program involving all aspects of the absorption and utilization of solar radiation by living organisms. The spectrum of research includes: the transmittal of solar energy into metabolic responses of living organisms, regulatory responses to solar radiation, photosynthesis with emphasis on storage processes, energy conversion in lower marine organisms with respect to high-energy phosphates, morphological and phototropic responses to radiation, and chromosomal aberrations and gene mutations induced by radiation. The Radiation Biology Laboratory provides a vital base for research on principles of energy cycling in natural biological systems and their relationships to human populations.

1966 appropriation-----	\$364, 000
1967 estimate-----	365, 000

The increase reflected above is for pay increases and not program costs.

(13) *Buildings management.*—The Buildings Management Department has responsibility for the protection, maintenance, and operation of seven Smithsonian buildings, including museums, art galleries, and scientific laboratories. This Department provides utilities and communications services; plans and supervises construction projects; performs alterations, repairs, and improvements; furnishes custodial services, provides guards, fire protection and security services; participates in the installation of exhibits programs; repairs and refinishes furniture, equipment, and museum objects; provides necessary supporting services for the curatorial and scientific activities; and is responsible for disaster and safety programs.

An increase of 162 positions and \$1,139,000 (including \$19,000 for general schedule employees' pay increase and \$107,000 for increases granted wage board employees in December 1964) is requested.

1966 appropriation-----	\$5, 750, 000
1967 estimate-----	6, 889, 000

Need for increase.—The requested increase will enable this Department to provide building services, on a part-year basis, to the Fine Arts and Portrait Galleries, to house the National Collection of Fine Arts and the National Portrait Gallery, which will be substantially completed and partially occupied in March 1967; to bring to completion six additional halls in the Museum of History and Technology Building; and to operate additional floor space and laboratories in the west wing of the Natural History Museum. Funds are also requested for heavier utility charges for air conditioning, improved heating, and lighting; and for repairs and alterations to existing buildings and grounds.

During the past fiscal year over 13 million people visited the Smithsonian buildings, an increase of more than 2 million over the preceding year. The increase in public use and enjoyment of the educational and inspirational exhibitions and reference collections causes an additional workload to maintain, repair, and protect the buildings.

Additional protection staff is required for the new exhibits in the Museum of History and Technology. Certain of these exhibits permit the public to view the objects without the intrusion of protective devices, such as enclosures and cases. More adequate guarding is therefore necessary.

The provision for air conditioning, heating, and lighting for the public-use buildings for increasing crowds and increasing floor areas has resulted in a higher consumption of electricity and steam, and has required operating personnel substantially greater than normally required for office-type buildings.

The requested increase will provide funds for the installation of a fire and smoke protection system; guarding the buildings and the national collections; participating in the exhibits installation program; furnishing all utilities, including servicing and operating refrigeration, heating, temperature and humidity control systems, and related machinery and accessories, performing repairs and alterations; refinishing and painting offices, workrooms, and storage areas; and supplying required services for the evening concerts and special exhibition hall openings.

Funds will also be used to provide custodial services and supplies and materials for the Lamont Street laboratory building and the oceanographic sorting center at the Navy Yard.

The program for the beautification of Washington and its buildings includes increased activity in the Mall area and places an increased workload on this Department for special arrangements, public events, and improved maintenance.

The validity of the estimates for buildings management expenses has been proved by independent review and evaluation by the Public Buildings Service, upon our request.

The buildings management operations of the Institution are carefully geared to meet the extraordinary uses which the buildings serve. These buildings must accommodate the great crowds of visitors totalling over 13 million annually, serve both as national depositories and as exhibition facilities for 59 million objects of great historical, scientific, and artistic value; and provide the necessary library, workroom, curatorial, administrative, and custodial space for the professional and other staff of the Institution.

Plan of work.—To provide for 162 positions (80 man-years in 1967) for buildings management workers (guards, laborers, and mechanics—\$433,000); and to provide funds for personnel benefits (\$30,000); electricity (including air conditioning), gas and steam, and communications (\$187,000); other services for additional cost of security and protection services; for additional halls and exhibition areas; inspection and maintenance of additional elevators and escalators; and repairs to heavy equipment, machinery, and motor vehicles (\$25,500); rehabilitation of buildings (\$143,500 net increase); supplies and materials for cleaning, restrooms, and workshops; uniforms for guards, elevator operators, and restroom matrons; and gardening supplies for the care and upkeep of the surrounding grounds and areas of the buildings (\$90,000); and purchase equipment (\$104,000) for additional public exhibition areas, offices, and laboratories, including cleaning equipment, safety, mechanical, and gardening equipment, and the purchase of 3 "carryalls"; a total increase of 162 positions and \$1,013,000 for program costs.

Buildings management—Rehabilitation of buildings

1966 appropriation-----	\$92, 500
1967 estimate-----	236, 000
Natural History Building: Installation of fire and smoke detection equipment-----	125, 000
Freer Gallery of Art: Modification of curb, sidewalk, and construction of loading area at south side of building-----	15, 000
Silver Hill facility: Additional warehouse space for reference collec- tion storage (approximately 20,000 square feet)-----	96, 000
Total estimate-----	236, 000
Less fiscal year 1966-----	-92, 500
Net increase-----	143, 500

(14) *Education and training.*—A program of education and training has been established to make provision for visiting investigators and qualified students, whose contributions to Smithsonian research have been indispensable throughout the Institution's history. In order that the Smithsonian may meet its national responsibilities for the progress of certain fields of knowledge, especially where there is a shortage of opportunities or facilities in the universities, it must achieve fuller use of its unique collections and laboratories by attracting scholars and scientists of the highest quality and offering them means for the pursuit

of their work comparable to those afforded by similar institutions. To establish this program we request an increase of \$150,000.

1966 appropriation.....	0
1967 estimate.....	\$150,000

Need for increase.—Establishment of this program on an institutionwide competitive basis will enable the Smithsonian to offer support both where its own preexisting requirements could not be met except through the services of outside specialists, and also where it may afford opportunities for research that would not be otherwise available. The proposed use of Smithsonian resources for such purposes in fiscal year 1967 will be somewhat below that achieved in the past by generally comparable Government basic research centers. The request will permit an estimated 25 appointments, as compared to approximately 450 at the National Institutes of Health and 200 in the National Bureau of Standards. Systematic efforts to publicize facilities will produce applications well suited to the opportunities available for consultation, study, and research. The program will make available 20 graduate and 5 postdoctoral appointments and a few undergraduate positions, in order to serve that vital segment of the educational process where research and education are inseparable.

A second major responsibility of the Division of Education and Training will be the more effective management of professional-level conferences at the Smithsonian, so that maximum benefits are achieved both for the advancement of knowledge and the Institution's effectiveness in meeting its scientific and scholarly responsibilities. These conferences will play an important role in insuring that the Institution and its staff will remain in the mainstream of scientific and scholarly development.

Plan of work.—To employ one assistant to the director, one conference director, one research assistant, and one secretary (\$35,000); personnel benefits (\$2,000); other services (\$108,000); supplies and materials (\$3,000); and equipment (\$2,000); a total of four positions and \$150,000 for program costs.

(15) *International activities.*—The international activities program focuses on the Smithsonian's traditional commitments to basic research in the sciences and the humanities. Further advances in knowledge are largely dependent on the Institution's ability to guide and stimulate research efforts in other countries, and on the exchange of official documents and scientific and literary publications.

An increase of \$28,000 is requested for this program in fiscal year 1967.

1966 appropriation.....	\$186,000
1967 estimate.....	214,000

Need for increase.—The requested increase is needed for three additional employees to administer the special foreign currency program and the international exchange of publications.

A deputy director position is needed to administer a program of grants designed to contribute to knowledge of ancient civilizations; to preserve and restore archeological sites and ancient monuments; to promote studies in systematics, ecology, and hydrobiology; and to assist in the planning of educational museums in developing nations.

The International Exchange Service forwards over 1 million pounds of publications annually to overseas institutions. Numerous additional requests for help in transmitting publications are being received. An increase of two employees and additional equipment funds will enable the Exchange to respond to these requests.

Plan of work.—To employ one deputy director and two clerks (\$22,000); personnel benefits (\$2,000); other services (\$1,000); and equipment (\$3,000); a total of three positions and \$28,000 for program costs.

(16) *Administrative support.*—Administrative support is necessary to facilitate the central purposes of the scientific, historical, and artistic programs of the Institution and its museums, art galleries, and laboratories. Administrative support is provided by: The Office of the Secretary, Editorial and Publications, Fiscal, Library, Museum Services, Personnel, Photographic Services, Supply, Automatic Data Processing, and Public Information.

1966 appropriation.....	\$2,450,000
1967 estimate.....	3,383,000

The increase is requested in order to provide the necessary executive direction and administrative services for the expected increased scope of the Institution's programs in 1967. The increase is in proportion to the total increase in estimated appropriations for 1967.

Funds are also urgently needed to overcome backlogs in printing the scientific and historical publications of the Institution, and to provide automatic data processing for a small portion of the work of the Institution.

These units are requesting an increase of \$933,000 for 1967, including \$34,000 for pay costs.

Office of the Secretary

The Office of the Secretary provides executive direction, policy guidance, program planning and review, and evaluation of the diversified programs of the Smithsonian Institution.

The Office of the Secretary includes the Assistant Secretaries for Administration, Science, and History and Art; General Counsel; Budget Division; Organization and Methods Division; and Contracts Office. This staff assists the Secretary by providing professional and administrative services in directing, planning, and reviewing the programs of the Institution. This Office requests an increase of \$139,000 in fiscal year 1967.

Need for increase.—The requested increase is needed to permit the Office of the Secretary to keep pace with the total scope of activities of the Institution in 1967. The increase is commensurate with the increase in "Salaries and expenses" but is less than commensurate for the total increase in all appropriations. A program planning and budget officer will be added in order to give renewed support to program planning and budgeting, to the establishment of goals, and to finding the most effective and economical way to achieve goals. The senior staff of the Institution will continue to share actively in program planning and budgeting, but it is essential to sound management to provide a position to devote full concentration on these important functions to provide continuity of the planning and budgeting effort, to appraise needs and balance among the various programs of the Institution, and to provide staff assistance in developing long-range programs and the establishment of standards, criteria, and projections.

The Assistant Secretary for History and Art is responsible under the Secretary for administration and development of the complex programs of exhibition and research in history and art throughout the Institution. A principal assistant is needed to provide professional and administrative services to increase the effectiveness of this office.

To assist in the review and analysis of financial and management operations, an internal auditor is requested.

Critical appraisal of the Institution's current and projected programs requires the assistance and advice of experts and consultants. It is planned to call upon recognized leaders in museums, universities, laboratories, and industry to come to the Institution periodically to provide this impartial review and consultation on the effectiveness of our plans and performance.

Plan of work.—To employ one program planning and budget officer, one special assistant, one internal auditor, and two secretaries (\$66,000); personnel benefits (\$5,000); rent, communications, and utilities (\$3,000); printing and reproduction (\$20,000); other services (\$38,000); supplies and materials (\$2,000); and equipment (\$5,000); a total increase of five positions and \$139,000 for program costs.

Editorial and Publications Division

The Editorial and Publications Division is responsible for editing and printing the scholarly publications of the Smithsonian. An increase of \$213,000 is requested in fiscal year 1967.

Need for increase.—The need for additional printing is the result of the rise in the number of research manuscripts produced by the professional staff and the greater diversity in the kinds of research being conducted. The programs of the Institution now offer a greater variety of educational materials for the general public. We have modernized our publications and include more illustrations of great value to the reader. At the same time, the cost of printing has substantially increased.

Plan of work.—To employ three editors, one designer, and one clerk-typist (\$34,000); personnel benefits (\$3,000); rent, communications, and utilities (\$1,000); printing and reproduction (\$172,000); other services (\$2,000); supplies

and materials (\$500); and equipment (\$500); a total increase of five positions and \$213,000 for program costs.

Fiscal Division

The Fiscal Division is responsible for the administration and accounting of funds. An increase of \$15,000 is requested in fiscal year 1967.

Need for increase.—The payroll, accounting, auditing, reporting, counseling, and other financial activities of the Fiscal Division are directly increased by the increased transactions required by the higher levels of appropriations.

Through the use of automatic data processing for the payroll and allotment procedures, it is necessary to request only one additional accountant for the expanded scope of activity in 1967.

Funds are requested also to finance the additional cost of penalty mail.

Plan of work.—To employ one accountant (\$5,000); and provide funds for rent, communications, and utilities (\$10,000); a total increase of one position and \$15,000 for program costs.

Library

The library maintains a collection supporting the scientific and historical research programs of the Institution and its museums, art gallery, and zoological park activities. The library provides support through acquisition and maintenance of the library's collections and reference services. An increase of \$135,000 is requested in 1967.

Need for increase.—Additional spheres of interest and intensification of study in other areas, together with increases in the size of the professional staff, have increased the number of publications and the library services required. Surveys by the professional users of the library have established that the library needs substantial improvement in acquisition, cataloging, reference, circulation, and translation.

While striving to keep pace, the library needs to begin to overcome serious backlogs of cataloging. With over half of the total of 500,000 volumes inadequately cataloged, a long-range program of recataloging the library is essential.

Funds to purchase books are inadequate and an increase must be requested.

The cost of scientific and other technical books is high, but fortunately the investment will serve scholars for many years in the future.

The key to unlock the door to the storehouse of knowledge is the scientist and the historian, but the light illuminating the room is the library.

Plan of work.—To employ five library assistants (\$27,000); personnel benefits (\$3,000); rent, communications, and utilities (\$3,000); printing and reproduction (\$5,000); other services (\$15,000); supplies and materials (\$2,000); and equipment (\$80,000); a total increase of five positions and \$135,000 for program costs.

Smithsonian Museum service

The Museum service provides museum education programs and visitor services. An increase of \$36,000 is requested.

Need for increase.—To increase the knowledge to be gained from the Institution's exhibits, guided tours, gallery lectures, and film presentations are needed.

The program to improve our exhibits has been applauded by the visiting public. Since 11 years ago, when our first modernized hall was opened, annual visitor attendance has risen from 3,658,881 to 13,153,000.

One Director, Audio-Visual services, would help to meet the demand for guided tours, gallery lectures, and other educational programs. Supplies and equipment are required to aid in the production of lectures and film presentations.

Plan of work.—To employ one Director, Audio-Visual services (\$10,000); personnel benefits (\$1,000); other services (\$10,000); supplies and materials (\$5,000); and equipment (\$10,000); a total of one position and \$36,000 for program costs.

Personnel Division

The Personnel Division supports the scientific, educational, and exhibition programs of the Smithsonian by providing personnel services, including employment, classification, employee relations, salary and wage administration, and recording.

An increase of \$17,000 is requested for fiscal year 1967.

Need for increase.—This increase would be used to insure the Institution's investment in obtaining, training, and developing effective senior staff members by providing an executive health program. Annual physical examinations will be given to an average of 50 senior personnel.

Plan of work.—For transportation of things (\$2,000); and other services (\$15,000); a total increase of \$17,000 for program costs.

Photographic Services Division

The function of the Photographic Services Division is to aid in the public information, publication, research, restoration, and preservation fields; and in the educational programs of the Institution. An increase of \$24,000 is requested.

Need for increase.—The work of the Photographic Services Division is affected directly by the increased workload throughout the Institution. Photographs are invaluable to illustrate scholarly publications, to show restoration and preservation methods, to illustrate news releases, to file with valuable accession papers, and to send to interested correspondents.

Plan of work.—To employ one photographer (\$7,000); personnel benefits (\$1,000); other services (\$3,000); supplies and materials (\$2,000); equipment (\$11,000); a total increase of one position and \$24,000 for program costs.

Supply Division

The Supply Division is responsible for the procurement and utilization of personal property. The Supply Division is also responsible for the perpetual inventory of furniture and the stocking of line items for daily use by the entire Institution. An increase of \$31,000 is requested.

Need for increase.—Modern research programs have increased the need for specialized technical equipment for the scientific staff. This type of procurement requires preparation of complex technical specifications to assure that requirements are satisfied. The efficient procurement of such equipment and the added volume of supplies and materials used in the diversified programs of the Institution requires the services of an additional contracts officer.

Plan of work.—To employ one contract specialist (\$6,000); personnel benefits (\$2,000); rent, communications, and utilities (\$3,000); other services (\$3,000); supplies and materials (\$15,000); and equipment (\$2,000); a total increase of one position and \$31,000 for program costs.

Automatic Data Processing Division

The Automatic Data Processing Division will require an increase of \$271,000 to provide for analysis, programing, and automatic data processing for the scientific, historical, museum, and administrative activities of the Smithsonian Institution. The computer is required in order to accomplish most efficiently a diversity of work not now being accomplished: data storage and retrieval, payroll preparation, experimental simulation, scientific analysis, and administrative programing.

Need for increase.—The Smithsonian's scientists are spending a portion of their time on subprofessional duties, including locating information needed for their research and answering questions from outside researchers and the public. This diversion of professional talent can be reduced with the aid of computers. Elimination of the time a scientist spends on tasks not requiring his level of competence would represent a substantial recurring saving.

Until recent years the Smithsonian relied on traditional methods of recording, storing, and recalling information. Only the Smithsonian Astrophysical Observatory and the Science Information Exchange have applied computerized storage and retrieval techniques to their research projects. Modest beginnings have been made in using computers in the Fiscal Division.

A consultant's review shows that almost every organization unit is handicapped by the lack of a computer with associated analysts and programers.

As an example, the program in ecology is particularly significant because of the ever increasing appreciation of the adjustment between populations and their environment. Computer simulation offers the advantage of compression of time, for what normally takes decades in nature can be simulated in hours by computer. Other simulations could provide insight into the harmonious collaboration by people of various ethnic, cultural, and social behavioral characteristics.

As a further example, the Radiation Biology Laboratory, which explores the absorption of radiation by living organisms, requires the use of a computer for the analysis of their findings. The development of food-producing capabilities

can improve our production methods and extend our knowledge of the sun's effects on plant and animal life.

The 60 million specimens of natural history and artifacts which document man's social, cultural, and technological development are increasing at a rate of over a million a year. Each of these specimens must be cataloged (described and documented) to show its origin and nature, environmental data, and associated plant life. This cataloging effort will ultimately require an additional 600 man-years of work. As this cataloging proceeds, we must also generate a computerized bank of the data being developed.

Action is needed now to make our library services fully responsive to the needs of the Smithsonian and other scholars. Reference, cataloging, and circulation aids involving a computer offer the most efficient means of making the library a more effective supporting service for the Institution's professionals.

The increase requested is substantially lowered by pooling resources with existing computers in the Science Information Exchange and the Fiscal Division.

Plan of work.—To employ one computer systems director, one deputy computer systems director, two systems analysts, three program analysts, one operations chief, five programmers, one shift supervisor, one tabulating operator, three computer operators, one tape librarian, and two EAM operators (\$179,000); personnel benefits (\$11,000); rent, communications, and utilities (\$67,000); supplies and materials (\$2,000); and equipment (\$12,000); a total increase of 21 positions and \$271,000 for program costs.

Public information office

The activities of the Smithsonian Institution, its programs of research and higher education, and its museums, art galleries, and zoo are of great interest to the professional and lay publics in the Nation's Capital, throughout the country and abroad. A public information office is necessary to meet this need for service. An increase of \$18,000 is requested.

Need for increase.—The Smithsonian needs to make the results of its programs known to various publics through all available media: newspapers, radio and television, motion pictures, technical and scientific journals, magazines, the collegiate press, the lecture hall, and the public forum. Only in this manner can we more adequately fulfill our mission; keeping the public fully informed of our research results and cultural activities is a fundamental part of the effective administration of our responsibility.

Since 1964, one individual in the Editorial and Publications Division has been given the primary responsibility for press relations. This new unit would be established with this individual as the nucleus. In order to establish a minimum program of information activities, an increase of \$18,000 is urgently requested.

Plan of work.—To employ one secretary (\$7,000); personnel benefits (\$1,000); rent, communications, and utilities (\$500); printing and reproduction (\$5,000); other services (\$1,500); supplies and materials (\$2,000); and equipment (\$1,000); a total increase of \$18,000 for program costs.

SALARIES AND EXPENSES

Report of the number of permanent positions by organization unit

	1965 actual	1966 estimate	1967 estimate	Increase, 1967 over 1966
Astrophysical Observatory.....	45	46	52	6
Canal Zone biological area.....	18	18	21	3
Freer Gallery of Art.....	3	5	6	1
Museum of History and Technology.....	150	154	161	7
Museum of Natural History.....	220	258	287	29
National Air and Space Museum.....	28	34	38	4
National Armed Forces Museum Advisory Board.....	2	4	9	5
National Collection of Fine Arts.....	18	31	52	21
National Portrait Gallery.....	9	15	23	8
Radiation Biology Laboratory.....	23	24	24	0
U. S. National Museum.....	192	197	210	13
Buildings Management Department.....	716	728	890	162
Education and Training Division.....	0	0	4	4
International activities.....	12	16	19	3
Administrative support.....	146	167	208	41
Total.....	1,582	1,697	2,004	307

Report of obligations by objects

	1965 actual	1966 estimate	1967 estimate	Increase or decrease (-), 1967 over 1966
11 Personnel compensation.....	\$10,308,000	\$12,047,000	\$13,802,000	\$1,755,000
12 Personnel benefits.....	740,000	900,000	1,021,000	121,000
21 Travel and transportation of persons.....	146,000	240,000	240,000	0
22 Transportation of things.....	104,000	109,000	159,000	50,000
23 Rent, communications, and utilities.....	965,000	1,132,000	1,415,000	283,000
24 Printing and reproduction.....	289,000	327,000	529,000	202,000
25 Other services.....	1,128,000	1,803,000	2,910,000	1,107,000
26 Supplies and materials.....	810,000	896,000	1,103,000	207,000
31 Equipment.....	1,028,000	1,466,000	2,257,000	791,000
42 Insurance claims and indemnities.....	0	1,000	1,000	0
Total obligations.....	15,518,000	18,921,000	23,437,000	4,516,000
Appropriation adjustments:				
Proposed supplemental for cost of wage board salary increases.....	0	-166,000	0	+166,000
Unobligated balance lapsing.....	+22,000	0	0	0
Appropriation (adjusted) or estimate.....	15,540,000	18,755,000	23,437,000	4,682,000

PERSONNEL

Senator BARTLETT. What percentage of the cost of the wage and salary increases are you absorbing?

Mr. RIPLEY. We have absorbed 5 percent. The increased workload and the operation of our additional building space has required that we ask the Congress for increased appropriations. In the face of these increased demands, any amount we would absorb would simply have to be offset by an increase.

Senator BARTLETT. How many employees do you have?

Mr. RIPLEY. About 2,800 in total.

Mr. BRADLEY. That is a good figure in total. The amount under this particular appropriation is 1,624, as of January 31, 1966.

Senator BARTLETT. How many employees in Washington?

Mr. RIPLEY. All but 475—under this appropriation, all but 85.

Senator BARTLETT. In toto, how many are elsewhere?

Mr. BRADLEY. Elsewhere would be 475 employees, principally at Cambridge, Mass., where Dr. Whipple has the Astrophysical Observatory.

Senator BARTLETT. Some under the foreign currency program?

Mr. RIPLEY. These are not direct employees. Some are abroad under Dr. Whipple's aegis with the Baker Nunn camera program about 70.

SMITHSONIAN FILM THEATER

Senator BARTLETT. On page B-8 of your justification you speak of the "Smithsonian film theater." Would you describe this activity?

Mr. RIPLEY. The Smithsonian film theater is a program which we have developed over the past 2 years. Programs are presented on the average of once a week in the auditorium of the Museum of Natural History. These are educational films available to us or, in two or three cases, we have them made as part of our expeditions, or under some grant received for this particular purpose. These are enormously popular. We have to run them about three times in succession because they are greatly attractive to both parents and their children. They are interesting scientific or historical subjects.

MUSEUM OF HISTORY AND TECHNOLOGY

Senator BARTLETT. I note that for the Museum of History and Technology you have proposed a program increase of \$123,000 in addition to \$14,000 needed to cover salary increases. Would you please tell the committee what is planned in the way of program increases?

Mr. RIPLEY. We are, as you know, still in the phase of completing the halls in this Museum. It was opened in January of 1964 with 12 halls. Since then an average of 8 halls have been opened each year. We have a specific program over the next few years of completing the total of 50 halls. We need additional curators and technicians, seven of them, to plan and direct the installation of the major exhibits in these halls.

As we go along, we are continuing to document most effectively the national collections in a way we were unable to do before this building was built. It is extraordinary how "bricks and mortar" make a real difference in our ability to lay out materials and then perform research and document them. When material is in a warehouse it has no meaning, and is not serving to reveal truth. This building has been a most wonderful asset for the study of the history of this Nation.

MODERN AND FOSSIL POLLENS

Senator BARTLETT. In the Museum of Natural History it is indicated that you want to initiate a laboratory to study modern and fossil pollens. How much have you planned in the way of people and dollars for this activity?

Mr. RIPLEY. We would like to employ a biologist and one assistant and have \$20,000 for laboratory equipment. This will make a total of \$42,000. As you know, the study of fossil pollen is very important in historical and biological studies and much of this work is developed from materials formed in the far north in Alaska, Canada, and the extreme northern part of the United States.

GRANTS FOR INDIVIDUAL RESEARCH PROJECTS

Senator BARTLETT. You are requesting \$400,000 this year to supplant funds formerly made available by the National Science Foundation for individual research programs. This was necessary last year, too. I understand that the reason for this is that the National Science Foundation is now prohibited from transferring any of its appropriations to you. Is that correct?

Mr. RIPLEY. That is correct. Under a statute, under the Independent Appropriations Act for 1966, the National Science Foundation was precluded from transferring funds to any other agency of the Government for research and grants without, in each individual case, specific permission of the Bureau of the Budget.

As a result of that, we requested last year a sum representing the average of the amount our individual scientists have been granted by the Foundation, just as they might have obtained grants at other institutions anywhere in the country, and this sum represented \$350,000. We feel that these projects are of such scope and depth as individual research projects that they are not viewed as ordinary research undertakings which would be supported by our conventional funding means. Prior to 1966, members of our staff were permitted to submit

these proposals to the National Science Foundation; under present law they cannot do so except in special cases. As a result, our scientists submit these grant proposals to review panels within the Smithsonian. The grant is for an appropriate period of time.

The funds are intended to serve a special purpose for a project rather than for the on-going institutional normal funding we request. We feel this small amount of research money would be most advisable.

Senator BARTLETT. To effect this, do you administer these funds on the same basis as were the grants received from the National Science Foundation?

Mr. RIPLEY. Yes, sir. These funds together with the base amount of \$350,000 appropriated for 1966 will be administered on the same basis as were the grants received from the National Science Foundation.

NATIONAL AIR AND SPACE MUSEUM

Senator BARTLETT. Would you review for the committee the present status of your activities with regard to the National Air and Space Museum, indicating when it is expected that this facility can be opened?

Mr. RIPLEY. The bill authorizing the construction of this building passed the House on February 7 of this year. It passed the Senate the session before. It is up now before the Senate Rules and Administration Committee and we hope it will be acted upon in this session. This bill for the construction authorization is the culmination of a long series of studies over a period of 20 years. An appropriation of nearly \$2 million has already been given to the Smithsonian to develop the plans and specifications for this Air and Space Museum.

We feel that if this authorization bill is passed by Congress during this session, it should be possible to open the museum in 1970 or 1971, depending on our success in obtaining a construction appropriation. We have been gradually hiring some people for the planning and preparation activities.

I believe this museum will provide a whole new dynamic development in the understanding of the history and science of air and space. It will be one of the most exciting exhibits and research centers in the world. It will be unique. It is most fitting that it should be here in the Washington area under the aegis of the Smithsonian where scientists have been developing the whole space-age concept.

Senator BARTLETT. What is the approximate cost?

Mr. RIPLEY. \$40 million, approximately, when completed.

Senator BARTLETT. Where is it to be located?

Mr. RIPLEY. On the Mall between Fourth and Seventh Streets where temporary buildings are presently located.

NATIONAL ARMED FORCES MUSEUM ADVISORY BOARD

Senator BARTLETT. Your justifications indicate that five workers are to be added to the planning staff of the National Armed Forces Museum Advisory Board. Please tell the committee how many personnel you have on this planning staff at the present time, and why it is necessary to add to them.

Mr. RIPLEY. Sir, the Armed Forces Museum Advisory Board has a staff of four people. We wish to increase this by five to provide two research historians, a secretary, one military equipment specialist, and one library assistant. We are being offered by the Armed Services historical material at a greatly increasing rate. This is with the expectation that sometime in the future there will be such a museum. We have been charged by the Congress, operating under the Armed Forces Museum Advisory Board, to anticipate and operate on this basis. We feel the momentum and constant increase in interest by the Armed Forces and others in our studies to delineate history of the Armed Forces is a must. We must keep after it.

FORT WASHINGTON, MD.

Senator BARTLETT. In the same justification, it is indicated that a part at least of the \$45,000 increase in program funds is to be used for studies to determine possible use of Fort Washington as a site for outdoor museum displays. You will recall that last year the Senate Committee on Appropriations put in its report a statement to the effect that the committee does not approve use of Fort Washington by any agency of the Government other than the National Park Service unless Fort Washington is transferred by legislation from the jurisdiction of the National Park Service.

Have you planned your budget request with this recommendation of the Senate committee in mind?

Mr. RIPLEY. We have, Senator, and have no anticipation of taking Fort Washington for the Armed Forces Museum. What we have done, in fact, is to have a series of conversations during the year past with the National Park Service and Secretary Udall to determine whether some compromise could be effectively developed that would allow us both to exist somewhere in the vicinity. I believe the results of these conferences have been most successful and I have reported this to the Armed Forces Museum Advisory Board, who have approved the compromise. The Board of Regents of the Smithsonian Institution has not submitted its report on the site to the Congress.

In effect, the compromise means the Armed Forces Museum would be located in the Fort Foote area, close to the Woodrow Wilson Bridge, that it will have adequate facilities there. About 85 acres would be assigned to us by the Park Service. As a result of this compromise, we will be able to develop certain interpretative and historical exhibits in Fort Washington with the collaboration of the National Park Service. We will collaborate with the National Park Service and they will assign us the Fort Foote area. We will eventually acquire adjacent land, some underwater in the bay where there is an anchorage for ships, and they will lend us certain facilities at Fort Washington.

PROGRAM OF INTERNATIONAL EXHIBITS

Senator BARTLETT. In the general statement accompanying your justifications it is indicated that an increase is included in your budget to continue the U.S. Information Agency arts program of international exhibits. In the portion of your justifications concerning the National Collection of Fine Arts it is stated that funds are included to carry out a program of international exchange of art exhibits simi-

lar to the one formerly conducted by the U.S. Information Agency. Why has the latter Agency discontinued its sponsorship and presentation of this program?

Mr. RIPLEY. Sir, by the act of May 17, 1938, the National Collection of Fine Arts, which is a bureau of the Smithsonian, was specifically requested to develop exhibitions of contemporary art and circulate them. This is an activity which, as you say, the USIA has been doing abroad. They feel this is a part of our ongoing projects. I may say in an effort to save considerable overhead expenses, that we are in a far better position to take on this foreign exhibition obligation as part of our domestic obligation.

The National Collection of Fine Arts has developed for approximately 18 years an extremely successful program called the Traveling Exhibition Service, which brings art collections from abroad, and circulates them in this country. The Smithsonian Traveling Exhibition Service is the primary exhibition exchange agency in the United States. There are a couple of others which work in this field. One is the Asia House of New York City and another is the American Federation of Arts. We feel the Traveling Exhibition Service of the Smithsonian is amply provided with the expertise to perform this. It is logical that we would be able to save money and perform the work with authority and effectiveness. That is why we propose to take over this program of international exhibits.

Senator BARTLETT. How much is in your budget to do this?

Mr. RIPLEY. \$130,000, including four people.

Senator BARTLETT. This is for traveling?

FUNDS SOUGHT FOR TRAVELING EXHIBITIONS

Mr. RIPLEY. Traveling exhibitions abroad, primarily. We will seek funds and grants to supplement this because the exhibitions will initially cost more. We will collaborate with museums. For example, a museum in New York or other city will put up funds to bring together these materials and we will submit requests to agencies like the National Arts Council and so on for budgetary aid.

Then, we will have this relatively small amount, if we can secure it, \$130,000, to make a base sum for our own exhibition services.

Senator BARTLETT. Do foreign countries at their expense provide similar type programs?

Mr. RIPLEY. They do have exhibitions in this country. They usually distribute through us, the traveling exhibition service at the Smithsonian, or through the Asia House of New York City or the Federation of Fine Arts. In some cases, the foreign country pays the cost of the transportation to and from the United States with galleries paying exhibition costs and pro rata shipping costs. Each individual situation is tailored. It depends on the potential of each individual case. They are normally proud to have art and archeological materials come to this country and will pay a very significant measure of this.

Senator BARTLETT. How does it work the other way around? Do they pay any part?

Mr. RIPLEY. Yes, they will pay on a pro rata basis.

ADMINISTRATIVE SUPPORT

Senator BARTLETT. Will you please discuss the need for a \$900,000 increase in your administrative support requirement in fiscal year 1967?

Mr. RIPLEY. The administrative support continues to approximate 13 to 14 percent of our "Salaries and expenses" appropriation. The increase requested in salaries and expenses this year is \$4,682,000 or about 25 percent of our current budget. This would justify a commensurate increase of \$613,000. To this, is added \$271,000 for the application of automatic data processing to our work, \$18,000 for public information, and \$34,000 for pay increases, for a total increase of slightly over \$900,000.

AUTOMATIC DATA PROCESSING

Senator BARTLETT. Do you not have an automatic data processing division now?

Mr. RIPLEY. We are planning to establish an automatic data processing division. We have just started exploring the project for application to a variety of programs. First of all, for our fiscal division; secondly, for problems of supply and equipment; and thirdly, in an exploratory way, for documentation for some of our collections.

Senator BARTLETT. Is there any money in the budget you are now justifying for this installation?

Mr. RIPLEY. Yes, we have one position and a total of \$29,000 in 1966.

Senator BARTLETT. This is exploratory?

Mr. RIPLEY. This is for what we have already started in the current year.

Senator BARTLETT. What have you started?

Mr. RIPLEY. We now have one employee. We would like to add 21 employees. We are now making exploratory studies of automatic data processing for our various programs.

Senator BARTLETT. Do you have any of these fabulous machines?

Mr. RIPLEY. Largely under grants received, we have been working with the 1440. Dr. Whipple has a 7094 in Cambridge. This is under a grant.

Dr. GALLER. We have also one 1460 and are preparing to lease one 360/30 computer at the Science Information Exchange.

Mr. RIPLEY. The one at the Science Information Exchange operates under a grant.

Mr. BRADLEY. We have the most junior of the computers on the market, one step above the bookkeeping level. At the Astrophysical Observatory in Cambridge, on the other extreme, we have one of the most sophisticated machines because of the complexity of these astronomical computations.

Senator BARTLETT. Do you understand these things?

Mr. RIPLEY. I am as bewildered as I think you are, sir.
 Senator BARTLETT. We will go to another subject, then.

MUSEUM PROGRAMS AND RELATED RESEARCH IN THE NATURAL SCIENCES
 AND CULTURAL HISTORY (SPECIAL FOREIGN CURRENCY PROGRAM)

THE 1967 BUDGET REQUEST

Senator BARTLETT. There will be placed in the record the statement in justification of the estimate of \$5,700,000 to carry on museum programs and related research in the natural sciences and cultural history, to be financed through a special foreign currency program.

(The justification follows:)

1966 appropriation-----	\$1,300,000
1967 estimate-----	5,700,000

An appropriation of \$5,700,000 in foreign currencies, as determined by the Treasury Department to be excess to the needs of the United States, is requested for a grant program in the following fields:

Archeological research and excavation-----	\$1,300,000
Archeological restoration-----	300,000
Systematic and environmental biology-----	3,145,000
Museum sciences-----	955,000
<hr/>	<hr/>
Total 1967-----	5,700,000

ARCHEOLOGICAL RESEARCH AND EXCAVATION

To continue the Smithsonian's program, \$1,300,000 is requested, initiated in fiscal year 1966, of grants to American universities, museums, or other institutions of higher learning interested in archeological excavations or research in the foreign currency excess countries.

Approximately \$900,000 in excess foreign currencies have already been granted to some 12 American institutions under the current or fiscal year 1966 program. Initiation of this program has made possible the following highly successful projects:

The Hebrew Union College, Jerusalem School of Archeology¹ excavations at Gezer in Israel, an ancient trading center which was a focal point of Nebuchadnezzar's campaign against the Kingdoms of Judea.

The Carnegie Museum and Pittsburgh Theological Seminary excavations at Ashdod in Israel, which have shed new light on biblical history, especially the extent of Phillistine cultural influence.

The University of Missouri excavations at Jelemie and Kafr Yasif in Israel, which have uncovered massive new evidence of ancient Phoenician glass factories.

The Peabody Museum of Natural History of Yale University excavations in the Fayum badlands of Egypt, which have produced significant new knowledge of man's earliest primate ancestry.

The American Research Center in Egypt, Inc.² a study center which is currently conducting six archeological projects in Egypt, ranging from an epigraphic survey of the great temples of Rameses III at Karnak to the study of early Christian and Coptic manuscripts at St. Catherine's monastery in the Sinai desert.

¹ A consortium of 33 American universities and theological seminaries.

² A consortium of 9 American universities with headquarters at Boston, Mass.

The American Institute of Indian Studies of Philadelphia, to establish a center located at Benares which will document, photograph, and make exploratory surveys of India's numerous temple sites and ancient monuments for the benefit of American scholars.

The American Institute for Archeology has called the Smithsonian's program "timely and much needed, an essential contribution to the advancement of our knowledge of ancient civilizations." The Institution therefore believes continued support at approximately the same level established during the program's first year is thoroughly justified.

ARCHEOLOGICAL RESTORATION

A total of \$300,000 in foreign currencies is requested for the preservation and restoration of archeological sites and ancient monuments. The Department of State considers that the Smithsonian should be responsible for coordinating all American archeological activity overseas and has asked the Institution to give greater attention to restoration and preservation projects.

The Smithsonian believes this kind of foreign currency support is justified for two reasons. First, it is in the U.S. interest to participate in international programs of archeological restoration because such participation results in increased exploration concessions and research opportunities for American institutions in the host countries. It also results in increased sharing or the quid pro quo of archeological treasures, for the enrichment of collections and the advancement of knowledge in American museums and universities. Stated simply, it is often said that no one welcomes archeologists "who dig and run." The archeologists who are welcomed are those who leave fitting monuments to the host country's cultural heritage and help to create what are in effect outdoor museums.

Second, the preservation and restoration of ancient monuments makes a positive contribution to the U.S. relations with the excess countries and directly supports foreign aid program objectives, since properly restored monuments are a proven stimulus to tourist industries and represent aid which goes to all sectors of society, from the considerable number of laborers employed in the larger projects to the foreign scholars and scientists working side by side with Americans.

SYSTEMATIC AND ENVIRONMENTAL BIOLOGY

The \$3,145,000 is requested to permit the Institution to expand its long-standing and traditionally strong commitments in systematic and environmental biology by responding to unique opportunities in certain of the excess countries.

The National Science Foundation has pointed to the need for a greater level of effort in systematics and environmental biology, which disciplines have been relatively neglected in the age of molecular biology, and fully endorses the concept of utilizing excess foreign currencies to the maximum degree possible for the advancement of these basic sciences. The National Academy of Sciences has signaled the necessity for urgent ecological surveys and productivity studies, or the basic task of inventorying the earth's land surfaces, in some of the excess countries, especially in connection with preparatory studies for the forthcoming international biological program. And the Inter-Agency Committee on Oceanography has pointed out the desirability of extending oceanographic research through the development of marine study centers or temporary field facilities in India, the Eastern Mediterranean, and possibly Guinea.

The Smithsonian is today the New World's foremost research center for systematic biology, or the science concerned with the classification and interrelationships of all organisms. As such, the Institution has an obligation to support and strengthen its preeminent research area through the economically advantageous medium of excess foreign currencies, both by grants to other institutions and by projects administered by the Smithsonian itself.

MUSEUM SCIENCES

The \$955,000 is requested to initiate a museum program which will allow the Smithsonian to respond to many requests already received for advisory services in the planning of museums and exhibits in the excess countries, especially India and Pakistan.

The Secretary of the Smithsonian has pointed out that in 1936 there were some 105 museums in the subcontinent of India and Pakistan, whereas today there are only 39. In commenting on this situation, Dr. Ripley has written:

"It is inconceivable that this whole vast oriental region with by far the most of the world's population, an area where education is a desperate priority task consuming the thoughts and energies of national governments, the U.N., the Colombo plan countries, SEATO, and the United States, no real effort is being given to the vast educational potential of museums. From childhood on, from illiteracy up, museum education is one of the easiest and most dramatic ways to capture the human imagination."

Under this program the Institution, in conjunction with the American Association of Museums, would utilize foreign currencies for an exchange of museum professionals to and from the excess countries. American specialists are needed to help plan museums, especially science and youth or "teaching" museums, in a number of the excess countries. Foreign specialists can best learn of new exhibit techniques or experiments in cognitive studies by coming to the United States, with dollar support provided by the host museums in which they would be employed in on-the-job training.

To begin the larger task outlined by Dr. Ripley, the International Council of Museums (ICOM) has recommended that international conferences be held in various of the excess countries to help them plan for and develop educational museums, especially those designed for illiterate and semiliterate audiences. The ICOM has also recommended that outstanding science and teaching exhibits be prepared in an excess country with high professional museum competence, such as Israel, for circulation among the developing nations where they are most needed as examples of what can be accomplished through museum education. It is expected that such circulating exhibits will generate return exhibits of local relevance and character, especially in archeology and the folk arts, from the developing nations to the United States, for the benefit of our rapidly growing museum public.

The Smithsonian believes it has the capability to so advance the museum's sciences, in consonance with the purposes of the proposed National Museum Act of 1966, which provides that the Director of the U.S. National Museum shall:

"* * * cooperate with museums and their professional organizations in a continuing study of museum problems and opportunities, both in the United States and abroad."

OVERSEAS PROGRAM, APPORTIONMENT OF FOREIGN CURRENCIES

Since the Smithsonian's greatest future responsibility in these programs is the thorough review of grant proposals from other institutions, an exact country-by-country project inventory is neither possible nor desirable at this time. But sound estimates can be made from three sources. First, in the case of the archeology program, there are on-going projects which the Institution considers worthy of continuing support. Second, in the case of the other programs, the Institution has already received firm expressions of interest from some of our Nation's foremost institutions of higher learning for projects in the excess countries which appear viable and capable of development with appropriate host country authorities. These are, in effect, sample or illustrative projects which the Institution believes may be successfully implemented during fiscal year 1967. Third, there are projects which the Smithsonian considers it is best qualified to administer itself.

On-going projects, sample or illustrative projects, and possible Smithsonian projects are as follows for the four major program categories:

I. Archeological research and excavation

On going projects

Recipient	Project	Grant expressed in U.S. dollars
1. American Institute of Indian Studies (a nonprofit organization of 24 American colleges and universities).	To establish the American Academy of Benares, a research center for south Asian archeology and art history. This center represents the essential first step in the important task of surveying, documenting, and recording India's numerous temples, monuments, and archeological sites. American museum directors and university scholars consider the center's work will provide them with a valuable resource in a field that has heretofore been badly neglected. The center will benefit from U.S. dollar support from the John D. Rockefeller III Fund for the exchange of Indian scholars to the United States and for other costs that cannot be met with foreign currencies.	\$76,850
2. American Research Center in Egypt (a nonprofit study center supported by 10 American universities).	To support the center's research and excavation program in the archeology of Egypt, which includes Pharaonic, Hellenistic, Roman, and early Christian sites.	250,000
3. Jerusalem School of Archaeology of the Hebrew Union College.	To continue the survey and exploration of some 400 archeological sites in the Negev and to conduct seminars in biblical archeology for American graduate students in archeology.	200,000
4. Peabody Museum of Yale University.	To continue stratigraphic investigations of Oligocene and Miocene deposits at El Faiyum, Egypt, which have resulted in important discoveries relating to human evolution.	19,310
5. University Museum, University of Pennsylvania.	To continue excavations at Mohenjo-daro in Pakistan, the center of the Harappan or earliest civilization of the Indus Valley.	30,100

Sample or illustrative projects

Institution	Project	Estimated grant expressed in U.S. dollars
1. African Studies Association.....	To survey, identify, and test archeological sites in the northern savannah region of Guinea.	\$20,000
2. Drew University and McCormick Theological Seminary.	To complete research in Israel on late Hellenistic and early Roman pottery.	40,000
3. University of Oregon.....	To survey and excavate human habitation sites in southwestern Guinea, with emphasis on the caves and rock shelters containing paleolithic and neolithic assemblages.	50,000
4. Peabody Museum of Yale University.	To excavate the Oligocene and Miocene deposits of the Siwalik Hills of northern India to enlarge knowledge of man's primate ancestry.	50,000
5. Peabody Museum of Yale University.	To conduct excavations related to item 4 above in Oligocene-Miocene deposits of the Pondaung region of Burma.	50,000
6. University Museum, University of Pennsylvania.	To survey and excavate early Neolithic sites in Yugoslavia, believed to contain important evidence on the origin and early production of food crops.	65,000
7. University of Michigan.....	To conduct research in ancient numismatics in the eastern Mediterranean (Israel).	18,740
8. American Institute of Indian Studies, American Academy of Benares.	To survey and excavate monuments and remains of the Pratihara period, especially at Bhinmal in Rajasthan.	150,000
	To survey and document the bronze sculpture of northern India.	30,000
9. Smithsonian Institution.....	To survey and document the art history of Tibet on the basis of objects currently being brought to India and Nepal by Tibetan refugees.	50,000
10. University of Chicago.....	To survey and excavate paleoarcheological sites in Tunisia.	200,000
Total, archeological research and excavation.	-----	1,300,000

II. Archeological restoration—Explanatory note

The estimates listed below for preservation and restoration of archeological sites is based on the desire of our diplomatic missions abroad, which the Institution shares, to foster international cultural development through collaboration in work which is the logical extension of archeological research undertaken by American institutions in the excess countries. Listed below, therefore, are illustrative projects in preservation and restoration which have been recommended by the Department of State, on the advice of overseas mission, and judged meritorious by a panel of distinguished American archeologists who have firsthand knowledge of the sites and monuments in question.

Institution	Project	Amount
American Research Center in Egypt.	Conduct preliminary survey leading to the restoration of archeological sites and monuments in Egypt, especially the temples of Karnak and the royal tombs and pyramids of Saqqarah.	\$150,000
Smithsonian Institution.....	Restoration of Roman Byzantine archeological sites in Tunisia.	150,000
Total, archeological restoration.....		300,000

III. Systematic and environmental biology

Explanatory note: The studies and conferences proposed in connection with the international biological program (IBP) will be channeled through, and reviewed by, the U.S. National Committee for the IBP. The IBP is expected to develop into a significant international scientific effort, involving some 44 countries, aimed at taking a comprehensive biological inventory of the earth's terrestrial environments, as an essential first step in determining the relative productivity of these different environments in the face of the rising human populations that will inhabit them.

Institution	Project	Estimated grant expressed in U.S. dollars
U.S. National Committee for the International Biological Program (IBP).	To support IBP preparatory studies which will establish the scope of research and determine areas for field study for a 5-year research program, the operational phase of which is expected to begin during fiscal year 1968. Funds will be apportioned as follows: International planning conferences..... Preliminary surveys to delineate natural areas for future study. To assist in development of research capabilities of centers in areas to undergo intensive study.	\$180,000 86,000 731,000
Smithsonian Institution.....	Total IBP..... To finance studies and field work in marine biology in such nations as India, Tunisia, Guinea, Yugoslavia, or Ceylon.	997,000 200,000
University of Michigan.....	To make before and after studies of the plankton communities of the Nile River delta area of the Mediterranean, which may be radically altered through changes in salinity and circulation caused by the construction of the Aswan Dam.	500,000
Smithsonian Institution.....	To provide for appropriate U.S. contribution to the establishment of international "Atolls for Science," or conservation sites for continuous biological study of coral reef environments in the Indian Ocean.	500,000

1510 INTERIOR AND RELATED AGENCIES APPROPRIATIONS, 1967

Institution	Project	Estimated grant expressed in U.S. dollars
Smithsonian Institution.....	To assist in the development of ecological studies overseas by surveys of opportunities designed to help foreign scientists identify the most deserving areas and projects for study:	
	India.....	\$29,600
	Pakistan.....	29,600
	Ceylon.....	12,800
	United Arab Republic (Egypt).....	12,800
	Israel.....	12,800
	Guinea.....	12,800
	Poland.....	2,100
	Yugoslavia.....	2,100
	Tunisia.....	2,100
	Total.....	116,700
Johns Hopkins University.....	To conduct ecological research in India on primates and small mammals and on game species distribution.	111,300
Smithsonian Institution.....	To initiate a 5-year program in conjunction with the Ecological Institute of the Polish Academy of Sciences, to study the flow of energy and matter through small rodent populations in different environments and the interrelationships of rodent and human populations.	470,000
University of Michigan.....	To study the changing biological conditions caused by the rising level of the lake behind the Aswan Dam.	250,000
	Total systematic and environmental biology..	3,164,000

IV. Museum Sciences

Institution	Project	Estimated grant expressed in U.S. dollars
Smithsonian Institution-American Association of Museums.	To carry out the International Council of Museums' recommendation to establish an exhibits laboratory, preferably in Israel, for the construction of scientific and other educational exhibits for circulation among developing nations, as examples of the potential of museum education.	\$750,000
	To provide advisory services by American museum specialists, requested by Egypt, Israel, Pakistan, and Tunisia, for the planning of specific science or youth museums.	25,000
	To hold international and national seminars and planning conferences in various of the excess currency countries, for the purpose of developing national programs in museum education.	160,000
	To support the international travel costs of bringing foreign museum specialists for on-the-job training provided by American museums.	20,000
	Total, museum sciences.....	955,000

INITIATION OF THREE NEW PROGRAMS

Senator BARTLETT. In addition to \$1,300,000 for "Archeological research and excavation," I note three new programs which are estimated to cost a total of \$4,400,000. Would you please describe these programs briefly, and indicate why it is necessary to initiate them during the coming fiscal year.

Mr. RIPLEY. I would like to point out this special foreign currency request carries no concomitant of U.S. dollar costs other than the salaries of the three persons to administer the program.

We found universities and museums to whom we award these grants very willing to pay the in-country costs.

In connection with our work abroad, we are extremely concerned and interested in research opportunities for American biologists, people working in various aspects of systematic and environmental biology, who would be more than eager to work with foreign colleagues in these countries.

INTERNATIONAL BIOLOGICAL PROGRAM

This area is of enormous interest to me, because I am very much interested in conservation, and I believe under the proposed international biological program it would be possible to really develop inventories of animal and plant species around the world.

In addition to this kind of basic research, systematic and environmental biology, I am particularly concerned that the U.S. National Museum, one of our most illustrious museums, should develop an understanding of museums abroad and by employing excess currencies, do research of great benefit to American museums on such questions as how to make our museums more effective teaching instruments.

In those areas, such as India, where the major portion of these excess currencies exists, there is a problem of illiteracy. I personally feel, underscoring the literacy problem, that museum exhibits and museum research and techniques provide most significant possibilities for educating illiterate people.

I am very heartened by the response the current Ambassador to India made to my concern. Having worked in the museum field in India myself, and having spent a number of years of my life there, I believe we have a unique opportunity here with museum-style exhibits to develop a service for museums for Indians and for the whole problem of basic subliteracy education. I would like particularly to see an organization like the U.S. National Museum with its sense of obligation and competence take a prominent part in such a program.

ARCHEOLOGICAL RESTORATION PROGRAM

Senator BARTLETT. In connection with the proposed archeological restoration program, do other nations contribute funds in equal amounts to this preservation and restoration program, especially in view of the fact that all such sites are located in countries other than the United States?

Mr. RIPLEY. We encourage participation of foreign institutions to the fullest in American programs. They are not paid by these currency programs directly, but, of course, they cannot and do not contribute exactly equal funds.

However, they do provide all sorts of services and assistance, including scientists, many of whom, after being trained, turn out in later years to be the chief administrative officers of their countries.

In the Middle East, particularly, the development and encouragement of archeology has been extraordinary in recent years, and many of these young men working up to positions in their own government are people who have worked as part of American teams.

In addition, we, of course, are provided sometimes with free labor, work space, and all sorts of buildings and research facilities, so it is

difficult to put a monetary tag directly on services any individual country provides.

I may say in general they are very considerable, and most enthusiastically given. We anticipate foreign contributions will be given to these restoration programs, and our Smithsonian part will be limited to advisory services.

In this field we encourage archeological excavators to carry their work to its logical conclusion by preserving the sites they have excavated.

I may say these sites become the principal tourist attractions of these countries, once they are finished, and the sort of thing American visitors are most keen to see.

Senator BARTLETT. Is any effort made to inform the countries involved that the United States is contributing to these restorations?

Mr. RIPLEY. I believe a considerable amount of publicity appears in the press. For example, when I have been in Egypt there have been articles in the press about joint United States and Egyptian projects, and I think it has redounded greatly to the credit of the United States.

Senator BARTLETT. Are there any of these three new and expanded programs which cannot be delayed without detriment to the overall program of the Smithsonian Institution?

PROGRAMS WOULD ADD TO KNOWLEDGE OF FOREIGN CULTURES AND CIVILIZATION

Mr. RIPLEY. I would say, Senator, that we do not feel these programs should be deferred, because of the importance of the work which can be done now to add to our knowledge of foreign cultures and ancient civilizations; because, I would say, of the relationship of the United States with these countries; because of the encouragement these programs provide to research in these countries; and also because of the financial reasons set forth in a letter to the Committee on Appropriations from the Director of the Bureau of the Budget, dated January 28, 1966. In that letter, the Budget Director said foreign currency balances are increasing and it is incumbent on us to devise intelligent ways of using them to the maximum extent possible.

The Bureau letter states that the new uses proposed in this budget will be of benefit to the United States, and will be at no current or prospective cost to the American taxpayer.

RECOMMENDATIONS OF DEPARTMENT OF STATE

I may add that these projects are based in part on recommendations that we have received from the Department of State or have been completely cleared with the Department of State.

We believe the programs are complementary to our general foreign aid objectives, that the content of these programs and the Smithsonian competence are parallel, and that it is appropriate and suitable for us to be charged with the responsibility of carrying them on.

Senator BARTLETT. I think it is appropriate that you be charged with the responsibility, but I do want to dwell for a bit upon the fact that your justifications indicate a good share of these programs are presented because of recommendations made by the Department of State on the advice of their oversea missions. Is that correct?

Mr. RIPLEY. It varies in each case. Most of them have emerged as important research from within the scientific community; others, notably archeological restoration, were initiated through State Department missions. For example, in Egypt quite obviously one of the most significant things we could do would be in archeology. The Smithsonian is the father and mother of archeology.

Interest here started in 1847, and we are competent to advise and secure the advice of university personnel and specialists in the area of archeology.

CONCERN OVER DISAPPEARANCE OF CERTAIN ANIMALS

In Ceylon we are much concerned about the disappearance of certain animals in the country. The construction of forests and national parks gives an opportunity to observe unique species of animals before they disappear.

In this case, the University of Michigan and others would be glad to develop studies in this area.

I would not say in this case the Department of State or their local representatives have required us to do this, but they concur that this would be a suitable and most effective way of developing mutual programs.

Senator BARTLETT. They have suggested it?

Mr. RIPLEY. Yes; it varies in each case.

Senator BARTLETT. Then my next question follows: Do you have any information as to why they, that is to say the programs, are not included in the foreign aid program of the United States, rather than your budget request?

Mr. RIPLEY. If we are to administer the programs, then it comes under our budgetary request, and, therefore, it is not part of a specific foreign aid appropriation.

Senator BARTLETT. They might ask for the money and transfer it to you, and have the burden of justifying the budget request.

Mr. RIPLEY. Yes, Senator; this is certainly conceivable. We feel it is more efficient and more direct if we ask for it, because we know about it, and what we can do.

I found as a private citizen, before joining the Smithsonian, that it was somewhat anomalous that the Department of State would attempt to develop a whole staff of people, essentially administrators of the Department, who suddenly had to acquire knowledge in entirely new fields.

Senator BARTLETT. I agree wholeheartedly.

Mr. RIPLEY. It seemed to me it was not valid for them to ask for the funds and justify them.

Senator BARTLETT. My only thought is when you ask for a little tiny bit of money, that is in relation to some other agency of the Government, you have an increase in your budget which looks tremendous, whereas it would not be significant in the Department of State.

Mr. RIPLEY. This is true. This is perhaps a voluntary assumption by the Smithsonian of an onerous burden. We feel we should speak out on these subjects for the sake of efficiency and on the basis of our own expertise.

As you know, other parts of the Government also administer foreign currency appropriations—the Library of Congress, Department of

Agriculture, Health, Education, and Welfare, and the Bureau of Standards.

We felt there was no reason why we should not speak to this issue and, as specialists in these fields, speak to the utilization of these funds.

Senator BARTLETT. Will you speak out further on these animals that are disappearing?

DISAPPEARANCE OF CEYLONESE ELEPHANT

Mr. RIPLEY. The worst is the Ceylonese elephant, a branch of the Indian elephant, distinguished by more delicate wrists, and it is curious that the males and females virtually never develop tusks.

There is some extraordinary relation between the environment in Ceylon and other unknown conditions, which means these animals are Muchnas or tuskless animals. They are just about as large as the Indian animals. I have been chased by one, and know the dimensions pretty well.

Very little is known about their gestation period, problems of birth, reproduction, much of which is of interest to scientists because of the large brain. All we know is the elephants are disappearing, whether due to poaching or the disruption of the pattern of the animals, who are locally migratory.

It is an interesting subject in itself. The species is on our list of the most threatened animals in the world, along with others, on lists maintained at Switzerland. This is a good example of these threatened animals.

MONKEYS, MAMMALS, AND BIRDS

A number of the primates, monkeys, in Ceylon are of particular interest, their habits and social habits. These are things the ecologists are very interested in studying.

There are accessory mammals and several birds on the danger list. In addition, there is a vast threat to the parks themselves set up under the British, and largely due to financial stringency these are not well administered.

We feel biologists' research will call attention to these problems and may cause the Ceylon Government to do something about them.

Senator BARTLETT. You might say you are much better informed on animals in Ceylon than on the data processing equipment.

Mr. RIPLEY. I am sorry to say I am.

Senator BARTLETT. You shouldn't be sorry. You should be proud.

Just so the record will be complete, as it always should be, how did it happen you were chased by an elephant?

Mr. RIPLEY. I was driving a Jeep in order to get into a preserve called Yala, which is about 160 square miles, in Ceylon. The terrain consists of bushes and large boulders as high as this room, rounded, dark, and at a distance they look like elephants.

As I came around one of these boulders on a rocky road and proceeded into a rocky stretch, I suddenly realized the boulder in front of me was an elephant, and he proceeded to charge me.

I felt like one of those comic strip situations you see. I threw the Jeep in reverse and proceeded to back away. I could do about 15 miles an hour, and the elephant could do about 18 miles an hour. But by dodging around boulders, I got away.

Running a Jeep backward is not easy.

Senator BARTLETT. He was not friendly?

Mr. RIPLEY. No; he was in a state which sometimes elephants get in approximately twice a year, which is thought to be a breeding stage. He gets into a highly excitable state. It is sometimes thought to be caused also by sinus trouble.

Senator BARTLETT. Is killing elephants prohibited?

Mr. RIPLEY. Yes; except under license. But I am afraid there is much poaching. Poachers usually have Jeeps, and guards if there are any have bicycles. There is no competition.

CONSTRUCTION AND IMPROVEMENTS, NATIONAL ZOOLOGICAL PARK

1967 BUDGET REQUEST

Senator BARTLETT. There will be placed in the record your estimate of a need for \$1,589,000 to continue construction and improvements at the National Zoological Park.

(The justification follows:)

Fiscal year:	<i>Appropriation</i>
1965-----	\$1,525,000
1966-----	1,539,000
1967 (estimate)-----	1,589,000

An appropriation of \$1,589,000 is requested to carry out the 5th year project of a 12-year program of capital improvement at the National Zoological Park. In 1967, these funds will provide for the planning of a public service and administration building and for the construction of a multiclimatic, animal exhibition building.

The 12-year program is designed to improve the Zoological Park for the millions of visitors by modernizing exhibits; improving visitor conveniences; eliminating of automobile traffic in the center of the park; enhancing educational and recreational values of exhibits and the natural park; subordinating buildings and other structures and increasing planting and landscaping; advancing science through the study of the animals, their health, nutrition, pathology, and behavior; and providing maintenance facilities for economy and efficiency of operation.

Funds totaling \$1,275,000 in fiscal year 1963, \$1,275,000 in 1964, \$1,525,000 in 1965, and \$1,539,000 in 1966 have been appropriated for the first 4 years of a continuing program of capital improvements at the National Zoological Park.

These appropriations have provided for: relocation of the east-west road from Connecticut Avenue to Harvard Street; construction of the bird flight cage, and remodeling of the bird exhibition building; construction of exhibits and houses for hardy hoofed stock, consisting of 7 large pens and simple shelters for the exhibition of animals that can be exhibited in the open throughout the year (the heavy antelope, oxen, eland, zebra, buffalo, ostriches, and cape buffalo); construction of the delicate hoofed-stock and deer exhibit, consisting of 2 houses with 6 large exhibit pens and 2 large paddocks for the warmer months (for such animals as okapis, klipspringer, gerenuk, sable antelope dik-dik, water buck, and bongo); construction of 2 paved parking areas for 526 visitors' automobiles and 24 buses; a property yard, warehouse, greenhouse, mechanical shop, garage, and incinerator; installation of a new sewerage system and utilities; and construction of an animal hospital, laboratory, and holding area.

When the modernization and improvement program for the zoo has been completed, the collection of animals maintained and exhibited will amount to over a thousand species (currently approximately 800) and over 4,000 individual animals (currently 2,700 to 3,000). The National Zoological Park will contain one of the major zoological collections in the world with the capability of exhibiting the collections in full accord with its purpose: "the advancement of science and the instruction and recreation of the people."

The remodeled zoo will have adequate parking facilities. A trackless train will provide internal transportation and an interesting view of many of the

animals while traveling to and from the parking areas and other points. This train will be operated on a concession basis and should make a substantial return to the Government.

Visual barriers will be largely eliminated between the visitors and animals by the use of both wet and dry moats, structural glass, and fine stainless steel tension wires.

The viewing eye level will be established at approximately 28 inches from the ground for the benefit of children. Stairs will be eliminated wherever possible and sidewalks will be kept to a maximum slope of 10 percent.

When the 12-year plan has been completed, the animal exhibit area will have increased from 17 acres to 50 acres. Twenty-three acres will be in parkland and 18 acres will be needed for primary circulation (automobile parking, roadways, and sidewalks.) The administration area which will include the educational, eating, and resting facilities; maintenance shops; and hospital and research area will total 13 acres. The total redeveloped area of the zoo will increase from 64 to 104 acres.

There follows a summary of the projects to be undertaken with fiscal year 1967 funds:

1967 program

Planning:

Detailed plans and designs for public service and administration building-----	\$150,000
Advance planning and consultation for 1969 projects-----	20,000

Total planning-----	170,000
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Construction:

Multiclimatic, animal exhibition building-----	1,419,000
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Total-----	1,589,000
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PLANNING (\$170,000)

Detailed plans and designs for 1968 project, \$135,000

Detailed plans will be made for the construction of a combined public service and administration building. This building will house a lecture hall to seat 300 people and will be used for educational and inspirational films, TV presentations, lectures, orientations, and other public service presentations and ceremonies. Groups of people coming to the zoo will be able to assemble in the lecture hall and hear talks, and view movies and slides presented by trained zoo staff about the animals they are going to see.

In this building will be two biological demonstration laboratories. These laboratories will be used by visiting students for special demonstrations directly related to the animals of the zoo. Lectures by teachers will be followed by special tours through the zoo having significant association with the subjects under study. These rooms will also be used by the zoo staff for developing an enrichment program for advanced students interested in biology.

In the basement will be a TV and movie studio for the preparation of educational material to be used in the zoo and on an exchange basis with other zoos. A photographic library and laboratory will be included. The building will contain a library for use by the zoo staff and the visiting public. An answering service where visitors can ask questions of trained personnel will be provided.

In this area also will be constructed a restaurant and cafeteria. It is planned to have an inside seating capacity for 250 people, with outside terraces to accommodate an additional 400 visitors. The design of the restaurant-cafeteria facilities and kitchens will provide much quicker service to the crowds of visitors. The present dining facilities at the zoo are obsolete and inadequate for the large number of visitors, estimated to total 4,536,000 in 1965. At present the seating capacity of the restaurant is only 223 people, the serving lines are slow, the kitchen is small and poorly arranged.

The present restaurant built in 1941 has contributed concession fees to the Government of over one-half million dollars. Under the present system, it is estimated that the income will amount to \$100,000 a year. Thus, the restaurant will amortize its investment in a relatively few years. Detailed plans and designs will be made also for the administrative offices. The office building will house the office of the Director, and the administrative staff, including offices for budget, accounting, personnel, engineering, and zoology. This building will have

about 10,000 square feet, designed to complement the present police building in the area adjacent thereto.

At present the administrative office is located in an early 19th century farmhouse, which has badly deteriorated and is heavily damaged by termites. This old dwelling, inadequate and ill-designed for administrative purposes, is located a mile from the center of the zoo. The new administrative offices will provide for more efficient functioning of the directoral and administrative activities by its central location and modern design. This entire complex for education and administration will be located near the new parking lot so that it can be sealed off from the rest of the zoo for use in the evening without disturbing the rest of the zoo.

Smithsonian Institution expenses, \$15,000

The Smithsonian Institution will require \$15,000 in fiscal year 1967 for the improvement program, including consultants' fees, travel for inspection of good design practices in other zoos, purchase of equipment, and similar expenses directly related to the program of improvements.

Advance planning and consultation for fiscal year 1969, \$20,000

Advance plans will be made for the construction of a new exhibit for aquatic mammals, bears, canines, goats and sheep, an additional parking area, and for landscaping.

CONSTRUCTION (\$1,419,000)

A multiclimatic house is to be constructed as a special environment building to exhibit various types of animals that can only be properly maintained in captivity by duplicating their natural conditions of light, heat, humidity, and local plantlife. The grouping in one building of these exotic animals will provide the most economical installation and use of the necessary mechanical equipment. The building will contain approximately 30,000 square feet of interior space of which 80 percent will be used for animal exhibits, related service area, and mechanical equipment, and the remaining 20 percent for visitors. There will also be approximately 10,000 square feet of cages and moated areas on the outside. Although the building will be basically single storied, it will have both sunken floor exhibits and balcony viewing areas. Service and mechanical areas will be in a partial basement. The construction materials will be plain and exposed aggregate cement, warm brown brick, painted and unpainted metals, glass, tile, and terrazzo.

The building will be designed to hold approximately 300 individual major animals of about 35 different species, and will comfortably handle 20,000 visitors daily.

In this building will be housed the gorillas and orangutans. These will be in large glassed enclosures with appropriate retiring dens and sleeping quarters for the animals. Adjacent outdoor exercise areas will be used in good weather. These exhibits will be separated from the public by structural glass with an electrically charged coating on the inside to discourage the animals from dirtying or hammering the glass. This type of exhibit has been used very successfully at Brookfield, Chicago; Milwaukee, Wis., and other American zoos. The visitor will have an unobstructed view of the animals. The outside exercise yards will be separated from the visitors by moats. The design of these cages will provide for easy cleaning and the handiest method for moving and shifting the animals. The most progressive innovations in gorilla and orangutan management will be taken into account. By mechanical controls, it will be possible to duplicate the humidity, light, and temperature of the native jungles of these animals.

Six cages will be used for special changing exhibitions. Environmental control will permit delicate and difficult-to-keep animals to be housed and exhibited.

There will be four major aquatic exhibits in this building. By grouping, the special temperature control of the water, filtration, and salinity can be controlled. These exhibits will have large aquarium glass fronts, showing both the underwater and above water scenes. There will be 4 feet of water, and at least 8 feet of "land" and space above the water. The first of these exhibits will contain the American beaver. The beaver lodge will be a cutaway, showing how the animals enter the lodge from the underwater entrance way and pass into the commodious inside chambers of the upper living area. The inside of the beaver lodge will be illuminated by red light, which the animals

cannot perceive, so that they will be perfectly at ease and yet visible to the visitor.

The second exhibit will be one for the manatee, the "mermaid" or sea cow. This exhibit will be primarily aquatic and have a degree of salinity, to duplicate the tidal estuaries where these animals live. The water would be tempered to simulate their natural conditions. Since these animals do not come out on land, the cage will be designed to simulate the South American riverbank, and will exhibit some of the natural companions of the manatee, such as the marmosets, sloths, and the hoatzin.

The third aquatic exhibit will be an exhibit for the platypus of Australia. The importance of exhibiting this animal lies in the fact that it is a rare type of mammal, is most difficult to exhibit, and is nocturnal, aquatic, and burrowing. This animal has been successfully exhibited in Australia and in New York. By providing the special environment that this animal needs, a most stimulating and interesting exhibit will be presented.

The fourth aquatic exhibit will be for penguins. The National Zoo is experienced in exhibiting the Antarctic penguins. The water will be temperature controlled; the humidity and light also must be controlled.

There will be four multipurpose, environment-controlled cages to exhibit animals from the Temperate Zone, northern climates, arid desert areas, or the tropical rain forest. These cages will be designed so that it will be possible to make them into riverbank scenes with appropriate background vegetation: desert scenes; savanna; or any other desired environment, with the exception of the Arctic. These cages will be approximately 30 feet in width, 20 feet high, and from 12 to 15 feet deep. They will be constructed for a 4-foot water level. The water filtration, recirculation, and tempering system will be in combination with the other aquatic exhibits. These cages will be most interesting to the public since it will be possible to exhibit animals seldom seen.

The National Zoological Park has always enjoyed an enviable reputation for exhibiting, keeping, and breeding rare animals. This multiclimate house, and particularly these multipurpose cages, will further increase our capability. Animals that would be contained in this area are the silky anteater; three-toed sloth; hoatzin; howler monkeys; some of the rarer forms of marmosets; pangolin; giant armadillo of South America; the giant water shrew of Africa; and many others.

The animals exhibited in this house will include a small collection of insects such as the leaf-cutting ant, the rhinoceros beetle, the very large imperial scorpion from West Africa (6 to 8 inches in length), some of the centipedes from South America and Africa (8 to 12 inches long), and the "walking stick" from the Malayan Archipelago (about 12 inches long). The entire insect area would be built for the special requirements of the insects. The uniqueness of this building and the flexibility of its design will permit many opportunities for careful observations of the animals housed and exhibited here. Closed-circuit television and observation posts for behavioral scientists will be provided.

The multiclimate building will be located north of the present bear pits.

PLANNED PROGRAM ON SCHEDULE

Senator BARTLETT. Is your planned program on schedule at this time?

Mr. RIPLEY. Yes, sir; we are on schedule.

Prior programs have been substantially obligated for 1963, 1964, and 1965. The 1966 program for the hospital and research center, which is now 30 percent complete as to design, has been approved by both the Commission of Fine Arts and the National Capital Planning Commission. We expect to put the hospital and research center under construction before the close of this year.

Senator BARTLETT. Describe briefly the proposed construction program for fiscal year 1967.

Mr. RIPLEY. The proposed program for 1967 will carry out the fifth year of a 12-year capital improvement program and consists essentially of the construction of a multiclimate animal exhibition building.

This is fascinating and entirely new to us in construction. It will

be a special environmental building for animals which can only survive in captivity if their actual habitat conditions of light, heat, humidity, and local plant life are reproduced.

It will be designed for about 300 individual major animals of 35 different species, and will handle up to 20,000 visitors a day, which is tremendous.

We are going to have a beaver lodge showing how the animals enter the lodge from under water. This can be seen by the public. One of the most fascinating things for children to see is a beaver house.

We can illuminate this beaver lodge with red light, which means the animals will be quite at ease and active during the daylight, which is the time the visitors can see them.

Many of these animals are seminocturnal. By substituting red light you can switch them to be active as we are in the daytime. This is very practical and is marvelous for viewing.

We are going to have sea cows, which are rare and only found in Florida; marmosets, and hoatzins. They are fascinating birds born with small claws on their wings so they can climb back up the branches to the nest if they fall into the water. We will also display the duck-bill platypus, temperate zone animals, northern climate animals, and animals from deserts and rain forests.

It will be one of the most exciting and interesting buildings in the zoo. It is one that will be parallel to zoos in Frankfort and London. Some work is being done on this in New York. It is the latest thing in zookeeping. It is very stylish, and we feel this would be an ideal adjunct to our zoo renovation program.

We are going to have also a small administration building encompassing about 10,000 square feet.

LOCATION OF ADMINISTRATION BUILDING

Senator BARTLETT. Where do you plan to locate the new administration building?

Mr. RIPLEY. It is going to be adjacent to the police station in the center of the present zoo. The old administration building is riddled by termites, and is going to have to be torn down.

Senator BARTLETT. They are on permanent exhibition.

RESTORATION AND RENOVATION OF BUILDINGS

1967 BUDGET REQUEST

Senator BARTLETT. Your estimate of funds required for "Restoration and renovation of buildings" is \$2,300,000. The justification statement will be placed in the record.

(The justification follows:)

Fiscal year:	<i>Appropriation</i>
1966-----	\$2,248,000
1967 (estimate)-----	2,300,000

An appropriation of \$2,300,000 is requested for 1967. These funds will provide for restoration and renovation of the old Court of Claims Building as a Gallery of Art; planning for improvement of the Arts and Industries Building as an "Exposition Hall"; feasibility studies of the future building needs of the Institution

to include provision for reference collections, laboratories, offices, workrooms, and library in the west court of the Natural History Building; a Center for Advanced Study; a Gallery and Garden of Sculpture; Science Building; Administration Building; and a garage for the Smithsonian Institution Building; and for renovating the Belmont Study Center.

1967 PROGRAM

There follows a summary of the projects to be undertaken with fiscal year 1967 funds:

Restoration, Old Court of Claims Building-----	\$1, 870, 000
Planning, Arts and Industries Building-----	133, 000
Feasibility studies (West courtyard of Natural History Museum; Center for Advanced Study; Gallery and Garden of Sculpture; Science Building; Administration Building; garage for the Smith- sonian Institution Building)-----	250, 000
Repairs (Belmont Study Center)-----	47, 000
Total request-----	<u>2, 300, 000</u>

OLD COURT OF CLAIMS BUILDING (\$1,870,000)

\$1,870,000 is requested for the restoration and renovation of the Old Court of Claims Building for use as a Gallery of American Arts, Crafts, and Design by the Smithsonian Institution.

This gallery is needed for the exhibition of the arts of design, including crafts, decorative arts, and industrial design. It is needed as a national gallery for public display of America's creative genius in the Nation's Capital, comparable to the national galleries that have been formed in the capitals of other nations—such as the Victoria and Albert Museum in London, the Museo de Arts Decoratifs in Paris, and the Museo de Artes Populares in Mexico City.

The gallery will display superlative selections from the Smithsonian collections, including paintings and sculpture, but with emphasis on glass, porcelain, tapestry, furniture, jewelry, and similar creations of American crafts and design. Thus it will be unique among the galleries of the Smithsonian.

The National Gallery of Art differs in that it emphasizes masterpieces of painting and sculpture, especially of European origin. The Freer Gallery is devoted primarily to oriental art. The new National Portrait Gallery is essentially historical, being concerned with portraits of men and women who have made significant contributions to the history and development of this country.

The National Collection of Fine Arts of the Smithsonian is expressly authorized by the act of May 17, 1938, to display exhibits as herein proposed. Restrictions of space in the Fine Arts and Portrait Galleries (formerly known as the Civil Service Commission Building) will not permit such displays in that building.

The Smithsonian is directed by statute to foster by public exhibition in Washington and other parts of the United States a growing appreciation of arts, both of past and of contemporary time. It is further directed to encourage the development of contemporary art and to effect the widest distribution and cultivation of such art. This museum of American arts and design will present excellence in the fields of creative crafts and decorative arts, folk and primitive arts, industrial arts and design, and the fine arts. It will provide a truly national exposition of American creativity.

A special exhibit area will present foreign exhibits arranged to coincide with the visits of foreign heads of state; exhibits sponsored by foreign embassies; and special exhibitions arranged in association with White House and civic activities. The assembly area in the large upstairs gallery will be used for receptions, lectures, concerts, and other assemblies, as well as for changing exhibitions as a part of the activities taking place at the Smithsonian Institution, the Blair House, and similar functions.

Located on Pennsylvania Avenue, across from the White House, and adjoining Blair House, the building is a part of the Lafayette Square project for the preservation of historical buildings fronting on Pennsylvania Avenue, Jackson Place, and Madison Place. When restored and renovated, this gallery will make

a significant contribution to an appropriate environment compatible with the use, design, and scale of the White House.

The Old Court of Claims Building is a distinguished building designed by the well-known American architect, James Renwick, and is a monument to Washington's cultural history. It is reputed to be the first building in the United States erected for use as an art gallery and also the first American building designed in the French renaissance revival style.

The building has been declared by the Joint Committee on Landmarks (appointed by the National Capital Planning Commission and the Commission of Fine Arts) as a landmark of both historic and esthetic importance which contributes significantly to the cultural heritage and interest of the District of Columbia and which should be preserved.

The proposed gallery will form an important center for realizing the President's goals in support of the arts.

The President has written to the Secretary of the Smithsonian Institution as follows:

"I am enthusiastic about your suggestion that the Smithsonian Institution take over the Old U.S. Court of Claims Building and establish it as a gallery of arts, crafts, and design.

"No more appropriate purpose for the building could be proposed than to exhibit, in the restored gallery, examples of the ingenuity of our people and to present exhibits from other nations, whose citizens are so proud of their arts.

"I would hope that tours of this gallery might play a memorable part in the official Washington visits of foreign heads of state, offering them not only a glimpse of our art but an opportunity to enjoy the friendliness and hospitality of our people.

"I have therefore approved your recommendation, and am instructing Mr. Lawson Knott, Administrator of the General Services Administration, to transfer the building to the Smithsonian Institution under existing authority. This is contingent, of course, upon your obtaining authorization for the funds necessary to renovate the building for use as a gallery."

Construction cost

The cost of restoration and renovation has been estimated by the General Services Administration to be \$1,850,000, as shown in the following letter:

GENERAL SERVICES ADMINISTRATION,
PUBLIC BUILDINGS SERVICE,
Washington, D.C., December 16, 1965.

Mr. JAMES C. BRADLEY,
Assistant Secretary,
Smithsonian Institution,
Washington, D.C.

DEAR MR. BRADLEY: As requested by your letter of December 8 there is enclosed a revised estimate of the improvement cost to restore, rehabilitate, and adapt the Old Court of Claims Building for use as a gallery.

This estimate represents our proposed distribution to the several items of cost of the \$1,850,000 allowed by the Bureau of the Budget.

Sincerely yours,

CASPER F. HEGNER,
Commissioner, Public Buildings Service.

REVISED IMPROVEMENT BUDGET ESTIMATE TO RESTORE, REHABILITATE, AND ADAPT THE OLD COURT OF CLAIMS BUILDING FOR USE AS A GALLERY OF AMERICAN ARTS, CRAFTS, AND DESIGN

Exterior work:

Earthwork-----	\$3, 000
Concrete-----	10, 000
Roofing and sheetmetal-----	45, 000
Masonry (partial replacement of stonework), brick, brownstone, scaffold, sidewalk protection, cleaning, pointing-----	560, 000
Ornamental iron-----	25, 000
Service entrance facility-----	10, 000
Exterior subtotal-----	<u>653, 000</u>

1522 INTERIOR AND RELATED AGENCIES APPROPRIATIONS, 1967

Interior work:	
Demolition-----	\$20,000
Marble, tile, stone, terrazzo-----	8,000
Metal door and trim-----	2,000
Plaster-----	220,000
Mechanical: Plumbing, HVAC, electrical-----	300,000
Special lighting (Museum)-----	30,000
Carpentry: Archway and doors, windows, supply; windows, re- move; wood floors—new pine, sand and finish-----	30,000
Insulation-----	5,000
Wood floor—parquet, 8,200 square feet-----	80,000
Hardware—rough, finish-----	2,000
Painting-----	30,000
Glaze and glazing-----	1,000
Resilient floor—removal asphalt tile, new "C" group-----	3,000
Elevators-----	60,000
Service entrance-----	30,000
Special finishes-----	30,000
Interior (subtotal)-----	851,000
Total net construction-----	1,504,000
Brought forward:	
Total net construction-----	1,504,000
Overhead and profit-----	171,000
Estimated contract cost-----	1,675,000
Reservations and contingencies:	
GSA-----	150,000
SI-----	25,000
Total-----	175,000
Estimated improvement cost-----	1,850,000

An additional amount of \$20,000 is requested in order to finance the additional cost to the Smithsonian Institution for consultants, preliminary design of exhibits, and other extraordinary expenses in connection with the construction project.

Transfer of building

The transfer of the property to the Smithsonian Institution by the General Services Administration for use as a museum and art gallery was approved by the President on June 23, 1965. The transfer is authorized under 202(a) of the Property Act. The transfer is further authorized by the act of May 20, 1932 (40 U.S.C. 122), which authorizes Federal authorities administering property within the District of Columbia owned by the United States to transfer jurisdiction of such properties for purposes of administration and maintenance.

The transfer of this building is contingent upon the appropriation of necessary funds for its restoration by the Congress.

The Institution is authorized by the act of August 22, 1949, to make repairs and alterations to buildings and grounds occupied by the Institution in the District of Columbia and elsewhere.

The Smithsonian for more than a century has held statutory responsibility for the administration of art galleries. The act of August 10, 1846, provides that objects of art located in Washington and owned by the United States shall be delivered to the Institution. Additional galleries of art were placed under the Smithsonian's administration by the Congress. These include the National Gallery of Art, the National Collection of Fine Arts, and the National Portrait Gallery. In addition, the Freer Gallery of Art was established through the gift of Charles Lang Freer and accepted by the Board of Regents in 1906, with the approval of President Theodore Roosevelt, pursuant to the statutory authority of the Institution to accept gifts.

Appendix

There is attached an appendix including the letter from the President to the Smithsonian Institution approving the transfer; a letter recommending the transfer signed by Lawson B. Knott, Jr., Administrator of General Services, and S. Dillon Ripley, Secretary of the Smithsonian Institution, and approved by the President; the historical background of the building; the General Services Administration's construction program; the status of design; and the authority to transfer the building.

THE WHITE HOUSE,
Washington, June 23, 1965.

Dr. S. DILLON RIPLEY,
Secretary, Smithsonian Institution,
Washington, D.C.

DEAR DR. RIPLEY: I am enthusiastic about your suggestion that the Smithsonian Institution take over the old U.S. Court of Claims Building and establish it as a gallery of arts, crafts, and design.

No more appropriate purpose for the building could be proposed than to exhibit, in the restored gallery, examples of the ingenuity of our people and to present exhibits from other nations, whose citizens are so proud of their arts.

I would hope that tours of this gallery might play a memorable part in the official Washington visits of foreign heads of state, offering them not only a glimpse of our art but an opportunity to enjoy the friendliness and hospitality of our people.

I have therefore approved your recommendation, and am instructing Mr. Lawson Knott, Administrator of the General Services Administration, to transfer the building to the Smithsonian Institution under existing authority. This is contingent, of course, upon your obtaining authorization for the funds necessary to renovate the building for use as a gallery.

With kindest regards.

Sincerely,

LYNDON B. JOHNSON.

GENERAL SERVICES ADMINISTRATION,
Washington, D.C., June 11, 1965.

THE PRESIDENT,
The White House.

DEAR MR. PRESIDENT: The building located at Pennsylvania Avenue and 17th Street NW., which housed the Court of Claims until 1964, originally was designed as an art gallery for W. W. Corcoran by James Renwick, who also designed the original Smithsonian Institution Building. It was occupied by the Corcoran Gallery from 1869 until 1897, and was acquired by the United States in 1901.

The Lafayette Square project, in addition to construction of a new office building and a new Court of Claims, and Court of Customs and Patent Appeals Building, includes renovation of this building and certain structures fronting on Lafayette Square for office use. Recently use of this building by the Smithsonian Institution as a museum and art gallery has been suggested. GSA's architect advises that the building is readily adaptable to restoration for the use for which it was originally designed. At best, conversion of the building for office use would be uneconomical.

One million dollars of the total project funds allotted to this building (\$100,000 of which had to be spent unexpectedly to shore up the building during excavation for the adjacent new office building) will permit only a minimum program on the interior and exterior. Funds available for the entire Lafayette Square project are extremely limited, any portion of which not required for this building can gainfully be used to improve the usability of the space in the other buildings being renovated. Whether funds available to GSA to renovate the building for office use are available for its restoration for use as a museum and art gallery is of doubtful legality. The Smithsonian Institution will require appropriated funds for the restoration of the property in an amount approximating \$1,850,000.

It is recommended that the property be transferred under existing authority to the Smithsonian Institution for use as a museum and art gallery.

Respectfully yours,

S. DILLON RIPLEY,
Secretary, Smithsonian Institution.
 LAWSON B. KNOTT, Jr.,
Administrator of General Services.

Approved June 23, 1965.

LYNDON B. JOHNSON.

HISTORICAL BACKGROUND

The building was designed by James Renwick, of New York, to house the collection of paintings and art objects of W. W. Corcoran, a resident of Lafayette Square. Renwick had earlier designed the turreted Smithsonian Institution. Construction began in 1857 and in 1861, while the building was only a shell, it was seized by Montgomery C. Meig, Quartermaster General of the Union Army and used to house the General's staff and supplies for the Union Army.

The building was returned to the trustees of the Corcoran Gallery of Art in 1869 who were paid a rental of \$125,000 for use of the building during the 8-year period. The building was restored and completed and the doors opened to the public in 1874. The opening was attended by an uninvited guest, the then President of the United States, Gen. Ulysses S. Grant. In addition to the paintings and objects of art, statues of the great artists of history by Moses Jacob Ezekiel chiseled from Carrara marble occupied the niches. It is said that W. W. Corcoran's gift to Washington represented a value of approximately \$1,255,000, consisting of \$250,000 for the building and site, \$100,000 for the original collection and an endowment of \$900,000 for the maintenance and growth of the institution. It was one of the first galleries in the United States and the Corcoran Art School was another pioneering venture.

By 1897, the growth of the galleries demanded larger quarters and a move was made to its new and present home at 17th Street and New York Avenue.

In 1899, the Court of Claims moved into the old Gallery Building which was purchased by the Government in 1901 for \$300,000 pursuant to the authority in the act making appropriations for sundry civil expenses of the Government for the fiscal year ending June 30, 1902, and for other purposes (31 Stat. 1133). Until vacated in 1964, the court had occupied the building for approximately 65 years.

GSA's construction program for the Lafayette Square area

The design of Federal Office Building No. 7 and the U.S. Court of Claims and the U.S. Court of Customs and Patent Appeals includes (1) the construction of the two basic structures and (2) the preservation of designated buildings on Pennsylvania Avenue, Jackson Place, and Madison Place. Both phases of the project are intended to preserve the dignity of historic Lafayette Square in a manner compatible with the design and scale of the White House.

The construction contract for the first phase, Federal Office Building No. 7 and the Court's Building, was awarded in January 1964 and work as of May 1, 1965, was about 20 percent complete.

The second phase was administratively authorized with a maximum limit of cost in the amount of \$5,670,000, of which \$5,190,000 is for improvements and alterations and \$480,000 for design, engineering, and construction supervision. Included in this second phase is the repair, restoration, and improvement of the interior and exterior of the old Corcoran Gallery of Art, to provide office space for various presidential commissions and other Federal activities requiring limited amounts of office space with proximity to the White House and the Executive Office of the President.

STATUS OF DESIGN—SECOND PHASE

Design work on the second phase of the project was started in October 1964 and is scheduled for completion in September 1965. The working drawings of the old Corcoran Gallery of Art are approximately 75 percent complete. The building contains approximately 38,000 square feet of space. Of the total budget available for the entire project, the contract architect has allocated \$1 million for the building which is adequate only for a minimum program on the

exterior and the interior. For example, the design contemplates expenditure of an estimated \$206,000 on minimum replacement and patching of exterior stone and brickwork, whereas a detailed inspection indicates that complete exterior restoration would cost approximately \$850,000.

A representative of the architect's firm volunteered that since the building was originally designed as an art gallery it was very adaptable to such use, whereas conversion for office use would result in a very low ratio of usable office space to gross building area. Much of the lobby, stair hall, and corridors could be used as display areas whereas such space has no value for office use.

The extremely tight budget for the entire second phase provides only for a very minimum program. Many of the upper floor areas of the buildings on Jackson Place although usable as office space would have very little if any restoration. Transfer of the old Corcoran Art Gallery to the Smithsonian Institution would free up remaining available funds originally scheduled for this building. An un contemplated expenditure of \$105,000 already has been made to shore up the building simply to keep it from falling into the adjacent excavation for Federal Office Building No. 7. Remaining available funds are sorely needed for the proper execution of the rest of the project. Also, there is doubt as to whether funds available to convert the building to office use legally could be utilized to convert the building to uses contemplated by the Smithsonian.

Authority to transfer the building to Smithsonian Institution

Under the act of March 1, 1919, as amended (40 U.S.C. 1), the Secretary of the Treasury, who acquired the building, was given control of and authorized to allot all space in the several public buildings owned by the United States in the District of Columbia, with certain exceptions not here pertinent. Under various reorganization plans and statutory enactments, notably the provisions of the Federal Property and Administrative Services Act of 1949, (63 Stat. 377), as amended, and Reorganization Plan No. 18 of 1950 (64 Stat. 1270), the functions and powers of the Secretary of the Treasury and others relating to the administration of public buildings devolved upon and now vested in the Administrator of General Services. The Smithsonian Institution is an independent establishment in the executive branch of the Government and is an "executive agency" as that term is used in the Property Act, *supra*.

Accordingly, there are two methods whereby the Court of Claims Building may be legally transferred to the Smithsonian Institution. The first method is to transfer the property under 202(a) of the Property Act and applicable regulations as excess to GSA's needs. With the approval of the Director of the Bureau of the Budget, and upon certification by the Smithsonian Institution that sufficient funds are not available to effect reimbursement, the transfer can be made without reimbursement.

The second method of effecting the transfer of the Court of Claims Building is pursuant to the provisions of the act of May 20, 1932 (47 Stat. 161), as amended (40 U.S.C. 122), which authorizes Federal authorities administering properties within the District of Columbia owned by the United States to transfer jurisdiction over such properties among or between themselves for purposes of administration and maintenance under such conditions as may be mutually agreed upon. Such transfer is subject to recommendation by the National Capital Planning Commission.

We understand that the Smithsonian Institution has the authority to accept the transfer, renovate, and operate the building as a museum or gallery, subject to availability of funds.

In the case of the old Patent Office Building, formerly occupied by the Civil Service Commission, legislation was enacted (72 Stat. 68) providing for transfer to the Smithsonian Institution and operation as an art gallery. In that case, however, GSA had taken the position that the building was not excess to its needs for office use. It is to be noted that in this instance, the enabling legislation provided for GSA to perform the conversion work but required the cost be funded by the Smithsonian Institution.

PLANNING (\$133,000)

ARTS AND INDUSTRIES BUILDING (\$133,000)

The amount of \$133,000 is urgently requested for the preparation of plans and specifications for the rehabilitation and improvement of the Arts and Industries Building.

This building, originally constructed to house large collections of great value donated by foreign governments and other exhibitors at the Philadelphia Centennial Exposition of 1876, is admirably suited for use as an exposition hall, to accommodate a wide variety of exhibitions, displays, and special events.

The building has been declared to be a landmark of importance, by the Joint Landmarks Committee of the National Capital Planning Commission and the Commission of Fine Arts.

Basically, the building is a one-story brick structure with exposed steel truss system supporting a metal covered roof. Basement areas are located beneath the northeast, northwest, and southwest pavilions. The four main halls are in the form of a cross with the rotunda located at the center. Partial second floor levels have been installed and a mezzanine borders the east, west, and south halls. The original four large main halls combined with the adjoining smaller exhibit spaces on the main floor provide over 80,000 square feet of extremely adaptable space with ceiling heights ranging from 14 feet under the galleries to 42 feet in the main halls.

The decision of the Board of Regents of the Smithsonian Institution to continue using the major portions of this building for exhibition purposes furnishes an unparalleled opportunity to present industrial, technological, architectural, scientific, and other large-scale exhibits and similar presentations which cannot be accommodated in other museum buildings. Facilities for visitor orientation, lectures, demonstrations, ceremonies, special events, and other public programs will also be provided.

It is proposed to prepare plans and specifications for the installation of heating, ventilating, and air-conditioning systems for the entire building; for office, work space, and reference collection areas on the second floor level; for the installation of passenger and freight elevators, alarm systems and telephone facilities, replacement of deteriorated interior finishes, plastering, and painting; planning for installation of public restrooms and plumbing changes; and for related improvements to conform to current standards of appearance, convenience, utility, and safety.

The location of this significant and unique building on the Mall adjacent to the other buildings of the Institution provides a convenient and accessible facility for the visiting public. During fiscal year 1965, 2,028,175 persons visited this building. Of this total, more than 50 percent arrived during the hot and uncomfortable weather of June, July, and August. The installation of the temperature and humidity control systems in the building will provide a major improvement for the comfort of our visitors and for the staff occupying certain areas of the building. The proper preservation and conservation of museum objects for the future cannot be satisfactorily accomplished except by the installation of the proposed systems.

The open areas in the building, free of structural or architectural interferences, combined with the high ceilings, arched openings, and general feeling of spaciousness established the "exposition" character of the structure. This objective, originally intended by the architects, Cluss & Schulze, has been firmly established in the 84 years of museum activities in the building. A return to the "Exposition Hall" concept can be economically realized at a minimum investment in the required rehabilitation and alterations.

Estimates for alterations, renovation, and improvements were developed by the Public Buildings Service, General Services Administration.

ARTS AND INDUSTRIES BUILDING (JEFFERSON DRIVE AT 9TH STREET)

Historical background

Originally known as the National Museum Building, the Arts and Industries Building was designed by Cluss & Schulze, architects, to house the large collections of great value donated to the United States by foreign governments and other exhibitors at the Philadelphia Centennial Exposition of 1876. The original one-story plan was influenced by the preferences of experts following the Paris exposition in 1867. The modernized Romanesque style of architecture was adopted in order to express a relationship with the original Smithsonian building which was designed by James Renwick.

In the words of the architects in the year 1879, "To modernize this style was found necessary on account of the different building material, and to do justice to the purposes of the building, with its modern demands of perfect safety and

elegance of construction, of greatest possible available floor space, of easy communication, efficient drainage, a well-calculated and pleasing admission of light, free circulation of air, and all other hygienic dicta."

Funds were appropriated for construction on March 3, 1879, ground was broken on April 17, 1879, the main walls were in place by November 1879 and the construction work completed in 1881. The first use of the new building was for the inaugural reception of President Garfield on March 4, 1881.

In 1883, Spences F. Baird, Secretary of the Smithsonian Institution, remarked that "the building continues to preserve the reputation it has acquired as representing the maximum of convenience and adaptation to its purposes with the minimum of original cost and expense for repairs."

Experience through the ensuing years has clearly substantiated the soundness of the architect's approach to the design of the building and it remains today as a flexible and adaptable structure capable of accommodating the great variety of events, activities, and programs envisioned for it, while only requiring the proposed renovation and improvements to conform to present day standards.

Rehabilitation and improvement

Improvements:		
Demolition-----	\$11,000	
Construction-----	592,000	
Mechanical-----	995,000	
Reservations-----	12,000	
Contingencies-----	121,000	
		\$1,731,000
Expenses:		
Duplication, bids, etc.-----	13,000	
Drawings and specifications-----	114,000	
Supervision and inspections-----	53,000	
Staff services-----	6,000	
		186,000
Estimated project cost-----		1,917,000
Smithsonian expenses-----		33,000
		1,950,000
Total construction costs including planning-----		1,950,000
Drawings and specifications, duplication, and staff services, total request-----		133,000

FEASIBILITY STUDIES (\$250,000)

Funds in the amount of \$250,000 are requested to finance feasibility studies of the future buildings needs of the Smithsonian Institution. These studies are needed to provide the basis for determining the scope of building and facilities, location, the estimated cost, recommendations for financing, and any necessary legislation.

WEST COURTYARD OF THE NATURAL HISTORY BUILDING

This space is needed to house the expanded research operations in the natural sciences and the very active growth in the collections of scientific specimens by providing space for reference collections, laboratories, offices, workrooms, and the library.

The recently completed additions to the Natural History Building substantially relieved the critical space shortage problem existing in that building. These additions were justified on the basis of the immensely important and numerous exhibit and reference objects and specimens that have been collected and safeguarded within the Smithsonian since its founding and especially over a period of 30 years, starting in 1930, the year the additions were authorized. More recent additions to the collections have now made necessary this request to plan for building space increase.

During fiscal year 1965, over three-quarters of a million of natural history specimens were accessioned into the collections, now a grand total of over 49 million. Noteworthy among these additions were 10,000 ichthyological speci-

mens from the island of Dominica and 5,700 mammals from South Africa, Mozambique, and Iran.

An increasing number of scientists, researchers, students, and members of the public are using the reference collections and other facilities of the Museum of Natural History to pursue their studies. During fiscal year 1965, several hundred such persons visited the museum for periods ranging from hours to months. It is necessary to continue to provide adequate work space and library facilities to encourage these serious studies and make the natural history resources readily available to all. By statute, the Smithsonian Institution is directed to do so.

Additional library space is required to house basic scientific publications. These materials are vital to Smithsonian and outside researchers in identifying specimens and in relating them to their environment.

Steps have been taken to obtain the fullest and most effective utilization of all space. In the original Museum of Natural History Building (completed in 1911), high ceiling office, laboratory, and storage areas have had a mezzanine level added to double the usable floor area. In the attic, additional lighting and rearrangement and addition of specimen cases have provided a substantial increase in storage space. In the new wings, automobile parking has been removed from the basements and the space converted to productive program uses.

To sustain this effort of providing adequate space to meet Smithsonian growth and research needs, it is proposed to study the feasibility of constructing additional laboratory, library, and reference collection space in the west courtyard of the Natural History Building. This court, no longer required for ventilation, offers an excellent solution to the present demand for the construction of a seven-floor building containing over 100,000 square feet of highly effective and most convenient floor space.

Adjoining areas of the existing main building would be modified to permit installation of public cafeteria seating 350 persons and a staff dining area seating 100, with a single kitchen to serve both facilities. There are no dining facilities in the existing museum.

Elevators, lighting, heating, air conditioning, plumbing, and electrical work would be included.

A feasibility study is required to determine the scope of the improvement and the estimated cost.

CENTER FOR ADVANCED STUDIES

Speaking at the Smithsonian Bicentennial, the President declared:

"* * * that ideas, not armaments will shape our lasting prospects for peace * * *. We must move ahead on every front and at every level of learning. We can support Secretary Ripley's dream of creating a center here at the Smithsonian where great scholars from every nation will come and collaborate * * *. We must assemble meetings of men and women from every discipline and every culture to ponder the common problems of mankind."

Today there are many graduate schools, but more and more scholars recognize the need for centers of advanced research and study. This is as much a goal for the Smithsonian today as it was in the day of the first Secretary, Joseph Henry. We propose to join with others in the Washington area to help to create facilities for coordinating advanced programs and a central setting for organized research. No single effort on the Institution's part could be more significant than this, to act as a catalytic agent, to further advanced research in this great heartland of our culture. We contemplate that others will join us—universities, institutions, and foundations, bodies and groups, both in and out of Government.

A feasibility study is required to determine the scope of the building and related facilities, alternative locations, estimated cost, alternative means of financing, and any necessary legislation to be proposed.

GALLERY AND GARDEN OF SCULPTURE

The beautification of the Mall and the potential acquisition of outstanding works of art and sculpture have combined to create a strong interest and urgency for action to prepare a feasibility study for a potential gallery of art and garden of sculpture. The magnificence of the Mall, its heroic proportions, and its presence as the central feature of the principal area of the Capital City require a comprehensive study for its beautification and use by the people of the city and of the country. With the collaboration of the Smithsonian Institution, the Secretary of the Interior is proceeding with such a study.

One of the key features of the Mall will be the treatment of the transverse Mall, between Seventh and Ninth Streets. Present considerations favor the creation of a garden of sculpture to add grace and heighten interest in this part of the park. In collaboration with others, the Smithsonian proposes to conduct a feasibility study of this site. The study will be equally useful for other sites, should a decision be made to create the garden gallery elsewhere.

The feasibility study will determine the scope of the gallery and garden, alternative solutions, location of site, estimated land and construction cost, and any necessary legislation to be proposed.

SCIENCE BUILDING

The increasing importance of the scientific research programs of the Institution, involving national collections of scientific specimens numbered in the millions, requires resolution of the problem of providing additional space for these important purposes.

Preliminary considerations favor the provision of off-Mall laboratory and storage facilities where certain of the research departments might be housed in uncrowded, utilitarian space designed for their particular needs. This would eliminate existing overcrowding, end the utilization of unsatisfactory leased space, and make provisions for future expansion which is not possible on the Mall.

The Departments of Botany and Entomology within the Institution are most directly concerned.

A feasibility study will determine the scope of the facility, alternative solutions, location of site, estimated land and construction cost, and any necessary legislation to be proposed.

ADMINISTRATION BUILDING

The administrative support divisions of the Institution are necessarily geared to its substantive programs. These include fiscal, library, photographic, budget, personnel, procurement, editorial, and buildings management services.

The necessary growth of these administrative offices has led to an encroachment on building space needed for the research and public exhibition programs, which are the principal objectives of the Institution.

Preliminary considerations point to the desirability of constructing an administration building of modest size, possibly on a site within the existing complex of buildings on the south side of the Mall. Such a building would provide adequate office space in a location convenient to the other buildings and staff of the Smithsonian. Its construction would release equivalent areas of premium space in the existing monumental buildings for the use of public exhibition and research programs.

A feasibility study is needed to determine scope, cost, alternative locations, and necessary legislation to be proposed.

PARKING GARAGE

The continued growth of Smithsonian Institution programs has resulted in an increase in the number of employees and visitors. The limited parking space in the rear of the Smithsonian Building, the need to clear the south lawn for use by visitors, the restriction on automobile parking on the driveways of the Mall, and the addition of thousands of Government employees in adjacent buildings have combined to intensify the automobile parking problems of the Institution.

Consideration should be given promptly to the construction of an underground garage in the area immediately to the rear of the Smithsonian Institution Building. The parking garage would be a two-story underground structure of about 288,000 square feet. This would allow parking for approximately 750 cars. Pedestrian and service access would be provided to the Smithsonian Building from the first level of the garage.

This inadequacy of parking will become even more acute when the south lawn of the Smithsonian Institution Building becomes the northerly terminus of the 10th Street Mall of the southwest development program. At that time, it is expected that the existing parking lot for 205 cars will become a necessary part of the landscaped areas of the plaza improvement.

A feasibility study is required to determine the scope of the improvement, its cost, and its potential capacity.

REPAIRS (\$47,000)
BELMONT STUDY CENTER

Funds in the amount of \$47,000 are requested for a rehabilitation program for the Belmont Study Center of the Institution, located near Elkridge, Md.

Planned use of this facility for conferences, lectures, and similar scholarly functions requires that the buildings, utilities, and furnishings be maintained in good operating condition.

The amount requested will provide for repair and improvement of guest house and caretaker's cottage; heating, ventilating, and air conditioning of the main house; and necessary furnishings.

The completion of the renovation work will provide the Institution with a special-purpose facility to accommodate groups of up to 25 persons in attendance for official meetings of several days' duration.

Belmont Study Center, estimates, fiscal year 1967

1. Installation of heating system in guest house and caretaker's house including electrical change-----	\$4, 500
2. Heating, ventilating, and air conditioning of main house-----	22, 500
3. Furniture, equipment, and accessories-----	20, 000
	47, 000

PLANS FOR DISPOSITION OF MONEY REQUESTED

Senator BARTLETT. Would you please describe briefly to the committee just what you plan to do with this amount of money?

Mr. RIPLEY. The principal part of this request is for the old Court of Claims Building, for use as a Gallery of American Arts, Crafts, and Design. In addition, we need to plan for restoration of the Arts and Industries Building, the first of the buildings built in 1881.

We request funds for feasibility studies for future buildings needs and for renovating the Belmont Study Center.

The Court of Claims is an extraordinary building, as you know. We feel a strong sense of kinship because it was the first building so designed in the United States as an art gallery.

The architect was James Renwick, our own architect for the castle on the Mall. The Court of Claims Building is part of the Lafayette Square project for the preservation of historical buildings fronting on Pennsylvania Avenue, Jackson Place, and Madison Place.

It is to be preserved, and it seems quite inappropriate that it be used for any other purpose than as a gallery. We would propose to use it as a gallery of arts and design to show visitors from abroad our effectiveness and accomplishments in that area.

Blair House and similar nearby areas show them something about our extraordinary ability and extraordinary interest in the traditional arts and crafts of Revolutionary design.

We want to show especially these foreign visitors that America has a part in history. We are concerned with this sort of craftwork which most people don't know exists.

We make electronic microscopes and other sophisticated hardware, as it is called, but most people don't know about our real interest, our hobbies and crafts.

ARTICLES TO BE PLACED ON EXHIBIT

Senator BARTLETT. Do you have these articles to be placed on exhibit, or will you have to acquire them?

Mr. RIPLEY. We have many of these articles already. We do not

have adequate space for many of them. We believe this gallery will attract considerable exhibits to be loaned and rotated to us from other museums.

NATIONAL PORTRAIT GALLERY

Senator BARTLETT. What does the portrait gallery contain?

Mr. RIPLEY. The proposed National Portrait Gallery will contain a certain number of portraits on permanent exhibition. These will be approved by a commission which will determine that these are people who are so distinguished they rate, as it were, permanent exhibition in galleries.

The National Portrait Gallery will consist also of a very large number of temporary exhibitions, many of which will be developed by particular States throughout the country. They find this an ideal place for historical exhibits associated with the growth and history of that State.

We will also have a tremendous research center, to develop bibliographic and biographic material on the States and on the men and women who have made distinguished contributions to the history and development of our country.

This is what I might call the heart of the Institution. "The Dictionary of American Biography" neglected to ask, in its summary of distinguished persons in this country, Where is there a portrait of this person?

This is what we hope to achieve.

Senator BARTLETT. I think that would be very important and useful.

Mr. RIPLEY. Really a unique function. We are going to have photographic exhibits also, because much of this material is unavailable in portraits.

We hope to have a contemporary area, where photographs of persons in Government can be shown. We first thought we would display drawings, but we decided photographs were more suitable and would last longer.

SMITHSONIAN ASTROPHYSICAL OBSERVATORY

Senator BARTLETT. I would like to ask some questions about the Astrophysical Observatory.

Mr. RIPLEY. If I may, I would like to suggest that Dr. Whipple, the Director, make a statement.

Dr. WHIPPLE. It will be a pleasure to do so.

The Smithsonian Astrophysical Observatory, as its name implies, carries out basic research in astrophysics. That is the science concerned with the nature and the origin of the solar system and the universe.

Research now is underway in fields of theoretical astrophysics, gamma ray, and radioastronomy, meteoritics—

Senator BARTLETT. What is that?

Dr. WHIPPLE. The study of the small bodies striking the earth's atmosphere from outside. Naturally, that is of great interest to the National Aeronautics and Space Administration. We have two programs in optical and radar studies to ascertain the number and nature of these bodies coming in. Then we have planetary, terrestrial, and lunar research; and, of course, a large program for the National

Aeronautics and Space Administration on satellite tracking; and lastly exobiology. I believe we have the only astronomical observatory concerned directly with the biology that can occur outside the earth's atmosphere.

An increase of \$536,000 is requested. Our 1966 appropriation is \$1,209,000, for 1967, \$1,745,000.

About half of the increase is requested for gamma ray astronomy. That almost entirely will be for the expense of building a large mirror about 50 feet in diameter to collect the faint light as the gamma rays entering the earth's atmosphere cause radiation in the atmosphere, and that can be photographed with a large, low-quality telescope.

Gamma rays are a part of the radiation spectrum. Beginning at the long wavelength end with radio waves, we then find the infrared heat radiation level, and then through the optical spectrum, the ultra X-rays, and finally the shortest rays, the gamma rays.

They provide valuable information from space. This field is extremely new, and we are in the pioneering of it at the present time. So far we have entered this field by utilizing a 28-foot reflector of a solar furnace belonging to the U.S. Army at Natick Laboratory in Natick, Mass.

We are planning to erect this large 50-foot mirror in the national forest in Arizona where the seeing conditions, transparency, and the latitude are the best for this work.

The balance of the increase, \$264,000, is needed to round out our radio astronomy program as a unit, and particularly to permit us to participate in preliminary studies for a new contemplated Northeast radio astronomy antenna.

These studies are being undertaken with the Massachusetts Institute of Technology and its affiliated Lincoln Laboratory, Harvard University, and the Smithsonian Astrophysical Observatory.

The funds requested for radio astronomy will be used specifically to erect and equip an 85-foot-diameter antenna which we were able to obtain from the Army as surplus equipment. Harvard has the pedestal, which they will provide, and this antenna will be connected then with a computer in Cambridge, a distance of about 26 miles, for experimentation and learning the techniques of remote control operation for this type of instrument.

RESEARCH RADIO TELESCOPE AND SOLUTION OF PROBLEMS

The program will fulfill two purposes. It will first provide the Observatory at minimum expense with a good radio telescope for immediate research needs. Secondly, it will provide valuable opportunities for the solution of problems which will be encountered in working with this larger instrument, which we hope will be developed in the Northeast.

We can solve problems with this instrument, particularly the new ones to come that are outside the range of solvable problems today.

I would like to point out particularly the present experiment is self-contained, a rounded program, and is valuable in itself. The request for this appropriation does not involve any commitment to a future proposal for the large regional antenna which may or may not develop in the future.

If I may, I would appreciate saying a few words about two questions which sometimes arise. One is, What is our relationship to other Government agencies that are concerned with astronomy and space?

The direct answer is our relationship is one of cooperation and collaboration. Our Observatory is unique in the Federal Government. It is devoted to basic research. We have no operational responsibilities.

For example, the Defense Department has the operational problem of defense; and the National Aeronautics and Space Administration, the development of vehicles in space. Their programs run into billions of dollars, with major equipment and development contracts.

In contrast, we have a request for \$13¼ million, for a staff of 46 technical positions. It is a small staff, as Government agencies go, and this is characteristic of the field of astronomy. I do not foresee that we will ever become a large organization.

But it is vitally important to us to obtain this increase of \$536,000 to provide for the design and installation of these two pieces of equipment, the gamma ray collector and our radio astronomy experiment.

The second question is sometimes directed to the need for additional antennas for radio astronomy. The direct answer is that the field of exploration is so vast that the need for additional regional facilities is critical.

All the instruments in operation in this country are used to the fullest extent. It is very difficult for us to obtain permission to use these existing instruments. We have to send our scientists to other sites where instruments are in operation and use them whenever we can.

Furthermore, the proposed new instruments open up entirely new vistas of studying the distant universe. Those will not be duplicated for a long time by anyone else.

GROUND-BASED ASTRONOMY

In 1964, the National Academy of Sciences report, entitled "Ground Based Astronomy," cited the need for a large regional antenna and urged its design and fabrication. They also have recommended smaller instruments to fill out the national program.

One very important point in this present plan for the design of a large instrument is the fact these electronic computer techniques now make it possible to take the design for an instrument, a bridge, or a moving astronomical radio telescope, or any other structure, and calculate precisely what it will do in operation, in various orientations—wind loadings, temperature changes, hurricanes, and so on.

By "precisely" I mean on the order of two-hundredths of an inch, on a structure perhaps 200 feet in diameter.

When these are complete, we will know precisely what that instrument can do, how to build it, and know its budgetary cost with real precision, so that we will be able to predict satisfactorily the actual cost, efficiency, and utility of the instrument.

SEVENTY-FIFTH ANNIVERSARY OF OBSERVATORY

SENATOR BARTLETT. How long has that Observatory been established?

DR. WHIPPLE. We celebrated our 75th anniversary this last summer. That brings us back to what, 1890?

Senator BARTLETT. I assume you work very closely with the educational institutions that abound there?

Dr. WHIPPLE. Yes. Ten years ago, when I assumed the directorship, we moved the observatory to Cambridge so we could be in close contact with the educational institutions there, so our people do teach in the institutions in Greater Boston.

Senator BARTLETT. Where were you before?

Dr. WHIPPLE. Washington.

Senator BARTLETT. Is it an educational institution now?

Dr. WHIPPLE. Yes, sir. It is contributing to education. You may be interested to know that we are planning to move one of our tracking stations to what we consider the best observation point in North America.

Senator BARTLETT. Where?

Dr. WHIPPLE. South of Tucson. It will be 800 to 2,000 feet higher than the Kitt Peak National Observatory some 50 miles to the west.

Senator BARTLETT. We will see that Chairman Hayden reads this.

Dr. WHIPPLE. He is aware of this project.

Senator BARTLETT. I assume that the results of your pure research, when appropriate and possible, flow to the operating agencies such as NASA and the Department of Defense.

Dr. WHIPPLE. Yes, we publish our own journal, which is given wide distribution internationally and nationally. Results of our research also appear in current publications and in journals available to everyone.

NASA DEVELOPED INSTRUMENTS

Senator BARTLETT. Would the Institution or the Observatory—I don't know who would want to answer this—have any interest in using some of the modern instruments developed by NASA, for example, including orbiting satellites, to assist in your surveys that might lead to improved astrophysical practices?

Dr. GALLER. We are very much interested in making use of the hardware that NASA and the DOD have generated, including biotelemeters, which are essentially small radio transmitters. By attaching these to animals, in a free-moving environment, we can track them. For example the polar bear, and some of the other relatively inaccessible animals, can be tracked as they move, giving us some information both about their habitats and their behavior. These studies are being sponsored by the Arctic Institute of North America. The Smithsonian Institution is prepared to assist in the instrumentation.

In addition, we are much interested in making use of some of the communication-type satellites to provide a mechanism for relaying real-time information resulting from scientific investigations taking place in the field back to some of the research centers, such as the Smithsonian Institution and universities throughout the country.

There is a great interest in using such satellites when available, by virtue of the fact it enables raw data to come back to our computers and be worked up in a very rapid manner. At present we must wait for the investigator to return to his laboratory and work up the data manually.

I would say there is considerable attention being given to utilization of instrumentation that has resulted from mission oriented research

for the advancement of fundamental investigations in the fields of taxonomy and ecology.

We have been asked by NASA to explore the desirability of using a new location device called the IRLS in order to enable ecologists not only to learn something about the behavior of animals, but also to pinpoint their precise positions latitudinally and longitudinally, without depending on land-based stations.

REFERENCE TO POLAR BEARS

Senator BARTLETT. I am very interested in polar bears. As a matter of fact at my request an international conference was held last year at the University of Alaska, and was attended by representatives from Norway, Denmark, Canada, U.S.S.R., and the United States, and the polar bear is a stateless animal. He doesn't know when he is crossing national boundaries, and he is a great wanderer.

We know little about the polar bear. The population count varies, as I recall, from 14,000 to 19,000.

There was a great spirit of cooperation at this meeting, and there was a desire not to overkill on behalf of all of the countries. The great emphasis was that no nation at this time, with the exception of Russia, knows whether it is taking too many, too few, or just enough animals to maintain the population in balance.

I mention Russia because that nation is to be commended. It took no chances. It limited the take of polar bears to 10 per year.

I know in Alaska the hunting has increased in recent years, yet it is very offensive to some conservation-minded people that the hunting techniques used in Alaska differ radically from the methods used in an earlier time when people who found themselves at an Arctic Eskimo village would arrange, if they were hardy enough to get a dogsled and go out on the pack ice. Only if they were very lucky would they find what they were after.

Now they go out in airplanes and, people suggest, they run the animal until it is exhausted. Then the "mighty hunter" lands and quickly kills the bear. Within an hour or two he is back in some warm room bragging about the hardy hunt he had and the risk involved in shooting this great animal, one of the hardest in the world.

In any case, our real need is to develop some system for ascertaining what the actual population is.

I for one don't intend to volunteer to the job of putting this radio device on the polar bear. I suppose experts could do that.

Dr. GALLER. It is being arranged.

Senator BARTLETT. Brave men still live in this world.

Is there any possibility that one of these orbiting satellites with photographic equipment can scan that whole Arctic Sea, vast as it is, and reap any conclusion as to the number of bears, bearing in mind the fact that the landscape is white, and the seascape is white?

Dr. GALLER. I can give a qualified answer. There exist infrared sensing satellites, such as the Tiros satellites, which are primarily used to obtain information regarding cloud cover and related weather information.

These satellites are at present still of a low order of resolution—by that I am trying to say they are able to detect large differences in

infrared emissions, but not from very small targets. However, the state of the art is improving to the point where it will be possible before long to make use of infrared sensing systems to detect small objects by measuring differences in infrared emissions from the animal and the surrounding environment.

I think also it is quite possible to use infrared sensors and radio telemetry to give us indications of the distribution of large animals such as polar bears.

SENATOR BARTLETT. This would be a wonderful, marvelous, incredible advancement.

I don't like to leave the polar bears, but we should.

EXHIBITS PROGRAM

Will you tell us, Mr. Ripley, a little about your permanent exhibit program?

MR. RIPLEY. We have, to an extent, developed permanent exhibits in the museum. These are the result of work of the exhibit staff and the curators, who are specialists in various areas.

We are opening new exhibit halls at the rate of about eight a year in technology. They deal with ceramics, development of American technology, historical developments, and so on.

We are much concerned about the fact that continuing need occurs also for temporary exhibits. It is very hard to meet these on any easily structured basis. Many requests come in very rapidly, rather late. The leadtime is not sufficient to develop them.

Recently we have had to turn down remarkably interesting suggestions from the Peace Corps. We couldn't develop a special exhibit simply because we were unable to meet the time schedule involved.

Each year we are greatly overburdened with the installation of such temporary exhibits; yet we feel the need is great.

We have tried to meet this need by setting up temporary exhibit areas and trying to detail some of our permanent exhibits staff as the unexpected projects come along.

When you have a permanent exhibit program continually pressing on one, with new buildings to be serviced and developed, it becomes increasingly difficult to shift to temporary exhibits. Yet the recent temporary exhibits we have had have been enormously successful.

DEAD SEA SCROLLS EXHIBITS

As an example of the problem, it took 8,300 man-hours to develop the Dead Sea Scrolls exhibit from Jordan last year.

It is all very well simply to receive the material. The whole problem of having the curators develop the necessary explanatory material, and then developing the design for the exhibit takes an incredible amount of time, and is a burden on our existing staff.

The Dead Sea Scrolls exhibit was most successful. People were lined up all round the block of the National History Building. When it finally opened, it was one of the most significant exhibits we could possibly have put on. It was seen by 209,000 just in this one location in a short period of time, a month, or something of that sort, here in Washington. Then the exhibit proceeded to travel around the country.

It is a good example of the way we have to plan. We hope to

find in our staff the knowledge and information to meet the shifting and changing needs that we would like to serve.

Senator BARTLETT. In this Dead Sea Scrolls exhibit that went around the country, was interest expressed similar to that manifested here?

Mr. RIPLEY. Yes; it was a tremendous success wherever it went.

REQUESTS FOR TRAVELING EXHIBITS

Senator BARTLETT. Are these requests for traveling exhibits increasing in number?

Mr. RIPLEY. Yes; constantly increasing, as is shown by the success of the exhibits themselves.

For example, Mr. Macy of the Civil Service Commission requested us to play host to an exhibit for Federal scientists and engineers. This was a smasher, a record breaker, opened by President Johnson here in the Museum of History and Technology.

We estimated this exhibit, which later traveled, was visited by 5 million people. It was an attempt to interest people in the Federal service in the science and engineering categories, and as a result of this exhibit directly we know that 10,000 people inquired about how they themselves could get positions and qualify for this service. It was, I think, a tremendous success.

1967 BUDGET REQUEST

Senator BARTLETT. How much money is there in the budget for next fiscal year for these traveling exhibits?

Mr. RIPLEY. We are requesting an appropriation of \$97,000 total for our special exhibits program in fiscal 1967. We believe that there is tremendous need for supplementing this allotment.

Senator BARTLETT. How much do you have for the current year?

Mr. RIPLEY. Sir, we have somewhat less than that now.

Senator BARTLETT. What you are telling the committee now is, I infer, that \$97,000 won't do the job you are requested to do.

Mr. RIPLEY. Exactly, Senator. It won't satisfy the demand we continually get. We haven't been able the last few years to meet this increasing demand.

Senator BARTLETT. How much money do you need in the next year to do this adequately, without going overboard?

Mr. RIPLEY. I would say if we had some way of approximately doubling this request, we might be able to satisfy the needs that we have. That is, if we could have an additional \$100,000.

Senator BARTLETT. I had prepared a series of questions relating to this activity, because it intrigues me very much. They are all written out. I am not going to read them now to you, or ask you to reply now. I shall submit them to you and ask you to place the questions and the replies in the record.

Mr. RIPLEY. We will be very happy to.

(The questions and answers follow:)

Question. What provision in dollars has the Smithsonian Office of Exhibits made for a special exhibits program?

Answer. We have requested an appropriation of \$97,000 for our special exhibits program in fiscal year 1967. There is great need for supplementing the allotments for this program.

Question. Why are special exhibits necessary?

Answer. Special exhibits are an essential part of any museum program because they enable the presentation of timely topics which have not been planned as part of the permanent exhibit halls. They can be useful to not only the Smithsonian but to other Government agencies in providing emphasis for programs and policies. Special exhibits permit the presentation of fortuitous acquisitions of importance, and the exhibition of rare treasures which may become available once in a generation.

Question. What is the demand for special exhibits?

Answer. There is much greater demand for the production of special exhibits than our present facilities permit. Because we have had to give preference to such exhibits that relate to our collections and research activities in the museums, it has been necessary to turn down some interesting and valuable proposals by outside agencies.

Question. What is the present system of evaluation of proposals for special exhibits?

Answer. Because of insufficient staff and funds for special exhibits, it has been our policy to give preference to those proposals submitted by members of our professional research staff for exhibits that relate most closely to our functions, collections, and research.

Question. Why has it been necessary to turn down special exhibits of merit?

Answer. It has been necessary to turn down proposals for special exhibits because of insufficient staff and funds for their production.

Question. Have significant proposals for special exhibits been turned down recently?

Answer. Yes. Among such proposals which have been turned down recently was one for an exhibit on the Peace Corps to commemorate its fifth anniversary. The cooperation of returned Peace Corps veterans would have been available in the preparation of this exhibit, but present schedules for the staff and funds did not permit its consideration.

Another proposal recently received was for an exhibit for the blind. Because of the desirability of such a special exhibit, other avenues for funds were explored, and it has been possible to obtain a grant of funds from the Department of Health, Education, and Welfare. However, it is not always possible to buy time and personnel by such means.

Question. What are several outstanding special exhibits which have been produced in the recent past?

Answer. Among the outstanding exhibits recently produced or shown at the Smithsonian were the exhibits on "The Federal Engineer and Scientist," "The Dead Sea Scrolls," and "The Art and Spirit of a People (folk art)."

Question. What is the value of such special exhibits and how can they be evaluated?

Answer. Special exhibits are of tremendous importance in that they may show facets of the museum activities other than those which are customarily on view to the public, in informing the public, and in making the public think. Taking the several outstanding examples listed in the foregoing, the following was accomplished:

"The Federal Scientist and Engineer." The exhibit was first shown at the Museum of History and Technology and traveled through four major cities of the United States. It is estimated that it was viewed by 5 million people. A total of 10,000 requests for information about Federal employment were received from viewers. This was basically the purpose of the exhibit—to generate interest in careers in Federal employment. The exhibit was considered to be not only successful, but a good investment on the basis of the interest generated.

"The Dead Sea Scrolls" exhibit, which cost the Institution a total of 8,369 man-hours to produce, was viewed by 209,643 people while it was on exhibit at the Smithsonian. Since then it has traveled to eight major cities in the United States and Canada and has been viewed by an estimated total of 1,500,000 people. Certainly the amount of viewing more than justifies the cost of production of the exhibit in time and funds.

"The Art and Spirit of a People (Folk Art)" represents the acquisition of one of the major collections in the United States of important Americana. The collection, which consists of a total of 450 specimens, brings the Smithsonian to the forefront in its holdings of American folk art. The exhibit serves not only as an announcement of one of the most important museum accessions in the country of recent times, but has been interpreted and presented in an unusual way, in that the specimens have been related to American life and literature, providing a completely new dimension to exhibition techniques, and displays a new and different aspect of American culture.

Question. How does the exhibit on the Alaskan Centenary fit into this program?

Answer. The Alaskan Centenary exhibit is another of the desirable special exhibits which was not anticipated in our program and for which manpower and funds must be provided from other sources. It is a desirable exhibit, and one which cannot be postponed because its effectiveness is contingent on timing.

Question. What plans have been made for the Alaskan Centenary exhibit?

Answer. The preparation of a script by a historian of Alaskan development and the selection of objects and graphics for the exhibit will be performed before the end of fiscal year 1966 from funds which will be diverted for our special exhibits program.

The production of the exhibit will proceed if funds for this purpose become available in fiscal year 1967. The amount available for this purpose will determine the size and scope of the exhibit and will be the deciding factor in whether the exhibit will be simply a flat display of photographs and graphics or a more elaborate exhibit including cases and objects. The appropriation will also determine whether it can be made into a traveling exhibit and the expensive demountable fixtures required can be afforded.

Question. What are the relative costs for the Alaskan Centenary exhibit?

Answer. The cost for the design and production of a traveling exhibit of moderate size consisting of 4 or 5 display cases and 10 free-standing panels is estimated to be \$50,000.

The cost for design and production of a flat display without cases or objects and consisting of panels to be hung on gallery walls is approximately \$7,500, which includes costs of transportation from Washington to Alaska, and the costs of preliminary planning as described in item 10 above.

Question. When will the exhibit be ready?

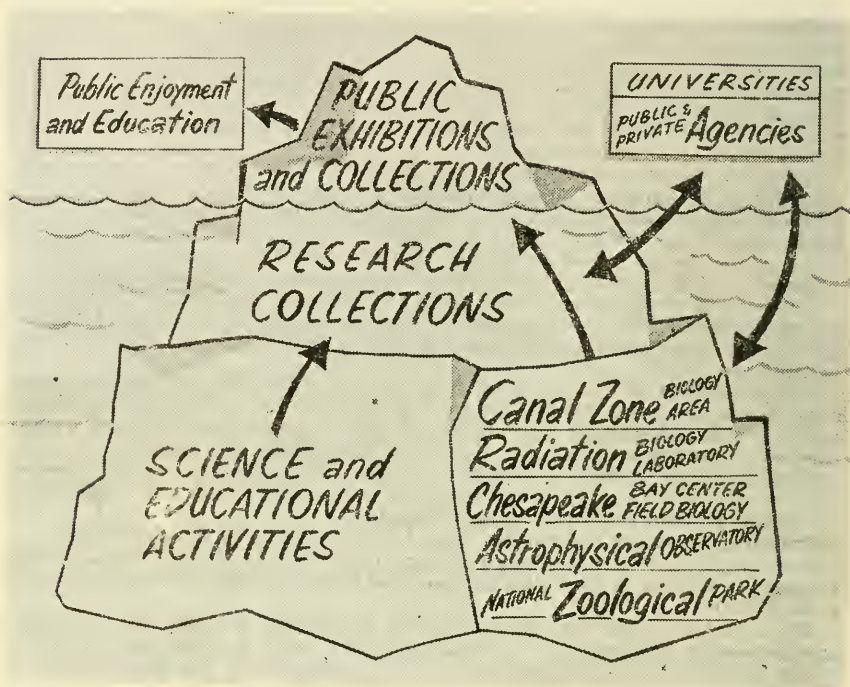
Answer. About 3 months will be required to build the exhibit from the time that the appropriation becomes available for fiscal year 1967; consequently the exhibit would be completed for November 1, 1966. It is anticipated that the exhibit would be displayed at the Smithsonian in November and December 1966, and shipped to Alaska to be available for display from the beginning of the centenary year.

ACTIVITIES OF SMITHSONIAN

Mr. RIPLEY. We would be happy if you care to examine or place in the record this sketch which we brought in here. Commonly called a visual aid, it delineates something about the iceberg-like quality of the Smithsonian. So much of our key activities go on outside the exhibit part of the museum program.

Senator BARTLETT. We will place that in the record.

(The illustration follows:)



PHOTOGRAPHIC REPRESENTATION OF PHENOMENON

Senator BARTLETT. Do you want to comment on it?

Mr. RIPLEY. It is a photographic representation of the phenomenon that the Smithsonian represents. I call it sometimes an iceberg, sometimes a "sleeping beauty," to the extent we have these internal activities, ones which are generally unknown in the community at large.

The public exhibits are shown—however, under these, are the activities which make these exhibits meaningful. They are the research collections, and the scientific investigations as shown.

The research and the research collections contribute basic information to scientists in the Federal agencies and universities located throughout the world. In other instances, we possess basic research laboratories of various sorts as shown which are not collection oriented. One of these, the Smithsonian Astrophysical Observatory, is directed by Dr. Whipple.

We have several research programs which relate directly to the environment, for example—the work in Panama, the tropical biological work which is unique for this country. In addition, radiation biology related to the effect on animals and plants, emanations both ionizing and nonionizing. The Chesapeake Bay Center depicted on the chart results largely from a bequest from a private individual, also we received a welcome grant from the Ford Foundation to purchase additional land. Now for the first time we have a field research center near the research activities of the Smithsonian Institution in Washington.

The Center is open to all universities in the neighborhood, as well as ourselves, for environmental biological investigations.

This is the thrust of this exhibit, attempting to show how we relate the exhibits to the component parts of the Institution functions.

Senator BARTLETT. That couldn't be done unless the greater area was below it?

Mr. RIPLEY. That is right.

Senator BARTLETT. Anything else, Mr. Ripley? You or your associates?

Mr. RIPLEY. We welcome this opportunity. We were glad to be here, and thank you very much for this hearing.

Senator BARTLETT. Obviously the committee enjoyed it, too, or we wouldn't have been here this long.

SUBCOMMITTEE RECESS

The subcommittee will be in recess until 10 a.m. Thursday, March 10, 1966, when witnesses will be heard with reference to the Franklin Delano Roosevelt Memorial Commission, Commission of Fine Arts, and the National Foundation on the Arts and the Humanities.

(Whereupon, at 12:15 p.m., Wednesday, March 9, 1966, the hearings were recessed, to reconvene at 10 a.m., Thursday, March 10, 1966.)

SMITHSONIAN INSTITUTION,
Washington, D.C., April 11, 1966.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: The Smithsonian Institution requests amendments to H.R. 14215, a bill "Making appropriations for the Department of the Interior and related agencies for the fiscal year ending June 30, 1967, and for other purposes." These amendments would increase the amount of the "Salaries and expenses" appropriation from \$22,523,000 to \$23,437,000, and the "Archeological Research and Excavation (special foreign currency program)" appropriation from \$2,316,000 to \$5,700,000.

Justifications of these amendments are set forth on the enclosed statements.

Sincerely yours,

S. DILLON RIPLEY, *Secretary.*

SMITHSONIAN INSTITUTION

"SALARIES AND EXPENSES," FISCAL YEAR 1967

Change of amount

On page 43, line 3, change \$22,523,000 to \$23,437,000.

The justifications for this change in amount appear on the following pages.

U.S. NATIONAL MUSEUM

Agency request.....	\$186, 000
House allowance.....	93, 000
Appeal.....	93, 000

Restoration of \$93,000 is requested for the exhibits and conservation programs of the U.S. National Museum and for increased shipping activities in the Smithsonian Institution.

Of the above amount, \$49,000 is required to maintain the exhibits of the National Museum in attractive and effective appearance. Funds are required because of the great number of exhibit halls in two of the largest museums in the world with unprecedented crowds of visitors numbering in the millions. The exhibits of the National Museum are the standard of excellence in the museum world. In recognition of this, museum representatives from more than 50 foreign countries and nearly every State in the Union have visited the Office of Exhibits for consultation, advice, and help with their exhibits problems.

\$9,000 is requested for additional staff for the Conservation Research Laboratory established to conduct analysis, examine, treat, restore, and preserve museum collections and to perform research in the science and techniques of conservation. Many of the over 59 million historic and scientific objects in the national collections are irreplaceable and all are significant to the heritage of our scientific, historic, and artistic accomplishments. The additional funds are required so that the U.S. National Museum can fulfill its obligation to expedite preservation of the national collections, and to assist and advise other museums and institutions of learning in these procedures.

The balance of the funds requested to be restored, \$35,000, is needed for the Office of the Registrar which provides transportation and mail services for the entire Institution and also secures visas and passports in connection with official foreign travel. The accelerated activities of the research staff, the National Armed Forces Museum Advisory Board, the National Collection of Fine Arts, and the National Portrait Gallery have increased the need for additional transportation and mail services, and the increasing number of official trips to foreign countries have added to the workload of obtaining visas and passports.

MUSEUM OF HISTORY AND TECHNOLOGY

Agency request.....	\$123, 000
House allowance.....	60, 000
Appeal.....	63, 000

Restoration of \$63,000 is requested for the Museum of History and Technology to meet increasing demands on the staff to study, evaluate, and report on the effects of science and technology upon our industry and culture. Specialized areas of museum scholarship in which gaps exist in our staffing and for which additional curators and technicians are required include the history of nuclear energy, medical history, the history of electronics, and American studies.

Funds are also needed to continue the installation of the original exhibits in the new Museum of History and Technology, to document the collections, to authenticate the educational exhibits, and to develop the best techniques for informing most effectively the 5 million visitors who come to the museum each year.

MUSEUM OF NATURAL HISTORY

Agency request.....	\$628, 000
House allowance.....	400, 000
Appeal.....	228, 000

Restoration of \$228,000 is requested for the Museum of Natural History which is the national institution for systematic biology, anthropology, and mineralogy. The increase falls into two interrelated categories: the maintenance of the unique national collections for which the museum is responsible, and the minimal essential expansion of scientific capability to permit a limited contribution to vital national and international scientific programs.

Because of the increasing importance of natural history studies and the inadequacy of the museum's staffing, enormous backlogs of uncataloged specimens have accumulated in collections vitally needed for scientific investigations conducted throughout the scientific community. Information demands from all levels of the American public, from schools and universities, and from local, State, and Federal agencies continue to increase at a rate that cannot be adequately serviced by existing staffing. Hundreds of scientists, largely from the United States, visit this museum each year to study its valuable reference collections. To properly provide for the researches of these visitors and to make possible the work of its own staff, the museum must have the appropriate tools.

Furthermore, many of the professional scientists are the only specialists in groups of organisms in the Nation or in the free world. Nevertheless, continuing inadequacy of technical support requires a considerable portion of their time to be devoted to routine nonprofessional activities. The recommendations of the Civil Service Commission and numerous outside consultants and boards of review have urged the Smithsonian to expand supporting staff in order to enable the professional staff to make more essential contributions. Restoration of \$125,000 is required if minimal progress toward these objectives is to be made.

The museum is also a center for basic research in the chemical and the physical structures of rocks, gems, and meteorites. Accelerated interest in extraterrestrial studies is exhibited by increased research upon meteorites, one of the largest and most important collections of which is in the U.S. National Museum.

The museum is increasingly looked to for leadership in environmental biology—the interaction of all kinds of organisms, including man, with each other and with their surrounding environment.

The scope and purpose of the oceanography program, which is strongly supported by the administration, have been developed with the approval of the Interagency Committee on Oceanography. Their recommendations are designed to eliminate a crippling disparity between physical and biological oceanography. The Smithsonian's program continues as a critical ingredient in the national oceanography effort and centers on the professional capabilities of the museum in the systematics of marine plants and animals. For adequate support to well serve the increasing national demands placed on these programs, restoration of \$103,000 is required.

FREER GALLERY OF ART

Agency request.....	\$6, 000
House allowance.....	3, 000
Appeal.....	3, 000

Restoration of \$3,000 is requested for the Freer Gallery of Art to provide sufficient funds to employ one secretary for the conservation laboratory. This laboratory has responsibility for the analysis and preservation of valuable objects of art.

INTERNATIONAL ACTIVITIES

Agency request.....	\$28, 000
House allowance.....	0
Appeal.....	28, 000

Restoration of \$28,000 is requested for the Institution's international activities program which focuses on the Smithsonian's traditional commitments to basic research in the sciences and humanities.

The Office of International Activities requires additional funds for the administration of a complex foreign currency grant program in excess of \$2 million de-

signed to contribute to knowledge of ancient civilizations; to preserve and restore archeological sites and ancient monuments; to promote the studies in systematics, ecology, and marine biology; and to assist in the planning of educational museums in developing nations. The existing staff of five persons with a base appropriation of \$72,000 is responsible for a grant program in the amount of \$1,300,000. The addition of one employee and a total of \$16,000 is urgently needed to administer a substantially increased program of grants.

The management of the foreign currency program is complex. It involves strong and continuing contact with American universities and museums in order to make known the research opportunities in the excess countries, the in-house and outside advisory council review of project proposals, the drafting of grant-contracts, and general supervision and reporting on all research projects and expeditions.

The International Exchange Service is responsible for the national and international exchange of official documents and scientific literary publications with libraries and institutions of learning. The funds requested are needed to add to the limited staff of 11 positions with an allotment of \$114,000, 1 shipping clerk and 1 machine operator. These workers are necessary to handle the increased volume of requests for exchange of publications. Even greater demand for these services is anticipated.

ADMINISTRATIVE SUPPORT

Agency request.....	\$899,000
House allowance.....	400,000
Appeal.....	499,000

The sum of \$499,000 additional is required for administrative support in the Office of the Secretary and the administrative divisions (Publications, Fiscal, Library, Museum Service, Personnel, Photographic Services, Supply, Automatic Data Processing, and Information). The responsibilities of the offices charged with executive direction of the Smithsonian and with providing administrative support for the program bureaus increase directly with the increase in the scope of operations.

The requested increase in the "Salaries and expenses" appropriation is \$4,682,000, a program increase of 25 percent. The commensurate increase in administrative support is \$613,000. This is needed to provide administrative services for the increase in activities throughout the Institution.

In addition to the workload increase, \$271,000 is needed for the application of automatic data processing to the work of the Institution. This will provide an economical means of performing a diversity of work not now being accomplished: data storage and retrieval, payroll preparation, scientific analysis and computation accounting, library accessions lists, and property inventory.

The Institution has obtained consulting services in order to assure the greatest effectiveness and economy in the application of automatic data processing to its needs.

The tremendous advances already accomplished throughout the Government through the application of automatic data processing underscores the importance of initiating a processing center of modest proportions at the Smithsonian.

The need for the restoration of the eut is further justified by the inadequacy of the amount in the base for the Office of the Secretary, Editorial and Publications, and the Library.

The requested increase for the Office of the Secretary is needed to keep pace with the enlarged activities of the Institution. Critical appraisal of the Institution's programs requires the assistance of consultants and senior staff assistants to increase the effectiveness of the executive direction of the Institution.

The inadequacy of funding for Editorial and Publications results from the problem of keeping pace with the increase in the number of contributing scholars and scientists which has risen 50 percent in the past 5 years. Much of the accomplishments of these gifted workers depend on the publication of the results of their studies and research. Publishing costs similarly have increased 50 percent in the past 5 years and have offset the modest increase in funds available during the years. The amount of the appeal is essentially to overcome backlogs, to meet the known workload, and to meet increased costs.

Current surveys by professional users of the Library have established conclusively that the Library is inadequate in every service: acquisitions, cataloging, reference, circulation, and translation. Funding the Library has not kept pace with the increase in the professional staff and in the number of publications required for the expanded programs. More than one-half of the total holding of 500,000 volumes is uncataloged. It is urgent to make a start on the backlog

2220 INTERIOR AND RELATED AGENCIES APPROPRIATIONS, 1967

of uncataloged books as the initial phase of a long-range recataloging program and to assist the productivity of the professional staff, by increasing the reference and circulation services.

SMITHSONIAN INSTITUTION

"ARCHEOLOGICAL RESEARCH AND EXCAVATION (SPECIAL FOREIGN CURRENCY PROGRAM)," FISCAL YEAR 1967

Change in amount

On page 43, line 13, change \$2,316,000 to \$5,700,000.

The justifications for this change in amount appear on the following pages.

MUSEUM PROGRAMS AND RELATED RESEARCH (SPECIAL FOREIGN CURRENCY PROGRAM)

Agency request.....	\$5, 700, 000
House allowance.....	2, 316, 000
Appeal.....	3, 384, 000

Restoration is requested of \$3,384,000 for museum programs and related research (special foreign currency program). This valuable source of research support places no additional burden on the American taxpayer, at a time when the administration and the Congress itself have shown mounting concern over the need for greater and more creative uses of U.S.-owned excess currencies, before they might lose value to us through inflation.

Funds for systematic and environmental biology would permit establishment of a proposed marine biology collecting facility in Tunisia, which would greatly accelerate the vital work of the Smithsonian Oceanographic Sorting Center here in Washington. The concept of this facility has already been well received by the Government of Tunisia and thoroughly endorsed by our Embassy there. We would also be able to conduct studies in marine biology in India and to create new observation stations for the Smithsonian Astrophysical Observatory in Ceylon or Poland, to mention a few examples.

Restoration of funds for systematic and environmental biology is urgently requested in order to finance the Smithsonian's capability to accommodate project proposals in the biological sciences from other institutions in a national program of support to basic scientific research. The American Institute of Biological Sciences, the National Science Foundation, the National Academy of Sciences, and many of our leading universities have expressed the greatest interest in our special foreign currency program and look to us for support in systematic and environmental biology.

Although American museums are among the best in the world in design and in exhibit techniques, we need more research on how to make our museums more effective teaching instruments at all levels of education. Funds requested for museum sciences would further progress toward this goal with minimal burden on the American public. Much of what could be learned through this program abroad would have direct value to American museums trying to establish pioneer programs in education and vocational guidance, especially among the culturally disadvantaged sectors of our society.

The total restoration of the House cut is requested on the basis that it is fully responsive to the administration's request as expressed in a letter dated January 28, 1966, addressed to Senator Hayden by the Director of the Budget. It is stated in that letter that the 1967 budget recommends the use of foreign currencies for specified programs which would be of benefit to the United States. The letter states further that these currencies would not otherwise be used and their use for the proposed programs would provide goods or services for U.S. use at no cost to the American taxpayer.

CONSTRUCTION AND IMPROVEMENTS, NATIONAL ZOOLOGICAL PARK

Agency request.....	\$1, 589, 000
House allowance.....	1, 589, 000
Appeal.....	As noted

(NOTE.—The House report states that a portion of the \$150,000 for planning funds for a public service building should not be used to plan facilities including a lecture hall and demonstration laboratories. The purpose of this appeal is to obtain the support of the Senate for the planning of the facilities at this time.)

Inclusion of the planning for a public educational and service building is expressly authorized in the National Zoological Park's founding statute, which includes the purpose of "the advancement of science and instruction and recrea-

tion of the people." This public service building is therefore an essential part of the 12-year capital improvement program since the purpose of the program is to provide facilities not only for the proper exhibition and housing of animals but also for the instruction and recreation of the people.

The educational potential of the public service building will greatly enhance the value of the National Zoological Park. It will make possible the presentation of lectures, educational films and slides, laboratory demonstrations relating to the animals of the zoo, and similar programs for increased knowledge and understanding of zoology.

NATIONAL GALLERY OF ART,
Washington, D.C., April 11, 1966.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
U.S. Senate, Washington, D.C.

DEAR MR. HAYDEN. I appreciate your letter of April 7, 1966, giving us an opportunity to propose amendments to H.R. 14215. This bill includes the 1967 appropriation for "Salaries and Expenses, National Gallery of Art," as approved by the House of Representatives on April 6, 1966.

We respectfully request that H.R. 14215 be amended as follows.

Page 45, line 11, "\$2,694,000," change to, "\$2,765,000."

The requested change will restore the full \$71,000 reduction made by the House of Representatives in our 1967 budget estimate. With reference to this item, the Committee on Appropriations, House of Representatives Report No. 1045, page 39, states:

"The reduction of \$71,000 below the budget estimate recommended by the committee consists of \$24,170 for three positions in the Office of Information; \$7,075 to fund the Index of American Design; and \$9,755 for miscellaneous administrative expenses."

The three new positions for the proposed office of information, two new positions for the Index of American Design, and the Index of American Design pilot project are justified on pages 8 through 13 of our 1967 budget submission. There is an urgent necessity for the new information office positions if the gallery is to fulfill its nationwide obligations to the general public and educational organizations in its era of widespread interest in the arts, and particularly in the gallery's programs.

In the past 9 years the number of exhibition rooms open to the public has increased by 10 percent, very significant additions have been made to the collections, an extension service which reached almost 1 million people last year has been instituted, and attendance (1965 over 1957) has risen by 33 percent. Our budget estimate for 1967 proposed 15 new positions for a total of 349 full-time permanent positions. Ten years ago, in 1957, the Congress approved 327 such positions. Thus, in a 10-year period of unusual growth, the net increase of 22 in full-time positions would be less than 7 percent. Furthermore, 15 of these positions were guards. Therefore, if the five new positions which the House did not approve were restored, we will have added only seven positions to our substantive program over a 10-year period. We believe that this is a record of efficient management which merits your favorable consideration of our present request.

Respectfully yours,

JOHN WALKER, Director.

CORREGIDOR-BATAAN MEMORIAL COMMISSION,
Washington, D.C., April 6, 1966.

Senator CARL HAYDEN,
Chairman, Senate Appropriations Committee,
New Senate Office Building, Washington, D.C.

DEAR SENATOR HAYDEN: The following information is sent in answer to your letter of April 6, 1966.

This Commission's request for \$35,000 for its operating expenses to May 6, 1967, approved by the Bureau of the Budget, was reduced to \$25,000 by the House Appropriations Committee. This amount will not provide funds sufficient to operate even at the present fiscal year 1966 level. Pay increases granted by the Congress, authorized civil service grade increases, and terminal leave requirements exceed the \$25,000 figure by approximately \$1,600.

The \$10,000 reduction was accomplished by denying an increase for travel (\$3,000), and an increase for personnel compensation (\$7,000) to provide for a part-time employee. The increase in travel is needed to send one staff member to Manila to confer with the Philippine National Shrines Commission in July 1966 and January 1967. The July trip has already been delayed for 12 months due to a lack of funds occasioned by the reduction of our fiscal year 1966 budget. The planned completion of construction of the Pacific War Memorial in 1967 requires the early initiation of discussions with the cognizant Philippine officials who have taken office recently under the administration of President Marcos.

The increase in personnel will enable the part-time employment of a historical researcher to review the historical accuracy of the documentary film of the Pacific war, and the location of the historical markers to be placed on Corregidor Island. Both of these items are provided for in current legislation.

In view of the foregoing, it is urged that H.R. 14215, page 45, line 16, be amended by changing "\$25,000" to read "\$35,000."

We are keenly aware of the desire of the Congress to reduce, or defer, requests for funds for the coming fiscal year. But it is submitted that the reduction made by the House Appropriations Committee will hamper unduly the carrying out of the Commission's responsibilities, under legislation passed by the Congress, during the final year of the Commission's existence.

It is respectfully requested that the Senate Appropriations Committee approve the sum of \$35,000 as requested. This sum is a very modest one and represents the Commission's policy of operating on a basis of the strictest economy. We venture to say that there is no other Federal agency which operates on such an austere basis.

Sincerely yours,

EMMET O'NEAL, *Chairman*



