

ADMINISTRATIVELY CONFIDENTIAL

SMITHSONIAN INSTITUTION

Fiscal Year 1970

Justification of Estimates of Appropriations

To the Bureau of the Budget

(Information not to be released until after the President's
Budget is submitted to the Congress in January 1969.)



SMITHSONIAN INSTITUTION
FISCAL YEAR 1970 ESTIMATES OF APPROPRIATIONS

TABLE OF CONTENTS

	<u>Page</u>
GENERAL STATEMENT	i
"SALARIES AND EXPENSES"	Tab A
Program Summaries:	
Research and Scholarship	A-1
National Collections	A-3
Education of the Public	A-5
Administrative and Technical Support and Buildings Management	A-7
Program Structure by Organization	A-9
Summary of Appropriations by Organization	A-13
Multiyear Projections of Selected "Outputs"	A-14
Narrative Justifications:	
Mandatory Pay Increases	A-15
Office of Director General of Museums	A-16
Conservation Analytical Laboratory	A-17
Office of Exhibits	A-19
Office of the Registrar	A-21
Museum of History and Technology	A-23
Museum of Natural History	A-26
National Air and Space Museum	A-29
National Armed Forces Museum Advisory Board	A-32

SMITHSONIAN INSTITUTION FISCAL YEAR 1970

ESTIMATES OF APPROPRIATIONS-- Table of Contents-- Page 2

	<u>Page</u>
Narrative Justifications (cont'd.)	
Freer Gallery of Art	A-33
National Collection of Fine Arts	A-34
National Portrait Gallery.....	A-36
Joseph H. Hirshhorn Museum and Sculpture Garden	A-37
Anacostia Neighborhood Museum	A-38
Smithsonian Astrophysical Observatory	A-39
Smithsonian Tropical Research Institute	A-42
Radiation Biology Laboratory	A-44
Radiation Biology Laboratory, Relocation Operating Costs .	A-46
Office of Ecology	A-48
Office of Oceanography and Limnology	A-50
Special Interdisciplinary Programs:	
Center for Study of Man	A-51
Center for Short-Lived Phenomena	A-52
Science Information Exchange	A-53
Council on Communication	A-54
Smithsonian Research Awards Program.....	A-55
Office of Academic Programs	A-56
Office of International Activities	A-59
International Exchange Service.....	A-61
Division of Performing Arts	A-62
Office of Public Affairs	A-63

SMITHSONIAN INSTITUTION FISCAL YEAR 1970
ESTIMATES OF APPROPRIATIONS--Table of Contents--Page 3

	<u>Page</u>
Narrative Justifications (cont'd.)	
Administrative and Technical Support Activities	A-65
Office of the Treasurer	A-66
Information Systems Division	A-67
Smithsonian Institution Libraries	A-69
Management Support	A-70
Office of Personnel and Management Resources	A-71
Office of the Secretary	A-72
Photographic Services Division	A-73
Smithsonian Institution Press	A-73
Supply Division	A-74
Buildings Management Department	A-76
MUSEUM PROGRAMS AND RELATED RESEARCH (SPECIAL FOREIGN CURRENCY PROGRAM)	Tab B
Narrative Justification	B-1
RESTORATION AND CONSTRUCTION	Tab C
Program Statement	C-1
Five-Year Building Program	C-2
National Zoological Park	C-3
Restoration and Renovation	C-5
Joseph H. Hirshhorn Museum and Sculpture Garden	C-10

SMITHSONIAN INSTITUTION

FISCAL YEAR 1970 ESTIMATES OF APPROPRIATIONS

General Statement

The fiscal year 1970 "Salaries and Expenses" request totals \$31,132,000, an increase of \$4,618,000 over the fiscal year 1969 base of \$26,514,000 (which includes a proposed fiscal year 1969 supplemental of \$766,000). Of the \$4,618,000 increase, \$890,000 are for pay purposes and \$3,728,000 to meet program needs. The requested program increase is approximately 40 percent less than the total "Salaries and Expenses" request for the highest priority items in the fiscal year 1969 estimate and 72 percent less than the total increase requested last year. In a difficult budget year, the 1970 requested amount will permit minimal additional support for the most important program activities. Choosing among alternative uses for scarce dollars, the Smithsonian is seeking no increases for certain program elements.

The amount requested for planning, restoration, and construction totals \$14,162,000. This is \$18,323,000 below that requested for fiscal year 1969. Many desirable projects are being deferred to a later date.

The Special Foreign Currency Program request of \$4,500,000, a decrease of \$1,500,000 from the fiscal year 1969 request, also reflects a concentration on the highest priority projects, including meeting new demands by American museums and institutions of higher learning.

A. Salaries and Expenses

<u>1968 Actual</u>	<u>1969 Estimate</u>	<u>1970 Estimate</u>
\$24,310,000	\$26,514,000	\$31,132,000

In considering the Smithsonian's program needs, special recognition has been given to the following:

- improving support services for the maintenance and use of the National Collections
- continuing the effort to refocus our research, scholarship, and public educational activity
- increasing plant and exhibits protection and maintenance.

This recognition is incorporated in the program statements which follow, and in the presentation of unit increases. Fiscal year 1970 activity is briefly summarized in the following paragraphs.

1969 As Enacted	\$25,748,000
Anticipated Supplemental, Fiscal Year 1969 ...	\$641,000
1969 Released Reserves	\$125,000
Mandatory Pay Increases, Fiscal Year 1970 ..	\$890,000

The Collections

The critical issue is to bring improved order to the information resources in the National Collections. For a number of years, a sizable portion of the funding activity in this area has been channeled into costs related to the physical acquisition, control, and storage of specimens. Support in areas of conservation, documentation, and information retrieval was forced to lag. The amounts requested as increases this year, however, will be devoted primarily to correcting these deficiencies and facilitating the use of existing collection resources.

1970 Increase \$591,000

Research and Public Education

The critical issue is to continue to refocus the research and educational activity toward problems related to improving the quality of man's environment. Much of the increase requested for 1970 will be used for support of projects in plant physiology, anthropology, astronomy and astrophysics, and tropical and marine biology. Increases requested for public education are directed at improving the exhibits programs on the Mall and at the Neighborhood Museum facilities; higher, elementary, and secondary education services; and related public orientation activities.

1970 Increase \$2,279,000

Protection, Maintenance, and Administration

The critical issue is to allow the protection, maintenance, and support activities which serve the museum and research centers to correct existing deficiencies, and to allow them to keep pace with expanded program contributions. The Institution is in a severe situation with regard to these areas. The occupation and utilization of new space in the Fine Arts and Portrait Galleries have added to protection problems which have been accumulating since 1964. Major new openings are not being planned through 1970. This presents an opportunity to catch up with our most urgent protection and maintenance requirements.

1970 Increase \$858,000

Total "Salaries and Expenses" 1970 \$31,132,000

B. Construction

<u>1968</u> <u>Appropriation</u>	<u>1969</u> <u>Appropriation</u>	<u>1970</u> <u>Estimate</u>
\$2, 328, 000	\$2, 700, 000	\$14, 162, 000

The critical issues are: continue the momentum to complete the Zoo master plan; provide adequate facilities for research, collections, and exhibits activities; and liquidate construction obligations under the Joseph H. Hirshhorn contract authority in the 1969 appropriation. Of primary importance in the construction area for fiscal year 1970 are the requested amounts for preventive maintenance and public safety at the Zoo; relocation of the Radiation Biology Laboratory; and construction of the Hirshhorn Museum. The total construction amount requested represents only the most essential needs, with many items deferred until the Federal budget situation is eased.

1970 Request	<u>\$14, 162, 000</u>
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C. Foreign Currency Program

<u>1968</u> <u>Appropriation</u>	<u>1969</u> <u>Appropriation</u>	<u>1970</u> <u>Estimate</u>
\$2, 316, 000	\$2, 316, 000	\$4, 500, 000

The critical issue is to provide adequate support, without any dollar drain to the nation, for overseas archeological work, systematic and environmental biology, astrophysical studies, and museum programs of benefit to American research organizations. Ongoing research, based on a progressively broader authority to employ these funds, now consumes the entire appropriation and new demand, spurred by diminishing dollar funding of basic research and by greater research opportunities in more countries, continues unabated.

1970 Request	<u>\$4, 500, 000</u>
Total 1970 Budget	<u>\$49, 794, 000</u>

RESEARCH AND SCHOLARSHIP

1968 Actual		1969 Estimate		1970 Estimate	
<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>
388	\$7,294,000	397	\$7,533,000	468	\$9,351,000

The resources of the Smithsonian Institution--the collections, laboratories, scholarly staffs, and technicians--constitute unique assets that must be exploited and used for national service. From its establishment, the Smithsonian has committed itself to the task of increasing and distributing knowledge through the use of these assets. The research and scholarship programs were developed to meet this commitment and insure that the nation receives the maximum benefit from its investment in the Institution. They have become intertwined in the operations of the Institution and are the foundation for virtually all its activities.

The Smithsonian recognizes that there is an urgent need for increased basic research in science and the history and development of this country while at the same time national and international events have placed limitations on research support. In order to maintain a high level of significant contributions, a serious and careful examination has been made of our priorities in order to determine which research activities would be most productive. In addition, the requested program increases reflect a Smithsonian concern that the core research facilities of the Institution are efficiently and effectively used. These increases total 71 positions and \$1,818,000.

Of high priority is an increase of five positions and \$407,000 to permit the relocation operating costs of the Radiation Biology Laboratory after it has been moved to adequate quarters at its new facility in Rockville, Maryland.

The Smithsonian Tropical Research Institute is requesting an increase of two positions and \$50,000 to increase its interdisciplinary research capability, especially as regards the investigation of the potential biological effects resulting from the construction of the proposed sea-level canal.

Four positions and \$130,000 for the Smithsonian Astrophysical Observatory are primarily to realize the research potential of present systems such as the 60" optical telescope, the 84' radio-astronomy instrument, and the new gamma-ray reflector.

The Oceanographic Sorting Center has an acute need for 12 positions and \$115,000 to correct serious workload problems in the sorting of marine biological and geological specimens.

The Museum of History and Technology is requesting an increase of four positions and \$60,000 to undertake urgent ethnic cultural history research.

Research is of little consequence unless the results can be made available to potential users across the nation. The Smithsonian attempts to do this through an active program to promote and assist scholarship. The Smithsonian Institution Press requires an additional three positions and \$118,000 to prepare, print, and distribute a steadily increasing backlog of manuscripts in all fields of Smithsonian activity. Programs of higher research education and training in the Office of Academic Programs will require an increase of \$105,000.

Other research and support activities, including the Center for the Study of Man and the Center for Short-Lived Phenomena, new outlets through which the Smithsonian can foster scholarship, are requesting an increase of 41 positions and \$833,000.

NATIONAL COLLECTIONS

1968		1969		1970	
<u>Actual</u>		<u>Estimate</u>		<u>Estimate</u>	
<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>
289	\$3,651,000	293	\$3,855,000	328	\$4,446,000

The word museum originally meant "a place to study." Although it means many more things today, it is still a place to study. The museum is the collections: their assembly; their conservation and protection; their identification and documentation; their storage and handling; their showing; and their examination. The collections are most nearly like a huge and unique library and like a library all items must be readily accessible to students, scholars, and the public. This activity is the museum. It takes place behind and away from the exhibits but is essential to their popularity and educational value.

The National Collections which the Smithsonian Institution has amassed and for which it is responsible include collections of natural and man-made objects spanning the arts, the sciences, history, and technology.

Associated with the collections of objects are library resources which by providing the complementary data essential to understanding natural science phenomena and the background for the development of cultures and technology, enable the productive interplay of the collections and research staff.

The areas of living collections or natural preserves, which are maintained by the Smithsonian on Barro Colorado Island in the Panama Canal Zone and at the Chesapeake Bay Center for Field Biology, add a third dimension to the National Collections.

These collections both demand and make possible research of a special and important sort. Research, for example in systematic biology, in the founding and growth of the nation, and in the history of art and material culture, cannot be carried on without access to collections of objects and supporting documentation. Similarly, the Institution's activities in public education through exhibits, publications, and performances are based upon the objects in the collections and could not exist without them.

The National Collections though long regarded as an essential focal point for scholarly research and public inquiry in the natural sciences, American history and technology, and art, are becoming more important in this regard each year. Increased national use intensifies pressures to fill significant gaps, to make these great collections ever more useful to a broadening array of scholars and specialists from all sectors of the community, and to strengthen this national referral center upon which researchers have learned to rely for identifications and basic investigations of all types.

The Smithsonian is deeply aware of its responsibility for preserving and documenting a continuing inventory of the world of man and nature. While other institutions share in this national enterprise, the Smithsonian bears the major burden of insuring that these specimens and objects will not disappear with the passage of time but rather will remain accessible to the scholars and students of the future and to an interested public in the years to come. These are responsibilities the Smithsonian Institution must meet.

For fiscal year 1970, many worthwhile new and expanded activities are being delayed in order to strongly emphasize improved care, preparation, and use of existing resources. An increase of 35 positions and \$591,000 is sought for strengthened programs in conservation, for indexing and applying automatic data processing techniques, for readying collections for exhibit and study, for the development of library resources, and for the preservation and use of natural preserves. Increases for fiscal year 1969 will be directed at the following areas of highest priority concern.

A massive job of preparing the Joseph H. Hirshhorn art collection for moving to Washington must be accelerated to coincide with the scheduled completion of the new Museum and Sculpture Garden in April 1971 and its planned public opening in October of that year. This is a request for six positions and \$100,000.

The Museum of Natural History has as its highest priority request an increase of eight positions and \$150,000 for continuation support of a highly successful grant-initiated pilot project for computer processing of biological data associated with the collections.

The acquisition of basic documentary library resources and improved material processing and availability are essential to the Smithsonian Institution Libraries. Seven positions and \$122,000 are a minimum increase to meet these needs.

Under the National Aeronautics and Space Administration's Artifacts Program, the National Air and Space Museum must obtain grant-replacement funding of two positions and \$50,000 to receive and prepare for exhibit and study an increasing number of space items of timely and unusual public interest.

The availability of conservation services through the Conservation Analytical Laboratory must be improved if deterioration and loss of many of the 60-million items in the National Collections are to be prevented. This will require an increase of two positions and \$30,000.

Included in the total are other significant needs, requiring an additional 10 positions and \$139,000 for archives and collection, indexing, information storage and retrieval systems, and for the maintenance of natural preserves at the Chesapeake Bay Center for Field Biology and the Smithsonian Tropical Research Institute.

EDUCATION OF THE PUBLIC

1968 <u>Actual</u>		1969 <u>Estimate</u>		1970 <u>Estimate</u>	
<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>
328	\$4, 296, 000	337	\$4, 576, 000	364	\$5, 037, 000

Education activities at the Smithsonian are directed toward the exhibitions (including the popular Mall performances), popular and scholarly publications, public instructional tours, the international exchange of publications, and assistance to other museums. This is an era when it seems particularly important to communicate to the average man the value of ordered change. The Smithsonian through its exhibits programs and related activities plays a unique national public education role in this effort. Exhibits present the results of man's accumulated knowledge and accomplishments. They show the commonalities among men, and the cultural heritage of the United States in an authentic and authoritative way to over 13 million viewers annually. The specific objective of these activities is not only to give pleasure, but to inspire and to educate people in the wonders of nature and the contributions that our forebearers have made to our history and development. The changing character and temperament of modern life demand that the Smithsonian intensify its exhibits and visitor orientation efforts.

The total budget increase requested for these activities involves 27 positions and \$461, 000. The highest priority items are for the educational activities of the Office of Director General of Museums, the Office of Exhibits, the Division of Performing Arts, the Office of Academic Programs, the Office of Public Affairs, and the Anacostia Neighborhood Museum.

Investigations of techniques to increase the educational impact of exhibits require an increase of one position and \$30, 000 for the Office of Director General of Museums. The Office of Exhibits has an essential need for four positions and \$61, 000 to maintain production schedules for exhibits completion.

The attraction of the summer Folklife Festival is an indication of what remains to be tapped in this area of national communications and public education. The living carriers of original American folk-culture currently number around 300, and represent many races. The Division of Performing Arts intends to expand its capability to preserve and present this culture. The information it assembles will be used for exhibitions, presentations, and publications. To fund this additional activity, three positions and \$60, 000 are requested.

The Division of Elementary and Secondary Education, Office of Academic Programs, conducts the formal educational tours for area-wide schools. Pressures are mounting for rapidly expanding the activities of this Office. The benefits to be gained from this expansion are not quantifiable, but immensely outweigh the additional costs. Funding is requested for two positions and \$15,000.

As a part of this quality effort in public education, the proposed activity of the Office of Public Affairs is important. The Smithsonian cannot hope to meet its full potential in education without improved public orientation services. The request of this Office for three positions and \$65,000 is of high priority.

The success of the Anacostia Neighborhood Museum speaks for itself. This venture has been received with widespread enthusiasm locally and area-wide, and in the United States Museum community. The Smithsonian needs to push ahead with this important project, and seeks additional funding of five positions and \$40,000.

The balance of the requested increases for public education is to improve the air and space exhibits, operations of our international exchange service, our technical aid to other museums, the registrar's office, and photographic support. Expansion in these areas grows with the general educational effort of the Smithsonian. The increases requested reflect only the most urgently needed items. They total nine positions and \$190,000.

ADMINISTRATIVE AND TECHNICAL SUPPORT AND BUILDINGS MANAGEMENT

1968 <u>Actual</u>		1969 <u>Estimate</u>		1970 <u>Estimate</u>	
<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>
941	\$9,069,000	973	\$9,784,000	1,063	\$10,642,000

Support services for the Smithsonian Institution include Administrative and Technical Support units and the Buildings Management Department. The Administrative and Technical units include the Office of the Secretary, Office of the General Counsel, Office of the Treasurer, Office of Personnel and Management Resources, the Office of the Registrar, Information Systems Division, Smithsonian Institution Libraries, Smithsonian Institution Press, Office of Public Affairs, Photographic Services Division, Supply Division, the Travel Services Office, the Duplicating Section, and other units.

The Buildings Management Department and each of the administrative and technical support units play an important role in helping to assure that research, collection development and usage, exhibition preparation, and education work can proceed successfully. Like all supporting activities, increases in workloads for these groups are forced by expanding programs and cannot be controlled by the support units themselves. Each of these units needs additional resources to make it responsive to program demands. Increases for certain of these units are highlighted under other program categories.

Although efforts are continuously being made to improve efficiency and productivity, it is necessary that funding increases be provided to support program requirements. For fiscal year 1970, an increase of 90 positions and \$858,000 is requested to correct deficiencies in current support levels and to support those increases in this budget for the research, education, and collection management activities.

The Administrative and Technical Support units are requesting an additional 24 positions and \$352,000. Administrative and clerical personnel are required to assist the Secretary and Assistant Secretaries in their executive direction, program planning, and review of the diversified activities of the Institution and in their official external responsibilities and commitments on various commissions, study groups, and councils. Provision should be made for adequate funds for the rising costs of postage indicia mail and adequate clerical personnel and computer time for the Fiscal Division to meet an increased and more complex workload in payroll, accounting,

auditing, and reporting. The Office of the Registrar must improve its transportation and mail handling services in light of steadily increased volume. The Personnel Office will provide stepped-up employee processing and health service capabilities. The Supply Division needs additional personnel to receive deliveries and issue materials in buildings distant from the central supply office, and to furnish essential supplies and materials needed in everyday operations by research, exhibit, and office activities.

The Buildings Management Department requires an increase of 66 positions and \$506,000 to continue the phased development of adequate protection, custodial, and mechanical services for the Fine Arts and Portrait Galleries building to meet nonnegotiable, higher utilities and communications costs, to correct serious guarding deficiencies in the Museum of Natural History, Museum of History and Technology, Freer Gallery of Art, Silver Hill Facility, and elsewhere (183 incidents of theft and vandalism in fiscal year 1967 increased to 240 in 1968), and to permit the continued development of the safety program.

SMITHSONIAN INSTITUTION
PROGRAM STRUCTURE BY ORGANIZATION

Fiscal Years 1968, 1969, and 1970

"Salaries and Expenses" Appropriation

Program Category	1968		1969		1970	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
<u>I. Research and Scholarship</u>						
Conservation Analytical Laboratory	5	51,000	5	61,000	6	81,000
Museum of History and Technology	60	673,000	61	741,000	68	860,000
Museum of Natural History	129	1,790,000	127	1,798,000	138	1,913,000
National Air and Space Museum	5	87,000	6	80,000	6	80,000
National Armed Forces Museum						
Advisory Board	1	19,000	2	22,000	4	53,000
Freer Gallery of Art	6	30,000	7	46,000	7	46,000
National Collection of Fine Arts	15	135,000	15	140,000	18	197,000
National Portrait Gallery	7	265,000	8	292,000	8	292,000
Smithsonian Astrophysical Observatory	53	1,806,000	54	1,858,000	58	1,988,000
Smithsonian Tropical Research Institute	13	188,000	15	238,000	23	333,000
Radiation Biology Laboratory	31	404,000	32	430,000	38	918,000
Office of Ecology	4	112,000	4	115,000	5	124,000
Office of Oceanography and Limnology	18	267,000	18	298,000	33	498,000
Special Interdisciplinary Programs	0	0	0	0	5	244,000
Smithsonian Research Awards	0	400,000	0	400,000	0	400,000
Office of Academic Programs	5	340,000	7	270,000	7	375,000
Office of International Activities	6	107,000	6	105,000	9	144,000
Administrative and Technical Support	30	620,000	30	639,000	35	805,000
Total--Research and Scholarship	388	\$7,294,000	397	\$7,533,000	468	\$9,351,000

SMITHSONIAN INSTITUTION
PROGRAM STRUCTURE BY ORGANIZATION

Fiscal Years 1968, 1969, and 1970

"Salaries and Expenses" Appropriation

Program Category	1968		1969		1970	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
II. Curation and Use of the						
<u>National Collections</u>						
Conservation Analytical Laboratory	4	\$45,000	5	\$55,000	7	\$85,000
Office of the Registrar	8	71,000	8	51,000	8	51,000
Museum of History and Technology	60	705,000	61	732,000	62	752,000
Museum of Natural History	103	1,140,000	101	1,170,000	109	1,320,000
National Air and Space Museum	28	333,000	28	344,000	30	394,000
National Armed Forces Museum						
Advisory Board	3	68,000	3	71,000	3	71,000
National Collection of Fine Arts	19	247,000	19	253,000	19	253,000
National Portrait Gallery	14	356,000	14	394,000	14	394,000
Joseph H. Hirshhorn Museum and Sculpture Garden	3	62,000	7	155,000	13	255,000
Smithsonian Tropical Research Institute	8	129,000	8	146,000	11	187,000
Office of Ecology	1	13,000	1	17,000	2	48,000
Administrative and Technical Support	38	482,000	38	467,000	50	636,000
Total--Curation and Use of the						
National Collections	289	\$3,651,000	293	\$3,855,000	328	\$4,446,000

SMITHSONIAN INSTITUTION

PROGRAM STRUCTURE BY ORGANIZATION

Fiscal Years 1968, 1969, and 1970

"Salaries and Expenses" Appropriation

Program Category	1968		1969		1970	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
III. <u>Education of the Public</u>						
Office of Director General of Museums.	5	\$173,000	5	\$199,000	6	\$229,000
Conservation Analytical Laboratory . . .	0	3,000	0	8,000	0	8,000
Office of Exhibits	166	2,062,000	167	2,151,000	174	2,242,000
Office of the Registrar	0	0	3	18,000	3	23,000
Museum of History and Technology	32	361,000	32	361,000	32	361,000
Museum of Natural History	31	283,000	31	312,000	31	312,000
National Air and Space Museum	8	60,000	8	92,000	10	192,000
National Armed Forces Museum						
Advisory Board	3	36,000	2	39,000	2	39,000
National Collection of Fine Arts	22	547,000	23	562,000	23	562,000
National Portrait Gallery	6	80,000	6	89,000	6	89,000
Anacostia Neighborhood Museum	1	8,000	4	35,000	9	75,000
Office of Academic Programs	7	100,000	7	100,000	9	115,000
International Exchange Service	9	107,000	9	99,000	10	117,000
Division of Performing Arts	5	71,000	7	91,000	10	151,000
Office of Public Affairs	12	138,000	12	144,000	15	209,000
Administrative and Technical Support . .	21	267,000	21	276,000	24	313,000
Total--Education of the Public	328	\$4,296,000	337	\$4,576,000	364	\$5,037,000

SMITHSONIAN INSTITUTION

PROGRAM STRUCTURE BY ORGANIZATION

Fiscal Years 1968, 1969, and 1970

"Salaries and Expenses" Appropriation

Program Category	1968		1969		1970	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
IV. <u>Administrative and Central Services</u>						
Office of the Registrar	18	\$175,000	17	\$204,000	18	\$238,000
Administrative and Technical Support.	124	1,795,000	129	1,831,000	152	2,149,000
Total--Administrative and Central Services	142	\$1,970,000	146	\$2,035,000	170	\$2,387,000
V. <u>Buildings Management</u>	799	\$7,099,000	827	\$7,749,000	893	\$8,255,000
Program Total	1,946	\$24,310,000	2,000	\$25,748,000	2,223	\$29,476,000
1969 Supplemental				766,000	.....	766,000
Mandatory Pay Increase .....					.....	890,000
GRAND TOTAL	1,946	\$24,310,000	2,000	\$26,514,000	2,223	\$31,132,000

SMITHSONIAN INSTITUTION

Summary of "Salaries and Expenses" Appropriations
(In thousands of dollars)

"Salaries and Expenses" Appropriation	1968		1969		1970	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
Office of Director General of Museums	5	\$173	5	\$199	6	\$229
Conservation Analytical Laboratory	9	99	10	124	13	174
Office of Exhibits	166	2,062	167	2,151	174	2,242
Office of the Registrar	26	246	28	273	29	312
Museum of History and Technology	152	1,739	154	1,834	162	1,973
Museum of Natural History	263	3,213	259	3,280	278	3,545
National Air and Space Museum	41	480	42	516	46	666
National Armed Forces Museum Advisory Board	7	123	7	132	9	163
Freer Gallery of Art	6	30	7	46	7	46
National Collection of Fine Arts	56	929	57	955	60	1,012
National Portrait Gallery	27	701	28	775	28	775
Joseph H. Hirshhorn Museum and Sculpture Garden	3	62	7	155	13	255
Anacostia Neighborhood Museum	1	8	4	35	9	75
Smithsonian Astrophysical Observatory	53	1,806	54	1,858	58	1,988
Smithsonian Tropical Research Institute	21	317	23	384	34	520
Radiation Biology Laboratory	31	404	32	430	33	511
Radiation Biology Laboratory Relocation	0	0	0	0	5	407
Office of Ecology	5	125	5	132	7	172
Office of Oceanography and Limnology	18	267	18	298	33	498
Special Interdisciplinary Programs	0	0	0	0	5	244
Smithsonian Research Awards	0	400	0	400	0	400
Office of Academic Programs	12	440	14	370	16	490
Office of International Activities	6	107	6	105	9	144
International Exchange Service	9	107	9	99	10	117
Division of Performing Arts	5	71	7	91	10	151
Office of Public Affairs	12	138	12	144	15	209
Administrative and Technical Services	213	3,164	218	3,213	261	3,903
Buildings Management Department	799	7,099	827	7,749	893	8,255
Total	1,946	\$24,310	2,000	\$25,748	2,223	\$29,476
1969 Supplemental				766		766
Mandatory Pay Increase						890
GRAND TOTAL	1,946	\$24,310	2,000	\$26,514	2,223	\$31,132

SMITHSONIAN INSTITUTION

Multyear Projections of Selected "Outputs"

By Program Category						
Program Category	Actual	Estimated				
	1968	1969	1970	1971	1972	1973 1974
I. Research and Scholarship						
A. Senior independent visiting researchers (Project investigators expressed in terms of full-time equivalents)	120	140	170	205	245	295 355
B. Junior visiting researchers supervised:						
Cooperative Ph. D. 's Completed at Smithsonian	50	60	75	100	120	145 160
Others supervised:						
Postdoctoral investigators	40	40	60	75	90	120 150
II. Growth of National Collections (Number of specimens in the United States National Museum, in millions)	64.5	66.5	68.0	70.0	72.0	73.5 75.0
III. Public Education and Enlightenment						
A. Number of visitors (Mall facilities exclusive of National Gallery of Art, in millions)	9.8	14.9	15.4	16.4	17.1	18.0 18.9
B. Organized visitation programs						
secondary school visits (in thousands)	3.1	3.2	3.3	3.4	3.5	3.6 3.7
primary school visits (in thousands) .....	.8	1.0	1.5	2.0	2.5	3.0 3.5

SMITHSONIAN INSTITUTION

MANDATORY PAY INCREASES

An increase of \$890,000 is required for personnel compensation and benefits. All operations of the Smithsonian Institution have been carefully reviewed to determine whether any portion of the requested increase can be absorbed. This will not be possible without seriously curtailing the research and scholarship, reference collections, and public education programs, and the protection, operation, and maintenance of the Smithsonian buildings and grounds.

- a. Full-year costs of the pay increase granted to General Schedule employees July 14, 1968 .. \$30,000
- b. To finance an extra work day in fiscal year 1970 \$61,000
- c. Periodic step-increases in accordance with the Government Employees Salary Reform Act of 1964. This includes the portion of the fiscal year 1970 step-increases to be paid in that year and the carryover cost from fiscal year 1969. The apparent cost was determined through a position-by-position study and has been reduced to real cost by offsets resulting from employees being separated or promoted before receiving step-increases and from filling some positions at a lower grade step than the former incumbents held. \$215,000
- d. Reclassification of positions.
Included in this total is the reclassification of approximately 157 GS-3 guards to GS-4 and 96 GS-4 guards to GS-5 in response to revised Civil Service Commission standards. \$314,000
- e. Full-year cost of wage board increases effective December 1967 \$120,000
- f. Full-year costs of wage board increases to be granted in October 1968 \$150,000

OFFICE OF DIRECTOR GENERAL OF MUSEUMS

Program Category	1968		1969		1970	
	<u>Actual</u>		<u>Estimate</u>		<u>Estimate</u>	
	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>
III. Education of the Public.....	5	\$ 173, 000	5	\$199, 000	6	\$ 229, 000

Program Increases in Priority Order

Exhibits Experimentation and Evaluation (III)..... \$30, 000

The value of museum exhibits is increasingly recognized by educators. Many communities are requesting advice from the Smithsonian on the use of museum resources in teaching and in stimulating curiosity and the desire to learn. To improve exhibits in the Smithsonian and to provide advice on the exhibition of museum objects, the Smithsonian has instituted new studies, experimentation, and evaluation of exhibits for the public and for the enrichment of classroom instruction. For example, a year's pilot test use of a series of 14 experimental learning exhibits on the physics of light has been completed by fourth- and sixth-grade students in a local school system. The results obtained were hailed by the teachers and principals. Side effects of the program included increased self-reliance of students who had had their first learning experiences away from the classroom. Valuable information was obtained for evaluating teaching aids in the museum itself.

It is planned to design further experimental exhibits in order to gain new knowledge of the sciences and techniques underlying the involvement of viewers through all their senses with objects and exhibits and to determine the fundamental values that produce the most effective exhibits. An increase of \$30, 000 for an exhibits researcher (\$17, 000) and funds for travel, contractual services, and equipment is requested.

Total Program Increase1 position \$30, 000

CONSERVATION ANALYTICAL LABORATORY

Program Category	1968 Actual		1969 Estimate		1970 Estimate	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
I. Research and Scholarship	5	\$51,000	5	\$61,000	6	\$81,000
II. Curation and Use of the National Collections	4	45,000	5	55,000	7	85,000
III. Education of the Public	0	3,000	0	8,000	0	8,000
Total	9	\$99,000	10	\$124,000	13	\$174,000

Program Increases in Priority Order

1. Improve Conservation Services (II) \$30,000

The improvement of the availability of conservation services is essential to the proper treatment of individual items in the collections and to research leading to new methods of treatment. These services consist of: advising museum staff on suitable methods of treatment; conserving material for which the Laboratory has special skills or facilities; and educating Smithsonian and other museum technicians and curators by providing reference materials, lectures, and seminars on conservation topics. Many of the 60 million items in the National Collections require treatment; e. g., 80,000 items in the Division of Numismatics alone, representing at least seven man-years of work. During fiscal 1968, about 30 requisitions for conservation services have been completed involving analytical services together with treatment of about 180 objects. At present, 150 requisitions are on hand awaiting attention and thousands more could be presented if the lab could handle them. This request provides for a conservator and a conservation technician (\$16,000) and funds for travel, supplies, and equipment (\$14,000).

2. Expansion of Analytical Capability (I)..... \$20,000

An expansion of analytical capability is essential to adequate support of museum research and scholarship. There are increasing demands for additional quantity and quality of services to provide information used in determining dates, history, attribution, and ancient production methods. For instance, three researches recently have been in progress--one on North Devon pottery utilizing the collections, one preliminary to the identification of inks used in medieval documents, and another on resin used as coloring matter by Indians. About 60 requisitions involving analysis of 100 samples and estimation of 1,000 elements have been handled. A chemist (\$12,000) and supplies and equipment funds (\$8,000) are requested to strengthen this capability.

Total Program Increase..... 3 positions \$50,000

OFFICE OF EXHIBITS

Program Category	1968 <u>Actual</u>		1969 <u>Estimate</u>		1970 <u>Estimate</u>	
<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>	
III. Education of the Public ...	166	\$2,062,000	167	\$2,151,000	174	\$2,242,000

Program Increases in Priority Order

1. Permanent Exhibits Program (III) \$61,000

The preparation of an increasing number of special temporary exhibits and assistance to innovative activities, such as the Anacostia Neighborhood Museum, are occupying an increasingly high percentage of the manpower and other resources of the Office of Exhibits. For instance, some 40 special and temporary exhibits were produced in fiscal year 1968. This capability to have dynamic and changing exhibits and other types of presentations enables the Institution to react quickly to timely themes of high visitor interest. This activity, although of major importance to the Institution's public education effort, has caused a substantial fall-off in the Office's ability to maintain production schedules for the completion of approximately 15 permanent exhibit halls in the Museum of History and Technology and the Museum of Natural History. The Office of Exhibits requires an increase of four exhibits specialists (\$27,000) and \$34,000 in support funds for label printing, contracted hall preparation services, supplies, and equipment to maintain an acceptable schedule of permanent exhibits production.

2. Maintenance of Exhibits (III) \$30,000

The deterioration of permanent exhibits is a fact of life in museum operations. It begins when each exhibit is completed and the production workers depart from the hall. Dust accumulates on the cases and, despite the tightness of cases, on the objects themselves. Background colors and descriptive labels fade and lose their sharpness from exposure to light. Visitor-operated models, audio systems, and projectors begin to break down from heavy use. The unfortunate result of a neglected exhibit is that it changes from a source of public education to one of public annoyance. Well over 3,000 permanent exhibits have been produced during the past fourteen years. A conservative estimate of the public investment in these exhibits is \$10,000,000. Many of the older

exhibits are now in seriously deteriorated condition. During fiscal year 1968, approximately two man-years were diverted from new preparation work and were devoted to the most serious maintenance tasks largely on an emergency basis. This was no more than 10 percent of the effort required. A more concerted effort by the Office will not be possible in fiscal year 1969 to meet other commitments. With the maintenance program falling short consistently, by fiscal year 1970 the backlog of work will demand the services of a full-time maintenance staff. Three exhibits specialists (\$22,000) are requested as a start to the development of such a maintenance program. An additional \$8,000 are required for services, supplies, and equipment.

Total Program Increase	7 positions	<u>\$ 91,000</u>
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OFFICE OF THE REGISTRAR

Program Category	1968		1969		1970	
	Actual Pos.	Amount	Estimate Pos.	Amount	Estimate Pos.	Amount
II. Curation and Use of the National Collections	8	\$ 71,000	8	\$ 51,000	8	\$ 51,000
III. Education of the Public	0	0	3	18,000	3	23,000
IV. Administrative and Central Services	18	175,000	17	204,000	18	238,000
Total	26	\$246,000	28	\$273,000	29	\$312,000

Program Increases in Priority Order

1. Transportation Funds (IV)\$30,000

The exhibits and research programs of the Smithsonian Institution are dependent on the transporting of collections, field equipment, supplies, and other objects. Transportation requirements reflect the growing workloads experienced by the Smithsonian's museums, galleries, and laboratories. Transportation funds should be increased to permit the acceptance on a timely basis of items coming available to the Smithsonian from a variety of sources. The present level of \$93,000 is not adequate. Other museums give competition in the quest for specimens. General transportation rate increase is also a factor to be anticipated. Many shipments require special packing and handling arrangements which add to costs.

2. Mail Service (IV)\$4,000

An additional mail room clerk is required to service the increased volume received in the central mail office as a result of increased public awareness of the Smithsonian, the initiation of new educational and research programs, the expansion of staff and research visitor projects, and the extension of Smithsonian offices off the Mall. Approximately 1,250,000 pieces of mail were handled by a mail staff of eight persons in 1968.

3. Insurance for Borrowed Objects (III)\$5,000

Insurance of historically and intrinsically valuable items is an accepted fact in the art and museum world today. Private individuals and organizations demand insurance protection as a provision for loans to the Smithsonian for exhibition or research purposes. The establishment of a fund is requested for financing insurance costs incurred in connection with such loans. No funds now exist for this purpose.

Total Program Increase..... 1 position \$39,000

MUSEUM OF HISTORY AND TECHNOLOGY

Program Category	1968 <u>Actual</u>		1969 <u>Estimate</u>		1970 <u>Estimate</u>	
	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>
I. Research and Scholarship ..	60	\$673, 000	61	\$741, 000	68	\$860, 000
II. Curation and Use of the National Collections...	60	705, 000	61	732, 000	62	752, 000
III. Education of the Public ...	<u>32</u>	<u>361, 000</u>	<u>32</u>	<u>361, 000</u>	<u>32</u>	<u>361, 000</u>
Total....	152	\$1, 739, 000	154	\$1,834, 000	162	\$1,973, 000

Program Increases in Priority Order

1. Ethnic Cultural History Activities (I)..... \$ 60, 000

The Museum of History and Technology has long recognized the need to portray accurately and comprehensively the role and influence of ethnic groups in the nation's development. This national repository of history in the Nation's Capital has a primary obligation for prompt initiation of such a timely project. The present national climate has developed a requirement for immediate action. Since relatively little historical research has been accomplished in this field, the present staff must be augmented with several full-time historians having special competence in ethnic history. They will develop the collections in these subject areas, plan and coordinate exhibits, develop Institution-wide perspectives, complete research projects, and publish the results. Only one such specialist, in Spanish-American ethnic history, is now on the staff. An increase of \$36, 000 is requested for two curators, a research assistant, and a clerk to perform and support research necessary for the documentation of Afro-American artifacts now in the collections and to seek and acquire

additional specimens. An additional \$24, 000 is requested for travel, services, and the purchase of objects.

2. Bicentennial of the American Revolution (I)..... \$59, 000

The Museum is concerned primarily with the nation's technological and cultural history, and artifacts as unwritten documents relating to its history. Relatively less study has been devoted to the objects and technologies of the Revolutionary period than to its political and intellectual aspects. The Museum is capable of making substantial contributions to the understanding and interpretation of the material culture of this period. Several themes of this period have recurred again and again in American history to the present, and merit particular study and research. Among these are such timely topics as transportation, civil disobedience, poverty, and urban development, all within the framework of an ongoing revolution.

In preparation for the Bicentennial, the Museum will organize symposia, conferences, and lecture programs involving scholars from other museums, universities, and related institutions. Ongoing research projects will be greatly expanded into unexplored areas of Revolutionary War era history, for the publication of scholarly papers, museum catalogs and guidebooks, and historically accurate popular materials. Many of these will document the contributions made by ethnic groups in civil and military activities during this period. The present program in historic site, underwater, and industrial archeology will be substantially expanded to undertake additional investigations and excavations of sites of military and cultural importance. Hitherto neglected exploration of shipwrecks in inland and coastal waters will also be emphasized.

An increase of \$30, 000 is requested for an historian, an archivist, and a clerk to perform and support the required research and field activities of this project. The importance of the project and the imminence of the forthcoming Bicentennial make it necessary to seek among the nation's foremost authorities for consultants and to acquire significant artifacts to make planned exhibitions complete and educational (\$29, 000).

3. Index of the Museum's Collections (II).....\$ 20, 000

The Museum must develop and implement, within the next several years, a museum-wide system for uniformity in indexing its collections. The systems presently in use are outdated and inadequate to the ever-growing needs of the public. Inventory control, which is a key function in all museums, is impracticable at present. Its lack has recently caused considerable embarrassment. The absence of an adequate indexing and information system creates great delays in accomplishing normal ongoing collection management tasks as well as in scholarly research by staff. Data cutting across subject matter lines is particularly difficult to retrieve. In some areas this weakness actually prohibits serving outside students, scholars, and the general public.

The present situation results from immense yearly increases in acquisitions, insufficient (until recently) storage facilities, and shortage of personnel trained in the registration of collections. The rapidly increasing use of the collections demands that the Museum become better equipped to control and diffuse knowledge regarding its resources and research activities. Modern developments in computer technology and data retrieval will permit the staff to rectify the problem.

During fiscal 1969, considerable staff time will be diverted to preliminary planning of the proposed new Index. During 1970, it will be necessary to determine the final systems design, acquire equipment, hire a data input clerk, and purchase computer time. This is a requested increase of \$20, 000.

Total Program Increase..... 8 positions \$ 139, 000

MUSEUM OF NATURAL HISTORY

Program Category	1968		1969		1970	
	<u>Actual</u>		<u>Estimate</u>		<u>Estimate</u>	
	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>
I. Research and Scholarship ...	129	\$1, 790, 000	127	\$1, 798, 000	138	\$1, 913, 000
II. Curation and Use of the National Collections	103	1, 140, 000	101	1, 170, 000	109	1, 320, 000
III. Education of the Public	31	283, 000	31	312, 000	31	312, 000
Total.....	263	\$3, 213, 000	259	\$3, 280, 000	278	\$3, 545, 000

Program Increases in Priority Order

- I. Automatic Data Processing Application to Collection
Management (II) \$150, 000

Collection growth in the past 50 years has made obsolete traditional manual techniques for the filing and recall of natural history specimen-related information. A pilot project clearly demonstrated the feasibility and benefits to the research community of using automatic data processing for the handling of information associated with these specimens. The principal benefits achieved are the potentially greater utilization of collections to answer research questions, especially those involving interrelationships among specimens such as a plant of economic importance and potentially damaging insects. Many of these questions bear on the solution of important national problems including pollution (both atmospheric and aquatic), conservation of natural resources, increasing food production, national health improvements, and national defense related problems. Immediate importance to education of applying computer systems to museum collection management is indicated by the support of the Office of Education to the initial development of the project.

Funds are requested for the support of this activity in fiscal year 1970 to provide continuity of development and an orderly phasing-in of staff currently associated with the project through the research grant. The initial grant will terminate on June 30, 1969. The amount of \$150,000, approximately half of the grant support, is needed for eight positions for programmers and source data automation technicians (\$83,000) and for computer rental time, necessary supplies, and equipment (\$67,000).

2. Additional Technical Support for Professional Researchers (I) \$ 65,000

At the present time there is insufficient technical support personnel for professional researchers. A considerable amount of time is spent in subprofessional duties by highly paid and highly qualified research personnel. These tasks include preparing specimens for study, searching bibliographic references, and developing statistical analyses. This work limits the amount of research that is conducted and is an inefficient use of the investment that has been made in these professionals. A total of nine positions are requested made up of three museum technicians, three research assistants, an illustrator, a draftsman, and a bibliographic assistant. In so far as possible, technicians are pooled for maximum flexibility of operations.

3. Systematic Biology (I) \$ 50,000

The Director of the Museum of Natural History has, since the establishment of this Office in January 1965, also been serving as its Director. The program and activities of the Office have now developed to the point where their effective prosecution requires the appointment of a Director (who will also serve as assistant to the Director of the Museum in scientific matters) and a biostatistician who will assist the departments of the Museum in developing statistical methods for treating research data; to serve as consultant in the interpretation of data; as well as to undertake research projects such as the increased application of automatic data processing techniques and technology to the study

of systematic biology. With supplies and equipment, this is an increase of \$45, 000. A portion of the increase (\$5, 000) would provide travel in support of the Primatology Program, particularly for the development of a uniform system of nomenclature for primates with emphasis being given to those of special significance to medical and biological research.

Total Program Increase	19 positions	<u>\$265, 000</u>
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NATIONAL AIR AND SPACE MUSEUM

Program Category	1968 <u>Actual</u>		1969 <u>Estimate</u>		1970 <u>Estimate</u>	
	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>
I. Research and Scholarship	5	\$87, 000	6	\$80, 000	6	\$80, 000
II. Curation and Use of the National Collections	28	333, 000	28	344, 000	30	394, 000
III. Education of the Public	<u>8</u>	<u>60, 000</u>	<u>8</u>	<u>92, 000</u>	<u>10</u>	<u>192, 000</u>
Total	41	\$480, 000	42	\$516, 000	46	\$666, 000

Program Increases in Priority Order

1. National Aeronautics and Space Administration
Artifacts Program (II) \$ 50, 000

An agreement with the National Aeronautics and Space Administration in March 1967 provided for important air and space artifacts developed by NASA to be transferred to the National Air and Space Museum. The Museum agreed to accept responsibility for the custody, protection, preservation, and display of such artifacts. The Space Agency provided initial funding (\$200, 000) with the understanding that the Smithsonian would provide continuation funding.

The physical number of space-oriented artifacts is large and is increasing daily. Hundreds of scientific and technical developments are involved and thousands of artifacts are potential candidates for the Museum's collections. The key advancements in aerospace science and technology must be documented, and the artifacts related to such advancements sought, inspected, accessioned and preserved for exhibit and/or study. The program has increased significantly the number of important air and space objects available for loan to other history and science museums and institutions, Federal and private, for exhibition and study. The

original NASA grant will be expended by the end of fiscal year 1969. Only \$25, 000 are available for replacement funding. The amount requested for fiscal year 1970 is the minimum necessary to insure the proper care and preservation of items which represent significant breakthroughs in America's space efforts. It will provide for a museum specialist and a technician (\$23, 000) and \$25, 000 in program support funds (travel, transportation, printing, services, supplies, and equipment).

2. Modernization of Exhibits (III)..... \$100, 000

In the period before the authorized new National Air and Space Museum can be funded, constructed, and opened to the public, all current exhibits must be redesigned, renovated and modernized. Even after construction money becomes available, at least five years will elapse before the public opening.

For this period, the National Air and Space Museum must improve its presently allocated spaces in the old Arts and Industries building and in the temporary (World War I) Air and Space building on Independence Avenue, to provide exhibits in America's air and space accomplishments to over one million annual visitors.

Except for a few temporary installations (representing space-oriented accomplishments of recent years), however, no major revisions in the displays in these buildings have been made since 1958. After ten years, many of the exhibits have become outdated. Some are obsolete and virtually all are shopworn from heavy visitor traffic.

Exhibit areas are an accumulation of hardware with little rational relationship. A proposal has been approved for a complete re-study and reconstitution of all current air and space displays. The following steps are essential. During 1969 a complete re-study will be made of the best use of exhibit spaces now available. Exhibits areas will be developed on a thematic basis, each completely integrated, and each related as far as possible to other areas in the museum. Specific specimens in the collections will be selected only if they fit into the thematic plan. Surplus

items will be stored at Silver Hill or, preferably, put on loan to other qualified museums until larger quarters become available in Washington. At least two to three years (after 1969) will be required to complete the job. Phase I is programmed to clean out and re-do the Air and Space building (making only minimal changes in the Arts and Industries building during 1970), followed by re-working all installations in the Arts and Industries building, beginning with 1971 funds.

This program is a necessary pilot operation for the development of the innovative and dramatic presentations and displays contemplated for the future building. Not only will new ideas be tested and developed during this program, but much of the display material will be designed for eventual transfer to the new building. To initiate this renovation effort, two museum specialists (\$23, 000) and \$75, 000 for services, supplies, and equipment will be required.

Total Program Increase..... 4 positions	<u>\$150, 000</u>
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NATIONAL ARMED FORCES MUSEUM ADVISORY BOARD

Program Category	1968 <u>Actual</u>		1969 <u>Estimate</u>		1970 <u>Estimate</u>	
	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>
I. Research and Scholarship ...	1	\$ 19, 000	2	\$ 22, 000	4	\$ 53, 000
II. Curation and Use of the National Collections.....	3	68, 000	3	71, 000	3	71, 000
III. Education of the Public.....	<u>3</u>	<u>36, 000</u>	<u>2</u>	<u>39, 000</u>	<u>2</u>	<u>39, 000</u>
Total	7	\$123, 000	7	\$132, 000	9	\$163, 000

Program Increases in Priority Order

Employment of Staff Director (I)..... \$ 31, 000

Since 1963, the present staff director for the Advisory Board has been on loan to the Smithsonian Institution from the United States Marine Corps. He will retire from the Service in April 1969. The anticipated site acquisition and the need to continue planning for the Museum Park and Study Center emphasizes the need to employ a director in fiscal year 1970 to provide continuity of program formulation and direction. The requested increase of \$31, 000 provides for a director and for a secretary.

Total Program Increase..... 2 positions \$ 31, 000

FREER GALLERY OF ART

Program Category	1968		1969		1970	
	Actual		Estimate		Estimate	
	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>
I. Research and Scholarship....	6	\$ 30,000	7	\$ 46,000	7	\$ 46,000

Program Increases in Priority Order

No increase sought for fiscal year 1970.

NATIONAL COLLECTION OF FINE ARTS

Program Category	1968 Actual		1969 Estimate		1970 Estimate	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
I. Research and Scholarship...	15	\$135,000	15	\$140,000	18	\$197,000
II. Curation and Use of the National Collections ...	19	247,000	19	253,000	19	253,000
III. Education of the Public	<u>22</u>	<u>547,000</u>	<u>23</u>	<u>562,000</u>	<u>23</u>	<u>562,000</u>
Total...	57	\$929,000	57	\$955,000	60	\$1,012,000

Program Increases in Priority Order

Research and Education Program (I)..... \$ 57,000

Successful United States representation, sponsored by the National Collection of Fine Arts, in the top two recurring international exhibitions, the Venice Biennale and the São Paulo Bienal, and the exhibits and facilities in the Fine Arts and Portrait Galleries building, opened in May 1968, are giving the National Collection of Fine Arts national recognition. As a result, increasing numbers of historians, students, collectors, and others are seeking opportunities to engage in study at the gallery using its collection of art, its archival and library resources, and professional guidance and assistance from its staff. Until recently, the director and five curatorial staff members have been able to respond adequately to these requests. The present volume of requests, about 50 a year and increasing, now precludes effective service with present staff resources if the growing collections are to receive adequate curation and if exhibits are to be planned and researched.

It is essential that two research curators and a secretary (\$51,000) be added to the staff to strengthen the research and education program by performing independent studies, by

aiding graduate students, interns, and advanced researchers to use the resources of the National Collection of Fine Arts, and by developing programs that relate the work of the gallery to an Institution-wide program on American studies. Program support funds of \$6,000 for travel, services, supplies, and book purchases would be required.

Total Program Increase.....3 positions	<u>\$ 57,000</u>
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NATIONAL PORTRAIT GALLERY

Program Category	1968		1969		1970	
	<u>Actual</u>		<u>Estimate</u>		<u>Estimate</u>	
	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>
I. Research and Scholarship...	7	\$265, 000	8	\$292, 000	8	\$292, 000
II. Curation and Use of the National Collections ...	14	356, 000	14	394, 000	14	394, 000
III. Education of the Public	<u>6</u>	<u>80, 000</u>	<u>6</u>	<u>89, 000</u>	<u>6</u>	<u>89, 000</u>
Total.....	27	\$701, 000	28	\$775, 000	28	\$775, 000

Program Increases in Priority Order

No increase sought for fiscal year 1970.

JOSEPH H. HIRSHHORN MUSEUM AND SCULPTURE GARDEN

Program Category	1968		1969		1970	
	Actual		Estimate		Estimate	
	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>
II. Curation and Use of the National Collections.....	3	\$62,000	7	\$155,000	13	\$255,000

Program Increases in Priority Order

Preparation of the Collections (II)..... \$100,000

In fiscal year 1969 the Smithsonian assumed costs for a staff of seven persons, with small temporary New York City offices, which has begun preparation of the Hirshhorn collection for its move to Washington. This work includes examination, classification, backing, framing, photographing, and storing of each painting, and careful restoration where damage has occurred. It involves continuous contracting with conservators, extensive research and a large volume of correspondence, record-keeping, and other clerical work. It must cover over 6,000 works of art to select some 500 paintings and 500 sculptures for the initial opening in late 1971 of the Museum, which will contain 250,000 square feet of floor space. It is imperative that efforts be expanded and accelerated to meet scheduled deadlines. This will require an additional curator, curatorial assistant and research assistant, plus an administrator, contracts clerk and clerk-typist (\$55,000). Additional transportation funds, temporary sorting and assembly space, printing, conservation and framing services, and office furniture and equipment are needed (\$45,000).

Total Program Increase..... 6 positions \$100,000

ANACOSTIA NEIGHBORHOOD MUSEUM

Program Category	1968 Actual		1969 Estimate		1970 Estimate	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
III. Education of the Public	1	\$8,000	4	\$35,000	9	\$75,000

Program Increases in Priority Order

Basic Operating Support (III) \$40,000

Approximately 54,000 people have visited the Neighborhood Museum during its first year of operations. Local, city-wide, and nationwide response to the Museum has been almost overwhelming. The Museum is at times swarming with school children. Local civic groups use its facilities for discussions and meetings on community problems. It has been described by a national magazine as "the most successful in this field" of "opening eyes in the ghetto." Continued successful operation and development of the Museum, however, require an adequate level of Federal funding. Long-term availability of private funding cannot be assured as the Museum assumes less of an experimental aspect. Fiscal year 1969 funding will permit meeting approximately one-quarter of the direct costs of the Neighborhood Museum now being met from private sources. Funds will be provided for the partial-year costs of the director, an exhibits specialist, a maintenance employee, and a secretary. The balance of 1969 funding will be used for local travel, rent, utilities, supplies and materials, equipment, and contractual services. The request for fiscal 1970 must concentrate on a build-up of essential staff. This request is for an assistant director, a clerk-typist, an exhibits specialist, a museum technician, and one maintenance employee (\$40,000).

Total Program Increase 5 positions \$40,000

SMITHSONIAN ASTROPHYSICAL OBSERVATORY

Program Category	1968		1969		1970	
	Actual		Estimate		Estimate	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
I. Research and Scholarship....	53	\$1, 806, 000	54	\$1, 858, 000	58	\$1, 988, 000

Program Increases in Priority Order

1. Additional Observations from 60" Telescope (I)..... (\$10, 000)

To maintain the Observatory's lead in Stellar Atmospheres and Theoretical Astrophysics additional observations from the 60" telescope (to be delivered in fiscal year 1969) located at Mt. Hopkins require increased observational costs which include an observer technician to operate this telescope. These observations complement and are an essential element to the continuing Stellar Atmospheres program at the Observatory. The cost of the technician will be absorbed by transferring funds from other deferred services.

2. Observations of Visible and Infrared Emissions (I)\$50, 000

A modest increase in equipment funding is requested to further observations of visible and infrared emission from stars and planets in early stages of evolution and of the enormous infrared emission from Quasar and Seyfert galaxies. This broad program of interference spectroscopy can best be furthered by utilizing most of the equipment already generated and by the 60" telescope presently under procurement. This effort coincides with the national goals relating to manned spaceflight by making ground-based planetary observations prior to these flights.

3. Radio Astronomy (I).....\$ 15, 000

Progress towards new major radio telescopes facilities in the United States has slowed considerably at a time

when scientific discoveries in Radio Astronomy continue at a remarkable pace and when other nations are making major steps forward. Increasing demands for access to radio instruments must be met in the United States by the existing modest equipment. The increase this year is to add an observational astronomer to effectively exploit the 84-foot diameter radio telescope (used jointly by SAO-Harvard).

4. Gamma-ray Astronomy (I).....\$ 10, 000

With the procurement and installation of a 10-meter gamma-ray light collector during the latter part of fiscal year 1968, the Astrophysical Observatory expects to be the world's principal ground-based gamma-ray observatory. Beginning fiscal year 1970, a more routine pattern of observations and equipment operation will necessitate one additional senior observer technician, supported by travel and related funds. This position was deferred during fiscal year 1969 because of the necessity of attention and familiarity of this new equipment by scientific personnel. Part of the cost (\$12, 000), has already been covered by transferring costs from deferred equipment purchases.

5. Preliminary Design of Telescope (I).....\$ 40, 000

The astronomical community is in dire need of large aperture, lightweight, and inexpensive telescopes. The increase is for the preliminary design services for such an instrument which may well serve several programs such as Gamma-Ray Astronomy and Stellar Astrophysics. This effort is within the national interest and goals since it will provide a means of obtaining such telescopes which should allow the United States to regain its position in Astronomy now threatened by European and USSR advancement in large (up to 600") telescopes.

6. Atomic and Molecular Astrophysics (I).....\$ 15, 000

The project in Atomic and Molecular Physics is concerned with the development of methods for predicting the efficiencies with which atomic and

molecular processes occur and applying the results to the interpretation and phenomena occurring in astrophysics. In order to become less dependent upon one or two senior scientists and in order to properly supervise the nine junior scientists on the project, an additional permanent senior member is required. This atomic and molecular group is evolving into the largest collection of personnel active in this field in the United States.

Total Program Increase..... 4 positions	<u>\$ 130,000</u>
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SMITHSONIAN TROPICAL RESEARCH INSTITUTE

Program Category	1968 Actual		1969 Estimate		1970 Estimate	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
I. Research and Scholarship	13	\$188,000	15	\$238,000	23	\$333,000
II. Curation and Use of the National Collections	8	129,000	8	146,000	11	137,000
Total	21	\$317,000	23	\$384,000	34	\$520,000

Program Increases in Priority Order

1. Expansion of Quantitative Ecology (I) \$50,000

The Institute's research has concentrated on behavior, evolution, and qualitative ecology. This must be supplemented by a rapid and energetic program of more quantitative ecology. New competence must be acquired by the addition of two new scientists (\$32,000). One would be a mathematical, theoretical ecologist. He would develop the models and techniques for more sophisticated attacks upon time and energy problems, refine and coordinate some of the investigations currently in progress, and develop plans for additional projects. The research of the bureau also must be extended to new organisms and different features of the environment. For this, it will be necessary to acquire a plant ecologist. They will also be engaged in experimental research and a systematic survey in order to determine what effects the proposed sea level canal will have on adjacent biotas and the repercussions to nearby economies. Support funds of \$18,000 are required for travel, transportation services, supplies, and equipment.

2. Buildings and Grounds (II) \$41,000

Maintenance of buildings and grounds within the Smithsonian Tropical Research Institute complex of facilities is provided for entirely within its own direct budget (in contrast to most other components of the Smithsonian who receive services budgeted for by the Buildings Management Department). Approximately 40 percent of the STRI budget has been directed at the maintenance and operation of its facilities. Every

possible economy has been made. The number of workers necessary to maintain Barro Colorado Island station has been reduced to the minimum. The budget is inadequate, however, to keep pace with increasing deterioration of the physical facilities. Also, the use of these facilities is greatly increasing (research and study visits of varying duration numbered 289 in 1966, 468 in 1967, and 567 in 1968, with an increasing spread of facilities--Barro Colorado, Galeta, Naos Islands, plus mainland facilities). An efficient approach to maintenance would be to establish a small central labor pool, supervised by the island manager, in order to provide specialized maintenance and servicing, to replace deteriorated materials, to protect the present investment and facilities, and to continue their serviceability.

An increase of \$41,000 is requested. This would provide three additional laborers and \$33,000 in maintenance funds.

3. Additional Research Assistants and Technical Support (I) . . . \$45,000

The Institute has no research assistants. Three assistants are essential for the marine and terrestrial research programs. This investment would be paid back many times over in increased research output. In addition, a general strengthening of the present very limited clerical and library staff is required to serve both the resident staff and visiting researchers. Two clerk-typists and a full-time assistant librarian are absolutely essential. At the present time, much routine typing as well as other requisitioning and paperwork chores are being performed by the scientists themselves. In addition, staff scientists must often reach into their own pockets to pay for research materials such as film and printing costs. STRI has inherited over the years several ancient surplus trucks. These are disintegrating and, as a consequence, the research staff must often use its own private vehicles for field work. A replacement truck is essential. Staff increases total \$34,000. An additional \$11,000 are required for services, supplies, and equipment.

Total Program Increase	11 positions	<u>\$136,000</u>
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RADIATION BIOLOGY LABORATORY

Program Category	1968 Actual		1969 Estimate		1970 Estimate	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
I. Research and Scholarship ...	31	\$404,000	32	\$430,000	33	\$511,000

Program Increases in Priority Order

1. Executive Officer (I) \$25,000

An executive officer is urgently needed to relieve the director and assistant director of management duties of a general nature, such as laboratory space and equipment scheduling and supervision, liaison with other agencies on research management problems, budget and financial control, and preparation of routine administrative reports and statistical summaries. The research staff of the Laboratory consists of but 12 scientists, including the director, a plant physiologist, and assistant director, a physicist. Relief from these duties, which now occupy one-half of their time, will allow these two scientists to devote time and attention to long-range planning of the research program and coordination of the scientific activities of the Laboratory and to pursue original fundamental research in the specialized fields in which they are recognized authorities. This request includes the executive officer position (\$19,000) and funds for travel, supplies, and equipment (\$6,000).

2. Replacement of Obsolete and Worn Out Equipment (I) ... \$37,000

An increase to provide for replacement and amortization of scientific equipment, in the amount of \$37,000, is requested as essential. During the past 10 years, no funds have been available for this purpose. A recent detailed inventory indicates more than 50 percent of major equipment is more than seven years old. Such items as recording spectrophotometers, centrifuges, autoclaves, monochromators, and radiation detectors are directly necessary for research. It is more costly to continue to repair obsolete and inadequate equipment than to buy new in many instances. Most instruments and equipment are used, not in a single phase of a project, but rather by several or all of the interdisciplinary teams working on problems that are part of the overall program.

3. Computer Time (I) \$13,000

The solar radiation detection and acquisition system requires augmented computer time, in the amount of \$13,000, to handle the reduction of biological and solar radiation data and to make correlations between reduced data in solar measurement projects. The magnitude of the accumulation of data from continuous measurements in six wavebands daily from sunrise to sunset makes it impossible to reduce manually the acquired material, certainly not within a time reasonable for accomplishment of results. Even if the time factor for production of information was not critical, the cost of computer service is very appreciably less than would be technician time needed for manual reduction and correlation.

4. Scientific Supplies (I)..... \$6,000

Scientific supplies and materials are required in almost all of the Laboratory's research projects. An increase of \$6,000 is requested for the purchase of chemicals, expendable small equipment items, electronic parts, and radioisotopes. As an example, radioisotopes, costing as much as \$500 for a single experiment, are required for research on light-sensitive mechanisms of biological systems. It is not possible to examine or study these biochemical mechanisms by any other means. Prices of materials and supplies have risen substantially. The additional funds required do not, except in some few instances, represent increased amounts of purchases, but rather funds necessary to cover increased costs.

Total Program Increase 1 position \$81,000

RADIATION BIOLOGY LABORATORY RELOCATION OPERATING COSTS

Program Category	1968 <u>Actual</u>		1969 <u>Estimate</u>		1970 <u>Estimate</u>	
	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>
I. Research and Scholarship	0	0	0	0	5	\$407,000

Program Increases in Priority Order

Relocation Operating Costs (I)	\$407,000
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Relocation has been planned for a considerable period of time because of the inadequate and unsuitable quarters in the basement of the 115-year-old Smithsonian Institution Building. Also, in the renovation of this building it has been found necessary to use for other purposes a part of the space now occupied by the Laboratory, reducing materially its research space. Funds have been appropriated in fiscal years 1968 and 1969 in the Restoration and Renovation section of the Smithsonian budget for partial costs of the relocation. Blueprints and specifications have been completed, and an extensive and exhaustive search was carried out to locate appropriate quarters at an economical cost. A new laboratory building, providing approximately 50,000 square feet, has been located in Rockville, Maryland, and additional Restoration and Renovation funds are being requested to ready the building for occupancy.

This is a request for funds for basic operating costs of the new laboratory building.

- Rental funds of \$5.00 a square foot will be required (\$250,000).
- Substantial nonrecurring costs will be incurred to move the Laboratory to the new site. In addition to general moving, special contracts will be needed for crating and shipping precision instruments and equipment (\$35,000).
- Major utility costs will be incurred to maintain controlled-environment facilities including precise temperature control systems and electrical systems to operate humidity and light control devices (\$62,000).

- Mechanical and service personnel will be required to maintain, repair, and operate complex refrigeration and electrical equipment used in experiments. Two operating engineers, an electrician, and two refrigeration mechanics are essential (\$43,000).
- Basic services, supplies, and equipment must be provided to care for the space and make minor modifications to adapt to changing program requirements (\$17,000).

Total Program Increase 5 positions \$407,000

(\$35,000 non-recurring)

OFFICE OF ECOLOGY

Program Category	1968 Actual		1969 Estimate		1970 Estimate	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
I. Research and Scholarship	4	\$112,000	4	\$115,000	5	\$124,000
II. Curation and Use of the National Collections	1	13,000	1	17,000	2	48,000
Total	5	\$125,000	5	\$132,000	7	\$172,000

Program Increases in Priority Order

1. Chesapeake Bay Center for Field Biology (II) \$31,000

Since its establishment in 1965, the Chesapeake Bay Center for Field Biology has been supported largely by grant funds for the initial development of basic facilities. These funds will not be available in the future. Now that the Center has been made ready for occupancy and full-time research work, its basic operating and maintenance needs must be met with a continuing Federal appropriation if the facility is to be available and useful as a natural preserve for ecological studies. A resident manager is required to provide constant surveillance and protection, to manage the physical facilities, and to assist the Director (\$7,000). Funds for utilities, supplies, and equipment are also essential (\$24,000). Fiscal year 1970 is the critical, initial year for the provision of this minimum basic support without which it will be impossible to attract competent investigators and develop a productive program of ecological research and education.

2. International Program Support (I) \$9,000

The international program has developed to a level at which the Office cannot function effectively without strengthened administrative support in fiscal year 1970 to handle details and follow through on commitments. This involves the implementation of projects in Ceylon, Israel, Pakistan, Tunisia, and elsewhere, including the preparation of proposals for the funding of new projects; the maintenance of a continuing audit of funds on all international projects; planning and obtaining travel arrangements for scientists working in other countries; and various related duties.

One administrative assistant will contribute significantly to the effectiveness and efficiency of the Smithsonian Office of Ecology's international program. The position is particularly important since the efficient administration of an international program reflects credit upon the Smithsonian Institution and the United States.

Total Program Increase	2 positions	<u>\$40,000</u>
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OFFICE OF OCEANOGRAPHY AND LIMNOLOGY

Program Category	1968		1969		1970	
	Actual		Estimate		Estimate	
	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>
I. Research and Scholarship.....	18	\$267, 000	18	\$298, 000	33	\$498, 000

Program Increases in Priority Order

1. Improved Specimen Processing Capability (I)..... \$115, 000

The Smithsonian Oceanographic Sorting Center provides the base of the national program to identify and describe systematically the biological and geological state of the world's oceans and the changes that take place in them. The basic organization of the Center has been developed, and adequate space has been provided. The most urgent need is for manpower to meet the needs which have grown from the availability of the Center. Large collections have been received from both Federal and private organizations. Several million specimens remain to be sorted with major additional collections anticipated from new national and international expeditions. This work cannot be accomplished with the 15 sorters, packers, and supervisors now on the staff. To provide minimum competence for day-to-day operations of eliminating backlogs and sorting and distributing new collections, \$150, 000 are requested for the salaries and related expenses of 12 additional specialists, technicians, and a shipping clerk (\$96, 000) and for sorting and shipping supplies and equipment (\$19, 000).

2. Specimen Identification Service (I) \$85, 000

The present sorting activity normally separates specimens into general taxonomic categories before distributing them to specialists for more precise identification. If common groups of marine plants and animals could be identified to species prior to distributions, scientists could focus on doubtful groups, work on major classifications, and increase their scientific output. The addition of a senior identification specialist and two identification technicians (\$26, 000) would allow the establishment of such an identification Service Unit as an adjunct of the Sorting Center. Supporting funds of \$59, 000 for outfitting the unit also would be required.

Total Program Increase..... 15 positions \$200, 000

SPECIAL INTERDISCIPLINARY PROGRAMS

Several Smithsonian activities are of special interest because of their current and potential contributions to research and the support of research, both within and outside the Institution. These activities serve to provide information, organize research efforts, and coordinate and channel scientific investigations along the most productive lines.

Center for the Study of Man

Program Category	1968		1969		1970	
	Actual		Estimate		Estimate	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
I. Research and Scholarship	0	0	0	0	2	\$50, 000

Program Increases in Priority Order

Basic Staff Requirements (I)	\$50, 000
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The United States is a world leader in the field of urgent anthropology and the Smithsonian Institution can take a strong role in maintaining this leadership. There are few, if any other, institutions in the world which have the necessary status and can mobilize the world's anthropologists in a massive program to carry out urgent anthropological research on disappearing and rapidly changing cultures. The Smithsonian Institution is the only center for the discovery and communication of knowledge which can organize and direct the efforts of hundreds of experts in the field of American Indian studies so that a new and long overdue Handbook of North American Indians can be produced. Both of these programs must be started soon in order that proper documentation and analysis can be made. A program coordinator and a secretary (\$22, 000) and operating expenses (\$28, 000 for travel, communications, printing, services, supplies, and equipment). In addition to coordinating and administering the program, the program coordinator will actively seek grant support which will constitute the major part of the funding for the Center.

Total Program Increase 2 positions	<u>\$50, 000</u>
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The Center for Short-Lived Phenomena

<u>Program Category</u>	<u>1968 Actual</u>		<u>1969 Estimate</u>		<u>1970 Estimate</u>	
	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>
I. Research and Scholarship	0	0	0	0	0	\$50,000

Program Increases in Priority Order

Provision of Basic Services (I) \$50,000

The growth of the Center's services during its first year of operations and the response from the scientific community have been overwhelming. The number of correspondents has risen from 108 in 17 countries to 403 in 71 countries, including 35 Government agencies such as the National Aeronautics and Space Administration, the Department of Defense, Environmental Science Service Administration, United States Coast and Geodetic Survey, and the Department of Interior. In addition, the Center has coordinated four major expeditions and two follow-up expeditions. Eighty-five publications have resulted from the 32 major events handled by the Center.

The Center has been located at the Smithsonian Astrophysical Observatory in order to take advantage of the Observatory's extensive communication's facilities and network.

The number of events and the growth in reporting requirements have resulted in the Center now accounting for 40 percent of the traffic handled by the Communication Center. Similar heavy support is being provided by the Observatory's publication section in the way of event notification and information reports.

This support assistance has been provided on a stop-gap basis in order to get the Center's operations underway. Support cannot continue and grow, however, without jeopardizing the Observatory's own programs. The Center requires basic core support for its operating expenses. A total of \$50,000 is requested for commercial communications services (\$15,000), printing and reproduction (\$27,000), computer time to process event notices (\$2,000), and supplies and equipment (\$6,000).

The Smithsonian is seeking support from user organizations in order that, to the maximum extent possible, the Center can be funded by those receiving its services.

Total Program Increase 0 Position \$50,000

Science Information Exchange

Program Category	1968		1969		1970	
	Actual		Estimate		Estimate	
	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>
I. Research and Scholarship	0	0	0	0	0	\$100, 000

Program Increases in Priority Order

Registry of Anthropological Research (I) \$100, 000

This project is designed to collect, identify, store, and retrieve information on both the individuals and current research carried out by anthropologists on a worldwide basis (approximately 5, 500 scientists). In addition to the collection of Notices of Research Projects on work being carried out by these scientists, it is planned to collect additional data elements on each of the members such that their specific areas of expertise can be analyzed and identified. Knowledge collected on expertise would include geographical areas, topical interest, and language capability all described according to the categories used by associates in current anthropology. Design of the system is such that it could provide either specific answers to specific requests for information or provide information in a form suitable for directory production, at periodic intervals. The value of such a system for obtaining comprehensive data is readily apparent. This approach could serve as a model for extension into other areas of research where geography, languages, and topical interest are of major importance to research managers and scientists. In addition, this project relates directly to Smithsonian efforts in urgent anthropology.

Funding of \$100,000 is requested for systems studies and design, computer services, and related costs.

Total Program Increase 0 Position \$100, 000

Council on Communication

<u>Program Category</u>	<u>1968 Actual</u>		<u>1969 Estimate</u>		<u>1970 Estimate</u>	
	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>
I. Research and Scholarship	0	0	0	0	3	\$44,000

Program Increases in Priority Order

Develop Understanding of Communications Technology (I) . . .	\$44,000
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There is an immediate need for the development of a clearer national understanding of the impact of new communications technology on social behavior and on political and economic decision-making. A Council on Communication, consisting of national leaders in science, humanities, education, Government, and industry with demonstrated understanding and involvement in a wide array of communication enterprises will identify the more important issues, sponsor studies and experiments to develop understanding of the issues, and recommend desirable policies aimed at more adequate communication to the Congress, Executive departments, the private sector, and the public. A small staff is requested to prepare studies and working documents for the Council's deliberation and to meet the administrative needs of the Council. The request is for an executive director, an assistant to the director, and a secretary (\$35,000), funding of Council travel expenses of \$6,000, and staff travel, supplies, and equipment (\$3,000).

Total Program Increase	3 positions	<u>\$44,000</u>
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SMITHSONIAN RESEARCH AWARDS PROGRAM

Program Category	1968		1969		1970	
	Actual		Estimate		Estimate	
	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>
I. Research and Scholarship....	0	\$400,000	0	\$400,000	0	\$400,000

Program Increase in Priority Order

No increase requested for fiscal year 1970.

OFFICE OF ACADEMIC PROGRAMS

Program Category	1968		1969		1970	
	Actual		Estimate		Estimate	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
I. Research and Scholarship...	5	\$340,000	7	\$270,000	7	\$375,000
III. Education of the Public....	7	100,000	7	100,000	9	115,000
Total	12	\$440,000	14	\$370,000	16	\$490,000

Program Increases in Priority Order

I. Higher Education and Research Training (I)..... \$105,000

The Smithsonian's effectiveness as an auxiliary academic establishment is being increased by restricting postdoctoral visiting research appointments to junior investigators (within five years of the Ph. D.) still in need of research training, and by concentrating such appointments in subject matter areas where they will reinforce other ongoing activities in graduate education. Applicants for visiting research appointments will be selected by professional-level committees of staff members appointed in each of seven program areas. The committees will also seek to arrange associated formal instruction in the form of seminars and tutorials. The program areas represent disciplines of Smithsonian research, listed as follows (in descending order of numbers of associated professional staff): physical sciences, evolutionary and systematic biology, American studies, environmental biology, anthropology, history of science and technology, tropical biology (and in the future, history of art and museum studies). This scheme of organization by disciplines will enable universities across the nation to recognize opportunities for cooperative study more readily and bring together students with shared interests into groups which may serve as nuclei for the further development of formal instruction.

In response to sharply increasing demand, the Institution requests that funds for full-time visiting research appointments be increased by \$70, 000 to add three additional junior postdoctoral appointments (averaging \$14, 000 with allowances) and seven additional graduate fellowships (averaging \$4, 000). University requests for cooperative programs are made with increasing frequency, indicating that Smithsonian activities are recognized as noncompetitive and of high quality. Support for students and research training is the primary component of these cooperative efforts. For academic year 1968-69, the Institution could accept only 14 percent of postdoctoral applications and 29 percent of those from graduate students. The Smithsonian acknowledges its obligation to train scholars and members of university faculties in its fields of competence. Its capacity is, in several cases, unique in the nation, as in historical and anthropological studies of material culture and in many areas of descriptive natural science. The Institution's inability to respond to rising demand is viewed with concern, reinforced by the fact that the Smithsonian's capacity to increase academic capability is not being fully used.

In June 1968, a comprehensive educational activities inventory determined that members of the professional staff consider it essential to devote a higher percentage of their time to higher education and research training. They estimate a capacity to supervise the full-time equivalent of 130 research trainees and to offer the equivalent of 200 credit hours of tutorials, as well as a limited number of formal seminars (between six and ten intensive seminars of one term's duration). In academic year 1967-68, the Smithsonian's academic programs, including students and others not on stipends paid from funds appropriated to the Institution, approximated one-half of capacity for supervision, one-third of capacity for tutorial instruction, and several survey courses but no intensive seminars. In order to increase the use of its educational capacity, the Smithsonian proposes to undertake a number of cooperative fellowships, to be offered jointly with cooperating universities, for students who will spend one term for full academic credit at the Institution, as well as the adjoining summer months, participating in supervised research, tutorials, and two seminars in each

discipline-based program area. A small beginning with universities where interest has already been expressed could be made with the requested sum of \$35,000, which would permit roughly 18 such fellowships to be awarded. When added to the groups of postdoctoral associates and Ph. D. candidates, even this small number of graduate students would form an adequate nucleus for expanded instructional efforts in most, and perhaps all, of the program areas. Once this critical mass is attained further participation by neighboring universities is expected to follow, resulting in a very considerable overall expansion in educational benefits from only a small increment in direct program costs.

2. Primary School Visit Program (III) \$15,000

The Institution requires a coordinator of volunteers and a clerk-typist in the Division of Elementary and Secondary Education. Approved teaching materials are now in readiness and 110 volunteer docents have been trained to make 10 major halls available for escorted class visits. The coordination and detail necessary for recruitment, training, and assignment at this level of activity require a full-time staff for these purposes. Prior to 1967, these arrangements were made by one civic group only, and entirely on a volunteer basis, with the result that the volunteer corps could not be built up beyond a level of 30 or so docents. In an attempt to meet rising demand, the Smithsonian, aided by a two-year grant from the Junior League of Washington, established on a trial basis a special staff assignment to coordinate volunteer teaching, which reached a new level of 46 docents, 800 class visits, and 29,000 pupils. In the experimental period, now drawing to a close, the Institution succeeded in recruiting docents from a wide variety of additional community organizations, in dramatically increased numbers, with the result that the Smithsonian can now respond adequately to the demand of nearby school systems for curriculum-related educational museum visits. The demonstration grant cannot be continued into fiscal year 1970 and in any event the Junior League of Washington is now supplying only one-third of the docents from its own membership. The two positions requested will make a material contribution to mobilizing museum resources for the enrichment of education.

Total Program Increase 2 positions \$120,000

OFFICE OF INTERNATIONAL ACTIVITIES

Program Category	1968		1969		1970	
	Actual		Estimate		Estimate	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
I. Research and Scholarship.....	6	\$107,000	6	\$105,000	9	\$144,000

Program Increases in Priority Order

1. International Scientific Support (I).....	3	\$30,000
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The rapid technological growth since World War II has resulted in increasing the emphasis on international cooperation as part of our national science policy. The scientific establishment of any nation can no longer afford to operate independently of what is being done in other countries. The success of the International Geophysical Year led to the even more ambitious International Biological Program, that calls for a study on a worldwide basis of those aspects of our environment and behavior which have a direct bearing on our very survival as a species. This Office plays a significant role in promoting the nation's international scientific effort. Furthermore, the Office has been delegated to administrate the new Iran-United States Scientific Cooperation Agreement, signed by the President and the Shah last May. To fulfill its obligations under these and other similar efforts, the Office must seek an increase in funding. The most pressing requirements are for administrative and clerical support in the Director's office. To defer such action would result in considerable loss of American international contributions. From a strictly scientific point of view, failure to carry out such international agreements as those described would result in the loss of scientific benefits to the United States. There is high priority for an assistant to the director, a secretary, and funds for office support.

The duties of the director have expanded particularly in the field of international scientific activities, including involvement with the Center for Short-Lived Phenomena, the Iran-USA Scientific Cooperation Agreement, the Organization for Tropical Studies, etc. Both positions are essential to the performance of the Office. In addition, the growth in the number of Foreign Currency grants has doubled the workload of the existing staff. An additional grants technical assistant is required.

2. Advisory Committee Support (I)..... \$9,000

An increased travel budget is necessary to cover the meeting costs of three new Advisory Committees (Biological Sciences, Earth and Space Sciences, and History and Art), which will be meeting twice annually by fiscal 1970. Heretofore, only one Committee (Archeology and Anthropology) met twice yearly. Estimated costs for holding each meeting run about \$1,000, depending on where the members of the Committee are located. The distinguished members of these committees give their time to the Smithsonian Institution without cost and are reimbursed only for their travel and expenses. In fact, it is mainly through such economies as this that the Foreign Currency Program has been able to keep the dollar costs of its operations at only about 2.5 percent of the total amount administered.

Total Program Increase..... 3 positions \$39,000

INTERNATIONAL EXCHANGE SERVICE

Program Category	1968 Actual		1969 Estimate		1970 Estimate	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
III. Education of the Public	9	\$ 107,000	9	\$ 99,000	10	\$117,000

Program Increases in Priority Order

Development of Information Transmission Techniques (III) \$ 18,000

An information technology specialist is urgently needed to investigate new methods, such as micro-printing or micro-transparencies, for the transmission of official United States publications to depository libraries in other countries. The volume of United States publications shipped abroad has increased to the point where their proper storage and accessibility in foreign libraries have become very difficult. New reduction and retrieval systems are needed. Compact information storage and transmission devices can benefit the International Exchange Service as much as the foreign libraries since substantial savings can be made through the elimination of bulk shipping freight charges. A specialist who can establish new systems and gain the acceptance of foreign libraries would bring real economies over the years to the operations of the International Exchange Service and produce lasting benefits to participating libraries.

Total Program Increase 1 position	<u><u>\$ 18,000</u></u>
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DIVISION OF PERFORMING ARTS

Program Category	1968		1969		1970	
	Actual		Estimate		Estimate	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
III. Education of the Public....	5	\$ 71, 000	7	\$ 91, 000	10	\$ 151, 000

Program Increases in Priority Order

Mall Programs (III)\$ 60, 000

Enthusiastic public attendance and participation in various performances, demonstrations, and special events have testified to the value of adding this new dimension to traditional museum visiting. The performing arts has been used successfully as a mechanism for teaching by presenting living exhibits of American artifacts and craftsmen's skills. Over 500, 000 persons viewed, listened, and learned at the Festival of American Folklife held during the several-day Fourth of July celebration in 1968. The planned American College Drama Festival to be held late in fiscal year 1969 will increase public awareness and support for the arts. An increase in staff and support funds must be provided to establish a sound, scholarly foundation for authentic programs, to locate and obtain native craftsmen, performers, and other participants, and to produce presentations of high technical and artistic quality. Funds are requested for a program director, a technical assistant, and a clerk-typist (\$29, 000) and travel, transportation, communication, design and fabrication services, and production supplies and materials (\$31, 000) associated with the planning and presentation of performances.

Total Program Increase.....3 positions \$60, 000

OFFICE OF PUBLIC AFFAIRS

Program Category	1968		1969		1970	
	Actual		Estimate		Estimate	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
III. Education of the Public	12	\$138,000	12	\$144,000	15	\$209,000

Program Increases in Priority Order

1. Visitor Orientation Films (III) \$50,000

In order to fill a notable gap in orientation services to the millions of visitors to the Institution each year, it is proposed to provide introductory films on the buildings and component research and museum activities of the Smithsonian as is done at other major facilities maintained and operated for the general public, such as National Park Service parks, battlefield areas and historic sites, museums elsewhere in the United States and overseas, and such tourist attractions as Mystic Seaport and Williamsburg, Virginia. These films would be shown regularly to the public in each building. A 10-year development program is planned with at least one visitors' orientation film being produced each year and updatings as required on the older films. Without such service, the Smithsonian cannot meet its full potential either as a tourist attraction or as an institution concerned with popular education in art, science, and history. This program cannot be accomplished by the existing staff and resources of the Office of Public Affairs. The increase provides for a film production assistant and a clerk-typist (\$14,000) and funds for services, supplies, and equipment (\$36,000).

2. Science Information Program (III) \$15,000

At the present time the Smithsonian is in the anomalous position of a very major scientific research and educational organization with almost no identifiable communication or information program with the general public or specialized groups in many scientific areas. Smithsonian programs

in oceanography, conservation, astrophysics, space science and technology, anthropology, and archeology are among those for which the Office receives requests for science information from all sectors of the public. This request is for a science writer (\$15,000).

Total Program Increase	3 positions	<u>\$ 65,000</u>
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ADMINISTRATIVE AND TECHNICAL SUPPORT ACTIVITIES

Program Category	1968 Actual		1969 Estimate		1970 Estimate	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
I. Research and Scholarship	30	\$620, 000	30	\$639, 000	35	\$805, 000
II. Curation and Use of the National Collections	38	482, 000	38	467, 000	50	636, 000
III. Education of the Public	21	267, 000	21	276, 000	24	313, 000
IV. Administrative and Central Services .	<u>124</u>	<u>1, 795, 000</u>	<u>129</u>	<u>1, 831, 000</u>	<u>152</u>	<u>2, 149, 000</u>
Total	213	\$3, 164, 000	218	\$3, 213, 000	261	\$3, 903, 000

Program Increases in Priority Order

Increases in this area cover a wide range of activity within nine Smithsonian organizational units. In sum, these units are responsible for finances, computer operations, libraries, personnel, publications, photographic services, procurement, management support, and program direction. Requested increases in priority order within the specific units are itemized below, and fall largely within the broad program category designed as "Administrative and Central Services."

In the aggregate, increases requested for these areas are closely tied to the program fluctuations of other units. For example, an increase in the workload of the Smithsonian Press is indicative of increased research output of the various museum departments. Additional library needs are the result of increased curatorial and exhibit preparation activity. Increases in accounting activity and central administration reflect the growth in necessary management duties associated with Institutional growth. To maintain its quality performance in administrative and technical support areas, an increase in manpower (43 positions) and an increase in funds (\$690, 000) is requested for fiscal year 1970. About 37 percent of this expenditure increase is related to priority needs in the Libraries and Press. The remaining amount is distributed among other important support activities.

Office of the Treasurer

Program Category	1968 Actual		1969 Estimate		1970 Estimate	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
IV. Administrative and Central Services.	31	\$460, 000	31	\$509, 000	34	\$574, 000
1. Information Control (IV)						\$10, 000
Increasing complexity of withholdings structure, the growth in employment, and greater flow of voucher transactions require two additional employees (accounts maintenance clerk, payroll clerk).						
2. Information Development (IV)						\$15, 000
The purchase of additional computer machine time is necessary for the production of management reports.						
3. Workmens Compensation Insurance (IV)						\$2, 000
The Department of Labor has requested increased Smithsonian reimbursement to Employees Compensation Fund.						
4. Information Control (IV)						\$13, 000
The purchase of equipment capable of producing a punched paper tape of transaction vouchers, which can be fed directly into the Institution-wide automatic data processing system would eliminate keypunching duplication in the computer center and result in faster and better accounting control. An operator for this equipment is required.						
5. Information Distribution (IV)						\$25, 000
Postal cost increases resulting from a higher volume of mail would be partially covered by this additional funding.						
Total Program Increase	3 positions					<u>\$65, 000</u>

Information Systems Division

Program Category	1968		1969		1970	
	Actual		Estimate		Estimate	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
I. Research and Scholarship	1	\$16,000	1	\$18,000	2	\$36,000
II. Curation and Use of the National Collections	3	54,000	3	48,000	7	89,000
III. Education of the Public	0	7,000	0	4,000	1	24,000
IV. Administrative and Central Services. <u>4</u>	<u>4</u>	<u>60,000</u>	<u>4</u>	<u>55,000</u>	<u>5</u>	<u>60,000</u>
Total	8	\$137,000	8	\$125,000	15	\$209,000

1. Information Retrieval (II) \$41,000

The Smithsonian is correcting shortcomings in information dissemination by developing effective computerized systems for the storage and retrieval of information associated with vast quantities of collection-related data. In keeping with the national interest of making scientific and historical knowledge available, a request is made for funding of four programmer-analyst positions. These analysts will expand the staff of the Information Systems Division in the area where it has already demonstrated its competence by pioneering in the field of museum information processing. Twenty-eight museums and universities in the United States and abroad have requested details of our information systems. While well qualified to continue this activity, we are seriously impeded by inadequate staffing.

2. Scientific Computation (I) 18,000

The Information Systems Division must correct shortcomings in mathematical computation capabilities by providing necessary programming and computer time to support work performed by Smithsonian scientists. These scientists have a strong need for applying mathematical and statistical techniques to their research. Conventional approaches using hand calculators often discourage even the most ambitious due to excessive amount of time required to perform even simple analyses. Man-months of laborious manual calculation can be reduced to a matter

of minutes on the computer. To continue with the development of scientific computation, it is requested that funding be provided to hire one programmer-analyst and to furnish computer time. Efforts will be primarily directed to develop mathematical algorithms and statistical methods to validate and give credence to scientific investigations and subsequent publications.

3. Assistance to Other Museums (III) \$20,000

The Smithsonian Institution, as a pioneer in the field of museum information processing, takes an active role in assisting other museums with their information efforts. This is a positive contribution to the Smithsonian's National Museum Act responsibilities. Assistance is especially needed by the small museums which cannot provide their own expertise for planning and developing computerized information systems. This exchange of design criteria for information systems is extremely important in context of national goals. Smithsonian development of a "Global Reference Code" is one concrete offshoot of this activity. This code could be employed throughout the United States geological community at much savings through the avoidance of redundant development of similar retrieval codes. Funding for a senior programming analyst-museology, supported with travel funds, is needed if this assistance is to continue. The pressures of in-house computer needs are absorbing an increasing allocation of existing personnel.

4. Information Assembly (IV) \$5,000

The Smithsonian's digital computer processes data on a round-the-clock basis, six days per week. There is a serious need for increasing our capability to organize and prepare data for speedier input to the machine. To relieve this situation it is important that a data clerk for input/output preparation and control be funded in 1970.

Total Program Increase 7 positions \$84,000

Smithsonian Institution Libraries

<u>Program Category</u>	<u>1968 Actual</u>		<u>1969 Estimate</u>		<u>1970 Estimate</u>	
	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>
I. Research and Scholarship	10	\$127, 000	10	\$145, 000	10	\$160, 000
II. Curation and Use of the National Collections	31	396, 000	31	384, 000	38	506, 000
III. Education of the Public	3	23, 000	3	27, 000	3	27, 000
Total	44	\$546, 000	44	\$556, 000	5	\$693, 000

1. Administration (II) \$22, 000

There is a serious need to strengthen the Library administration in fiscal year 1970. A top-level manager is needed to oversee the systemization of the entire library effort, to provide strong management controls, and to develop selection policy criteria. Funding is requested for an assistant director and a secretary.

2. Systems Study (I) \$15, 000

Continued development of basic systems study capability and application of ADP techniques to Library functions is a sine-qua-non for rendering effective and efficient service and will result in long-term increased productivity. Since routines in research libraries are necessarily many and interrelated, systems analysis should be a constant function of library operations. By developing better methods, increases to staffing can be minimized.

3. Acquisitions (II) \$68, 000

Increased costs of periodicals, books, and other materials, as well as a heavy backlog of purchase needs will require a minimal funding increase in fiscal year 1970. Approximately \$45,000 of the requested amount are necessary to restore a fiscal year 1969 decrease in the purchase budget. The balance will be used to absorb increased costs of materials and purchase of the most urgently needed serials and monographs.

4. Information and Material Processing (II) \$25,000

The organization, input, and provision of new information through the technical processes of the library on a reasonably current basis is a basic and chronic need. Funding for three additional catalogers and an acquisitions librarian to handle an estimated 10,000 additional items a year is of high priority in fiscal year 1970.

5. Messenger and Motor Vehicle Usage (II) \$7,000

Improved physical access to the collections and increasing the service capacity of the libraries' central reference and circulation services are essential. There is a high priority need for a messenger and vehicle to give the libraries the ability to borrow and return quickly to other libraries scarce, restricted, and heavily used materials which are unavailable for loan unless such service is provided by the borrower. Book funds and manhours will be saved.

Total Program Increase 7 positions \$137,000

Management Support

Program Category	1968 Actual		1969 Estimate		1970 Estimate	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
I. Research and Scholarship ...	0	0	0	0	1	\$15,000
II. Curation and Use of the National Collections	4	\$32,000	4	\$35,000	5	41,000
IV. Administrative and Central Services. 27		<u>310,000</u>	<u>29</u>	<u>277,000</u>	<u>34</u>	<u>319,000</u>
Total	31	\$342,000	33	\$312,000	40	\$375,000

1. Information Dissemination (IV) \$20,000

There is a need for the acquisition of labor-saving equipment (folding and punching machines) within the Duplicating Section. In addition, two helper-type positions are urgently needed to free professional employees for more skilled work.

2. Museum Assistance (II) \$6,000

An expansion in the Smithsonian Archives' micro-reproduction facilities is necessary to handle the increasing requests from State and local museums, libraries, and universities for microfilm copies of its unique collections of manuscripts and printed materials documenting the history of American science in the 19th century and to create security copies of these documents. Funding is requested for equipment and operator.

3. Information Processing (I) \$15,000

To enable the purchase of computer time and to develop scientific and historical information systems needed for archival management, funding is requested for additional data processing and an input clerk.

4. Management Control (IV) \$16,000

Two printing activities are to be merged, the Institution's Print Shop and the Duplicating Section. A printing manager is needed to provide administrative and technical supervision. A clerk-typist is necessary for processing a backlog of requisitions, for ordering supplies, and arranging for delivery of completed work.

5. Travel Services (IV) \$6,000

The Travel Services Office relieves all the other offices of functions in travel. This centralization makes it possible to create a pool of expertise in the Smithsonian to be available to all. An additional travel clerk is needed to assist in the work.

Total Program Increase 7 positions \$63,000

Office of Personnel and Management Resources

Program Category	1968 Actual		1969 Estimate		1970 Estimate	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
IV. Administrative and Central Services	18	\$252,000	18	\$252,000	23	\$288,000

1. Employee Processing (IV) \$12,000

The most critical need in the personnel office is for additional support to meet the extraordinary daily workload of correspondence, telephone calls, interviewing, placement, and records processing. Two additional clerks are absolutely necessary.

2. Health Services (IV) \$24,000

Two health units in the museums are presently understaffed to meet the staff needs and to provide emergency first-aid to visitors. In addition, the opening of the Fine Arts and Portrait Galleries building in 1969 requires that an additional health unit be staffed and operated. Funding to provide for three nurses is requested for 1970.

Total Program Increase 5 positions \$36,000

Office of the Secretary

Program Category	1968 Actual		1969 Estimate		1970 Estimate	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
IV. Administrative and Central Services	23	\$347,000	26	\$375,000	33	\$488,000

1. Public Service Development (IV) \$70,000

It is necessary to establish a new Assistant Secretary's office responsible for the administration and coordination of the public service activities of the Smithsonian. This is a requested increase of four positions.

2. Development of History and Art Programs (IV) \$30,000

To continue the development and management of the history and art programs of the Institution, an additional research assistant and a secretary are necessary.

3. Data Storage and Retrieval (IV) \$5,000

There is a particular need to store and retrieve internal management information related to the science areas within the Smithsonian. Funds will be used for data processing.

4. Gift Coordination (IV) \$8,000

Communications on coordination concerning gifts and donations to the Institution have increased rapidly over the last year. A secretary is needed to handle this growing workload.

Total Program Increase 7 positions \$113,000

Photographic Services Division

Program Category	1968 Actual		1969 Estimate		1970 Estimate	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
III. Education of the Public	18	\$200,000	18	\$208,000	20	\$225,000

Photographic Services and Support Activity (III) \$17,000

There is a heavy backlog of museum processing activity which requires semiskilled manpower, darkroom equipment and additional commercial services. Funding is requested for two technicians (\$10,000), equipment (\$4,000), and services (\$3,000).

Total Program Increase 2 positions \$17,000

Smithsonian Institution Press

Program Category	1968 Actual		1969 Estimate		1970 Estimate	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
I. Research and Scholarship	19	\$477,000	19	\$476,000	22	\$594,000
III. Education of the Public	0	37,000	0	37,000	0	37,000
IV. Administrative and Central Services	1	80,000	1	80,000	1	80,000
Total	20	\$594,000	20	\$593,000	23	\$711,000

1. Manuscript Publication (I) \$96, 000

The most critical need of the Press is for printing funds to eliminate a large backlog of research manuscripts as of the end of fiscal year 1969 and to cope with a substantial forecasted increase in submissions. The combined 1968-69 backlog will amount to approximately 7,600 pages. There was no increase in the fiscal year 1969 budget for printing funds. If no additional funds are provided in fiscal year 1970, the compounded backlog by the end of that year will amount to approximately 14,000 pages. At present funding levels, the Press is servicing only about 50% of the printing needs of the Smithsonian scientists and historians.

2. Publications Preparation (I) \$12, 000

The increased manuscript workload has forced Press professional staff to perform many routine clerical tasks associated with material preparation. The current ratio of professional to clerical staff is 7:1. Two additional typing personnel are urgently needed.

3. Publications Distribution (I) \$10, 000

An increasing number of titles available for distribution and a rising volume of requests for publications from libraries and the general public require an additional clerk to handle distribution.

Total Program Increase 3 positions \$118, 000

Supply Division

Program Category	1968 Actual		1969 Estimate		1970 Estimate	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
IV. Administrative and Central Services.	20	\$286, 000	20	\$283, 000	22	\$340, 000

1. Purchase of Supplies (IV) \$44, 000

The Supply purchase fund providing for office, workshop, and laboratory supplies for Smithsonian-wide use by research, exhibit, and educational programs has been woefully inadequate for better than two years. The amount requested is the minimum needed to restore basic inventories; to service forecasted requirements; and to avoid uneconomical small-lot purchases.

2. Purchase of Supplies (IV) \$13,000

The general expansion of Smithsonian activities has rapidly outpaced the growth of the Supply Division's procurement capabilities. An additional clerk-typist and a stockroom clerk are needed for the processing of purchasing transactions and for providing prompt delivery services to various units, many located off the Mall.

Total Program Increase 2 positions \$57,000

BUILDINGS MANAGEMENT DEPARTMENT

Program Category	1968 <u>Actual</u>		1969 <u>Estimate</u>		1970 <u>Estimate</u>	
	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>
V. Buildings Manage- ment	799	\$7,099,000	827	\$7,749,000	893	\$8,255,000

Program Increases in Priority Order

1. Protection and Maintenance of Fine Arts and
Portrait Galleries (V) \$287,000

The National Collection of Fine Arts, housed in the newly renovated Fine Arts and Portrait Galleries building, was opened to the public in May 1968. The present Buildings Management staff is adequate only to provide minimum support services for the National Collection of Fine Arts offices, laboratory areas, and the galleries which have been completed, furnished, and opened to the public, and for the National Portrait Gallery nonpublic areas. This existing staff will be supplemented by other staff temporarily reassigned from other important areas in order to permit the opening of the National Portrait Gallery exhibition areas in October 1968 as scheduled. This increase requested will provide minimum support services to the National Portrait Gallery public areas, give similar services to the National Collection of Fine Arts when its remaining exhibition areas are opened, and restore personnel to originally assigned duties elsewhere in the Institution. Additional funds are also requested for increased communications and utilities; the installation and service charges for fire, security, and detection systems; supplies and materials; and a nominal amount for the purchase of equipment. This building will become fully operational over a period of several years as additional galleries are completed, furnished, and opened to the public. Although the Smithsonian is exploring further visiting hour reductions to save staff, an increase of 40 positions and \$287,000 is a high priority need.

2. Utility and Other Mandatory Costs (V) \$83,000

In fiscal year 1969, the Smithsonian Institution will spend \$1,185,000 for utilities and detection systems. An increase of \$50,000 is required to provide for increased costs for steam, electricity, and communications. The cost of steam per pound has increased 9.6 percent over the past fiscal year. This amounts to \$29,000. An increase of \$7,000 is also required

for the Federal Telecommunications System (FTS) intercity telephone service in fiscal 1970, based on a recent notice from the General Services Administration. An increase of \$14,000 will be required for operation of additional air-conditioning equipment to be installed during the restoration and renovation of the Smithsonian Institution building. An increase of \$33,000 is also requested for the installation and service charges for fire, security, and detection systems in the Renwick Gallery and other building areas now deficient in protection systems.

3. Protection, Museum of History and Technology (V) \$43,000

An increase of eight guard positions and \$43,000 is essential for the continuous security coverage of 37 regular established guard posts in over 300,000 square feet of exhibit area including building entrances, special security posts, traffic control, and central security control room.

At the present time, men assigned to posts must also handle relief assignments. This has proven unsatisfactory because it does not provide for continuous security coverage during the period the building is open to the public. The shape of building spaces and the design of exhibit halls frequently make it impossible for a guard to give acceptable protection to a large square-footage area. In addition, many exhibits are being designed to permit the public to view the objects without the intrusion of protective devices, such as enclosures and cases. This increases security problems. The additional guards will also provide increased protection and assistance for the five million visitors who come to this Museum each year.

4. Protection and Maintenance, Museum of Natural History (V). \$40,000

The Museum of Natural History, containing over 1-1/4 million square feet of floor space, is the largest and most complex of all Smithsonian Institution buildings. There are critical deficiencies in the number of personnel for the operation and security of this building. There are not enough guards to man the 45 guard posts (each guard post requires up to five guards for three-shift protection, seven days a week), including public areas and exhibit halls; and insufficient staff to operate two checkrooms which are a convenience to the visitors as well as a vital part of the security system. An increase of five guards, and \$26,000 is needed for the Egyptian Archeology Hall, the Physical Anthropology Hall, and an additional Egyptian Archeology Hall which will open in fiscal year 1970.

Three checkroom attendants and \$14,000 are requested for the checkrooms located at the Constitution Avenue and Madison Drive entrances. These attendants will provide checkroom services to the visitors, and also assist in preventing unauthorized removal of objects by checking all parcels, portfolios, and other containers carried into the building.

5. Protection, Silver Hill Facility (V) \$6,000

The Silver Hill facility includes 22 buildings on approximately 21 acres of land. Here the Smithsonian houses collections of aircraft, memorabilia, objects of science, technology, art, and natural history, and includes workshops to rehabilitate historic and irreplaceable aircraft and spacecraft. Although the area is fenced, there are several acres of open storage for aircraft and vehicles which are an attraction for children and souvenir seekers. To give adequate protection against vandalism, it is necessary to provide one additional guard to completely man the minimum number of posts to maintain a 24-hour patrol of the buildings and grounds.

6. Maintenance, Building Services Division--South Group (V). \$29,000

This group provides general custodial and laboring services for the Smithsonian and other buildings on the south side of the Mall, plus Barney Studio House, 24th Street, Lamont Street, Silver Hill facility, Oceanographic Sorting Center, Belmont, and the Chesapeake Bay Center for Field Biology. An increase of five laborers is required to handle the increasing workload for moving museum objects in buildings, and for cleaning laboratories, additional offices, and work-rooms. An assistant building manager is necessary to provide improved management of building operations.

7. Maintenance, Smithsonian Institution Building (V) \$8,000

The restoration and renovation of this building was started in fiscal 1969 and will be completed in the fall of 1970. It is anticipated that the newly installed air conditioning plant serving the entire Smithsonian Institution building will be operational for the last six months of fiscal 1970. To operate, maintain, and service this large modern system on a 24-hour, seven-day-a-week basis, will require two additional trained operating engineers and \$8,000 for a six-month-period.

8. Safety Management Office (V) \$10,000

An increase of one administrative assistant is required to strengthen the present three-man staff of this office for continued development and implementation of programs reducing injuries to employees and visitors. The following programs require constant effort in programming and implementation: Employee safety; public safety; fire prevention; radiation safety; pesticides control; motor vehicle and driver safety programs; property damage control; tort claims investigations; hazard detection and control. The workload of this office includes development of statistics, conducting accident prevention activities, providing investigative services, development of training and educational functions in accident, fire protection and safety work.

There has been over a 50 percent reduction in the disabling work injury frequency rate since the establishment of the Safety Management Office and an active program in support of the President's Mission SAFETY-70 Program.

Total Program Increase 66 positions \$506,000

SMITHSONIAN INSTITUTION
MUSEUM PROGRAMS AND RELATED RESEARCH
(SPECIAL FOREIGN CURRENCY PROGRAM)

1968 Appropriation	\$2, 316, 000
1969 Appropriation	\$2, 316, 000
1970 Estimate	\$4, 500, 000

An appropriation of \$4, 500, 000 in foreign currencies, which are determined by the Treasury Department to be excess to the needs of the United States and other foreign currencies which may become available under provisions of Public Law 90-436, is requested for a program of grants to United States institutions for essential field research in archeology and related disciplines, systematic and environmental biology, astrophysics, and other fields of Smithsonian competence.

The requested increase of \$2, 184, 000 in foreign currencies is to be devoted to strengthening the research programs of United States universities, museums, and other institutions of higher learning. The request is based on the growing total of ongoing research commitments, the unabated flow of new research proposals, and the increasing opportunities for research contributing to national programs.

In this time of budgetary restraint, however, the total amount requested for fiscal year 1970 has been reduced by the equivalent of \$1, 500, 000 below the request submitted for fiscal year 1969. The reduction has been possible because of a rigorous review of program objectives facilitating discrimination between approved projects which should go forward now and those which might be postponed. It is estimated that program needs can be limited to the new \$4, 500, 000 level. Ideally, an appropriation of about \$6, 000, 000 in foreign currencies would be adequate to meet these needs in subsequent years.

Funds are requested for the following programs:

	Fiscal Year 1968 <u>Appropriation</u>	Fiscal Year 1969 <u>Appropriation</u>	Fiscal Year 1970 <u>Estimate</u>
Archeology and Related Disciplines.....	\$1, 105, 000	\$1, 105, 000	\$2, 000, 000
Systematic and Environ- mental Biology	1, 016, 000	1, 046, 000	2, 000, 000
Museum Programs.....	40, 000	40, 000	75, 000
Astrophysics.....	145, 000	95, 000	380, 000
International Exchange Service.....	...	15, 000	15, 000
Grant Administration ...	<u>10, 000</u>	<u>15, 000</u>	<u>30, 000</u>
Total.....	\$2, 316, 000	\$2, 316, 000	\$4, 500, 000
Less Fiscal Year 1969 Appropriation.....			<u>2, 316, 000</u>
Fiscal Year 1970 increase.....			<u>\$2, 184, 000</u>

The requested increase in the Smithsonian Special Foreign Currency Program appropriation seeks to bring the supply of these funds more in the line with the demand from United States research institutions. The increase is justified because an expanded program has been authorized and yet the level of funding has remained stationary for three of the four years of the Program's existence. At the invitation of the Department of State, the Smithsonian took over the program of grants in "excess" foreign currencies for archeological research which had developed under State Department auspices as the principal source of field research funding of American archeology abroad. Just as this initial approach to the Smithsonian was based on the Institution's long leadership in archeological research, Congressional approval of expansion of the program first into systematic and environmental biology and then into astrophysics was based on Smithsonian leadership in these fields. The result, however, is that the fiscal year 1969 appropriation of \$2, 316, 000 in foreign currencies suffices only for the support of ongoing research.

Ongoing research totals more than 100 grants benefitting more than two hundred United States institutions in over twenty-five states. Examples of these studies include:

... Computer correlation of theories on the nature of the core and the surface of evolving stars, a joint project of the Smithsonian Astrophysical Observatory and Hebrew University, Jerusalem.

... Interdisciplinary ecological studies of the plants and animals of tropical Ceylon, a natural research laboratory. These studies include elephants and related species of monkeys which may contribute to preserving these animals which are both important to medical research. The Ceylon studies are expected to serve as a model for similar studies in other world areas.

... Five different archeological excavations in Yugoslavia carried out with Smithsonian support by Stanford, Princeton, University of Pittsburgh, University of Minnesota, and Denison College in collaboration with Yugoslav institutions which will vastly increase our knowledge of man's history from early prehistoric through Roman and medieval times while providing field research training for many American graduate students.

Inquiries concerning new research proposals continue to flow in unabated at the rate of seven per week. This flow reflects in part the awareness that dollar funding for basic research is likely to be curtailed in this period of budgetary stringency, and that this may be the time to take advantage of the availability of PL-480 currencies to carry out research programs which can only be carried out abroad. Research in tropical biology can naturally be best conducted in the tropics and studies in South Asian linguistics can perforce be best conducted in the field in South Asia. It is felt that chances of obtaining research funding may be better at present in PL-480 "excess" foreign currency countries because of United States Government effort to employ these funds which continually depreciate, through inflation.

In this situation, an increase in the foreign currency appropriation to the Smithsonian is necessary to cover pending and new research proposals which are expected to total some \$760,000 and \$1,015,000

respectively during fiscal year 1970. Present estimates of distribution of demand for funds in fiscal year 1970 follow: *

	<u>Archeology</u>	<u>Biology</u>	<u>Astrophysics</u>	<u>Other</u>	<u>Total</u>
Ongoing ..	\$1, 340, 000	\$1, 290, 000	\$ 95, 000	--	\$2, 725, 000
Pending ..	390, 000	370, 000	--	--	760, 000
New.....	<u>270, 000</u>	<u>340, 000</u>	<u>285, 000</u>	<u>\$120, 000</u>	<u>1, 015, 000</u>
Total.....	\$2, 000, 000	\$2, 000, 000	\$ 380, 000	\$120, 000	\$4, 500, 000

Many proposals represent careful planning and accumulation of staff over a period of several years. To postpone such research is often to lose an opportunity to advance knowledge significantly and to waste the years of planning at home and patient development of working relations with collaborating research institutions abroad. Examples of pending and new proposals include:

... A study in India of the nature and movement of microscopic airborne organisms by Pennsylvania State University biologists.

... Cooperative operations of an archeological research and training program involving a consortium of United States institutions, the American Museum of Natural History and Vassar College and the Archeological Survey of India to speed the training of a substantial number of Americans competent in South Asian archeology.

* This request, as in the past, is based on budget projections for ongoing research and on pending and new research proposals which include firm research proposals, postponed for lack of sufficient funds, and other sample or illustrative proposals based on firm indications of interest both within and without the Smithsonian. They represent the Institution's selection of possible projects which appear most promising for successful development and implementation during fiscal year 1970. It should be noted, however, that actual implementation of these projects will be contingent upon three factors: review by the Smithsonian's outside advisory councils, review and approval by American embassies overseas, and appropriate cooperative arrangements with host-country institutions or Governmental authorities.

Research supported by the Smithsonian foreign currency grants contributes to national programs. A joint Congressional colloquium convened in August 1968 was devoted exclusively to the study of environmental quality, which is the focus of Smithsonian ecological studies. In addition, Oceanographic studies of direct interest to the National Council for Marine Resources and Engineering Development and supported by the Smithsonian Foreign Currency Program are carefully constructing a picture of the food and mineral resources of the seas. Many of these studies contribute to the International Biological Program of the International Council of Scientific Unions which promotes those studies of natural productivity which cannot well be studied by any one nation alone. Many of these studies contribute valuable materials to the National Collections of the Smithsonian. All of them provide the basis for the enduring collaboration involving American and foreign scholars and institutions with common objectives.

Opportunities for foreign currency funded research continue to grow, further justifying an increase in the Smithsonian foreign currency appropriation. Morocco has been added to the list of "excess" foreign currency countries. As soon as Morocco appeared on the list, a proposal was in preparation to explore that country's Atlantic and the Mediterranean waters in collaboration with Mohammed V University in Rabat and the government fisheries station at Casablanca in studies complementary to those already being conducted in Tunisia and Israel with foreign currency support. A proposal to study ancient and little known Phoenician settlements in Morocco has also been received.

The recent amendment (PL 90-436) to PL-480 appears likely to provide the Smithsonian access to the United States-owned local currencies accruing in such countries as Ghana and South Korea from new sales of surplus agricultural commodities. In both nations, Smithsonian plans for cooperative research in ecology would stand to benefit. In Ghana, the Smithsonian has already assisted the University of West Africa south of the Sahara and provided a base for the ecological research of United States institutions. In South Korea, plans for a model series of ecosystem studies are well advanced based on the unique situation evolving in the area south of the demilitarized zone where long dormant native vegetation has reappeared in areas not occupied by man in recent years.

Expanding research opportunities in these countries will not be offset in fiscal year 1970 by the imminent end of the United States excess account in Israeli pounds. No new research starts will be

made there but it is necessary to complete the research which has already been started there. In fiscal year 1970, it is anticipated that \$450,000 in Israeli pounds will be obligated for ongoing research only.

After years of careful preparation, the opportunity to broaden research activities in Tunisia, Yugoslavia, and India appears at hand. A bilateral agreement has been signed with Tunisia providing the legal basis for research in that country in all fields of Smithsonian competence. The agreement is expected to facilitate arrangements for research which have long been delayed. The first project likely to profit from the agreement is a multinational, interdisciplinary International Biological Program study of the Sahara and adjacent ecosystems. The study will seek the explanation for the continuing advance of the desert and the corollary recommendations for halting that advance. Furthermore, the Yugoslav Government has invited expansion of PL-480 uses under the Smithsonian program because of the satisfactory experience over the past two summers in archeological research. Expanded American research collaboration there appears likely to develop within the framework of a Yugoslav national program of ecological research. Such a program could contribute to man's ability to sustain environmental quality by predicting and compensating for the effects of his environmental modifying actions. In India, programs procedure changes suggest that research proposals, heretofore long delayed, will now find ready Government of India acceptance providing further great, research opportunities.

Publications based on research supported by Smithsonian Foreign Currency Program Grants are now beginning to appear. Southern Methodist University's survey of prehistoric sites along the Nile have for example resulted in a three volume publication entitled The Prehistory of Nubia. These volumes are the first of a series covering continuing research which is revealing early phases of man's residence in the Nile valley long neglected for the more spectacular historic period. A series of volumes entitled Ashdod is now coming off the press detailing the results of the excavation of this Philistine city by the Carnegie Museum in Pittsburgh working in collaboration with the Israeli Department of Antiquities. The Biblical Archeologist issue of May 1967 was entirely devoted to the results of the excavations at Biblical Gezer being conducted by Cincinnati's Hebrew Union College on a Smithsonian Foreign Currency grant. The American Academy of Benares in India has begun publishing a Bulletin or international scholarly journal devoted to South

Asian art and archeology. A number of scientific monographs have also begun to appear on the mollusks of the Indian Ocean which the University of Michigan has been studying with Smithsonian support.

Some other significant research results are already known. For example:

...The same Yale University team which uncovered the skull of one of man's early primate ancestors in the Egyptian Fayum badlands has uncovered an equally remarkable lower jaw of a giant ape in the Siwalik Hills of Northern India on a joint expedition with Punjab University. Preliminary estimates date this "early man" about 14 million years ago. The Smithsonian provided the local currencies for this research; the National Science Foundation provided dollars for expenses in this country.

... The University of California at Berkeley is conducting computer evaluations of the results of its experimental pyramid X-ray project. Initial interpretation of the results suggests an anomaly in the pyramid. The possibility that the anomaly represents an undiscovered chamber has not been ruled out.

This substantial program is operated at a minimum cost to the Institution in dollars. There are no overseas dollar costs and those associated individual research projects cover expenses with the United States and do not, as a consequence, contribute to the United States balance of payments deficit. In fact, the Smithsonian Foreign Currency Program functions as a "dollar-saving device" for Government agencies and private foundations supporting research in fields of Smithsonian competence.

Direct dollar costs to the Smithsonian are limited to those for personnel in Washington who administer the Program. During fiscal year 1969, five people were employed in the Office of International Activities for this purpose. An additional grants technician is requested for fiscal year 1970. Compensation for State Department administrative support abroad is in local currencies.

SMITHSONIAN INSTITUTION
PROGRAM
PLANNING, RESTORATION, AND CONSTRUCTION
1970

This request is for the most essential improvements and additions to the physical plant of the Smithsonian Institution. Particular attention has been given to those projects which would correct deficiencies and increase the usefulness of existing building spaces and areas. The construction and modification of new spaces will provide increased exhibit and public service facilities, space for research, and much needed areas for adequate housing and protection of the National Collections.

All requests for planning, restoration, and construction in fiscal year 1970 total \$14,162,000. This compares with a request of \$32,485,000 in fiscal year 1969. In view of budget austerity, many worthwhile projects are being deferred and the Smithsonian is requesting only those identified as most important to its basic ongoing functions. These projects include:

-- \$2,500,000 for the National Zoological Park for, in priority order; preventive maintenance and safety repairs to existing fencing, walks, and cages (\$500,000), the installation of heating plants to eliminate air pollution (\$300,000), planning for the next increment of the improvement program (\$100,000), and construction of a public service building with restaurant, cafeteria, and visitor orientation facilities (\$1,600,000).

-- \$5,462,000 for the Restoration and Renovation of Buildings for, in priority order: completing the relocation of the Radiation Biology Laboratory to adequate housing (\$600,000); correcting deficiencies at the Renwick Gallery to permit its use as a Museum and to protect restoration already accomplished (\$200,000); completing the Lincoln Room as an exhibit area in the Fine Arts and Portrait Galleries building (\$100,000); repairing deteriorating buildings and constructing additional laboratory space at the Smithsonian Tropical Research Institute (\$215,000); improving the Silver Hill facility as a collection center to relieve serious storage problems on the Mall (\$255,000); renovating and air conditioning the 87-year-old Arts and Industries building for use in connection with the American Revolution Bicentennial (\$3,367,000); preparing plans and specifications for constructing floors in the courtyards of the Museum of Natural History to take advantage of this otherwise wasted space (\$500,000); preparing plans for an addition to the Freer Gallery of Art to accommodate needed expansion of work spaces (\$100,000); and feasibility studies of future building needs (\$125,000).

-- \$6,200,000 for continuing construction of the Joseph H. Hirshhorn Museum and Sculpture Garden. This will fund 1970 contract payments for an obligation incurred under the contract authorization contained in the 1969 appropriations act for the Smithsonian.

Amounts requested for each item are justified in the following sections of the budget.

SMITHSONIAN INSTITUTION BUILDING PROGRAM

APPROPRIATIONS

Project	Total Cost	Available	1970	1971	1972	1973	1974	Additional Required
Zoological Park	\$ 20,081,000	\$ 7,903,000	\$ 2,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 3,678,000
Hirshhorn Museum	15,200,000	2,803,000	6,200,000	6,097,000	.....	.....	.....	.....
Air and Space Museum	52,000,000	1,875,000	.....	9,500,000	40,625,000	.....	.....	.....
*Armed Forces Museum ...	43,210,000	.....	.....	.....	13,400,000	3,868,000	5,068,000	21,374,000
*Administration Building ...	4,300,000	.....	.....	.....	.....	.....	1,000,000	3,300,000
Restoration and Renovation.								
Smithsonian Institution								
Building	6,300,000	.....	.....	800,000	.....	500,000	5,000,000	.....
Arts and Industries								
Building	3,367,000	.....	3,367,000	.....	.....	.....	.....	.....
Museum of Natural								
History	10,500,000	.....	500,000	5,000,000	.....	.....	5,000,000	.....
Museum of History and								
Technology	8,200,000	.....	.....	500,000	5,000,000	300,000	2,300,000	.....
Freer Gallery of Art	2,200,000	.....	100,000	.....	2,100,000	.....	.....	.....
Fine Arts and Portrait								
Galleries Building	600,000	.....	100,000	500,000	.....	.....	.....	.....
Renwick Gallery	2,350,000	1,850,000	200,000	300,000	.....	.....	.....	.....
Chesapeake Bay Center								
for Field Biology	663,000	.....	.....	220,000	300,000	66,000	22,000	55,000
Radiation Biology								
Laboratory	939,000	339,000	600,000	.....	.....	.....	.....	.....
Smithsonian Tropical								
Research Institute	515,000	.....	215,000	100,000	100,000	100,000	.....	.....
Silver Hill	20,255,000	.....	255,000	2,000,000	2,000,000	2,000,000	2,000,000	12,000,000
Feasibility Studies	575,000	250,000	125,000	50,000	50,000	50,000	50,000	.....
TOTAL	\$191,255,000	\$15,020,000	\$14,162,000	\$26,567,000	\$65,075,000	\$ 8,384,000	\$21,940,000	\$40,407,000

*Construction authorization required - Priority to be determined

September 1968

CONSTRUCTION AND IMPROVEMENTS NATIONAL ZOOLOGICAL PARK

1968 Appropriation	\$400,000
1969 Appropriation	300,000
1970 Estimate	2,500,000

In fiscal year 1963 the Congress appropriated funds for the first increment of a long term program to redevelop and improve the National Zoological Park. At that time the 78-year-old Zoological Park had not had any major improvements since the mid 1930's, except for a police building constructed in 1956, although the collection of animals, reptiles, and birds had become one of the largest and finest in the world, and visitor attendance had grown to 4,000,000 annually. A widely acclaimed master plan was approved as a basis for redevelopment which would cost approximately 17 million dollars over a ten-year period.

A rapid pace of development was maintained for the next five years and work was completed on new roads, parking areas, sewer lines, a new flight cage, renovated bird house, new deer paddocks, an incinerator, antelope houses and paddocks and service facilities. In 1968, however, the pace slackened because construction funds were not appropriated. Again in fiscal 1969, construction funds could not be provided due to more urgent demands and a new request had to be made for funds to maintain and continue the useful life of those antiquated facilities not yet replaced.

The magnificence of the new facilities must not eclipse the critical condition of those portions not yet completed. The job is only half done and the momentum must be regained to replace the 78-year-old lion house, the 67-year-old bear pens, the inadequate and unsanitary mammal pools, the wolf pens, the monkey facilities, and the disgraceful restaurant building. All of these facilities are now seven years older than they were when the improvement program was started and because their replacement has been anticipated, their maintenance has been minimal.

An appropriation of \$2,500,000 is requested to revive and maintain the program to improve the National Zoological Park. The following specific items are listed in the order of priority:

1. Renovation and repairs--\$500,000

Funds are requested to repair and renovate and extend the useful life of miles of fencing and walks, along with a maze of cages, exhibits, walls and utilities that comprise this 167-acre zoological park. Although all new facilities are designed to require a minimum of maintenance, some repairs are occasionally required. Because these facilities retain highly dangerous animals and reptiles, repairs must be made promptly, regardless of cost. With the continued deferral of replacement of old buildings the need for this priority request becomes critical.

2. Installation of heating plants--\$300,000

The central coal-fired heating plant at the Zoological Park has been criticized for several years by city inspection officials and by local residents as a source of obnoxious air pollution. The improvement program proposes installation of smaller, modern heating plants in each building and the eventual elimination of the central plant. In compliance with efforts of the Federal Government to promptly eliminate air pollution from Government facilities, this is a high priority request.

3. Planning--\$100,000

Funds are requested to proceed with planning for the next increment of the improvement program so that momentum may be maintained and so that plans and specifications can be ready for immediate construction upon receipt of future appropriations.

4. Construction--\$1,600,000

Detailed plans and specifications are now being prepared, with funds previously appropriated, for a public service building with restaurant, cafeteria, and educational facilities along with contingent site development and landscaping. This facility is essential to properly serve the flood of visitors, students, and scientists who throng to the Zoo. The cafeteria will seat 250 inside and another 350 on an outside terrace. The educational and public-orientation facilities include an auditorium, seating 300, for movie and slide orientation programs and for special zoo and animal programs for school groups.

RESTORATION AND RENOVATION OF BUILDINGS

1968 Appropriation	\$1,125,000
1969 Appropriation	400,000
1970 Estimate	5,462,000

An appropriation of \$5,462,000 is requested for the following projects, listed in the order of priority:

Radiation Biology Laboratory	\$600,000
Renwick Gallery.....	200,000
Fine Arts and Portrait Galleries	100,000
Smithsonian Tropical Research Institute ..	215,000
Silver Hill Facility	255,000
Arts and Industries Building	3,367,000
Museum of Natural History Courts	500,000
Freer Gallery Addition	100,000
Feasibility Studies	<u>125,000</u>

Total estimate for 1970	\$5,462,000
Less amount appropriated in fiscal year 1969	<u>400,000</u>

Increase in fiscal year 1970 ... \$5,062,000

Radiation Biology Laboratory

An appropriation of \$600,000 is requested to complete the relocation of the Radiation Biology Laboratory to a new site.

With funds appropriated in fiscal years 1968 and 1969 work has been started to relocate the Smithsonian Radiation Biology Laboratory from cramped, dungeon-like rooms in the basement of the old Smithsonian Institution building to a new leased laboratory building at Rockville, Maryland. The additional amount requested in fiscal year 1970 will permit completion of the move by funding relocation of the carbon-dating laboratory equipment, the greenhouses and specialized laboratory and lighting equipment and permit installation of plant growth units which are essential to controlled light equipment on plants.

Renwick Gallery

An appropriation of \$200,000 is requested to continue a program of restoration and improvement of the old Court of Claims building on Lafayette Square.

The construction and renovation work being accomplished with funds previously appropriated by the Congress will be completed during the current fiscal year and when funds are available the building will be fitted as a museum of American art, crafts, and design and opened to the public. This will complete action complying with a desire of the Congress to preserve this historic and monumental building as a national museum. The restoration work has been well done and the exterior stonework repair, in particular, has been acclaimed publicly in the newspapers and by several technical experts.

There are some deficiencies remaining which should be corrected prior to operating the building as a museum. The most important is a service entrance for receiving and shipping the many objects so important to a museum operation. This will be difficult and costly because the building occupies a corner position on two busy streets and has no off-street access. It is proposed to modify an areaway, install a hydraulic lift, and enlarge a doorway entering into the areaway. It will also be necessary to install a birdproofing system on the building to protect the recently renovated stonework and to install special museum lighting in a portion of the building.

Fine Arts and Portrait Galleries

An appropriation of \$100,000 is requested to continue a program for completing exhibit areas in the new Fine Arts and Portrait Galleries building which houses the National Collection of Fine Arts and the National Portrait Gallery.

The new Fine Arts and Portrait Galleries building is developing into one of the Smithsonian's finest museums and its importance and acceptance becomes more apparent as each new hall is completed and opened. Most of the funds for developing the exhibits and facilities come from the operating budget of the museum. The larger, more expensive one-time projects must be funded from the capital budget. One remaining item of this type is completion of the famous Lincoln Room, a room of 18,000 square feet in which Lincoln's inaugural ball was held. The room needs special treatment in terms of exhibits, lighting, and furnishings to make it one of the finest halls in the museum. The requested funds will permit completion of this hall and some lesser projects required to improve the operation of the museum.

Smithsonian Tropical Research Institute

An appropriation of \$215,000 is requested for improvements to facilities at the Smithsonian Tropical Research Institute.

Since the mission of the Tropical Research Institute is to maintain Barro Colorado Island as a national nature reserve, similar to national parks, and to provide support for American-sponsored scientists working in the Tropics, the Institute does not have any costly physical facilities in Panama, nor will it be necessary to invest in a large physical plant to continue and even substantially increase tropical research activities. Over the years, a series of small wood buildings have been constructed, on the island, to serve as living quarters and laboratory space for scientists. Also, three small surplus buildings, two on the Pacific side of the Canal and one at the Atlantic side, have been made available for laboratory use by United States military agencies. All buildings are in very poor condition and rapidly deteriorating in the hot, humid, insect-infested environment. The most essential repairs to continue the useful life of only the most important building will cost \$25,000. In addition, \$190,000 are requested to construct two small concrete block buildings to replace some of the more deteriorated facilities and to provide better space for books, papers, laboratory experiments, and storage of equipment including expensive microscopes, in a more secure manner and better protected from weather, insects, and tropical fungus.

Silver Hill Facility

An appropriation of \$255,000 is requested for improvements and for planning future facilities at the Smithsonian Institution storage facility at Silver Hill, Maryland.

If the Smithsonian Institution must continue to acquire objects in its role as a national historical and scientific depository and on behalf of the United States Government at an average rate comparable to that of the past decade, it is obvious that a highly developed and modern storage facility will be needed. Rather than continue to use monumental buildings on the Mall as warehouses, a new solution is proposed. The Smithsonian Institution has used Government-owned land at Silver Hill, Maryland, for several years, to store large objects such as aircraft, engines, and vehicles. Several temporary-type metal buildings have been constructed to provide protection from the weather for some objects. It is now proposed to make some immediate improvements in existing facilities for work on mammal skeletons and for small objects from the Museum of History and Technology. Funds in the amount of \$175,000 are requested for this purpose. An additional \$80,000 are requested for preparing plans for a long-term development of the Silver Hill area, by removing the temporary buildings and constructing permanent warehouses and laboratory facilities for the National Collections. This ultimate development would then free substantial space in Mall buildings for additional public exhibits.

Arts and Industries Building

An appropriation of \$3,367,000 is requested for renovation of the 87-year-old Arts and Industries building.

In fiscal year 1967 the Congress appropriated \$133,000 to prepare plans and specifications for renovating the Arts and Industries building, installing central air conditioning, and preparing the building for use as a national expositions building. With design now approaching completion, construction funds are requested. If an early construction start can be assured, this building can be completed and made available for use prior to the start of the national celebration of the Bicentennial of the American Revolution in 1974.

Museum of Natural History Courtyard Additions

An appropriation of \$500,000 is requested to prepare plans and specifications for additional floors to be constructed in the two interior courtyards in the Museum of Natural History.

The interior courtyards in the Museum of Natural History are no longer required for light and ventilation now that the building is fully air conditioned. With funds appropriated in fiscal year 1967, a feasibility study has been performed and shows that it would be possible to increase the useable area of the building by almost 200,000 square feet by constructing new floors in the courtyards, to match the existing floor levels in the main building. Funds in the amount of \$500,000 are requested for plans and specifications. Construction funds will be requested in a future budget.

Freer Gallery of Art Addition

An appropriation of \$100,000 is requested to prepare plans for an addition to the Freer Gallery of Art.

The Freer Gallery of Art was constructed in 1922 as a depository, museum, and study center for oriental art. The growth of this activity in the intervening 47 years has been accommodated by expanding into and then overcrowding all available space. Plans to enlarge the building have been proposed from time to time, but have always been disapproved because an addition would disfigure the appearance of this beautiful and widely acclaimed architectural masterpiece. It has now been found feasible to construct an underground addition on the north side of the building without affecting the present appearance. This addition would accommodate a badly needed expansion of the library, study center, laboratories, offices, and other nonpublic spaces. An appropriation of \$100,000 is requested to prepare plans and specifications for this addition.

Feasibility Studies

An appropriation of \$125,000 is requested to prepare feasibility studies of the future building needs of the Smithsonian Institution.

The Smithsonian Institution is destined to play a vital and central role in the celebration of the Bicentennial of the American Revolution during the coming decade. To accommodate special exhibits covering the American Revolutionary period and an unprecedented influx of Bicentennial visitors, it is proposed that two exhibition pavilions be added to the Museum of History and Technology. This plan would also enable the special exhibits in the pavilions to be viewed in the context of the museum's permanent displays relating the 200 years of national development. Funds in the amount of \$50,000 to allow a study of the feasibility of this proposal are requested.

The Smithsonian Astrophysical Observatory at Cambridge, Massachusetts has been expanding its authorized function. To meet the increasing demands for space in this expanding discipline, a feasibility study will be prepared to determine the size and type of technical facilities required for its present and future requirements: Laboratories, offices, workrooms, and storage spaces. The study will consider the opportunities and related costs for expanding the presently leased buildings and the comparative merits of constructing a Smithsonian Institution building for the Observatory. Funds in the amount of \$50,000 to allow a study of the feasibility of this proposal are requested.

The Chesapeake Bay Center for Field Biology needs certain research facilities, roads, and utilities to support future programs. Rather than permit indiscriminate development of the area with construction of facilities on an "as-needed" basis, a feasibility study to develop a "master-plan" is desired. A coordinated design for roads, drainage, sewage disposal, trash disposal, and other construction is needed to protect the ecology of the area from unnecessary contamination and to protect the preserve for scientific studies. Funds in the amount of \$25,000 are requested for this study and to develop the scope and cost for future improvements.

CONSTRUCTION
JOSEPH H. HIRSHHORN MUSEUM AND SCULPTURE GARDEN

1968 Appropriation	\$803,000
1969 Appropriation	2,000,000
1970 Estimate	6,200,000

An appropriation of \$6,200,000 is requested to continue construction of the Joseph H. Hirshhorn Museum and Sculpture Garden.

By the act of November 7, 1966, the Congress provided a site on the Mall for construction of the Joseph H. Hirshhorn Museum and Sculpture Garden and provided statutory authority for the appropriation of construction and operating funds. Within this appropriation authority funds were appropriated in fiscal year 1968 for the preparation of plans and specifications. In fiscal year 1969 an additional \$2,000,000 were appropriated to start construction and authorization was granted by language in the appropriations bill to enter into construction contracts in an amount not to exceed \$14,197,000.

The present schedule calls for a construction bid opening in January 1969 with construction running continuously until April 1971. Exhibits will be installed during the following six months and the new museum will be opened to the public in October 1971. Funds now appropriated will finance construction activities through fiscal year 1969. An additional \$6,000,000 are requested for continuing construction through fiscal year 1970. Additional funds requested will be used for continuing contract payments for an obligation incurred under the authorization contained in the 1969 appropriations bill and will not be used to incur a new obligation. This appropriation is essential to the completion of the contract and without it a contract termination must be made.

As a corollary to the authorization for the Joseph H. Hirshhorn Museum and Sculpture Garden, the act of November 2, 1966, authorized the Secretary of the Army to construct an addition to the existing Armed Forces Institute of Pathology at Walter Reed Army Medical Center. Funds for construction of this addition were appropriated to the Department of Defense in fiscal year 1968. This new addition, when completed in January 1971, will house the Medical Museum and a research unit now housed in the existing building at Seventh Street and Independence Avenue, the site of the Hirshhorn Museum. To comply with the intent of Congress and proceed promptly with construction of the Hirshhorn Museum, the Medical Museum must be relocated to temporary quarters until the new building is completed at Walter Reed. Funds for this interim move have not been included in previous budgets and an appropriation in the amount of \$200,000 is now requested. The estimate was prepared by the General Services Administration, which will prepare temporary space at the old Bureau of Standards site on Connecticut Avenue and accomplish this move.

SMITHSONIAN INSTITUTION LIBRARIES



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